



Template for Subspecialty Training Framework (STF)

Preface

Historically, advanced specialist training in Malaysia originated in Ministry of Health MOH, where it was initiated, developed and governed. MOH is still the largest Educational Training Provider (ETP) for both advanced specialty, subspecialty and area of interest (AOI). These advanced specialty training programmes are also being offered by the public universities, local private institutions and overseas institutions.

Based on a survey in 2024, there are 126 fields of practice that were categorised as advanced specialist training (64 are listed in the Fifth Schedule of the amended Medical Act 2024) and 206 areas of interest (AOI) across both public and private practice, including the universities.

There are no established standards for subspecialty training, and no regulatory process exist to oversee the subspecialty training programmes. Since 2022, the training programme under MOH is guided by the *Training Management Guide for Subspecialty*, a training template developed by Medical Profession Development Section, Medical Development Division under Ministry of Health (MOH).

The development of *Subspecialty Training Framework* by Malaysian Medical Council (MMC) represents an important first step towards standardization of the subspecialty training structure for all ETPs in Malaysia.

Introduction

This template for subspecialty training framework is developed with the primary objective of standardising the training structure for all subspecialties in Malaysia. The template is intended to be used by the Education Training Provider (ETP) intend to develop a subspecialty training programme.

This training framework outlines the structure, minimum requirements and key processes for the Subspecialty Training Programme. This document provides guidance on the essential components on curriculum design, trainer and trainee requirements, assessments, resources, and aspects on governance. It ensures a consistent, high-quality educational experience aligned with the Malaysian Medical Council (MMC) Standards for Medical Specialist Training (2019) and best evidence in medical education with the aim of producing competent and independent subspecialists.

While this framework is primarily intended to guide the subspecialties listed under Fifth Schedule of the Medical (Amendment) Act 2024, it is designed to be adaptable and may be applied to other fields of practice as well.

Disclaimer

This training framework is designed to be comprehensive yet generic in nature, serving as a guide with the essential structure and components of a training programme. However, it is not exhaustive, and compliance is encouraged.

Glossary

1. Training Domains

Areas of Interest (AOI)

A focused area within a specialty with a shorter training period than advanced specialty training or subspecialty.

Advanced Specialty

A focused area within a specialty (training programme is similar as subspecialty) but not formally recognised as a subspecialty and not listed under the Fifth Schedule of the Medical (Amendment) Act 2024.

Field of Practice

A broad medical domain encompassing related specialties, subspecialties, and areas of interest.

Specialty

A formally recognised field of practice that is listed under the Fourth Schedule of the Medical (Amendment) Act 2024.

Subspecialty

A formally recognised field of practice (a focused area within a specialty) that is listed under the Fifth Schedule of the Medical (Amendment) Act 2024.

2. Training Roles

Educational Supervisor

A designated trainer responsible for overall supervision and management of a specified trainee's educational progress.

Educational Training Provider (ETP)

An institution approved to conduct training (e.g., Ministry of Health, universities).

Head of Programme

A qualified clinician or practitioner who is responsible for managing and overseeing the training programme.

Subspecialty Training Committee (STC)

A subspecialty-specific committee within an ETP that oversees the programme's structure and delivery.

3. Training Programme Components

Blueprint

A table of specifications that specifies, in appropriate detail, the content and competencies need to be covered in an assessment. It ensures alignment between learning outcomes, curriculum content and the assessment structure.

Curriculum

A planned learning experience encompassing learning objectives, content and activities, intended learning experiences and competencies, instructional methods, assessments, and required materials to achieve the specified learning outcomes.

Formative Assessment

Ongoing assessments that provide feedback to guide and support learning.

Summative Assessment

A high-stakes assessment usually conducted at the end of training to determine competency for certification.

Syllabi

A detailed list of topics, skills, and knowledge areas to be covered in all the rotations.

4. Training Framework Concepts

Certificate of Completion (CCT)

A certificate awarded by the ETP upon completion of a training programme.

Seamless Postgraduate Medical Training

A structured, continuous, and integrated pathway for postgraduate medical training that minimises interruptions and unnecessary transitional phases. For example, it enables progression from basic to subspecialty training within a single programme or framework, ensuring cumulative competency development without repeated re-application.

5. Competency-Based Assessment Tools

CBD (Case-Based Discussion)

A formative assessment method involving a structured one-to-one discussion between a trainee and a supervisor about a real clinical case managed by the trainee.

DOPs (Directly Observation of Procedural Skills)

A work-based assessment tool to evaluate trainees' performance by directly observing them performing a clinical procedure in real clinical setting.

Logbook

A detailed record of clinical procedures and cases managed by the trainee.

Mini-CEX (Mini Clinical Evaluation Exercise)

A brief, structured evaluation of a trainee's real-time patient interaction.

MSF (Multi-Source Feedback)

An evaluation of professional behaviour based on collated feedback from multiple sources (e.g., peers, various categories and levels of healthcare workers, including nurses and supervisors such as consultants).

PBA (Procedure-Based Assessment)

A structured procedure-based assessment tool for evaluating technical and procedural skills.

Portfolio

A collection of evidence demonstrating learning, performance, and professional development.

WBA (Work-Based Assessment)

Assessment of performance in real clinical settings using structured tools and direct observation. Examples include PBA, DOPs, CBD, Mini-CEX, and MSF. Each specialty or subspecialty may develop its own variant of WBA.

STRUCTURE AND COMPONENTS

(Subspecialty Name) Subspecialty Training Programme**Name of Award:**

Certificate of Completion in (Subspecialty Name)

Educational Training Provider (ETP):

(e.g., Ministry of Health, University)

Developed by:

(e.g., Subspecialty Training Committee)

Purpose of This Training Programme

(State the key objectives and intended outcomes of the programme)

Table of Contents

(Include section titles, subsections, and page numbers.)

1.0 INTRODUCTION

May include the following elements:

- Historical evolution of the subspecialty
 - Overview of the training programme
 - Scope of service
 - Types of diseases managed
 - Procedures performed
 - Local burden of disease
 - Distinctions from the parent specialty
 - Required resources
 - National relevance of the subspecialty
 - Mapping of services
-

2.0 CURRICULUM**2.1 Curriculum Overview**

Example statement:

The programme aims to produce well-rounded, clinically competent, and ethically grounded subspecialists in (*subspecialty*). Graduates will possess the competencies required for independent practice and for contributing to service development, education, and research.

Key components include:

- **Entry Criteria:** Completion of general specialty training (listed in Fourth Schedule), SR registration, and demonstrated interest/aptitude.
 - **Training Pathway:** Minimum three-year structured programme including clinical rotations, continuous assessment, research, and optional external exposure.
 - **Key Progression Points:** Annual portfolio review and eligibility for progression.
 - **Exit Criteria:** Achievement of clinical and non-clinical competencies and successful completion of summative assessments.
-

2.2 Selection and Recruitment

Entry Requirements

- Certified specialist (SR-listed under Fourth Schedule)
- Relevant clinical experience
- Completed academic and professional portfolio

Selection Process

- Portfolio submission and review
 - Structured competency-based interviews
 - Referee reports/recommendations
 - Transparent merit-based selection
-

2.3 Induction

Conduct a formal orientation covering:

- Curriculum structure
 - Expectations and responsibilities
 - Assessment methods
 - Learning resources
 - Professional conduct and ethical standards
-

2.4 Head of Programme

Criteria

- Senior consultant with ≥ 5 years' experience in the subspecialty
- Recognised trainer
- Demonstrated leadership and administrative skills

Appointment

- Nominated by ETP
- Approved by governing body following interview

Roles

- Oversee programme implementation
- Lead curriculum review and updates
- Monitor trainer and trainee performance

- Liaise with the STC
-

2.5 Trainers

Trainer-to-Trainee Ratio 1:2

Criteria

- ≥3 years of active clinical practice in the subspecialty
- SR registration
- Completed a “Train-the-Trainer” course within the last 5 years

Appointment

- Recommended by STC
- Reviewed and approved by a panel

Roles

- Provide supervision and mentorship
 - Conduct assessments
 - Foster a safe and supportive learning environment
-

2.6 Syllabi

Describe progression of technical and non-technical competencies across training years, using recognised models (e.g., Dreyfus Model of skill acquisition: Five levels of development of expertise, from novice to mastery).

2.7 Training Resources

Training Centres

- Defined accreditation criteria (caseload, staff, facilities)
- List approved centres

Online Resources

- Learning management system
- e-Learning modules
- Journal access
- e-Portfolio system

Simulation Training

- Procedures requiring simulation
- High-fidelity simulators
- Task trainers
- Accredited simulation centres

External Opportunities

- **Mandatory:** Required courses, safety training
- **Optional:** Conferences, leadership workshops, non-technical skills courses

Overseas Attachments

- Indicate whether mandatory or optional

- Expected learning objectives
 - Duration
 - Approved training centres
-

2.8 Exit Criteria

Trainees must demonstrate:

- Core and non-technical competencies (e.g., medical expert, communicator, collaborator, leader, health economist, educator, reflective practitioner)
 - Completion of minimum required procedures
 - Audit/research/project/publication completion
 - Pass all summative assessments
-

2.9 Assessment Methods

Formative (Ongoing)

- Case-Based Discussion (CBD)
- Procedure-Based Assessment (PBA)
- Mini-CEX
- Multi-Source Feedback (MSF)
- Reflective writing

Summative

- Viva voce
 - Clinical examination (OSCE, long case)
 - Exit interview
-

2.10 Portfolio Components

- Completed formative assessments
 - Supervisor reports
 - CPD activities
 - Research/publications
 - Clinical and simulation logbooks
 - Courses and workshops attended
 - Contributions to advocacy and professional societies
-

2.11 Eligibility for Exit Assessment

- Full completion of training duration
 - Satisfactory portfolio and logbook review
 - Completion of all required assessments
-

2.12 Utility & Blueprint

- Assessments mapped to curriculum outcomes
 - Assessments must be valid, reliable, feasible/cost effectiveness, educational impact and acceptable
 - Blueprinting ensures coverage of all competencies
-

2.13 Assessors

Criteria

- Recognised senior trainers with ≥ 3 years' subspecialty practice (SR in subspecialty)
- Trained in assessment methodology (assessor training course)

Governance

- Conflict of interest declaration
 - Examiners to recuse themselves where necessary
 - Participation in calibration exercises to ensure consistent standards
-

2.14 Documentation

- Standardised WBA forms
 - Include/attach tools for documentation (e.g., supervisor report forms)
 - Digital/physical portfolio system
 - Clear guidance on documentation requirements
 - Minimum case mix and procedural numbers
-

2.15 Discipline & Support

Underperforming/Problematic Trainees

- Early detection and remediation plan
 - Identify deficiencies (knowledge, skill, aptitude, attitude)
- Mentorship and structured review
 - Document remediation meetings
- Exit criteria and termination process
- Appeal mechanism

Extension/Deferment

- Valid reasons (e.g., health, maternity, academic)
- Maximum total training duration: **5 years**

Underperforming Trainers

- Feedback from trainees and peers
 - Peer mentoring and support
 - Removal from trainer list if necessary
-

2.16 Administration & Governance

- Centralised database (trainers, trainees, centres, assessments)
 - Compliance with MMC and ETP policies
 - Subspecialty Training Committee (STC)
 - Terms of reference
 - Meeting requirements
 - Reporting to ETP's Central Training Committee
-

2.17 Programme Monitoring & Quality Improvement Monitoring Tools

- Feedback from trainees, trainers, examiners annually
- Employer and alumni feedback

Quality Improvement

- Curriculum review every 3–5 years
- Self and peer evaluation

3.0 APPENDICES

1. Subspecialty Training Committee (STC) – Chairman and members
2. Head of Programme – Name and credentials
3. Trainers – List of supervisors and trainers
4. Trainees – List their name and stage of training
5. Assessors – List local and international examiners including their credentials
6. Training Centres – List local and overseas centres including the trainers in each centre
7. Graduates – Names and dates of completion
8. Work-Based Assessment Forms
9. Glossary – Specific to the subspecialty

Acknowledgement

Following the recommendation made by Medical Education Committee (MEC), a dedicated working group chaired by Dato' Dr. Jiffre bin Din was established. The members include Dato' Seri Dr. Mohamed Yusof bin Abdul Wahab, Professor Dr Roslina Abdul Manap and Dr Sabeera Begum Kader Ibrahim. We greatly appreciate the feedback and input provided from members in Subspecialty Education Committee (SbEC) and Medical Education Committee 2 (MEC 2).

We would like to express our sincere appreciation to Medical Development Division, Ministry of Health, especially Dr. Hirman bin Ismail, for his invaluable assistance in sharing the MOH training template.

References:

1. Medical Profession Development Section (2022) *Training Management Guide: Subspecialty*. Malaysia: Medical Development Division, Ministry of Health
2. Pitt, D. (2015) *How to Design and Develop Curriculum: A Practical Introduction*. 2nd edn. UK. Creative Learning Associates.
3. Specialty Education Committee of the Medical Education Committee (2019) *Malaysian Standards for Medical Specialist Training*. Kuala Lumpur: Malaysian Medical Council.
4. Subspecialty Education Committee of the Medical Education Committee 2 (2025) *Resolusi Bengkel Halatuju dan Amalan Jaminan Kualiti Subkepakaran*. Malaysia Medical Council
5. Swanwick, T. (ed.) (2018) *Understanding Medical Education: Evidence, Theory and Practice*. 3rd edn. Hoboken, NJ: Wiley-Blackwell.

[Approved by Council on 16th December 2025]