GUIDELINES ON POSTGRADUATE TRAINING IN INTERNAL MEDICINE

SIXTH EDITION
HONG KONG SAR
CHINA
JUL 2018

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I. Preface

PREFACE TO THE SIXTH EDITION

In July 1993, the First Edition of Guidelines on Postgraduate Medical Training of the Hong Kong College of Physicians (HKCP) was published by the Joint Committee on Internal Medicine Training (JCIMT), before the inauguration of the Hong Kong Academy of Medicine in December 1993. Since then, under the supervision of its Education and Accreditation Committee (E&AC) the HKCP has implemented structured training programmes in Basic Physician Training (BPT) and Higher Physician Training (HPT) encompassing a comprehensive range of medical specialties, and the training programmes are updated on a regular basis.

Since its original inception and for over two decades, the Intermediate Examination for the HKCP physician training programme continues to be conducted in the form of a Joint Examination in association with the Membership Examination of the Royal Colleges of Physicians in United Kingdom for the qualification of MRCP(UK). Passing the Intermediate Examination and a minimum duration of three years of supervised training are both required for successful completion of BPT, at which point physician trainees are awarded membership certificates for MHKCP and MRCP(UK) respectively. This link with the Royal Colleges of Physicians in United Kingdom serves to guarantee a high international standard of our BPT programme and provides discernible evidence of international benchmarking.

In response to the progress and developments in clinical medicine and to provide continued assurance of a high standard of physician training and practice, the contents of medical specialty training programmes and the assessment format for BPT and HPT have been enhanced and refined on a regular basis over the past two decades. At each revision exercise, all proposed amendments have been thoroughly discussed and deliberated at the respective specialty boards, the E&AC, and the HKCP Council, to ensure that all training guidelines are fit for purpose and also feasible in practice.

The Sixth Edition of Guidelines on Postgraduate Medical Training of the Hong Kong College of Physicians (HKCP) will be formally implemented in November 2017. The following points in this edition are worthy of note:

1 The training guidelines stipulate that training in a "broad-based" specialty, namely Advanced Internal Medicine or Geriatric Medicine, is a mandatory element in Higher Physician Training. This is to ensure a sturdy foundation in general internal medicine that is required in the clinical management of the increasing number of patients with multiple comorbidities that involve different medical specialties. Training in the "broad-based" specialty may proceed concurrently with the training programme of another specialty, or sequentially as the first or the second specialty. In regard to specialist training in Dermatology & Venereology, this requirement for "broad-based" training is strongly encouraged, but is at the moment optional for trainees working in units faced with workforce deficiency and organizational challenges. The latter provision is kept under regular review.

2 Following the approval of the Clinical Toxicology specialist training programme under HKCP by the Medical Council of Hong Kong on 20 October 2017, Clinical Toxicology has been established as a new specialty under our College, within the purview of the Subcommittee of Clinical Pharmacology & Therapeutics, which reports to E&AC.

3 The Specialty Board in AIM has introduced minor revisions to the format of Interim Assessment in AIM.

4 The Specialty Board in Rheumatology/Immunology & Allergy has implemented major revisions to the Training Guidelines in Immunology and Allergy.

The College is grateful to all colleagues who have contributed to Specialty Boards or Subcommittees and the E&AC, all our Trainers and Programme Directors, the Hospital Authority, and the Chief of Service of all Medical departments, for their steadfast commitment and support to physician training, so that our training programmes continue to produce physicians of the highest calibre internationally to serve our patients and the community.

Prof Chan Tak Mao Daniel
E&AC Chairman, HKCP Vice-President

Prof Li Kam Tao Philip
HKCP President

November 2017

MEMBERSHIP OF
THE EDUCATION AND ACCREDITATION COMMITTEE

November 2017

Chairman:	Professor Daniel TM Chan
Vice-Chairman:	Dr MS Lai
Secretary:	Dr ML Wong
Members:	Dr Thomas SY Chan Dr KK Chan Dr Johnny Chan Dr CK Ching Dr P Hui Professor Alice Kong Dr KS Lau Dr Jenny Leung Dr Patrick Li Professor Philip Li Dr Francis Mok Dr PW Ng Professor LS Tam Professor Sydney Tang Professor Justin Wu Dr Loretta Yam Dr KH Yeung Professor Richard Yu

PREFACE TO THE FIFTH EDITION

The first edition of the Hong Kong College of Physicians (HKCP) Guidelines on Postgraduate Medical Training was published in July 1993 by the Joint Committee on Internal Medicine Training (JCIMT), just in time for the inauguration of the Hong Kong Academy of Medicine in December 1993. Since then, the Education and Accreditation Committee (E&AC) had implemented structured training programmes in Basic Physician Training (BPT), and Higher Physician Training (HPT). The Intermediate Examination (IE) of HKCP continued to be conducted in the form of a Joint Examination with the Membership Examination of the Royal College of United Kingdom [MRCP(UK)]. Success at this examination is required for completion of the three years of BPT. All successful candidates are awarded two certificates, allowing them to join both HKCP and the Royal Colleges in UK as members. The continuation of this linkage guarantees the high international standard of our Basic Physician Training programme.

In the past four years E&AC has received valuable opinions on the training programmes and assessment format during HPT. Recognising the rapid changes in the knowledge in the medical specialties, E&AC and all the Specialty Boards have further revised and updated their training guidelines in the current fifth edition of the College's Training Guidelines. The following points about the current edition are worthy of note.

1 To avoid a detailed list of individual clinical conditions under the "knowledge" section, most guidelines have been amended to reflect the broad disease categories with individual conditions quoted as examples.

2 To ensure a broad based approach to Internal Medicine training, the College has directed that trainees undergoing concurrent training should choose Internal Medicine or Geriatric Medicine as one of the specialties.

3 The format of Assessment has been revised by reducing the former two Annual Assessments for each HPT specialty to one Interim Assessment for each specialty.

The College deeply appreciates the efforts and contribution made by E&AC and Specialty Boards to update the training guidelines. The College thanks the devotion and ceaseless support from all Programme Directors, Assistant Programme Directors, Chiefs of Service (Medicine), Trainers and the administration of Hospital Authority, to assist in the implementation of these modified training programmes so as to train high calibre physicians to serve the community.

Finally, the College will continue to seek reciprocal recognition of our training programmes with national accreditation bodies in other parts of the world, and strive to maintain for generations into the future the excellent reputation that Hong Kong physicians now enjoy internationally.

Dr Loretta Yam
Chairman
Education and Accreditation Committee

Dr Patrick Li
President

March 2011

MEMBERSHIP OF
THE EDUCATION AND ACCREDITATION COMMITTEE

March 2011

Chairman:	Dr Loretta Yam
Vice-Chairman:	Dr CS Li
Secretary:	Professor Anthony Chan
Members:	Dr KM Ho Professor David Hui Dr Emily Kun Professor KN Lai Dr MS Lai Dr ST Lai Dr Patrick Li Prof Philip Li Dr SK Li Dr PW Ng Dr SC Tiu Professor Richard Yu

PREFACE TO THE FOURTH EDITION

The first edition of the Hong Kong College of Physicians (HKCP) Guidelines on Postgraduate Medical Training was published in July 1993 by the Joint Committee on Internal Medicine Training (JCIMT), just in time for the inauguration of the Hong Kong Academy of Medicine in December 1993. Since then, the Education and Accreditation Committee (E&AC) had implemented structured training programmes in the first three years of Basic Physician Training (BPT), and introduced the Trainee Log Book as well as yearly review and assessment of trainees. The Intermediate Examination (IE) of HKCP, which can be taken after the first two years of training, continued to be conducted in the form of a Joint Examination with the Membership Examination of the Royal Colleges of United Kingdom [MRCP(UK)]. Success at this examination is required for completion of the three years of BPT. All successful candidates are awarded two certificates, allowing them to join both HKCP and the Royal Colleges in UK as Members. This linkage has continued to guarantee the high international standard of our Basic Physician Training programme.

Since the publication of the Third Edition of the Guidelines on Postgraduate Training in Internal Medicine in 2002, E&AC has gained valuable feedback from local and overseas examiners and trainees on the training programme and the Annual and Exit Assessment exercises. Recognising the rapid changes in the knowledge in the medical specialties, E&AC and its Specialty Boards have further updated all existing Guidelines in the Fourth Edition of the College's Training Guidelines. The following points about the current edition are worthy of note.

1 The training guideline in Clinical Pharmacology and Therapeutics has undergone major revisions to reflect the current emphasis on Toxicology.

2 Guidelines on the following advanced invasive procedures have been amended to clarify the conditions for accreditation towards College certification.

Guidelines for Certification of Advanced Training in Invasive Cardiac Electrophysiological Studies & Intervention
Guidelines for Certification of Advanced Training in Percutaneous Cardiovascular Interventions
Guidelines on Certification in Advanced Diagnostic and Therapeutic Gastrointestinal Endoscopy

3 The updated marking systems of the Annual and Exit Assessments are included in Section V for reference by examiners, trainers and trainees.

The College wishes to express its deepest appreciation to E&AC and Specialty Boards for contributions towards the updating of our Training Guidelines. The College appreciates the hard work and dedication of all Programme Directors, Assistant Programme Directors, as well as the support and understanding of Chiefs of Service (Medicine) and the administration of Hospital Authority, to enable the implementation of these training programmes towards the production of high calibre physicians for the medical services in Hong Kong. The College appreciates the hard work and dedication of Ms Gloria Ng,

Administrative Manager and staff of the College Secretariat, without whom it will not able to function and thrive.

Finally, the College will continue to seek reciprocal recognition of our training programmes with national accreditation bodies in other parts of the world, and strive to maintain for generations into the future the excellent reputation that Hong Kong physicians now enjoy internationally.

Dr Loretta Yam
Chairman
Education and Accreditation Committee

Professor KN Lai
President

April 2007

MEMBERSHIP OF
THE EDUCATION AND ACCREDITATION COMMITTEE

March 2007

Chairman:	Dr Loretta Yam
Vice-Chairman:	Dr CS Li
Secretary:	Professor Anthony Chan
Members:	Dr LY Chong Professor Annie Kung Professor KN Lai Dr MS Lai Dr ST Lai Professor WK Lam Professor CS Lau Dr Patrick Li Professor Philip Li Dr ML Szeto Dr CP Wong Professor CM Yu Professor Richard Yu

PREFACE TO THE THIRD EDITION

The first edition of the Hong Kong College of Physicians (HKCP) Guidelines on Postgraduate Medical Training was published in July 1993 by the Joint Committee on Internal Medicine Training (JCIMT), just in time for the inauguration of the Hong Kong Academy of Medicine in December 1993. Since then, the Education and Accreditation Committee (E&AC) of HKCP had implemented structured programmes in the first three years of Basic Physician Training (BPT), and introduced the Trainee Log Book as well as yearly review and assessment of trainees. The Intermediate Examination (IE) of HKCP, which can be taken after the first two years of training, continued in the form of a Joint Examination with the Membership Examination of the Royal Colleges of United Kingdom [(MRCP(UK)]. Success at this examination is required before completion of the three years of BPT. All successful candidates are awarded two certificates, allowing them to join both HKCP and the Royal Colleges in UK as Members. This linkage has continued to guarantee the high international standard of our Basic Physician Training programme.

Following the replacement of the JCIMT by the E&AC in May 1996 and the establishment of the Specialty Boards, structured training programmes in Higher Physician Training (HPT) became progressively implemented. As from 1998, every HPT trainee has to undergo Annual Assessments before the Exit Assessment at the end of the three-year training period. The Exit Assessment, comprising of viva and a dissertation, is held twice yearly. The second edition of the Hong Kong College of Physicians Guidelines on Postgraduate Training in Internal Medicine was published in June 1998. The guidelines provided comprehensive outlines of the objectives, structure, knowledge, skill and institutional requirements of eighteen specialties. Four of these, namely, Clinical Pharmacology & Therapeutics, Infectious Disease, Palliative Medicine, and Rehabilitation, are administratively under the Board of Internal Medicine.

E&AC has gained valuable feedback from experiences of examiners (local and overseas) and trainees on the annual and exit examinations over the last five years. Recognising the rapid development of new knowledge and technology and the need of subspecialisation especially in invasive procedures, E&AC and its Specialty Boards have further updated the existing Guidelines, and the result is now published as the third edition of the College's Training Guidelines. The following points are worthy of note.

1 The Hong Kong Academy of Medicine and the Medical Council of Hong Kong have further approved the following as distinct specialties in Medicine. Qualified physicians practising these specialties are recognised as specialist in these areas. These include:

Clinical Pharmacology & Therapeutics	*Infectious Disease*
Palliative Medicine	*Rehabilitation*

2 The Board of Internal Medicine has developed two programmes of training in Internal Medicine in response to the need for ambulatory and community-orientated care:

Hospital-based Internal Medicine Physician
Community-based or Ambulatory Care Physician (ACP)

3 Three new guidelines have been revised to reflect the beginning of conjoint training programmes with other Academy Colleges. They include collaboration with microbiologists (College of Pathologists) in Infectious Diseases, laboratory immunologists (College of Pathologists) in Immunology and Allergy, and Orthopaedic surgeons (College of Orthopaedic Surgeons) in Rehabilitation.

4 Due to the complexity and the additional skills required for physicians to perform invasive procedures, new guidelines have been developed in three areas. Qualified physicians will be awarded certificates upon completion of one-year of relevant supervised training. These include:

Advance training in percutaneous cardiovascular interventions
Advance training in invasive cardiac electrophysiological studies & intervention
Training in advanced diagnostic and therapeutic gastrointestinal endoscopy

5. Due to the introduction of advance training programmes in percutaneous cardiovascular interventions and cardiac electrophysiological studies & intervention, the core training period in Cardiology has reverted back to two years, similar to the *JCIMT Guidelines* of July 1993.

6 The issues of medical ethics and clinical auditing have been emphasized strongly in the new edition of training guidelines.

7 The marking system of the Exit Assessment is enclosed for easy reference by both trainers and trainees.

We congratulate members of the E&AC and Specialty Boards on updating our College Training Programmes into the present degree of maturity within the short space of three years. The College thanks their continuing efforts and the hard work of the Programme Directors, as well as the support and understanding of the Chiefs of Service (Medicine) in public hospital and the administration of Hospital Authority, to enable these programmes to come to fruition so as to produce high calibre physicians for the medical services in Hong Kong.

Finally, the College will continue to seek reciprocal recognition of our training with similar training programmes in other parts of the world, and strive to maintain for generations into the future the excellent reputation that Hong Kong physicians now enjoy internationally.

Professor KN Lai
Chairman
Education and Accreditation Committee

Professor Richard Yu
President

January 2002

MEMBERSHIP OF THE EDUCATION AND ACCREDITATION COMMITTEE

January 2002

Chairman:	Professor KN Lai
Deputy Chairman:	Dr CS Li
Secretary:	Dr Loretta Yam
Members:	Dr LY Chong Professor Karen Lam Professor WK Lam Dr Patrick CK Li Professor Raymond Liang Dr ML Szeto Dr CP Wong Dr Lawrence KS Wong Professor KS Woo Professor Richard Yu (Ex-officio) Dr H Yuen

PREFACE TO THE SECOND EDITION

The first edition of the Hong Kong College of Physicians (HKCP) Guidelines on Postgraduate Medical Training was published in July 1993 by the Joint Committee on Internal Medicine Training (JCIMT), just in time for the inauguration of the Hong Kong Academy of Medicine in December 1993. Since then, the Education and Accreditation Committee (E&AC) of the HKCP has implemented structured programmes in the first three years of Basic Physician Training (BPT), and introduced the Trainee Log Book as well as yearly review and assessment of trainees. The Intermediate Examination (IE) of the HKCP, which can be taken after the first two years of training, continued in the form of a Joint Examination with the Membership Examination of the Royal Colleges of United Kingdom [MRCP (UK)]. Success at this examination is required before completion of the three years BPT. All successful candidates are awarded two certificates, allowing them to join both the HKCP and the Royal Colleges in UK as Members. Continuation of this valuable linkage will serve to guarantee the high international standard of our basic physician training programme.

In May 1996, the E&AC took over the function of the JCIMT, and established 12 Specialty Boards which were charged with the review of individual Training Guidelines, appointment of trainers, overseeing the trainees and their programmes, as well as accrediting Fellows in the respective specialties. This task has largely been completed. At the 70th Council Meeting held on 14 January 1997, it was determined that all higher physician trainees will be required to register with the College starting from 1 July 1997. Annual Assessment in Higher Physician Training (HPT) is to be introduced in 1998. All trainees who complete Higher Physician Training after December 1997 will have to pass an Exit Assessment in the respective specialties. Exit Assessment will be held twice yearly, and the first Assessment will take place in May-June 1998.

With experience gained in the first year of structured training, the E&AC and Specialty Boards have deliberated on and modified the 1993 JCIMT Guidelines, and the result is now published as the second edition of Training Guidelines. The following points are worthy of note.

1 The Hong Kong Academy of Medicine has resolved in 27 February 1997 that the term "Subspecialty" is to be replaced by "Specialty" to avoid misunderstanding by the community. The College duly revised our nomenclature, and the "Subspecialty Boards" were also re-named "Specialty Boards" after ratification at an Extraordinary General Meeting on 29 May 1997.

Twelve Specialty Boards have been set up to oversee the eighteen specialties.

2 The College also revised the nomenclature of the following specialties.

Internal Medicine (IM)	*Formerly General Internal Medicine*
Immunology and Allergy	*Formerly Clinical Immunology*

3 In general, the objectives, structure and contents of training in each specialty in the current Guidelines are similar to the previous edition.

4 Programme Structures are more clearly defined, especially for Medical Oncology, Infectious Disease, and Immunology and Allergy. Three new specialties, Clinical Pharmacology, Rehabilitation Medicine and Palliative Medicine have been added.

5 In some specialties where certain aspects of training require knowledge and skills in highly technical and complex procedures, special training programmes followed by Competence Certification will be introduced. Examples include: Interventional Cardiology, Blood and Marrow Stem Cell Transplantation, Therapeutic Endoscopy, etc.

6 In order to prevent fragmentation in patient care delivery and to avoid the problems of superspecialisation, the College is encouraging trainees to be dually trained in IM in addition to another Specialty. Such dual accreditation would require a longer duration of 4-5 years of HPT after completion of the first three years of BPT. The College is convinced that a trainee dually accredited in IM and a Specialty has a wide perspective in managing patients than another who is trained solely in a single specialty. Furthermore, physicians competent in IM will have a more fulfilling practice in the long run. Hence, it is worthwhile for trainees to spend the extra time and effort in obtaining accreditation in both IM and another Specialty.

7 Some related specialties also allow trainees to undertake dual accreditation programmes with corresponding longer training duration. Training programmes in each specialty should comprise not less than two years of structured training. Some dual accreditation programmes of this nature are offered by Respiratory Medicine and Critical Care Medicine (four years); Cardiology and Critical Care Medicine (five years); Haematology & Haematological Oncology and Medical Oncology (four years); Rheumatology and Immunology and Allergy (four years); Geriatric and Rehabilitation Medicine (four years), and Internal Medicine and Palliative Medicine (four years).

Members of the E&AC and Specialty Boards should be congratulated for bringing our College Training Programmes into the present degree of maturity within the short space of four years. The College would need their continued effort, the hard work of the Programme Directors and College Advisors, as well as the support and understanding of the Chiefs of Service (Medicine) in public hospital and the administration of Hospital Authority, to enable these programmes to come to fruition, to produce high calibre physicians for the medical services in Hong Kong.

Finally, the College will continue to seek reciprocal recognition of our training with similar training programmes in other parts of the world, and strive to maintain for generations into the future the excellent reputation which Hong Kong physicians now enjoy internationally.

Dr Richard YH Yu
Chairman
Education and Accreditation Committee

Professor TK Chan
President

June 1998

MEMBERSHIP OF
THE EDUCATION AND ACCREDITATION COMMITTEE

June 1998

Chairman:	Dr Richard Yu
Secretary:	Dr Loretta Yam
Members:	Professor TK Chan Professor KN Lai Professor Karen Lam Professor SK Lam Professor WK Lam Dr MF Leung Dr CS Li Dr Patrick Li Dr KK Lo Dr TF Tse Dr SP Wong Professor Jean Woo Dr EK Yeoh Dr H Yuen

PREFACE TO THE FIRST EDITION

Preamble

The Hong Kong College of Medicine was established in 1887 for the purpose of training local Chinese in Western Medicine. This pioneering effort of its founders was amongst the earliest in this part of the World. The College was incorporated as the Faculty of Medicine of the University of Hong Kong (HKU), founded in 1912, and continued as the only institute for the training of undergraduate medical students for seven decades. It was joined in 1980 by the Faculty of Medicine of the Chinese University of Hong Kong (CUHK). At present, the two Faculties produce about 300 medical graduates per annum, and both the MB, BS degree granted by HKU and the MB, ChB degree granted by CUHK are fully registrable by the General Medical Council (GMC) in United Kingdom (UK). This attests to both the standard of teaching of the two Medical Faculties as well as the standard of their graduates. While the GMC will recognise these degree fully up to 1997, the Hong Kong Medical Council needs to take over this role and seek recognition internationally for these degrees.

In Hong Kong, the compulsory internship year was introduced in 1952, and one year of supervised training in two major disciplines, Medicine or its equivalent and Surgery or its equivalent, are required before full registration. In 1988, a split internship of three months each in two related specialties was introduced, which served to broaden the experience of the intern.

Postgraduate training in Internal Medicine in Hong Kong follows the practice in the UK. An apprentice system of practical learning in Academic Units or Medical Unites in Public Hospitals, with proper supervision for a period of two to three years, would qualify a candidate to sit the MRCP examination in the UK, and gain recognition as a specialist in Medicine. The pass rate of the previous MRCP examinations (e.g. MRCP, London, Edinburgh, etc) was low, and most candidates would need four to five years experience in Medicine before they passed. In the 1970's, the Royal Colleges recognised that the MRCP examination, which can be taken after two years of clinical experience, is but an entry requirement for further training in a subspecialty. Accreditation of specialists after three to six years of higher medical training was introduced, and further refinement of guidelines has been made in recent years. The CMO Working Group on Specialist Medical Training in the UK has recently recommended the award of a Certificate of Completion of Specialist Training (CCST) on exit from an approved training programme.

Since 1985, the entire MRCP(UK) examination can be taken in Hong Kong once a year in October. The pass rate has been relatively high, approximately 30%, and the standard of the candidates is good. Hence the completion rate of basic physician training in regional public hospitals in Hong Kong is high. The problem of higher specialist training still exists. Up to now, we have depended heavily on sending our trainees overseas to Institutes in the UK, USA and Australia. This period of overseas training is followed by further in-service and/or self-learning experience in Hong Kong. This has resulted in a large pool of internationally recognised specialists and enhanced the standard of medical practice.

The Hong Kong College of Physicians was formed in October 1985 by the majority of the trained specialists in Internal Medicine. With the formation of the Academy of Medicine in August 1992, the time has come for the College of Physicians to take on the additional function of examination and advise on structured training locally. We recognise at the outset of our deliberations that overseas training is very useful for our higher specialist trainees and should be encouraged; that our training programme should be recognised internationally, and the excellent standard of our doctors should be maintained.

While the Hong Kong College of Physicians is given the power and duties of setting standard and accrediting training post and trainees, the majority of the trainees and trainers are in public hospitals, which, since 1991, have been under the auspices of the Hospital Authority. It seems reasonable that the training committee of both these organisations should work together if only to avoid duplication of effort. The Joint Committee on Internal Medicine Training (JCIMT) was formed in January, 1993 and this document is the result of deliberations of the JCIMT and its co-opted Subspecialty Advisory Groups which advised on each of the subspecialty training programmes. The membership and terms of reference of the JCIMT are listed in Appendix A. The Council of Hong Kong College of Physicians has endorsed continuation of the JCIMT and has also supported the formation of Subspecialty Advisory Committee (SACs) as subcommittees of the JCIMT, with membership and terms of references as listed in Appendix B.

TK Chan
Chairman, JCIMT

July 1993

MEMBERSHIP OF
THE EDUCATION AND ACCREDITATION COMMITTEE

July 1993

Chairman:	Dr EK Yeoh
Secretary:	Dr Loretta Yam
Members:	Dr WK Lam Dr CS Li Dr SP Wong Dr J Woo Dr R Yu

GENERAL COMMENTS AND GUIDELINES

1 **MEDICAL EDUCATION** is a continuum from Undergraduate through internship to Structured Postgraduate Medical Training, which is further divided into two stages: basic and higher professional training. In fact, self-learning aided by Continued Medical Education (CME) programmes, should continue throughout the career of a medical practitioner and re-training is desirable whether re-certification is mandatory or not. This concept is depicted in the schematic diagram as follows:-

STAGES IN TRAINING	**UNDERGRADUATE**	→	**INTERNSHIP**	→	**STRUCTURED POSTGRADUATE TRAINING BASIC-HIGHER**	→	**CME**
YEARS	**5**	→	**1**	→	**3**	→	**3 → LIFE LONG**

This should not be construed to mean that doctors are not adequately trained for their job at graduation or on exit from higher professional training, but that Medicine is complex and evolving; therefore, continued update, review and re-education are mandatory in the Medical Profession.

2 This document only deals with the **STRUCTURED POSTGRADUATE MEDICAL TRAINING** in Internal Medicine.

3 **BASIC PHYSICIAN TRAINING**, which lasts for three years, aims at a broad-based training in general internal medicine. Experience in other disciplines which interact with Internal Medicine and can enrich the trainees should be encouraged and accredited.

4 The correct **ATTITUDE** should be inculcated early; re-inforced during higher specialist training and practised throughout a physician's career. Minor differences in emphasis in each of the subspecialties are due to the different nature of illnesses treated.

5 We agreed that for the initial years, the MRCP(UK) type of examination shall be **INTERMEDIATE EXAMINATION** to test competence in basic clinical skills, attributes of a physician and an adequate level of basic knowledge in general medicine. This can be taken after 2 years' training and the HKCP has agreed on a Joint Examination with MRCP(UK) starting from February 1994, to be held twice a year, in February and October, in Hong Kong.

6 A pass in the joint MRCP(UK)-HKCP/HKCPaed examination and three years of accredited basic physician training shall be the requirement for entry to Higher Training in a Subspecialty.

7 Guidelines for **HIGHER SUBSPECIALTY TRAINING** are drawn up according to the same format. These are listed in the following sections.

8 As to the **STRUCTURE** of each programme, all the **SUBSPECIALTY ADVISORY GROUPS** support periods of training abroad as well as periods of research in relevant topics, which will be accredited up to 6 months. In certain cases, training programmes may be approved on an individual basis.

9 The **CONTENTS** of each subspecialty need to be updated regularly because of the rapid progress of Medicine.

10 **INSTITUTIONAL REQUIREMENTS:** Flexibility in training programmes should be entertained because, for most cases, completion of specified training may require training in more than one institution.

11 **ASSESSMENT OF TRAINERS, EVALUATION OF TRAINING PROGRAMMES** in each subspecialty should, as far as possible, use similar guidelines. Assessment of trainees would be based on COMPETENCE and therefore best performed by the individual trainers involved.

12 **ASSESSMENT FORMS AND CHECK LIST** for each subspecialty will change from time to time and trainees and trainers should use the most updated forms. Suggested forms are appended at the end of this document.

13 The processes for **COMPLAINTS AND APPEALS** are as follows.

1 Complaints on training facilities, supervision or other related matters can be made by the trainees either at the regional level, through Programme Directors and Regional College Advisors, or directly to the Council of the HKCP.

2 Appeals against unsatisfactory progress reports, discontinuation of training and failure of final accreditation should be made directly to the HKCP Council.

14 These Guidelines are written for **TRAINEES, TRAINERS** and **EXECUTIVES OF INSTITUTES** and will be regularly updated.

TK Chan
Chairman, JCIMT

July 1993

JCIMT OF HONG KONG COLLEGE OF PHYSICIANS AND THE COORDINATING COMMITTEE IN INTERNAL MEDICINE OF HOSPITAL AUTHORITY

A TERMS OF REFERENCE

1 To formulate guidelines for basic physician training.
2 To formulate guidelines for higher medical training in the subspecialties.
3 To advise on the format of examination and continued assessment of trainees.
4 To advise on institutional requirements for training posts.
5 To recommend procedures for monitoring and accreditation of trainees and training programmes.
6 To keep the above issues under constant review.

B MEMBERS

HKCP Education & Accreditation Committee

Chairman	Dr EK Yeoh
Members	Dr WK Lam Dr Loretta Yam Dr Richard Yu

HA-CCIM Training Subcommittee

Chairman	Prof TK Chan (Chairman, Dept of Medicine, HKU)
Members	Prof D Anderson (Chairman, Dept of Medicine, CUHK) Dr M Tsang (HK)) Dr SP Wong (Kowloon)) Regional Training Directors Dr Jean Woo (NTE)) Dr SCR Kapoor (NTW)) Dr CS Kay/Dr KM Lam (Kowloon) Co-opted member Dr KO Cheung (Kowloon) Co-opted member Dr Lawrence Lai (DCDO, Professional Training)
Secretary	Mr Wong Tai Wai (Senior Human Resources Manager, T&D)

Prof TK Chan acted as Co-ordinator/Chairman of JCIMT

SUBSPECIALTY ADVISORY COMMITTEEs (SACs)

These are standing subcommittees of the JCIMT.

TERMS OF REFERENCE

1 To determine and review the guidelines for the training of subspecialties in Internal Medicine.

2 To consider and recommend trainees for accreditation.

3 To consider training posts in the subspecialty submitted by Institutions and Units and recommend accreditation status.

4 To consider and advise on any matter referred from the JCIMT.

MEMBERSHIP

Three members recommended by JCIMT (at least one being a member of JCIMT) and three members nominated by subspecialty association and/or academic units and approved by Council of HKCP.

The subspecialty association of various subspecialties are listed below and this list will be reviewed periodically.

SUBSPECIALTY	SUBSPECIALTY ASSOCIATIONS
Cardiology	Hong Kong College of Cardiology Hong Kong Cardiology Society
Dermatology and Venereology	Hong Kong Society of Dermatology and Venereology
Diabetes, Endocrinology and Metabolism	Society for the Study of Endocrinology, Metabolism and Reproduction
Gastroenterology and Hepatology	Hong Kong Society of Gastroenterology Hong Kong Society for the Study of Liver Diseases
Geriatrics	Hong Kong Geriatric Society
Haematology	Hong Kong Society of Haematology
Neurology	Hong Kong Neurological Society
Nephrology	Hong Kong Society of Nephrology
Respiratory Medicine	Hong Kong Thoracic Society American College of Chest Physicians (Hong Kong & Macau Chapter)
General Internal Medicine (including Infectious Diseases, Medical Oncology, Clinical Pharmacology, Rheumatology Immunology & Allergy)	Hong Kong Cancer Chemotherapy Society Hong Kong Society of Rheumatology
Critical Care Medicine	
Accident and Emergency Medicine	
Rehabilitation Medicine and Hospice Care	

SUBSPECIALTY ADVISORY GROUPS (SAG's) FOR FORMULATION OF GUIDELINES

SAG	MEMBERS
Cardiology	Dr SP Wong (Chairman) Dr CH Cheng, Dr PTH Ko, Dr CP Lau, Dr WH Leung, Dr GYK Mak, Dr PWY Pau, Dr CO Pun, Dr YT Tai
Critical Care Medicine	Dr Jane CK Chan (Chairman) Dr Mary Ip, Dr WK Lam, Dr Loretta Yam
Dermatology & Venereology	Dr KK Lo (Chairman) Dr Avery Chan, Dr LY Chong, Dr CF Lai
Endocrinology, Diabetes and Metabolism	Dr Karen Lam (Chairman) Prof D Anderson, Dr C Cockram, Dr J Ma, Prof R Young
Gastroenterology & Hepatology	Prof SK Lam (Chairman) Dr CK Chan, Dr CL Lai, Dr Nancy Leung, Dr Joseph Sung, Dr CW Tsang
Geriatric Medicine	Dr Jean Woo (Chairman) Dr NS Ng
Haematology & Haematological Oncology (Haem/Onc)	Prof TK Chan (Chairman) Dr CH Chan, Dr LC Chan, Dr EKW Chiu, Dr RHS Liang
Infectious Disease	Dr CW Tsang (Chairman) Dr WK Kwan, Dr JY Lai
Clinical Pharmacology	Prof CR Kumana, Dr J Critchley
Medical Oncology	Prof PJ Johnson (Chairman) Dr EKW Chiu, Dr J Critchley, Dr CL Lai, Dr WK Lam, Dr RHS Liang, Dr M Sham
Nephrology	Dr CS Li (Chairman) Dr IKP Cheng, Prof KN Lai, Dr R Yu
Neurology	Dr YL Yu (Chairman) Dr YW Chan, Dr CM Chang, Dr YS Chan, Dr R Kay, Dr Patrick Li

Respiratory Medicine	Dr WK Lam (Chairman) Dr Jane Chan, Dr WNK Chan, Dr Mary Ip, Dr CY Tse, Dr L Yam, Dr WW Yew
Rheumatology	Dr CS Lau (Chairman) Dr Edmund Li, Dr Raymond Wong
Clinical Immunology	Dr SS Lee, Dr J Lawton

The assistance of the above Fellows of the Hong Kong College of Physicians is gratefully acknowledged.

II. Basic Physician Training

II. BASIC PHYSICIAN TRAINING

GENERAL GUIDELINES

1 Entry requirements

The trainee should possess MBBS, MBChB or equivalent plus one year of internship experience. Prior experience in one or more related disciplines may be accredited as detailed in the *Training Guidelines* under (II) Structure. Overseas Basic Physician Training experience will only be assessed by the Basic Physician Board when the Hong Kong applicant has a full-time structured training post in the two universities or the Hospital Authority in Hong Kong.

2 Programme Director

2.1 A Programme Director shall be appointed by the Council of the Hong Kong College of Physicians to oversee Basic Physician Training within each service network of acute and extended care institutions. Depending on the number of institutions within the service network, Deputy Programme Directors shall be appointed to assist the Programme Director in training-related matters. Assistant Programme Directors shall also be appointed to supervise Basic Physician Training within individual hospitals and networking institutions.

2.2 The Programme Director shall be responsible for enforcing the training requirements, facilitating and coordinating training rotation within the service network, collating and reviewing Trainee assessment reports submitted by Trainers, and advising Trainees, Trainers and institutions on training-related matters.

2.3 In the case of Trainees undergoing training rotations across service networks, the Programme Director of the recipient network shall be responsible for overseeing the training progress and monitoring and reporting on performance during the elective rotation. The original Programme Director shall be responsible for overall coordination of the Trainees' training programme including elective rotations within and across service networks.

3 Assessment of Trainees

3.1 Trainees should register with the College as soon as possible when they join a Basic Physician Training Programme. All prior training experience in related disciplines or overseas institutions should be submitted to the Basic Physician Board for vetting and consideration of accreditation.

3.2 Trainees should use a Log Book to maintain records of their experience in bedside diagnostic and therapeutic procedures and attendance at educational activities. Their Trainers and Programme Directors should periodically review their Log Books to assess training progress and recommend remedial action where appropriate.

3.3 Trainees should submit 6-monthly reports of their training progress to their Trainers for assessment and certification and then to the respective Programme Directors for review. Both Programme Director and Trainee should keep a copy of the training records. Copies of these reports may also be submitted to the Department Head and Hospital Management where appropriate.

3.4 The Programme Directors should regularly review the assessment reports of their Trainees, particularly in case of suboptimal performance and when certifying completion of Basic Physician Training.

3.5 Programme Directors should counsel Trainees with unsatisfactory training progress and submit relevant reports and recommended remedial action through the Basic Physician Board to the Education and Accreditation Committee, as well as to the Trainees' Department Heads and Hospital Management.

4 Accreditation of Trainers

4.1 A Trainer must be a Fellow who possesses at least two years of relevant post-Fellowship experience and is accredited in Internal Medicine and/or a Specialty under the Hong Kong College of Physicians.

4.2 A Trainer must be actively engaged in, and actively contributing to, full-time institutional practice in Internal Medicine and/or its specialties in accredited training programme(s).

4.3 A Fellow cannot perform the role of a Trainer in Basic Physician Training while he/she is undergoing training in a medical specialty.

5 Accreditation of Training Programme

5.1 The Education and Accreditation Committee of the Hong Kong College of Physicians is empowered by the Council to accredit individual training programmes, and monitor their performance through review of reports on individual Trainees and visits to the respective institutions.

5.2 Training programmes must be organised by accredited Trainers. The Trainer to Trainee ratio should not be lower than 1:2 at any time.

5.3 Training institutions shall be accredited based on evaluation of their specialty casemix, spectrum of disease, emergency admissions, patient volume and turnover, quality of training programme, and institutional infrastructure and facilities.

5.4 The College will periodically review and publicise the status and duration of accreditation of individual training programmes in accordance with their conformity to College requirements.

6 Complaints and appeals

6.1 Avenues shall be open to Trainees to lodge complaints regarding training facilities, programme content, Trainer supervision or related matters to the Basic Physician Board through their Programme Directors and directly to the Council of the Hong Kong College of Physicians.

6.2 Appeals against unsatisfactory training assessment reports, discontinuation of training and failure at the Intermediate Examination shall be directed to the Council of the Hong Kong College of Physicians.

TRAINING GUIDELINES

I) OBJECTIVES

1 To provide a broad experience in General Internal Medicine, including its inter-relationship with other disciplines.

2 To enhance medical knowledge, clinical skills, and competence in bedside diagnostic and therapeutic procedures.

3 To achieve the professional requirements of the Intermediate Examination and prepare for Higher Physician Training in one or more specialty in Internal Medicine.

4 To cultivate the correct professional attitude and enhance communication skill towards patients, their families and other healthcare professionals.

5 To enhance sensitivity and responsiveness to community needs and the economics of health care delivery.

6 To enhance critical thinking, self-learning, and interest in research and development of patient service.

7 To cultivate the practice of evidence-based medicine and critical appraisal skills.

8. To inculcate a commitment to continuous medical education and professional development.

II) STRUCTURE

The basic physician training programme should be organised with flexibility. Exposure to various medical specialties and other related disciplines is encouraged.

1 The core programme consists of three years of supervised training.

2 Trainees should have at least two years of training in units dealing with general medical problems, of which at least one year should be spent in a unit dealing with a comprehensive range of acute medical emergencies. They should also attend general and specialty medical clinics for no fewer than five hours per week throughout the three years of training, unless they are engaged in training in non-physician specialties or highly specialized physician training units like Accident and Emergency Department and Intensive Care Unit. The requirement for general and specialty medical clinics exposure applies to trainees working in all (acute or non-acute) training institutions.

3 Trainees should have no less than 3 months' working experience in General Medical Units of Hospitals with Obstetric and acute surgical services in their 6 years of physician training (BPT+HPT) [Note: This applies to Trainees who start BPT from 1 July 2009 onwards]. They should also possess the knowledge of handling medical problems and preparation of patients requiring obstetric and surgical operations or procedures.

4 Exposure to various medical specialty services in parallel with duties in general medicine should be encouraged. Trainees should preferably have the opportunity for training rotation to critical care settings including ICU/CCU/HDU and rehabilitation services.

5 Supervised training in a full-time specialty service under Department of Medicine approved by the College may be accredited for up to six months each for a total of not more than 12 months. Examples include Bone Marrow Transplant, Coronary Care, Dermatology, Geriatric Outreach Programmes, Intensive Care, Medical Oncology and Renal Dialysis Service.

6 Supervised training in related disciplines may be accredited for a total of not more than 12 months, provided there is no overlap with full-time specialty postings during training within the Department of Medicine, as stated in Item 5 above. Training experience in Anaesthesiology, Clinical Oncology, Dermatology, Emergency Medicine, Paediatrics, Pathology, Psychiatry and Radiology may be accredited for up to six months each. Training experience in ICU/CCM in a unit (either within Department of Medicine or independent department) may be accredited for up to twelve months, provided that six months' training takes place in ICUs with at least two accredited CCM Trainers. Family Medicine training modules in Internal Medicine, Emergency Medicine, Paediatrics and Psychiatry may also be accredited for up to six months each, up to a total of not more than 12 months. Such training modules must be conducted in programmes accredited by the respective Colleges and is subject to assessment by the Basic Physician Board with regard to their training element and clinical exposure.

7 Trainees should acquire competence through supervised performance of the required numbers of diagnostic and therapeutic procedures during their Basic Physician Training.

8 Mandatory Scientific Meetings and Web-based Learning

8.1 Trainees should attend the mandatory Scientific Meetings during the course of their Basic Physician Training. The 3 recognized Scientific Meetings are the Annual Scientific Meeting (ASM) of the HKCP, Advances in Medicine (AIM) organized by CUHK and Hong Kong Medical Forum (HKMF) organized by HKU. Trainees are required to attend:

a. at least one meeting a year and a total of 6 out of these 9 meetings during the 3 years of their training (or calculated on a *pro rata* basis if the required training as registered with the College is below 3 years. If the training period is more than 3 years, the trainees should attend 2 out of 3 meetings per additional year).

b. at least one HKCP ASM over any 2-year period

Trainees who have a deficit of 3 or less of such conferences/forums will be allowed to make up for the deficiency during their Advanced Internal Medicine/Geriatric Medicine (as single specialty or broad-based specialty) training. Trainees who have a deficit of more than 3 meetings will be subjected to possible penalty at the discretion of the E&AC.

8.2 The Self-Learning Tool (SLT) is a web-based interactive training modules jointly developed by the College and the Hospital Authority. It consists of clinical scenarios in different subspecialties with the aim of helping the trainees to identify and prevent risks in clinical decision and ultimately improve in their clinical management. SLT questions are released in 3 cycles every year on the first day of March, July and November. Trainees are required to complete all the SLT questions of each cycle before the release of the next cycle of questions. Failure to fulfil this requirement will mandate a remedial exercise to be held at the College Chamber and a registration fee will be imposed. Failure to complete a remedial exercise will result in deferral for admission to College membership for 3 months and the trainee must in addition complete the remedial exercise.

8.3 Core Medical Skill Course (CMSC)

Core Medical Skill Course (CMSC) is a structured training course organized jointly by Hong Kong College of Physicians and Hospital Authority for Basic Physician Trainees, with the contents listed as follows:

(1) Basic procedural sedation

(2) Basic airway management and ventilator care

(3) USG guided central line insertion

(4) USG guided chest drain insertion

(5) Lumbar puncture

(6) Bone marrow biopsy

The basics of procedural sedation are covered in a lecture and training of the other items includes hands-on training. Three identical 1-day courses are organized per year. All trainees who start Basic Physician Training in or after July 2020 must attend the CMSC during the course of their Basic Physician Training. Trainees who cannot attend the course during Basic Physician Training will be allowed to make up for the deficiency during the first year of their Higher Physician Training. Trainee who fail to fulfil this requirement will be subjected to possible penalty at the discretion of the E&AC.

III) CONTENTS

(A) Knowledge

1 Aetiology, clinical manifestation, disease course and prognosis, investigation and management of common medical diseases.

2 Scientific basis and recent advances in pathophysiology, diagnosis and management of medical diseases.

3 Spectrum of clinical manifestations and interaction of multiple medical diseases in the same patient.

4 Psychological and social aspects of medical illnesses.

5 Effective use and interpretation of investigation and special diagnostic procedures.

6 Critical analysis of the efficacy, cost-effectiveness and cost-utility of treatment modalities.

7 Patient safety and risk management

8 Medical audit and quality assurance

9 Ethical principles and medicolegal issues.

(B) Skills

1 Ability to take a detailed history, gather relevant data from patients, and assimilate the information to develop diagnostic and management plans.

2 Competence in eliciting abnormal physical signs and interpreting their significance.

3 Ability to relate clinical abnormalities with pathophysiologic states and diagnosis of diseases.

4 Ability to select appropriate investigation and diagnostic procedures for confirmation of diagnosis and patient management.

5 Skills in performing important bedside diagnostic and therapeutic procedures and understanding of their indications. Trainees should acquire competence through supervised performance of the required number of each of the following procedures during the 3-year training period and should record them in the Trainee's Log Book.

At least 10 times during the three-year training period:

Cardiopulmonary resuscitation
Central venous cannulation
Marrow aspiration and trephine biopsy
Abdominal paracentesis
Pleural tapping and biopsy
Endotracheal intubation

At least 6 times during the three-year training period:
Lumbar puncture
Chest drain insertion

6 Ability to present clinical problems and literature review in grand rounds and seminars.

7 Good communication skills and interpersonal relationship with patients, families, medical colleagues, nursing and allied health professionals.

8 Ability to mobilise appropriate resources for management of patients at different stages of medical illnesses, including critical care, consultation of medical specialties and other disciplines, ambulatory and rehabilitative services, and community resources.

(C) Attitudes

1 The well-being and restoration of health of patients must be of paramount consideration.

2 Empathy and good rapport with patient and relatives are essential attributes.

3 An aspiration to be the team-leader in total patient care involving nursing and allied medical professionals should be developed.

4 The cost-effectiveness of various investigations and treatments in patient care should be recognised.

5 The privacy and confidentiality of patients and the sanctity of life must be respected.

IV) INSTITUTIONAL REQUIREMENTS

To be recognised for Basic Physician Training, a medical department in an institution or a rotational programme in more than one institution should fulfil the following criteria:

1 Sufficient number of beds to admit patients of both genders and with a variety of medical diseases.

2 Organised ambulatory care, outpatient follow-up clinics and link with extended care facilities for rehabilitation and chronic care.

3 Facilities for care of critically ill patients, e.g. CCU, ICU, HDU.

4 Consultations from a broad range of Surgical disciplines.

5 Sufficient number of Trainers directly supervising trainees in patient management during regular ward rounds, emergency calls, ambulatory care and outpatient services.

6 Resident emergency duties for the trainees at a frequency of at least four times per month.

7 Regular medical audits to review the outcome of treatment and interventional procedures, and referral to the pathologists to perform autopsies to resolve diagnostic problems.

8 Laboratory diagnostic support, including chemical pathology, immunology, haematology, microbiology and histopathology services.

9 Diagnostic imaging support, including radiology, ultrasonography, computed tomography, magnetic resonance imaging and nuclear medicine imaging.

10 Maintenance of complete and high quality medical records with easy and prompt accessibility at all times.

11 Structured education programmes including case presentation, journal club and grand round, X-ray meeting and clinicopathological conference.

12 Availability of the following facilities:

12.1 Residential facilities for on-call duties

12.2 Medical library with core journals in Internal Medicine and computerised literature search systems.

12.3 Meeting rooms with adequate facilities including audiovisual aids for educational activities.

12.4 Information technology facilities for preparation of clinical presentations/ seminars.

V) INTERMEDIATE EXAMINATION

The Intermediate Examination of the Hong Kong College of Physicians is held jointly with the Membership of the Royal Colleges of Physicians of the United Kingdom [MRCP(UK)] Examination. Applicants for PACES must have passed the MRCP(UK) Part I Examination within 7 years, or have exemption from it, and have spent not less than 12 months after registration in continuing care of emergency medical patients. It is recommended that candidates have commenced 18 months in Basic Physician Training before attempting PACES. In addition to the award of MRCP(UK) certificate, an Intermediate Examination Certificates will be awarded by the Hong Kong College of Physicians to candidates who have successfully completed all three sections of the Intermediate Examination. The maximum number of attempts is 6 for each Part. Further attempts may be granted after documentation of additional training experience.

VI) DEFERRAL OF TRAINING

1 Suspension of training

Trainees wishing to suspend their training should discuss with their Chiefs of service (COS), Trainer and Program Director, and should complete Part 1 and seek approval from COS to complete Part 2 of Section A of the Application Form (AppSuspenF 291013) to be submitted to the BPT Board at least 8 weeks in advance of the expected commencement of suspension (except for urgent and unusual circumstances which need separate approval by the Board). The period of suspension must be above six months and below three years. Extension of suspension period is normally not allowed.

2. Leave of Absence

If trainees require long periods of leave of absence (sick leave, maternity leave, and other types of leave excluding study leave) in addition to their annual leave, full accreditation of training is only awarded if the cumulative leave does not exceed three months over the 3-year BPT training period.

VII) COMPLETION OF TRAINING

After completing three years of accredited Basic Physician Training and passing the Intermediate Examination, the trainee should report, through the Programme Director, to the Basic Physician Board for certification of training completion. Within 3 months after certifying completion of Basic Physician Training, the trainee should apply to the College for admission as Member of the Hong Kong College of Physicians before proceeding to Higher Physician Training in one or more specialty in Internal Medicine. Failure to apply for College membership will lead to postponement of HPT till the Membership is confirmed.

Hong Kong College of Physicians

(Incorporated in Hong Kong with limited liability)

Programme Director of Basic Physician Training

Programme Directors should be in full-time practice as Trainers in accredited training programmes of the respective specialty.

Functions and Responsibilities

1 To advise and endorse basic physician training programmes submitted from training units within the hospital/hospital cluster.

2 To liaise with Trainers, Chiefs-of-Service and hospital administration on appropriate postings and other training requirements.

3 To liaise with Programme Directors of other hospitals/hospital clusters and advise on trainee rotation in cases which so require. In the case of Trainees undergoing training rotations across service networks, the Programme Director of the recipient network shall be responsible for monitoring the training progress and reporting on performance during the elective rotation. The original Programme Director shall be responsible for overall coordination of the Trainee' training programme including elective rotations within and across service networks.

4 To provide the Education & Accreditation Committee with authoritative evaluation on the appropriateness and effectiveness of basic physician training & the respective training programmes within the hospital/hospital cluster.

5 To co-ordinate basic physician training

- 5.1 To recommend admission of candidates into the basic physician training programme.
- 5.2 To hold regular meetings with trainees to discuss issues of training.
- 5.3 To monitor training programmes and progress of training.
- 5.4 To counsel failed trainees.
- 5.5 To review trainees' records and certify satisfactory completion of training.

6 To receive suggestions and complaints from trainers and trainees and to recommend to the Education and Accreditation Committee, through the Basic Physician Board, appropriate response or action.

7 To assume a teaching and motivating role in basic physician training, through direct contact with trainees and trainers within the hospital/hospital cluster.

8 To be responsible for all other matters pertaining to basic physician training within the hospital/hospital cluster.

9 To hold office for a period of 2 years, subject to renewal.

Accountability

The Programme Director is accountable to the Basic Physician Board, the Education & Accreditation Committee and the Council of the Hong Kong College of Physicians.

III. Higher Physician Training

SPECIALTY BOARDS

1 **Advanced Internal Medicine**
Clinical Pharmacology and Therapeutics
Clinical Toxicology
Palliative Medicine

2 **Cardiology**

3 **Critical Care Medicine**

4 **Dermatology and Venereology**

5 **Endocrinology, Diabetes and Metabolism**

6 **Gastroenterology and Hepatology**

7 **Genetics and Genomics (Medicine)**

8 **Geriatric Medicine**

9 **Haematology and Haematological Oncology**

10 **Infectious Disease**

11 **Medical Oncology**

12 **Nephrology**

13 **Neurology**

14 **Rehabilitation**

15 **Respiratory Medicine**

16 **Rheumatology**
Immunology and Allergy

General Guidelines

1 Entry Requirements

Three years of accredited structured basic training in Internal Medicine, plus a pass in the Intermediate Examination of the Hong Kong College of Physicians or equivalent qualification and Membership of the Hong Kong College of Physicians.

2 Assessment of Trainees

2.1 Continuous assessment will be undertaken by the respective trainers. Standard assessment forms should be completed at six-monthly intervals, or at the end of a training period under a specific trainer if the period falls short of six months. A log book to record clinical and procedural experience should be used for assessment of competence.

Trainees are encouraged to keep up with medical advances. They should understand that teaching and research are important activities in the advancement of knowledge.

2.2 Log book

A record of clinical and procedural training should be kept by each trainee for signature by his/her trainer(s) and regular review by the respective Programme Directors, as well as by the Interim & Exit Assessment Panels.

2.3 A Programme Director in each Region shall be appointed by the Council to oversee the Higher Physician Training, to be responsible for collation of assessments from various trainers throughout the training period.

2.4 The Programme Director shall be responsible for the enforcement of training requirements, facilitation and coordination of training rotations within the respective service network, collation and review of Trainee Assessment Reports submitted by Trainers, and advice to Trainees, Trainers and institutions on training-related matters.

2.5 The Programme Director shall regularly review the assessment reports of the Trainees, in particular when suboptimal performance is identified.

2.6 The Programme Director and a panel appointed by the relevant Specialty Board shall be responsible for yearly review of the trainee's progress. The trainee must attain Grade 5 or above in the evaluation of clinical and professional competence before he/she can proceed with further training.

2.7 Exit Assessment

At the end of the training, a final appraisal of each trainee shall be conducted by the respective Specialty Boards, in the form of an assessment of a dissertation (where appropriate), oral examination and review of log book and previous Interim Assessments, to determine his/her competence before certification of specialist status.

3 Accreditation of Trainers

3.1 A Trainer is normally a Specialist registered with The Medical Council of Hong Kong and an accredited Fellow of the Hong Kong College of Physicians who has been in active full-time institutional practice in the respective specialty(s) for not less than two years after specialist accreditation. A Trainer cannot be at the same time undergoing Higher Physician Training in any specialty within the College.

3.2 A Trainer must be actively engaged in full-time institutional practice of Internal Medicine and/or its specialties and be able to conduct training in accredited training programmes, and is recognized by peers to be actively contributing to the discipline.

3.3 As stated under Sections 3.1 and 4.1, a Trainer appointed by the Hong Kong College of Physicians is normally a College-accredited Fellow practising at College-accredited training unit(s). Under special circumstances, Fellows of Academy Colleges or other Specialists registered with The Medical Council of Hong Kong who do not otherwise meet the usual College criteria for Trainer status may, upon recommendation by the Education & Accreditation Committee, be invited by the College to serve as Trainers in specific professional areas for defined periods, and such training may be conducted at locations other than College-accredited training units, subject to approval by the College Council.

3.4 A Trainer should spend at least 50% of his/her time in the specialty and a Fellow cannot hold Trainer status in more than two specialties.

3.5 Trainers are appointed by the Education & Accreditation Committee subject to approval by the College Council.

4 Evaluation of the Training Programme

4.1 Training programmes must be organised by Trainers who have not less than two years' experience after the award of certification in a specialty, and are in active practice in accredited training units. The minimum trainer to trainee ratio is 1:2.

4.2 Training programmes rather than specific units or institutions shall constitute the foundation of accreditation. Supervision by more than one trainer and in more than one unit is encouraged. Units which fail to satisfy all training requirements for an individual specialty may formulate programmes which are networked with other hospitals.

4.3 The Education and Accreditation Committee of the HKCP, through its Specialty Boards, is empowered by the Council to evaluate every training programme, and to monitor its results through review of reports on individual trainees and visits to the respective institutions.

4.4 Accredited programmes will be publicised regularly by the College, and the status of each programme, e.g. full, provisional, suspension and withdrawal of accreditation, will be used to ensure institutional conformity to College requirements.

4.5 Overseas training

This is encouraged but prior approval should be obtained from the respective Specialty Boards. The duration of recognised overseas training should normally be six months, though a maximum of 12 months of overseas training may be recognised on a case-by-case basis upon the discretion of the relevant Specialty Boards.

4.6 Clinical & Laboratory Research

Relevant research programmes are encouraged and may be accredited for a maximum of six months in each 3-year Higher Physician Training programme.

5 Complaints and Appeals

5.1 Channels for complaints on training facilities, supervision or other related matters should be made available to trainees both at the regional level through Programme Directors and Specialty Boards, and directly to the Council of HKCP.

5.2 Appeals against unsatisfactory progress reports, discontinuation of training and failure of final accreditation should be made directly to the Council of HKCP.

6 Training Programmes

Apart from Dermatology and Venereology, all programmes for Higher Physician Training comprise 24 months of core training and 12 months of optional or elective training. For Dermatology and Venereology, the training programme consists of 36 months of core training.

There will be a formal Interim Assessment after at least 12 months of training in a specialty, and an Exit Assessment on completion of training. Every candidate must have attained a pass in Interim Assessment before he/she is allowed, after at least another 12 months of training, to undergo Exit Assessment in that specialty. The Interim Assessment takes the form of a clinical viva by an Assessment Board while the Exit Assessment consists of a dissertation (with the exception of Advanced Internal Medicine (AIM) in the context of broad-based specialty in concurrent or sequential training) and a clinical viva. (Please see p.165 for details).

It should be noted that a minimum of one dissertation per trainee is required before specialist accreditation and attainment of Fellowship status in the Hong Kong College of Physicians.

6.1 For Higher Physician Trainees

All training programmes for Higher Physician Trainees must include a broad-based specialty with or without one other specialty, apart from Dermatology and Venereology for which single specialty training is allowed.

The broad-based specialty is either AIM or Geriatric Medicine. For trainees undergoing dual training in AIM and Geriatric Medicine, AIM is considered to be the broad-based specialty.

There are three possible types of training programmes:

6.1.1 **Concurrent training in a broad-based specialty and one other specialty**

This would require a minimum of four years of supervised training.

To be considered for dual accreditation, each four-year Higher Physician Training programme should comprise 24 months (cumulative) of core training in a broad-based specialty and 24 months (cumulative) of core training in one other specialty.

Dual training programmes must be approved by the Specialty Board of the broad-based specialty as well as that of the other specialty. Such a programme will normally consist of periods in which 50% of time is spent in the broad-based specialty and the other 50% in the other specialty, as well as periods of full time training in either one or both of the specialties.

A trainee may apply to undergo the Exit Assessment in one of the two specialties after not less than three years of Higher Physician Training, provided the full period of 24 months of core training has been completed in that specialty. Exit Assessment for the second specialty may be undertaken at the end of the fourth year of training, again with the provision that the required period of core training has been completed.

Special requirements for concurrent training in a broad-based specialty and specific specialties are as follows:

(a) Dermatology and Venereology: The training programme comprises 24 months (cumulative) of core training in a broad-based specialty and 36 months (cumulative) of core training in Dermatology and Venereology.

(b) Palliative Medicine: The broad-based specialty must be AIM.

(c) Palliative Medicine and Rehabilitation: Trainees must have completed training and passed the Exit Assessment in a broad-based specialty before they are eligible to be College Fellows (Please see details of Training Programmes in these two specialties: Pages 141-145 and 146-153). Trainees who opt to take the Exit Assessment in Palliative Medicine or Rehabilitation at the end of three years of Higher Physician Training (i.e. as the first specialty) are eligible to be admitted as College Fellow only after they have also completed training and passed the Exit Assessment of their broad-based specialty, i.e. at least four years after commencement of Higher Physician Training. Should trainees in Palliative Medicine or Rehabilitation wish to become College Fellow three years after commencing Higher Physician Training, they may opt to take the Exit Assessment with dissertation in their broad-based specialty as the first specialty. It should be noted that such trainees would still

be required to submit a second dissertation for their subsequent Exit Assessment in Palliative Medicine or Rehabilitation.

6.1.2 **Sequential training in a broad-based specialty and one other specialty**

This would require a minimum of five years of supervised training.

To be considered for dual accreditation, each five-year Higher Physician Training programme should comprise 36 months training in one of the two specialties followed by 24 months of core training in the remaining specialty.

Such a trainee may apply to undergo the Exit Assessment in the first specialty after not less than three years of Higher Physician Training provided the full period of 36 months of training has been completed in that specialty. Exit Assessment for the remaining specialty may be undertaken at the end of the fifth year of training with the provision that the required period of core training of the remaining specialty has been completed.

Special requirements for sequential training in a broad-based specialty and Dermatology and Venereology are as follows:

- A sequential training programme comprising 36 months of core training in Dermatology and Venereology as the first specialty would be followed by 24 months of core training in a broad-based specialty, thus involving a minimum of five years of supervised training.
- A sequential training programme comprising 36 months of training in a broad-based specialty as the first specialty would still be followed by 36 months of core training in Dermatology and Venereology. This training programme would thus require a minimum of six years of supervised training before completion.

6.1.3 **Single specialty training**

Single specialty training can only be allowed for a broad-based specialty (AIM or Geriatric Medicine) or Dermatology and Venereology. This single specialty training programme would require a minimum of three years of supervised training before completion.

6.2 **For Fellows Accredited in at least one specialty**

6.2.1 **Fellows accredited in any one or more specialties other than a broad-based specialty**

Such Fellows may opt to undertake any one of the following three possible types of training programmes.

6.2.1.1 Sequential training in a broad-based specialty and a selected specialty: Fellows accredited in any one or more specialty other than a broad-based specialty may opt for sequential

training in another specialty, provided that they undertake a concurrent or sequential core training programme of the selected specialty together with a broad-based specialty in accordance with 6.1.1 and 6.1.2 above. The training programme will thus comprise 48 months, being the sum of 24 months of core training in each specialty.

Irrespective of the selected specialty and training programme, such Fellows are required to have completed the core training requirements and passed the Exit Assessment in the broad-based specialty as their first specialty before they can undergo the Exit Assessment of the other specialty.

It should be noted that such Fellows are not required to submit a dissertation for the Exit Assessment in AIM if they select AIM as the broad-based specialty. However, a dissertation for the Exit Assessment is required if Geriatric Medicine is selected as the broad-based specialty.

6.2.1.2 Sequential training in a broad-based specialty only: Fellows accredited in any one or more specialties other than a broad-based specialty may undertake sequential training in a broad-based specialty only. The training programme will thus comprise 24 months of core training in the broad-based specialty. The requirement for submission of dissertation is the same as that described under 6.2.1.1.

6.2.1.3 Fellows accredited in any one or more specialties other than a broad-based specialty may also undertake sequential training in Dermatology and Venereology only without the need for training in a broad-based specialty. The training programme will thus comprise 36 months of core training in Dermatology and Venereology.

6.2.2 **Fellows accredited in a broad-based specialty with or without another specialty**

Fellows accredited in a broad-based specialty with or without another specialty may undertake sequential training in another specialty by completing 24 months of core training requirement of the selected specialty.

In case the specialty selected is Dermatology and Venereology, the sequential core training programme comprises 36 months of core training.

Summary of Training Programmes for Higher Physician Trainees and Fellows

Trainee Status	Training Programme	Specialty(ies) selected (minimum duration of training in years)	Minimum total duration of training in years
Higher Physician Trainee	Concurrent Training	A broad-based specialty (2) + one other specialty* (2)	4
		A broad-based specialty (2) + Dermatology and Venereology (3)	5
		AIM (as the broad-based specialty) (2) + Geriatric Medicine (2)	4
	Sequential Training	One other specialty* (3) followed by a broad-based specialty (2)	5
		A broad-based specialty# (3) followed by one other specialty* (2)	5
		Dermatology and Venereology (3) followed by a broad-based specialty (2)	5
		A broad-based specialty# (3) followed by Dermatology and Venereology (3)	6
		AIM (as the broad-based specialty)# (3) followed by Geriatric Medicine (2)	5
		Geriatric Medicine (3) followed by AIM (as the broad-based specialty) (2)	5
	Single Specialty	AIM (3) or Geriatric Medicine (3) or Dermatology and Venereology (3)	3
Fellow accredited in any one or more specialties other than a broad-based specialty	Concurrent Training	A broad-based specialty (2) + one other specialty*^(2)	4
		A broad-based specialty (2) + Dermatology and Venereology^(3)	5
	Sequential Training	A broad-based specialty (2) + one other specialty*^(2)	4
		A broad-based specialty (2) + Dermatology and Venereology^(3)	5
		A broad-based specialty (2)	2
		Dermatology and Venereology (3)	3
Fellow accredited in a broad-based specialty with or without another specialty	Sequential Training	Any specialty* (2)	2
		Dermatology and Venereology (3)	3

* Apart from Dermatology and Venereology

\# If trainees opt to select AIM as the broad-based specialty AND wish to become College Fellows three years after commencing Higher Physician Training, they are required to submit dissertations in the AIM Exit Assessment.

^ Irrespective of the selected specialty, such Fellows are required to have completed core training and passed the Exit Assessment in the broad-based specialty as the first specialty before they can undergo the Exit Assessment of the other specialty

Hong Kong College of Physicians

(Incorporated in Hong Kong with limited liability)

Specialty Programme Director of Higher Physician Training

Specialty Programme Directors should be in full-time active practice as Trainers in accredited training programmes of the respective specialty.

Functions & Responsibilities

1 To advise and endorse higher specialty training programmes submitted by trainees within the Region.

2 To liaise with Trainers, Chiefs-of-Service and hospital administration on appropriate postings and other training requirements.

3 To liaise with Specialty Programme Directors of other Regions through the respective Specialty Boards, and advise on trainee rotation in cases which so require.

4 To provide the Education & Accreditation Committee, through respective Specialty Boards, with authoritative evaluation on the appropriateness and effectiveness of higher physician training & the respective training programmes within the Region.

5 To co-ordinate higher physician training in the respective Specialty within the Region.

- 5.1 To recommend admission of candidates into the higher physician training programme.
- 5.2 To monitor training programmes and progress of training.
- 5.3 To counsel failed trainees and to recommend remedial action.
- 5.4 To review trainees' records and certify satisfactory completion of training.
- 5.5 To keep and update a central file of trainees within the Region.
- 5.6 To report to the Specialty Board biannually.

6 To receive suggestions & complaints from trainers and trainees, and to recommend to the Education and Accreditation Committee, through the respective Specialty Board, appropriate response or action.

7 To conduct and chair the Interim Assessment processes in the respective Region.

8 To be responsible for all other matters pertaining to higher physician training in the respective specialty within the Region.

9 To hold office for a period of 2 years, subject to renewal.

Accountability

The Specialty Programme Director is accountable, through the appropriate Specialty Board, to the Education & Accreditation Committee and the Council of the Hong Kong College of Physicians.

IV. Guidelines for Higher Physician Training

Advanced Internal Medicine

I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Advanced Internal Medicine.

2 To acquire competence in managing acute medical emergencies and identifying medical problems in patients referred by primary care and other doctors, and in selecting patients for timely referral to appropriate tertiary care or the expertise of another specialty.

3 To develop competence in the inpatient and outpatient management of medical problems, and in selecting patients for referral to tertiary care facilities and treatment modalities requiring high technology and/or the expertise of another specialty.

4 To equip the trainees to manage patients in general medical units in regional/ district hospitals; to be a leader in the health care delivery team and to work closely with networking units which provide convalescence, rehabilitation and long term care.

5 To encourage the development of skills in communication and collaboration with the community towards total health care delivery.

6 To foster the development of skills in the critical appraisal of new methods of investigation and/or treatment.

7 To reinforce self-learning and commitment to continued updating in all aspects of Internal Medicine.

8 To encourage contributions aiming at advancement of knowledge and innovation in medicine through basic and/or clinical research and teaching of junior trainees and other health-related professionals.

9 To acquire professional competence in training future trainees in Advanced Internal Medicine.

10 To acquire knowledge and understanding of medical ethics relating to the practice of Internal Medicine.

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Advanced Internal Medicine. The three-year training programme comprises two years of core training in Advanced Internal Medicine as described below (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College), plus one year of training in any of the following:

1.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

1.2 All specialties of the College, which may be accredited for a maximum of six months each, AND/OR

1.3 Overseas training in Advanced Internal Medicine, which may be accredited for a maximum of six months, with prior approval by the specialty board, AND/OR

1.4 Research in Advanced Internal Medicine *(clinical or laboratory)*, which may be accredited for a maximum of six months, with prior approval by the specialty board.

2 Apart from single specialty training in Advanced Internal Medicine as stated above, the Higher Physician Trainees in Advanced Internal Medicine may also undergo dual training together with another specialty. In such dual training programmes, the Advanced Internal Medicine is considered to be the broad-based specialty.

3 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen when applying to be registered as Higher Physician Trainee of the College:

3.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in Advanced Internal Medicine and 24 months (cumulative) of core training in another specialty*.

3.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Advanced Internal Medicine or another specialty* followed by 24 months of core training in remaining specialty.

*In case Dermatology and Venereology is selected as the other specialty, it should be noted that the core training programme of Dermatology and Venereology comprises 36 months of core training in both concurrent and sequential training.

4 The two-year period of core training should consist of:

4.1 At least 18 months of core training in acute general medicine in general medical units receiving acute admissions and having facilities similar to the institutional requirements listed in Guidelines for Basic Physician Training. Such units should require trainees to: i) function at increasing grades of seniority and exercise correspondingly enhanced responsibilities, ii) undertake regular resident on-call duties for inpatients, iii) take up primary responsibility in the management of inpatients, iv) manage patients attending Specialist Medical Outpatient Clinics and v) participate in research. Because of increasing emphasis on community-based health-maintenance, AIM trainees are encouraged to undertake the option of Ambulatory Care Physician (ACP) training after completion of the 15-month core component of AIM training. Important aspects of the requirements for a 36-month AIM training programme are detailed in Appendix 1.

4.2 At least 3 months of training in aspects of extended care and/or rehabilitation and/or palliative medicine and/or ambulatory care physician.

4.3 At least 3 months of working experience in ICU/CCU/HDU during HPT or BPT.

4.4 At least 3 months of working experience in a medical unit in a hospital with obstetric and acute surgical services during HPT or BPT for trainees commencing BPT from 1 July 2009 onwards. They should possess the knowledge of handling medical problems and preparation of patients requiring obstetric and surgical operations or procedures.

4.5 Trainees should attend mandatory scientific meetings and perform Self-Learning Tool (SLT) assessment as part of the requirement for Interim and Exit Assessment in the specialty. The Self Learning Tool is a web-based interactive training modules jointly developed by the College and the Hospital Authority. It consists of clinical scenarios in different subspecialties with the aim of helping the trainees to identify and prevent risks in clinical decision making and ultimately improve in their clinical management.

4.6 Experience obtained through working in other medical specialties in parallel with AIM is encouraged and will be accredited accordingly.

III) CONTENTS

(1) Skills and knowledge should be acquired in the following.

1.1 Competence in the diagnosis and management of emergency medical problems, in particular cardiorespiratory problems, stroke, organ failures, infection and shock, gastrointestinal bleeding, metabolic disorders and poisoning.

1.2 Competence in the diagnosis and management of acute and chronic medical problems as secondary care in a regional/district hospital.

1.3 Diagnostic skills to effectively manage complex cases with unusual presentations.

1.4 Updated knowledge on evidence-based medicine and its implications for diagnosis and treatment of medical patients.

1.5 Familiarity with different care approaches and types of health care facilities towards the total care of patients with medical illnesses, including convalescence, rehabilitation, palliation, long term care, and medical ethics.

1.6 Ability to implement strategies in preventive care and early detection of diseases in collaboration with primary and community care doctors.

1.7 Skills in performing important diagnostic and therapeutic procedures and understanding of their indications. The trainee should record the following procedures performed in the Trainee's Log Book.

- Cardiopulmonary resuscitation
- Endotracheal intubation
- Central venous cannulation
- Marrow aspiration and trephine biopsy
- Pleural tapping and biopsy
- Chest drain insertion
- Lumbar puncture
- Abdominal paracentesis

1.8 Knowledge on the use of sedative and/or analgesic medications for patients undergoing diagnostic and therapeutic procedures.

1.9 Ability to understand medical statistics and critically appraise published work and clinical research on disease presentations and treatment outcomes. Experience in basic and/or clinical research within the training programme should lead to publications and/or presentation in seminars or conferences.

1.10 Knowledge on patient safety and clinical risk management.

1.11 Awareness and concern for the cost-effectiveness and risk-benefits of various advanced treatment modalities.

1.12 Familiarity with the concepts of administration and management, medical audit, and overall forward planning for a general medical unit in a regional/district hospital.

1.13 Knowledge and understanding of the concepts in medical ethics relating to the practice of Internal Medicine.

(2) Attitudes

2.1 Enhancement and reinforcement of the attitudes inculcated during Basic Physician Training.

2.2 Ability to appreciate the importance of the effects of disease on the psychological and socio-economic aspects of individual patients and to understand patients' psycho-social needs and rights, as well as the medical ethics involved in patient management.

2.3 Willingness to keep up with advances in Internal Medicine and other Specialties.

2.4 Willingness to refer patients to the appropriate specialty in a timely manner.

2.5 Ability to recognise and appreciate the importance of cost-effectiveness of treatment modalities.

2.6 Aspiration to be the team leader in total patient care involving nursing and allied medical professionals.

2.7 Recognition that teaching and research are important activities for the advancement of the profession.

IV) INSTITUTIONAL REQUIREMENTS

To be recognised for AIM Training, a medical department in an institution or a rotational programme in more than one institution should fulfil the following criteria:

1 Sufficient number of medical and specialty beds to admit patients of both genders and with a variety of medical diseases.

2 Organised ambulatory care, medical outpatient follow-up clinics and link with extended care facilities for rehabilitation and chronic care.

3 Facilities for care of critically ill patients, e.g. CCU, ICU, HDU.

4 Consultations from a broad range of surgical disciplines.

5 Sufficient number of Trainers directly supervising trainees in patient management during regular ward rounds, emergency calls, ambulatory care and outpatient services. The trainer to trainee ratio should not be lower than at least 1:2.

6 Regular medical audits to review the outcome of treatment and interventional procedures, and referral to the pathologists to perform autopsies to resolve diagnostic problems.

7 Laboratory diagnostic support, including chemical pathology, immunology, haematology, microbiology and histopathology services.

8 Diagnostic imaging support, including radiology, ultrasonography, computed tomography and magnetic resonance imaging and nuclear medicine imaging.

9 Maintenance of complete and high quality medical records with easy and prompt accessibility at all times.

10 Structured education programmes including case presentation, journal club and grand round, x-ray meeting and clinicopathological conference.

11 Availability of the following facilities:

- 11.1 Residential facilities for call duties
- 11.2 Medical library with core journals in Internal Medicine and computerised literature search systems.
- 11.3 Meeting rooms with adequate facilities including audiovisual aids for educational activities
- 11.4 Information technology facilities for preparation of clinical presentations/ seminars.

Programme for training in Advanced Internal Medicine (AIM)

1 Core Programme

The five components of the Core Programme for training in AIM must be fulfilled within a 24-month period which may or may not be continuous.

Table 1 Core Programme of Training in AIM

Component	Programme	Duration
I	Acute general medicine with primary responsibility for and adequate exposure to patient management in acute general medical wards with 24-hour emergency call admissions* including a. Resident emergency on-call duties, at least 4 times per month, and b. Responsibility to attend to medical consultation requests from other hospital departments * A general guideline is to be in charge of 10 or more beds in such wards	Minimum 18 months (or 15 months + 3 months in ICU/CCU/ HDU)
II	Management of new and old cases attending general and specialty medical outpatient clinics which serve patients of all adult age groups.	Minimum 5 hours per week for 24 months throughout the core programme (except during ICU training)
III	Experience of working in ICU/CCU/HDU	Minimum 3 months during Basic or Higher Physician Training or Maximum 6 months (of which 3 months should be within the 18 months specified in item I above)
IV	Experience with aspects of extended care and/or rehabilitation and/or palliative medicine and/or Ambulatory Care Physician (ACP) Programme *(see Section 2b below)*	Minimum 3 months
V	Experience of working in a medical unit in hospital with obstetric and acute surgical services for trainees who start BPT from 1 July 2009 and onwards	Minimum 3 months during Basic or Higher Physician Training
VI	Hospital-based training in non-acute medicine, or acute medicine, or a medical specialty other than that of concurrent training *(see Section 2a below)*	Maximum 3 months

2 Training in AIM for Single Accreditation

In addition to the mandatory hospital-based component of the core programme, trainees may opt to undertake one of the two possible streams of programmes aiming at single accreditation in Internal Medicine: the Hospital-based AIM Training Programme or the Community-based Ambulatory Care Physician (ACP) Programme. All trainees should specify their choice to the Board on entry into the HPT programme.

2a Hospital-based AIM Training programme

Hospital-based training programme in AIM may be undertaken in both acute and non-acute hospitals, where ward and call duties, outpatient clinic activities, and consultations from other hospital departments provide opportunities for trainees to refine their skills in patient management. Full-time training in other medical specialties, up to a maximum of six months for each specialty, for a total duration of 12 months, is encouraged.

2b Community-based Ambulatory Care Physician (ACP) Programme (Appendix 2)

In addition to core training requirements, trainees have to spend a total of at least 12 months in ambulatory care training, and should undergo a comprehensive and in-depth structured training programme as recommended by the Specialty Board, including medical outpatient clinics and outreach programmes for the elderly and patients with medical disability in the community. They are to be well-equipped to maintain health and reduce the hospitalization needs of patients suffering from chronic medical illnesses.

3 Training in AIM and one Additional Specialty

Apart from "Dermatology and Venereology" and "Geriatric Medicine", all training programmes for Higher Physician Trainees must include a broad-based specialty. For trainees undergoing dual training in AIM and another specialty, AIM is considered to be the broad-based specialty. The dual training programme may be either concurrent or sequential. The training programme must be approved by the AIM Board as well as the Board of the second specialty. Applications for training in AIM for Fellows accredited in at least one specialty other than AIM will be individually assessed by the AIM Board.

4 Training in ACP for Fellows accredited in AIM with or without another specialty

Fellows already accredited in AIM with or without another specialty require 12 months of ACP training, as stipulated in 2b, in order to be accredited as ACP. No formal assessment is required but all components of training must be verified by the respective supervisors and endorsed by the AIM Board.

5 Training in another specialty for Fellows solely accredited in AIM (hospital-based or ACP)

Fellows solely accredited in AIM (hospital-based or ACP) may apply for additional training in other specialties. Such applications will be assessed by the respective Specialty Boards.

Table 2 Summary of Training Programmes in AIM

Status of Trainee	**Training Programme**
Concurrent Training	The programme normally consists of a 48-month* training period of which 50% of time is spent in AIM and the other 50% in another specialty
Sequential Training	The programme normally consists of a 60-month* training period of full-time training in AIM and another specialty
Fellow accredited in other Medical Specialty	24 months core training programme in AIM
Single Accreditation in AIM only - Hospital-based	36 months training programme including: a) 24 months core training programme and b) 12 months full-time hospital-based training. Full time training in other specialties (normally for a period of 3-6 months for each specialty) and related clinical or laboratory research (max accreditation of 6 months), may be accredited for a total duration of 12 months
Single Accreditation in AIM only - Community-based ACP	36 months training programme including: a) 24 months core training programme (including 3 months of ambulatory care) b) 12 months in ACP programme

*Apart from Dermatology and Venereology. For details, please see p.88-93

Table 3 Summary of Requirement for Assessments in AIM

Status of Trainee	Interim Assessment	Exit Assessment
Concurrent training	i) At least 12 months accredited training in AIM, e.g., at least 50% of 24 months should be spent in AIM ii) Complete annual requirement for SLT	i) Minimum 30 months of training in HPT with minimum 18 months in acute general medicine ii) Minimum 3 months during Basic or Higher Physician Training or maximum 6 months experience of working in ICU/ CCU/ HDU of which 3 months should be within the 18 months specified in (i) iii) Minimum 3 months working experience in extended care and/ or rehabilitation and/or palliative medicine and/or ACP programme iv) Minimum 3 months working experience in a medical unit in a hospital with obstetric and acute surgical services for trainees who start BPT from 1 July 2009 and onwards v) Pass in AIM Interim assessment vi) Complete SLT assessment
Sequential training	i) At least 12 months accredited training in AIM ii) Complete annual requirement for SLT	
Single Accreditation in AIM only -Hospital-based	i) At least 12 months training in AIM ii) Complete annual requirement for SLT	As above except (i) i) Minimum 30 months training in AIM with minimum 18 months in acute general medicine
Single Accreditation in AIM only - Community-based ACP		
Fellow accredited in one other medical specialty	i) At least 12 months training in AIM ii) Complete annual requirement for SLT	As above except (i) i) Minimum 18 months in acute general medicine
Fellow accredited in two or more other medical specialties		

Note: Candidates are allowed to take the exit assessment up to 3 months earlier than the date of completion of AIM training. The deficient training time must be made up after passing the exit assessment before the candidates are eligible for accreditation.

Ambulatory Care Physician Training Programme
part of the AIM training programme
for Higher Physician Training

I	**Core Training Programme** (i) Primary responsibility for and adequate exposure to patient management in <u>acute</u> general medical wards with 24-hour emergency call admissions* including (a) Resident emergency on-call duties, at least 4 times per month, and (b) Responsibility for responding to medical consultation requests from other hospital departments.				Minimum 18 Months
	(ii) Management of new and old cases attending general and specialty medical outpatient clinics which serve patients of all adult age groups.				Minimum 5 hours/week for 18 months
	(iii) Experience of working in ICU/CCU/HDU/				Minimum 3 months and maximum 6 months (of which 3 months should be within the 18 months specified in 1(i) above) during Basic or Higher Physician Training
	(iv) Experience of working in a medical unit in a hospital with obstetric service for trainees who start BPT on 1 July 2009 and onwards				***Minimum 3 months during Basic or Higher Physician Training***
	** A general guideline is to be in charge of 10 or more beds in such ward*				
II	**Training Programme for Care of Common Chronic Medical Illnesses** Training in recognised specialty centre is encouraged. (*Major specialties encouraged to be included.)				**Minimum 15 months**
Major specialties	Major areas to be covered	Procedures (exposure, understanding of the indications for, and interpretation of results)	Major activities e.g. medical OPD outreach programmes	Other activities e.g. case reports	≥ 3 to ≤ 6 months for each specialty
Cardiology*	Coronary artery disease/IHD Congestive heart failure Hypertension Simple arrhythmia Warfarin treatment	Echo Treadmill Holter Cardiac catheterization Swan Ganz	Hypertension clinic Lipid disorder clinic Cardiac clinic	Cardiac rehab programme CCU exposure	
Dermatology	Dermatitis/eczema/skin eruption Psoriasis Skin manifestations of systemic disease Fungal infection and other infections Common STD	Skin biopsy Scraping Other sample collections	Dermatology clinic STD clinic	Record of 5-10 cases managed	For all specialties, it is recommended to have 1. ≥ 5 hr clinic/outreach programme/week 2. Consultations 3. Exposure to relevant acute conditions 4. Chances to acquire the skill of interpretation of X-ray/blood/other investigation findings, and to learn the indications for referral for special test/specialist advice
Endocrinology*	DM and complications Thyroid disease Lipid disorder Osteoporosis Obesity Hypopituitarism	DM complication assessment/screening Endocrine function test interpretation Bone density Dynamic function tests Insulin class & DM Education'	DM clinic Thyroid clinic Endocrine clinic	3 case reports (DM, thyroid, and one other disorder)	Continuous attendance of General Medical Clinic (with case-mix including HT, DM, thyroid disease, cardiac, COAD/asthma) throughout the 36-month training is mandatory

Gastroenterology	Peptic ulcers, GERD, dyspepsia Hepatitis, cirrhosis GIB Hepatobiliary infections/ cancer Irritable bowel syndrome Nutrition	OGD USG Colonoscopy ERCP Liver biopsy	Hepatitis clinic GI clinic	X-ray/Pathology meetings	
Geriatric*	See below				
Haematology	Anaemia Bleeding tendency Common malignancies	Bone marrow	Haematology & anticoagulation clinic		
Infectious Disease	Common infections Community acq infections Use of antibiotics STD Notifiable communicable disease TB Hepatitis	Microbiology lab Specimen collection	Infectious disease clinic Travel medicine clinic Consultations e.g. opportunistic infections	Communication skills e.g. counselling for HIV	
Nephrology	Proteinuria/haematuria Nephritis CRF UTI Fluid, electrocyte, acid-base disorders	Urine microscopy CAPD HD Renal biopsy Acute dialysis	Renal clinic CAPD clinic	Drug prescription in renal failure Pathology/X-ray meeting	
Neurology	Stroke/TIA Parkinsonism Dementia Epilepsy Headache Common muscle/nerve problems	NCS/EMG LP EEG CT/MRI EP	Neuro clinic Stroke Rehab Programme	Exposure to Critical Care Neurology	
Respiratory Medicine*	COAD/asthma Sleep apnoea Bronchiectasis Ca lung Pneumonia Allergic rhinitis	Lung function test interpretation Pleural tap & Biopsy Chest drain Bronchoscopy ET Tube O_2 therapy	Asthma clinic Pulmonary Rehabilitation Respiratory clinic	X-ray Chest interpretation X-ray meeting	

Rheumatology	SLE RA Gout Spondyloarthropathies Dermatomyositis Polymyositis Scleroderma OA	Joint aspiration & injection	Rehab conference Daily inpatient management Rheumatology clinic	Journal club X-ray & histology meetings Interpretation of rheumatologic tests	
Palliative Medicine	Management of symptoms, psychological, social and spiritual problems, emergencies Hospice philosophies Ethics in palliative care Care for carers	Thoracocentesis Abdominal paracentesis Communication Family care	Home care Out-patient care	Multi-disciplinary conference Home Care conference Bereavement conference Case presentation	
Rehabilitation	Rehabilitation programmes in 1) Stroke and complications 2) Common neuromuscular disorders 3) Cardiopulmonary disorders 4) Common soft tissue and arthritic disorders	Disability assessment Swallowing videofluoroscopy and endoscopy Common simple orthotics Prescription of assisted devices	1) General or Special e.g. (stroke, cardiac) 2) Community rehabilitation (day hospital, ambulatory or outreach visits)	1) Case conference – multi-disciplinary 2) Journal club	

Geriatrics*	(I) Each trainee should preferably undergo full-time training for not less than three months in a recognised training institution for Geriatric Medicine. The training should include the following: a. Acute management of common geriatric problems such as dementia, acute confusional states, incontinence, falls, pressure sores, stroke, tube feeding, Parkinsonism, iatrogenesis and polypharmacy, etc. b. Skills and knowledge in Comprehensive Geriatric Assessment and Geriatric Evaluation/Management Services. c. Attendance in Specialist Geriatric Clinics and subspecialist clinics such as continence clinic, memory clinic, fall clinic and frail elderly clinics for at least 2 sessions per week. d. Multidisciplinary and holistic approaches in geriatric care and rehabilitation of chronic disabling diseases in the elderly, including case conferences. e. Terminal care and long term care for the elderly. f. Geriatric Day Hospital management of patients requiring ambulatory rehabilitative services. g. Domiciliary visits. h. At least 2 sessions per week training in Community Geriatric Assessment Service providing support to Elderly Residential Homes and elderly patients on waiting list for infirmaries living in community. (II) Throughout the ACP training programme, the trainees should have accumulated experience of not less than 50 sessions of Community Geriatric Assessment Team (CGAT) service.

CARDIOLOGY

I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Cardiology.

2 To enable trainees to make accurate clinical bedside diagnoses, appropriate ordering of decisive investigations, to be sensitive to unique features of individual patients and to integrate all data into a well organised management strategy.

3 To develop in the trainees the humanistic, moral and ethical aspects of medicine.

4 To foster the appreciation of cost-effectiveness of various investigational, therapeutic and preventive aspects of intervention.

5 To provide further experience in critical thinking by active participation in research.

These objectives in philosophy, knowledge, skills and experience are essential to provide a solid foundation in Clinical Cardiology before advancing to focus on more subspecialised areas.

6 To acquire professional competence in training future trainees in Cardiology.

(II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Cardiology. The three-year training programme comprises TWO years of core training in Cardiology as described below, with a minimum of 12 months of core training to be undertaken in training units accredited by the College, plus ONE year of training in any of the following:

1.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

1.2 A broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, which may be accredited for a maximum of 12 months, AND/OR

1.3 Overseas training in Cardiology, which may be accredited for a maximum of six months, with prior approval by the specialty board, AND/ OR

1.4 Research in Cardiology, which may be accredited for a maximum of six months, with prior approval by the specialty board.

2 To ensure the acquisition of a broad-based physician training for all Higher Physician Trainees undergoing Cardiology training, the College requires that all registered Higher Physician Trainees undergo dual training in a broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, together with training in Cardiology. Fellows who have been trained

in Cardiology without a broad-based specialty will not be accepted as Trainer in any specialty in the future.

3 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen at the time of application to be registered as Higher Physician Trainee of the College:

3.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in a broad-based specialty and 24 months (cumulative) of core training in Cardiology.

3.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Cardiology or the broad-based specialty followed by 24 months of core training in remaining specialty.

III) CONTENTS

1 The 2-year core training in Cardiology consists of two components – Clinical Cardiology and training in special diagnostic and therapeutic skills. Clinical Cardiology training consists of two years full-time experience under supervision in one or more accredited hospitals, of which six months must be in a hospital with 24-hour general accident and emergency service. Full-time training in rehabilitation related to cardiovascular medicine may be accredited up to a maximum of six months. Training in special diagnostic and therapeutic skills are to be taken concurrently with Clinical Cardiology training and are described as follows:

Coronary Care Unit	6-12 months
Pre- and Post-Cardiovascular Surgery Patient Care	1-3 months
Non-invasive Cardiology	2 or more sessions per week on average during the 2-year core training period
Invasive Cardiology (performed in Cardiac Catheterization Laboratory, Operation Theatre or Angio suite facilities shared with Radiology Department)	1 or more sessions per week on average during the 2-year core training period.

(Remarks: 1 session means 1 half-day session)

Trainees are required to perform minimum numbers of some procedures during the 2-year core training in Cardiology. The aim is to ensure adequate exposure to clinical material and pathology and to provide trainers sufficient opportunity to assess competency in these areas.

Ambulatory ECG monitoring	interpret at least 100
Exercise testing	perform and interpret at least 50
Echocardiography (M-mode, 2D, Doppler)	perform and interpret at least 100

Cardiac catheterization	participate in at least 100 diagnostic cardiac catheterization procedures e.g. coronary angiogram, haemodynamic assessment
Arrhythmia management and cardiac pacing	perform at least 5 temporary pacemakers and participate in at least 20 cardiovascular implantable electronic devices (CIED) implantations

2 Knowledge

2.1 Training in Patient Care and Management

2.1.1 Skill in obtaining a comprehensive history and performing complete cardiovascular examination.

2.1.2 Familiarity with the role of psychological factors in the genesis of symptoms, and the emotional and physical response of patients to cardiovascular diseases.

2.1.3 Familiarity with the preventive and rehabilitative aspects of managing hospital patients with established or potential cardiovascular disease.

2.1.4 Experienced in addressing consultations from other physicians and non-physician specialties.

2.1.5 Direct patient care responsibility in Cardiology under the supervision of accredited trainer(s).

2.2 Training in the Understanding, Diagnosis, Prevention and Treatment of Cardiovascular Diseases

The trainee must be well-educated in the

Pathogenesis and pathology
Risk factors
Natural history
Diagnosis by history, physical examination and laboratory methods
Medical management and principles of surgical management
Complications
Prevention
Rehabilitation of cardiovascular conditions, including

Coronary artery disease
Hypertension
Valvular heart disease
Congenital and structural heart disease
Cardiac arrhythmias
Cardiomyopathy

Involvement of cardiovascular system by systemic diseases
Infective endocarditis
Diseases of the great vessels and peripheral blood vessels
Diseases of pericardium
Pulmonary heart disease
Cardiovascular complications of chronic renal failure
Traumatic heart disease
Cardiac tumours

2.3 Training in Coronary and Critical Cardiac Care

At least six months of supervised working experience with patients undergoing acute coronary care and critical care of other acute cardiovascular disorders.

2.4 Training in Follow-up Care

Continued responsibility for cardiovascular outpatient management and consultation.

2.4.1 Each trainee should attend to outpatients with cardiac problems at no fewer than two sessions per week for the entire core training period, or an equivalent period to be approved by the Board.

2.4.2 Experience with longitudinal follow-up of patients is desirable.

2.4.3 Exposure to a wide age span of patients ranging from adolescence through old age.

2.4.4 Exposure to a variety of cardiovascular cases including hypertension, lipid disorder, cardiac arrhythmias, cardiovascular implantable electronic devices (CIEDs) follow-up, post myocardial infarction, post-surgical follow-up, anticoagulation, post-percutaneous coronary intervention, valvuloplasty etc.

2.5 Training in Electrocardiography

Skill in the performance and interpretation of

Surface Electrocardiography
Ambulatory Electrocardiography
Exercise electrocardiographic tests

2.6 Training in Cardiac Catheterization Laboratory and Cardiac Intervention: A fully-equipped and staffed angiographic and haemodynamic laboratory dedicated to cardiac procedures is required.

2.6.1 Direct experience under supervision in an adult cardiac catheterization laboratory which performs

2.6.1.1 Right and left heart catheterizations and haemodynamic studies.

2.6.1.2 Ventriculography and angiography including coronary and major vessels arising from the aorta.

2.6.1.3 Cardiac interventional procedures e.g. percutaneous coronary intervention, temporary right ventricular pacing, pericardiocentesis, myocardial biopsy, intra-aortic balloon counterpulsation.

2.6.2 Development of a sound knowledge of the fundamentals of cardiovascular physiology as related to clinical disease, analysis of haemodynamic records and interpretation of angiographic images.

2.6.3 Development of a sound knowledge of the principles of radiation safety.

2.6.4 Cardiovascular surgery must be performed in, or be readily accessible to, the institution to which the accredited training unit belongs.

2.7 Training in Echocardiography

2.7.1 Participation in the performance of echocardiography including

M-Mode and 2D-echocardiography
Doppler echocardiography
Colour flow imaging
Transoesophageal echocardiography
Exercise and pharmacological stress echocardiography (preferable).

2.7.2 Development of a sound knowledge in the fundamental principles of ultrasound imaging, analysis and interpretation of echocardiographic records in relation to clinical disease.

2.8 Training in Diagnostic Radiology and Nuclear Medicine

Development of a sound knowledge of the principles, indications and limitations of nuclear cardiovascular procedures and magnetic resonance imaging (MRI) studies and computed tomography imaging.

2.9 Training in Cardiovascular Implantable Electronic Devices (CIEDs)

2.9.1 Development of a sound knowledge of the principles and limitations of, and indications for, cardiac pacemakers, implantable cardioverter defibrillators, cardiac resynchronization therapy, cardiac resynchronization therapy defibrillator, implantable loop recorder.

2.9.2 Direct experience under supervision in the implantation of single and dual chambers permanent cardiac pacemakers.

2.9.3 Development of a sound knowledge of the principles of management of patients with CIEDs, trouble-shooting when complications occur, and optimal programming of CIEDs in accordance with patients' physiological and pathological conditions.

2.10 Training in Electrophysiology and Catheter Ablation

2.10.1 Development of a sound knowledge of the indications for, limitations of and skill in, the selection of patients for electrophysiology studies and catheter ablation.

2.10.2 The trainee should be well-educated in the principles of electrophysiology studies and catheter ablation in relations to the manifestations of clinical diseases and patient management.

2.11 Training in Peripheral Vascular Disease

2.11.1 Development of a sound knowledge of the clinical features and treatment of peripheral vascular disease.

2.11.2 Competence in the history and physical examination of patients suffering from diseases of the arterial and venous systems.

2.11.3 Education in selecting and interpreting peripheral angiography, and other imaging and Doppler vascular studies.

2.12 Training in Cardiovascular Research

All trainees should participate actively in research activities.

2.13 Training in Related Sciences

2.13.1 Understanding of the normal physiology of the circulatory system, including adaptation of the cardiovascular system to exercise, stress, pregnancy, ageing, as well as renal and pulmonary abnormalities.

2.13.2 Continuing education in basic sciences including the aspects of anatomy, physiology, pharmacology, pathology, biophysics and biochemistry that are pertinent to Cardiology.

2.13.3 Experience with programmes in computer sciences and biostatistics is desirable.

2.14 Training in Related Fields of Medicine

2.14.1 Radiology: The interpretation of cardiovascular images.

2.14.2 Surgery: The risks and benefits of cardiovascular surgery, and the rationale for selection of candidates for surgical treatment. Participation in pre- and post-operative care.

2.14.3 Anaesthesia: Close collaboration with anaesthesia colleagues in the pre- and post-operative management of patients with cardiac disease.

2.14.4 Pulmonary: Solid knowledge of basic pulmonary disease physiology. Interpretation of pulmonary function testing, blood gases, pulmonary angiography and radioactive lung scanning. Experience in the management of acute pulmonary problems.

2.14.5 Obstetrics: Experience in the clinical management of pregnant patients with heart disease.

2.14.6 Physiology: Physiology of the cardiovascular system, its response to exercise and stress, and its alterations produced by disease.

2.14.7 Pharmacology: The pharmacology and interactions among cardiovascular as well as other drugs.

2.14.8 Pathology: Familiarity with the gross and microscopic pathology of all major forms of heart disease.

2.14.9 Procedural sedation: Knowledge and skills of procedural sedation – pharmacology of sedation medications and reversal agents, indications and contraindications, assessment and monitoring, management of complications and emergency.

3 Specialty Clinical Skills

Advanced cardiac interventional procedures require additional post-fellowship training. Further training for one year post-Core Cardiology accreditation in one or more special procedures is desirable but not mandatory.

e.g. (a) Percutaneous coronary intervention.
(b) Electrophysiology studies and catheter ablation.
(c) Structural heart intervention.

4 Attitudes

Enhance and re-inforce the attitudes inculcated during basic physician training.

IV) INSTITUTIONAL REQUIREMENTS

1 Core training in Cardiology aims to provide comprehensive exposure to various fields of Cardiology practice, exchange of experience and facilitation of peer discussion, review and audit.

1.1 The training unit should therefore have a comprehensive range of training activities and spectrum of in-patients and out-patients with a variety of cardiac problems.

1.2 Sufficient number of accredited trainers for training in Clinical Cardiology.

1.3 Adequate facilities for the management of all common cardiac conditions and emergencies.

2 Centres providing core training in Cardiology may be regularly assessed and accredited by the Specialty Board according to

2.1 Facilities and equipments.

2.2 Scope and volume of activities in the programme.

2.3 Experience of trainers in the relevant subspecialty field.

3 Each trainee should be under supervision of more than one trainer in Cardiology and the minimum trainer: trainee ratio should not be less than 1:2.

4 In the assessment of training units/programmes, the Specialty Board in Cardiology will also consider the availability of and participation in inter-hospital/interdepartmental conferences, meetings and lectures as well as networking activities.

CLINICAL PHARMACOLOGY AND THERAPEUTICS

I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Clinical Pharmacology and Therapeutics, so as to be able:

1.1 To provide a consultative and advisory service to general physicians and other specialists regarding drug therapy, particularly with respect to safe and cost-effective use of drugs, evidence-based therapeutics, adverse drug reactions, drug-drug interactions and therapeutic drug monitoring.

1.2 To provide clinical toxicology services at local and regional levels, including poison treatment service for in-patients and out-patients, poison information service to health care professionals, consultative service for the management of poisoning and toxicovigilance.

1.3 To provide an acute general medical service with responsibility for medical in-patients and input into specialist clinics that are relevant to Clinical Pharmacology and Therapeutics.

1.4 To provide advice to local and regional hospitals and health authorities on drug- and clinical toxicology-related issues.

1.5 To engage in diverse types of clinical activities that will contribute to new drug evaluation, clinical pharmacology, clinical toxicology, drug safety, pharmacovigilance, pharmacoepidemiology, pharmacoeconomics and pharmacogenetics.

1.6 To lead a multidisciplinary team of health care professionals in promoting rational use of drugs and safe medication practices.

2 To develop skills, knowledge and competence in Clinical Pharmacology and Therapeutics at a specialist level.

3 To develop an interest in quality assurance, audits, cost-effectiveness and evidence-based medicine in relation to drug use and prescribing, with a view to the development and continued refinement of hospital formularies, drug policies, guidelines and shared care protocols.

4 To promote a commitment to continued medical education and to provide suitably qualified teachers in Clinical Pharmacology and Therapeutics for undergraduates and postgraduates.

5 To develop an infrastructure for future commitment to clinical and laboratory research in Clinical Pharmacology and Therapeutics, with a view to promoting safe and cost-effective use of drugs and introducing and evaluating new drug therapy, poison prevention and control.

6 To acquire professional competence in training future trainees in Clinical Pharmacology and Therapeutics.

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Clinical Pharmacology and Therapeutics. The three-year training programme comprises two years of core training in Clinical Pharmacology and Therapeutics as described in paragraph 2 (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College), plus one year of training in any of the following:

1.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

1.2 A broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, which may be accredited for a maximum of 12 months, AND/OR

1.3 Overseas training in Clinical Pharmacology and Therapeutics, which may be accredited for a maximum of twelve months, with prior approval by the specialty board, AND/ OR

1.4 Research in Clinical Pharmacology and Therapeutics which may be accredited for a maximum of six months, with prior approval by the specialty board.

2 The core training in Clinical Pharmacology and Therapeutics includes a minimum of two years (cumulative) to be spent in a Clinical Pharmacology Service and Clinical Toxicology Service under the supervision of recognised trainer(s).

2.1 The trainee should have primary responsibility for and adequate exposure to patient management and poison information and consultations within a Clinical Toxicology Services for a minimum of 12 months, including

a) Resident emergency on-call duties, at least 4 times per month

b) Responsibility for patients with acute or chronic poisoning

c) Contribution to poison information service for hospitals and community doctors

3 To ensure the acquisition of a broad-based physician training for all Higher Physician Trainees undergoing Clinical Pharmacology and Therapeutics training, the College requires that all registered Higher Physician Trainees undergo dual training in a broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, together with training in Clinical Pharmacology and Therapeutics. Fellows who have been trained in Clinical Pharmacology and Therapeutics without a broad-based specialty will not be accepted as Trainer in any specialty in the future.

4 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen at the time of application to be registered as Higher Physician Trainee of the College:

4.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in a broad-based specialty and 24 months (cumulative) of core training in Clinical Pharmacology and Therapeutics.

4.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Clinical Pharmacology and Therapeutics or the broad-based specialty followed by 24 months of core training in remaining specialty.

III) CONTENTS

1 Knowledge and practical skills:

1.1 Knowledge and understanding of the principles of basic and clinical pharmacology and toxicology.

1.2 The principles and specialised techniques essential to the assessment of drug pharmacokinetics and pharmacodynamics.

1.3 The principles and methods to promote rational and cost-effective use of drugs at all levels, e.g. developing and maintaining drug formularies and participating in drug and therapeutics committee.

1.4 The management, investigation and prevention of drug-related problems, including adverse drug reactions, drug-drug, food-drug and herb-drug interactions, therapeutic failure and drug non-compliance.

1.5 The key actions required to improve medication safety and the key components of a safe medication-use system

1.6 The principles and applications of pharmacovigilance, pharmacoepidemiology, pharmacogenetics, pharmacoeconomics and outcomes research.

1.7 The management, investigation and prevention of acute poisoning from drugs, chemicals and natural toxins and other toxicological problems.

1.8 Drug and poison consultative and advisory service to health care professionals.

1.9 Laboratory methods of measurement of drugs, chemicals and their metabolites in biological fluids and data interpretation for the purposes of therapeutic drug monitoring, clinical toxicology, pharmacokinetic and other studies.

1.10 Analysis of bioavailability and pharmacokinetic data with a view to advising on the choice of appropriate pharmaceutical preparations and drug dosage regimens, and on problems encountered in special patient groups such as the elderly or those with renal impairment.

1.11 Audits, quality assurance, cost-effectiveness, epidemiological studies and applied statistics in Clinical Pharmacology and Clinical Toxicology.

1.12 Research methodology and evaluation in clinical trials, including design, execution, data interpretation and analysis of adverse events.

1.13 Investigation skills required for pharmacological studies in accordance with Good Clinical Practice.

1.14 The principles and role of pre-marketing studies of drugs and postmarketing surveillance.

1.15 An understanding of the potential problems associated with the use of herbal medicines, including toxicological problems and herb-drug interactions.

1.16 An understanding of the ethical and regulatory aspects of drug prescribing, clinical trials and research.

2. Attitudes

2.1 The basic requirements are the same as Advanced Internal Medicine (AIM) and the general attitudes required of a doctor regardless of specialty.

2.2 An impartial attitude in the interactions between the Clinical Pharmacologist and the pharmaceutical industry.

2.3 A good understanding of the role of Pharmacists both in hospital and in the community.

2.4 An appropriate attitude, demonstrating an awareness and understanding of the ethical issues in relation to the use of drugs in the management of patients and conduction of clinical trial.

IV) INSTITUTIONAL REQUIREMENTS

1 Sufficient number of general medical beds to admit patients of both genders and with a variety of medical disease, with consultations from a broad range of surgical disciplines, and where consultations in Clinical Pharmacology and Clinical Toxicology are called upon on a regular basis.

2 An acute hospital with medical subspecialties and multidisciplinary teams, where interspecialty and interdisciplinary liaison with clinical pharmacologists is important in patient care.

3 Organised ambulatory care, specialist outpatient follow-up clinics in Medicine and Clinical Pharmacology and Clinical Toxicology, and linking with extended care facilities for rehabilitation and chronic care.

4 An Intensive Care Unit where full cardiorespiratory support is provided for critically ill patients including those suffering from drug overdose.

5 A sufficient number of fully trained staff with specialist accreditation and trainer status in Clinical Pharmacology and Therapeutics, to provide a minimum trainer to trainee ratio of 1:2 at any one time. The trainee should have the

opportunity of experiencing all aspects of patient management in Clinical Pharmacology and Clinical Toxicology, including ward rounds, emergency calls and consultations and out-patient services.

6 General laboratory and diagnostic facilities including chemical pathology, haematology, microbiology, histopathology, diagnostic radiology, and access to laboratory facilities for assays of plasma drug concentrations and toxicological analysis.

7 Regular medical audit procedures and quality assurance programmes.

8 A structured continuing educational programme including attendance and participation in seminars, journal clubs and grand rounds in General Internal Medicine, Clinical Pharmacology and Clinical Toxicology.

9 Adequate educational facilities including access to medical libraries with computerized search systems and specialised databases for information on drugs and poisons.

CLINICAL TOXICOLOGY

I) OBJECTIVES

1. To provide a broad training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Clinical Toxicology.

2 To enhance clinical skills, practical and scientific knowledge and proper attitudes in the management of patients with poisoning.

3 To inculcate and enhance critical thinking, self-learning and commitment to continuing medical education in Clinical Toxicology.

4 To encourage and provide opportunities in the pursuance of scientific enquiry and clinical research in Toxicology.

5 To inspire trainees to be leaders of multidisciplinary teams of health care professionals in the management of patients with acute and chronic poisoning, including interdisciplinary collaboration with other specialties and clinical services, such as Emergency Medicine, Intensive Care, Paediatrics, Psychiatry, Poison and Drug Information Service, Toxicology Laboratory and Public Health Medicine, to respond to poisoning outbreaks and to promote poison control and prevention in the community.

6 To provide supervision, guidance and opportunities to acquire the necessary competence for accreditation in this specialty.

7 To acquire professional competence in training future trainees in Clinical Toxicology.

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Clinical Toxicology. The three-year training programme comprises two years of core training in Clinical Toxicology as described in paragraph 2 (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College), plus one year of training in any of the following:

1.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

1.2 A broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, which may be accredited for a maximum of 12 month, AND/OR

1.3 Overseas training in Toxicology which may be accredited for a maximum of twelve months, with prior approval by the specialty board, AND/ OR

1.4 Research in Toxicology which may be accredited for a maximum of six months, with prior approval by the specialty board.

2 The two years of core training should include a minimum of 15 months full-time or part-time equivalent service in a recognized Clinical Toxicology Service for the management of patients with a full spectrum of acute and chronic poisoning where trainee should have primary responsibility for management of in-patients and out-patients with acute or chronic poisoning and provision of poisoning and drug-related consultation service including active participation in care of patients requiring intensive care. The core training should also include a minimum of one month full-time or part-time equivalent training in poison information in a recognized centre and a minimum of one month full-time or part-time equivalent training in a recognized laboratory.

3 A minimum of 6 months of exposure (full time or part-time equivalent) in at least two of the modules relevant to toxicology in addition to the core Clinical Toxicology module:

3.1 Laboratory: Full-time or part-time equivalent service in a recognized laboratory. Training in this area can be accredited for a maximum of three months.

3.2 Critical Care: Full-time or part-time equivalent service in an Intensive Care Unit recognized by the College. Training in this area can be accredited for a maximum of three months.

3.3 Nephrology: Full-time or part-time equivalent service in a Renal Unit recognized by the College. Training in this area can be accredited for a maximum of three months.

3.4 Poison Information: Full-time or part-time equivalent service in a recognized centre. Training in this area can be accredited for a maximum of three months.

3.5 Psychiatry: Full-time or part-time equivalent service in a recognized Psychiatric Unit with service including substance abuse clinic and other activities related to the management of patients with poisoning. Training in this area can be accredited for a maximum of three months.

3.6 Public health including toxicoepidemiology and poisoning outbreak investigation: Full-time or part-time equivalent service in the Toxicovigilance Section of the Department of Health. Training in this area can be accredited for a maximum of three months.

4 To ensure the acquisition of a broad-based physician training for all Higher Physician Trainees undergoing Clinical Toxicology training, the College requires that all registered Higher Physician Trainees undergo dual training in a broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, together with training in Clinical Toxicology. Fellows who have been trained in Clinical Toxicology without a broad-based specialty will not be accepted as Trainer in any specialty in the future.

5 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen at the time of application to be registered as Higher Physician Trainee of the College:

5.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in a broad-based specialty and 24 months (cumulative) of core training in Clinical Toxicology.

5.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Clinical Toxicology or the broad-based specialty followed by 24 months of core training in remaining specialty.

III) CONTENTS

1 Knowledge and skills

During the training in Clinical Toxicology, the trainee is expected to acquire knowledge and practical skills in the following areas:

1.1 Knowledge and understanding of the principles of basic and clinical toxicology.

1.2 The principles and specialised techniques essential to the assessment of patients with full spectrum of acute and chronic poisoning including emergency and intensive care settings.

1.3 The principles and applications of toxicocovigilance and toxicocoepidemiology.

1.4 The management, investigation and prevention of acute poisoning from drugs, chemicals and natural toxins and other toxicological problems.

1.5 Poison and drug-related consultative and advisory service to health care professionals.

1.6 Laboratory methods of measurement of drugs, chemicals and their metabolites in biological fluids and data interpretation for the purposes of clinical toxicology and other studies.

1.7 Audits, quality assurance, cost-effectiveness, epidemiological studies and applied statistics in Clinical Toxicology.

1.8 Research methodology and evaluation in clinical studies, including design, execution, data interpretation and analysis of outcomes.

1.9 An understanding of the potential problems associated with the use of herbal medicines, including toxicological problems and herb-drug interactions.

2 Attitudes

2.1 Enhancement and reinforcement of the attitudes inculcated during Basic Physician Training.

2.2 Aspiration to be the leader of a multidisciplinary team of health care professionals in management of patients with acute and chronic poisoning, as well as poison control and prevention.

3.2 Recognition that teaching and research are important activities for the advancement of the profession.

IV) INSTITUTIONAL REQUIREMENTS

1 The institution has a recognized Clinical Toxicology Services for the management of patients with a full spectrum of acute and chronic poisoning where trainee should have primary responsibility for management of in-patients and out-patients with acute or chronic poisoning and provision of poisoning and drug-related consultation service including active participation in care of patients in the emergency setting and those requiring intensive care.

2 Sufficient number of medical beds to admit patients of both genders and with a variety of medical disease, with consultations from a broad range of disciplines, and where consultations in Clinical Toxicology are called upon on a regular basis.

3 An acute hospital with medical subspecialties and multidisciplinary teams, where interspecialty and interdisciplinary liaison with clinical toxicologists is important in patient care.

4 Organised ambulatory care, specialist outpatient follow-up clinics in Medicine and Clinical Toxicology, and linking with extended care facilities for rehabilitation and chronic care.

5 An Intensive Care Unit where full cardiorespiratory support is provided for critically ill patients including those suffering from drug overdose.

6 A sufficient number of fully trained staff with specialist accreditation and trainer status in Clinical Toxicology, to provide a minimum trainer to trainee ratio of 1:2 at any one time. The trainee should have the opportunity of experiencing all aspects of patient management in Clinical Toxicology, including ward rounds, emergency calls and consultations and out-patient services.

7 General laboratory and diagnostic facilities including chemical pathology, haematology, microbiology, histopathology, diagnostic radiology, and access to laboratory facilities for assays of plasma drug concentrations and toxicological analysis.

8 Regular medical audit and quality assurance programmes.

9 A structured continuing educational programme including attendance and participation in seminars, journal clubs and grand rounds in General Internal Medicine and Clinical Toxicology.

10 Adequate educational facilities including access to medical libraries with computerised search systems and specialised databases for information on drugs and poisons.

CRITICAL CARE MEDICINE
(effective from 1 July 2022)

(I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Critical Care Medicine.

2 To enhance knowledge and clinical competence in all specialties in Internal Medicine which are relevant to critical care practice, and to inculcate a multidisciplinary approach to the management of patients with acutely life-threatening conditions and multiple organ failure.

3 To ensure procedural competence in Critical Care Medicine.

4 To ensure mastery of the physiology of vital organs and interventional modalities available, including drugs and artificial support systems, in the management of vital organ failure.

5 To ensure practical and technical familiarity with monitoring and support equipment and devices in the intensive care unit.

6 To inculcate critical thinking, self-learning, enthusiasm for research, and commitment to continuing medical education in knowledge and technologic innovations in Critical Care Medicine.

7 To enhance the trainees' sensitivity to issues of critical care delivery in the local community, and to inculcate a sense of responsibility and leadership in related policy making and implementation.

8 To acquire professional competence in training future trainees in Critical Care Medicine.

(II) STRUCTURE

1. This period consists of three years of supervised and accredited training in Critical Care Medicine. The three-year training programme comprises two years of core training in Critical Care Medicine as described below (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College), plus one year of training in any of the following:

    1.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

    1.2 A broad-based specialty, defined as Advanced Internal Medicine (AIM) which may be accredited for a maximum of 12 months, AND/OR

    1.3 Overseas training in Critical Care Medicine which may be accredited for a maximum of 12 months, with prior approval by the specialty board, AND/ OR

1.4 Research in Critical Care Medicine which may be accredited for a maximum of 6 months, with prior approval by the specialty board.

2. To ensure the acquisition of a broad-based physician training for all Higher Physician Trainees undergoing Critical Care Medicine training, the College requires that all registered Higher Physician Trainees undergo dual training in a broad-based specialty, defined as Advanced Internal Medicine (AIM), together with training in Critical Care Medicine. Fellows who have been trained in Critical Care Medicine without a broad-based specialty will not be accepted as Trainer in any specialty in the future.

3. The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen at the time of application to be registered as Higher Physician Trainee of the College:

3.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in AIM and 24 months (cumulative) of core training in Critical Care Medicine.

3.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Critical Care Medicine or AIM followed by 24 months of core training in remaining specialty.

4 For a minimum period of 24 months, the trainee is required to assume direct patient care responsibility of critically ill patients for at least 44 hours per week in a general intensive care unit of an acute hospital as defined in Section IV. Clinical training in intensive care units overseas is acceptable, provided such training programmes fulfill College accreditation requirements.

5 Training Unit Rotation Requirement

During the training, the Candidate needs to work in at least 2 different training Units, with a minimum of 3 months in each training Unit.

6 The Candidate is required to attend at least 6 Board organized tutorials before undertaking the Exit Examination.

7 Procedure log

7.1 The candidate needs to have undertaken the following procedures under trainer supervision during the training period, and keep a record of these.

7.2 These procedures include:

7.2.1 Percutaneous tracheostomy: 5

7.2.2 Bronchoscopy: 10

7.2.3 Brainstem death test: 5

7.2.4 Ultrasound guided central venous catheter insertion, including catheters for Renal Replacement Therapy: 20

7.2.5 Echocardiography: 20

8 An elective period totaling no more than three months is allowed in one or more of the following.

Internal Medicine

Anaesthesia

Bone Marrow Transplantation Unit

Cardiothoracic Intensive Care Unit

Neurologic/Neurosurgical Intensive Care Unit

Traumatology

All elective programmes must be formally accredited by the respective Colleges and/or Specialties.

9 Concurrent Training with Advanced Internal Medicine

9.1 For the minimum period of 24 months of Critical Care Medicine training, the trainee is required to go through training as specified in (II) Structure. (2) & (5).

9.2 During the 24 months of Advanced Internal Medicine training, the trainee is required to assume a minimum of three months of meaningful inpatient and consultative responsibilities in each of the following medical specialties based in acute hospitals: Cardiology, Nephrology and Respiratory Medicine. Part of the training in Cardiology should preferably involve direct patient care in a coronary care unit.

10 Sequential training subsequent to accreditation in other medical specialties

10.1 Fellows accredited in any one or more specialties other than AIM

10.1.1 Fellows accredited in any one or more specialty other than AIM may opt for sequential training in Critical Care Medicine, provided that they undertake a concurrent or sequential core training programme of Critical Care Medicine together with AIM. The training programme will thus comprise 48 months, being the sum of 24 months of core training in each specialty.

10.1.2 Such Fellows are required to have completed the core training requirements and passed the Exit Assessment in AIM as their first specialty before they can undergo the Exit Assessment of Critical Care Medicine.

10.1.3 It should be noted that such Fellows are not required to submit a dissertation for the Exit Assessment in AIM.

10.1.4 For the minimum period of 24 months of Critical Care Medicine training, the trainee is required to go through training as specified in Structure II, (2) & (5).

10.1.5 For a minimum of three months, the trainee is required to assume inpatient and consultative responsibilities in each of the following medical specialties based in acute hospitals during his/her higher physician training period

Cardiology, Nephrology and Respiratory Medicine. Part of the training in Cardiology should preferably involve direct patient care in a coronary care unit. If the trainee is already accredited as fellows in related specialties include Cardiology, Nephrology and Respiratory Medicine, he/she would be exempted from the three month training in his/her accredited specialty(ies).

10.2 Fellows accredited in AIM with or without another specialty

Fellows accredited in AIM with or without another specialty may undertake sequential training in Critical Care Medicine by completing

10.2.1 For the minimum period of 24 months of Critical Care Medicine training, the trainee is required to go through training as specified in Structure II, (2) & (5)

10.2.2 For a minimum of three months, the trainee is required to assume inpatient and consultative responsibilities in each of the following medical specialties based in acute hospitals during his/her higher physician training period:

Cardiology, Nephrology and Respiratory Medicine. Part of the training in Cardiology should preferably involve direct patient care in a coronary care unit. If the trainee is already accredited as fellows in related specialties include Cardiology, Nephrology and Respiratory Medicine, he/she would be exempted from the three month training in his/her accredited specialty(ies).

(III) THE SYLLABUS

Competencies-based Domains

1. Resuscitation and Initiation Management of the Acutely Ill Patient

1.1. Adopt a structured and timely approach to the recognition, assessment and stabilization of the acutely ill patient with disordered physiology

1.2. Manage cardiopulmonary resuscitation

1.3. Manage the patient post-resuscitation

1.4. Triage and prioritise patients appropriately, including timely admission to ICU

1.5. Assess and provide initial management of the trauma patient

1.6. Assess and provide initial management of the patient with burns

1.7. Describe the management of mass casualties

2. Diagnosis: Assessment, Investigation, Monitoring and Data Interpretation

   2.1. Obtain a history and perform an accurate clinical examination

   2.2. Undertake timely and appropriate investigations

   2.3. Describe indications for echocardiography (transthoracic /trans oesophageal)

   2.4. Perform electrocardiography (ECG) and interpret the results

   2.5. Obtain appropriate microbiological samples and interpret results

   2.6. Obtain and interpret results from blood gas samples

   2.7. Interpret clinical imaging

   2.8. Monitor and respond to trends in physiological variables

3. Disease Management

   Acute Disease

   3.1. Manage the care of the critically ill patient with specific acute medical conditions

   Chronic Disease

   3.2. Identify the implications of chronic and co-morbid disease in the acutely ill patient

   Organ System Failure

   3.3. Recognise and manage the patient with circulatory failure

   3.4. Recognise and manage the patient with, or at risk of, acute renal failure

   3.5. Recognise and manage the patient at risk of, acute liver failure

   3.6. Recognise and manage the patient with neurological impairment

   3.7. Recognise and manage the patient with acute gastrointestinal failure

   3.8. Recognise and manage the patient with acute lung injury syndromes (ALI/ARDS)

   3.9. Recognise and manage the septic patient

   3.10. Recognise and manage the patient following intoxication with drugs or environmental toxin

   3.11. Recognise life-threatening maternal peripartum complications and manage care under supervision

4. Therapeutic Interventions and Organ System Support in Single or Multiple Organ Failure

   4.1. Prescribe drugs and therapies safely

4.2. Manage antimicrobial drug therapy

4.3. Administer blood and blood products safely

4.4. Use fluids and vasoactive/inotropic drugs to support circulation

4.5. Describe the use of mechanical assist devices to support the circulation

4.6. Initiate, manage and wean patient from invasive and non-invasive ventilatory support

4.7. Initiate, manage, and wean patient from renal replacement therapy

4.8. Recognise and manage electrolyte, glucose and acid-base disturbances

4.9. Co-ordinate and provide nutritional assessment and support

4.10. Use of hyperbaric oxygen therapy

5. Practical Procedures

Respiratory System

5.1. Administer oxygen using a variety of administrative devices

5.2. Perform fibreoptic laryngoscopy under supervision

5.3. Perform emergency airway management

5.4. Perform difficult and failed airway management according to local protocols

5.5. Perform endotracheal suction

5.6. Perform fibreoptic bronchoscopy and BAL in the intubated patient under supervision

5.7. Perform percutaneous tracheostomy under supervision

5.8. Perform thoracocentensis via a chest drain

Cardiovascular System

5.9. Perform peripheral venous catheterization

5.10. Perform arterial catheterisation

5.11. Describe ultrasound techniques for vascular localization

5.12. Perform central venous catheterisation

5.13. Perform defibrillation and cardioversion

5.14. Perform cardiac pacing (transvenous or transthoracic)

5.15. Describe how to perform pericardiocentesis

5.16. Demonstrate a method for measuring cardiac output and derived haemodynamic variables

Central Nervous System

5.17. Perform lumbar puncture (intradural/"spinal") under supervision

5.18. Manage the administration of analgesia via an epidural catheter

Gastrointestinal System

5.19. Perform nasogastric tube placement

5.20. Perform abdominal paracentesis

5.21. Describe Sengstaken tube (or equivalent) placement

5.22. Describe indications for, and safe conduct of gastroscopy

Genitourinary System

5.23. Perform urinary catheterisation

6. Perioperative Care

6.1. Manage the pre-post-operative care of the high risk surgical patient

6.2. Manage the care of the patient following cardiac surgery under supervision

6.3. Manage the care of the patient following craniotomy under supervision

6.4. Manage the care of the patient following solid organ transplantation under supervision

6.5. Manage the pre- and post-operative care of the trauma patient under supervision

7. Comfort and Recovery

7.1. Identify and attempt to minimize the physical and psychosocial consequences of critical illness for patients and families

7.2. Manage the assessment, prevention and treatment of pain and delirium

7.3. Manage sedation and neuromuscular blockade

7.4. Communicate the continuing care requirements of patients at ICU discharge to health care professionals, patients and relatives

7.5. Manage the safe and timely discharge of patients from the ICU

8. End of Life Care

8.1. Manage the process of withholding or withdrawing treatment with the multidisciplinary team

8.2. Discuss end of life care with patients and their families/surrogates

8.3. Manage palliative care of the critically ill patient

8.4. Perform brain-stem death testing

8.5. Manage the physiological support of the organ donor

9. Professionalism

Communication Skills

9.1. Communicate effectively with patients and relatives

9.2. Communicate effectively with members of the health care team

9.3. Maintain accurate and legible records/documentation

Professional Relationships with Patients and Relatives

9.4. Involve patients (or their surrogates if applicable) in decisions about care and treatment

9.5. Demonstrate respect of cultural and religious beliefs and an awareness of their impact on decision making

9.6. Respect privacy, dignity, confidentiality and legal constraints on the use of patient data

Professional Relationship

9.7. Collaborate and consult; promote team-working

9.8. Ensure continuity of care through effective hand-over of clinical information

9.9. Support clinical staff outside the ICU to enable the delivery of effective care

9.10. Appropriately supervise, and delegate to others, the delivery of patient care

Self-Governance

9.11. Takes responsibility for safe patient care

9.12. Formulate clinical decisions with respect for ethical and legal principles

9.13. Seeks learning opportunities and integrates new knowledge into clinical practice

9.14. Participate in multidisciplinary teaching

9.15. Participate in research or audit under supervision

10. Transport

10.1. Undertakes transport of the mechanically ventilated critically ill patient outside the ICU

11. Patient Safety and Health Systems Management

11.1. Lead a daily multidisciplinary ward round

11.2. Comply with local infection control measures

11.3. Identify environmental hazards and promote safety for patients and staff

11.4. Identify and minimize risk of critical incidents and adverse events, including complications of critical illness

11.5. Organise a case conference

11.6. Critically appraise and apply guidelines, protocols and care bundles

11.7. Describe commonly used scoring systems for assessment of severity of illness, casemix and workload

11.8. Demonstrate an understanding of the managerial and administrative responsibilities of the CCM specialist

The above is a summary of the Joint syllabus. There are more detail requirements of the relevant knowledge, skills and attitudes under each competency domain. The full syllabus is available in the college website.

(IV) INSTITUTIONAL REQUIREMENTS

For recognition as a training unit in Critical Care Medicine, the training hospital should fulfill the following criteria.

1 The hospital should be an acute care hospital with the following facilities:

1.1 A general intensive care unit defined in (2) below.

1.2 An Accident and Emergency Department with active patient service 24 hours a day.

1.3 Beds of both sexes, admitting patients with a comprehensive range of medical and surgical diseases.

1.4 24-hour access to emergency consultative services including the various specialties in Medicine, Surgery and Anaesthesia.

2 The intensive care unit should admit patients with a variety of critical illnesses. It should be attended daily by trained critical care physicians with regular clinical input from related physician-based specialties. In hospitals where there are administratively independent medical and surgical intensive care units, the training programme should be based in the medical intensive care unit, but provision for the trainee to obtain regular exposure to surgical intensive care patients is also encouraged.

3 The general intensive care unit should have the following organisation and be equipped with, or have access to, the following facilities.

3.1 Fellows accredited in Critical Care Medicine as trainers, to provide a minimum trainer to trainee ratio of 1:2 at any one time. To ensure efficient, timely and consistent delivery of critical care services, the trainers should be directly supervising all aspects of critical care practice, including a minimum of twice daily rounds; acute management of newly admitted patients; performance of technical procedures; initiation, maintenance, and discontinuation of life support devices and systems;

critical evaluation and analysis of data obtained from monitoring devices; regular conferences with families; regular conferences with other members of the care team; emergency calls; in-service teaching; triage and bed allocation; as well as other administrative activities.

3.2 Trainer and trainee should have adequate contact time to allow teaching, supervision and assessment of trainee performance. Trainer-trainee contact time is defined as the total duration within a week during which both the trainer and trainee are physically present within the hospital performing clinical critical care duties. The maximum accredited durations of core CCM training in CCM training centres recommended by the College are as follows:

Number of CCM trainer	Contact time per week in hours	Maximum duration of core CCM training accredited
Two or more	More than 30	21 months
Two or more	Between 22 to 30	18 months
Two or more	Less than 22	0 month
One	More than 30	18 months
One	Between 22 to 30	12 months
One	Less than 22	0 month

The contact time of supervisors having CCM Fellowship but had not become CCM trainer would be counted as half the contact time of accredited trainers.

3.3 Well-trained nursing staff at patient-to-nurse ratio of no more than 2:1.

3.4 Life support devices and systems including mechanical ventilators, intra-aortic balloon pump, haemodialysis, peritoneal dialysis and temporary transvenous pacemaking facilities.

3.5 Haemodynamic monitoring devices, including monitoring of blood pressure, pulse, cardiac output, pulmonary artery occlusion pressure, mixed venous oxygen saturation.

3.6 Respiratory monitoring devices including arterial oxygen saturation, respiratory mechanics while on mechanical ventilation, end-tidal or transcutaneous PCO_2.

3.7 Neurologic monitoring including intracranial pressure monitoring.

3.8 Facilities for the following diagnostic and therapeutic procedures.

3.8.1 Haemofiltration

3.8.2 Charcoal haemoperfusion/Molecular adsorbent recirculation system (MARS)

3.8.3 Plasmapheresis

3.8.4 Bedside fibreoptic bronchoscopy.

3.9 24-hour access to laboratory for arterial blood gas analysis, and cell count and biochemistry of body fluids.

3.10 24-hour blood banking facilities and imaging services (X-rays, CT Scan).

3.11 Ready access to total parenteral nutrition service.

3.12 On-call facilities close to the unit for trainees.

4 Laboratory and diagnostic facilities

4.1 Radiology/imaging (X-rays, CT Scan, radionuclide scans, pulmonary angiogram, ultrasound).

4.2 Pathology, including exfoliative cytology.

4.3 Microbiology.

4.4 Clinical Chemistry.

4.5 Haematology.

5 Regular medical audit procedures and performance of autopsies to resolve diagnostic problems.

6 Maintenance of adequate and high quality medical records with easy and prompt accessibility at all times.

7 Structured educational programme including teach-ins, journal clubs and grand rounds in Critical Care Medicine.

8 Adequate educational facilities, which include

8.1 Access to medical library facilities and computerized search system.

8.2 Space and equipments for educational activities.

DERMATOLOGY AND VENEREOLOGY

1) OBJECTIVES

1 To provide a broad training, in-depth and updated experience at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Dermatology and Venereology.

2 To enhance knowledge, clinical skills and procedural competence in Dermatology & Venereology.

3 To provide an opportunity for postgraduate continuing medical education in Dermatology & Venereology.

4 To understand the various health care delivery issues concerning Dermatology & Venereology in the community.

5 To acquire professional competence in training future trainees in Dermatology & Venereology.

II) STRUCTURE

1 This period consists of a minimum of three years of supervised and accredited training in Dermatology and Venereology.

1.1 In the three years, the trainee should undergo a minimum of 24 months' full-time dermatology training in a College accredited Dermatology & Venereology training institute and a minimum of 6 months' full time venereology training in a College accredited Dermatology & Venereology training institute. The remaining six months are dedicated to full-time dermatology and/or venereology training or the training detailed in 1.2 below.

1.2 A maximum of 3 months may be accredited for full-time supervised training or research in a College accredited institute, or a local or an overseas institute considered by the Specialty Board to be of an equivalent standard, in Leprosy, Dermatopathology, Dermatosurgery, HIV medicine, Aesthetic Dermatology, Allergy, Occupational Dermatology or other specialties which are considered to be relevant by the Specialty Board of Dermatology & Venereology. Prior approval from the Specialty Board must be obtained by the Higher Physician Trainee in Dermatology & Venereology.

2 Apart from single specialty training in Dermatology and Venereology as stated above, the Higher Physician Trainees in Dermatology and Venereology may also undergo dual training together with a broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine. In such dual training programmes, the training in the broad-based specialty ensures the acquisition of a broad-based training for those trainees.

3 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the pathways chosen at the time of application to be registered as Higher Physician Trainee of the College:

3.1 Concurrent training: A minimum of five years of supervised training is required. The training programme comprises 36 months (cumulative) of training in Dermatology and Venereology and 24 months (cumulative) of core training in a broad-based specialty.

3.2 Sequential training: The training programme comprises 36 months of training in Dermatology & Venereology and 24 months in a broad-based specialty if it is chosen as a second specialty whereas 36 months in a broad-based specialty if it is chosen as a first specialty. A minimum of five and six years of supervised training is required depends on the training sequence.

III) CONTENTS

(1) Medical Dermatology

Adequate opportunities are provided for the trainee, under the supervision, coaching and evaluation of trainers, to observe, manage, and deliver comprehensive care for patients with a wide variety of dermatological diseases.

The contents of training includes, but not limited to the following items

1.1 Fundamentals in dermatology: effective communication, history taking, valid informed consent, dermatological examination, investigations and interpretation, clinical diagnosis and decisions with evidence based treatment plans

1.2 Histopathology of the skin, focusing on histopathology report interpretation and clinical correlation.

1.3 Specialized topics

Eczema, psoriasis, other papulosquamous disorders, exanthems, drug eruptions, erythroderma, urticarial, vasculitis, bullous dermatosis, emergency dermatology, developmental disorders, cutaneous oncology, cutaneous infection, pigmentary disorders, autoimmune conditions, hair and nails disorder, oral diseases, anogenital diseases, allergy, hypersensitivity and contact dermatitis, anogenital diseases, neutrophilic and eosinophilic disorder, histiocytosis, mastocytosis, non-infective granulomatous conditions, subcutaneous fat disorders, disorders of the vascular and lymphatic system, skin manifestation of systemic diseases, psychocutaneous diseases, paediatric dermatology, dermatoses of the elderly, dermatoses in pregnancy, aesthetic dermatology and leprosy.

(2) Sexually Transmitted Infection

Adequate opportunities are provided for the trainee, under the supervision, coaching and evaluation of trainers, to observe, manage, and deliver

comprehensive care for patients with sexually transmitted infections.

The contents of sexually transmitted infections training includes, but not limited to the following items:

2.1 Fundamentals of sexually transmitted infection: diagnosis and management of disease characterized by genital, anal or perianal ulcers (chancroid, genital HSV infections, granuloma inguinale, lymphogranuloma venereum), syphilis, diseases characterized by urethritis and cervicitis, chlamydial infections, gonococcal infection, diseases characterized by vaginal discharge (bacterial vaginosis, trichomoniasis, vulvovaginal candidiasis), pelvic inflammatory disease, epididymitis, human papillomavirus infection and its complications, proctitis, proctocolitis and enteritis, pediculosis pubis and scabies. Management of STIs patients' sexual partners.

2.2 Specialized topics: special populations (pregnant women, adolescent and children, men who have sex with men, women who have sex with women, transgender), HIV infection detection and management of STI in the HIV infected, Hepatitis A, B & C, management of STI patients who have a history of drug allergy, clinical prevention measures, counselling of STI patients and their partners.

(3) Procedural Dermatology

Adequate opportunities are provided for the trainee, under the supervision and evaluation of trainers, to observe and acquire the skills to deliver safe and effective dermatological procedure for diagnostic and therapeutic purposes.

The contents of procedure dermatology training includes, but not limited to the following items

3.1 Fundamentals of procedural dermatology: pre-procedural assessment, valid informed consent, anatomy, lesion and site selection, delivering local anesthetics, instruments, equipment and surgical materials, aseptic techniques, correct-patient and correct-site/lesion procedure, hemostasis, after-care and follow-up, complications of surgery.

3.2 Specialized topics:

3.2.1 Investigatory procedure: Fungus scraping and microscopy, scabies scraping and microscopy, skin smear examination for leprosy, hair-pull test/trichogram, dark ground microscopy for spirochaete, Gram-staining and wet smear examination for pus cell, Trichomonas vaginalis and Gonococcus, specimen taking for sexually transmitted infections, cervical cytology smear, speculum examination, proctoscopy, prostatic massage, patch test reading and interpretation, Wood's light examination, phototesting, patch test, prick test and intradermal testing, lumbar puncture.

3.2.2 Dermoscopy on pigmented and non-pigmented lesions

3.2.3 Therapeutic procedures: phototherapy, wet-wrap therapy, iontophoresis.

3.2.4 Surgical procedure: punch incision/excision, elliptical incision/excision, shave incision/excision, electrodessication, curettage, paring of corn, cryosurgery, intralesional steroid injection: needle/Dermojet, nail surgery, oral mucosal and genital skin surgery.

3.2.5 Laser surgery: for pigment lesions, vascular lesions and ablative laser.

3.2.6 Cosmetic procedures: Botulinum toxins, soft tissue augmentation, skin resurfacing.

(4) Professional quality development

During the process of training, a professional quality must be developed in order to provide high quality care to patients

4.1 Be humanistic. To listen, to empathize and to gain patient's trust.

4.2 Be ethical, legal and evidence-based in clinical practice.

4.3 Commitment to Continuing Medical Education and Continuing Professional Development.

IV) INSTITUTIONAL REQUIREMENTS

The accredited Dermatology/Venereology training institute of the training programme should fulfil the following criteria.

1 Dermatology training Institution should have the following features.

1.1 A day care center with out-patient clinics with accessible service which accepts referrals from a wide spectrum of health services. The volume of cases must be adequate; the range of cases type must be wide: from common dermatoses to rare dermatoses; from mild dermatosis to severe; from simple to complicated. Emphasis is given to the volume of cases with severe and complicated dermatosis.

1.2 The day care centre should be installed with facilities, equipment and materials to enable all the procedures in dermatology (Session 3) to be carried out. The facilities and equipment must be well maintained and operated to enable medical procedures to be carried out in a safe and high quality manner.

1.3 For a training institute not offer training in cosmetic procedures, arrangement must be made for trainees to be seconded to a College approved unit to receive training in cosmetic procedures.

1.4 The dermatology training institutes must possess a full range, updated

and necessary pharmaceutical agents which enable comprehensive pharmaceutical management of patients.

1.5 The dermatology training institute must have ready access to a range of supportive service enabling comprehensive diagnostic and therapeutic activities to be carried out. Those supportive service will include, but not limited to: pathology (Histopathology, chemical pathology, haematology, immunology), radiology and microbiology.

1.6 The dermatology training institute must be affiliated with general hospitals with a full range of specialist services. This enables severe dermatoses to be taken care under in-patient environment and benefits from the immediate input from other specialties. This also enables acquiring of knowledge and experience in diagnosis and management of dermatoses in other specialties through the provision of inpatient dermatology consultation service. The trainee should work in the affiliated hospital for an adequate period under supervision to enable the acquisition of experience in hospital dermatology.

1.7 There must be adequate supporting facilities, equipment and material to enable academic, research and educational activities to be carried out: a library with full range of books, periodicals and other reference material which are made readily accessible physically or over the internet; space for seminars and meeting; computers and projection equipment.

2 The Venereology training institute, in addition to the features needed for a dermatology training institute, should have the following features.

2.1 A day care centre with out-patient clinics with accessible service which accepts patient self-referral and also referrals from a wide spectrum of health care services.

2.2 The volume of cases must be adequate; the range of cases type must be wide: from common to rare STI; from simple to complicated.

2.3 A laboratory attached to the clinic, to provide dark field examination, Gram stain smear microscope examination, and wet smear examination.

2.4 A counselling & contact training service supported by trained health nurses.

2.5 For a Dermatology training institute not offering the six months training in venereology, arrangement must be made for trainees to be seconded to an accredited Venereology training institute in order to complete the six months of training in venereology.

3. Supervision, coaching and evaluation

3.1 An accredited trainer is matched to a maximum of two trainees. Trainers are responsible for onsite supervision, coaching and evaluation of the performance of a trainee, reporting to the Specialty Board Chairman of the progress and advise the chairman on the individual need of a trainee.

3.2 On-site supervision, coaching and evaluation is essential. It requires the trainer to be of close proximity with the trainee in a significant proportion of the trainee's training time, be present in the trainee's clinical sessions and procedural session, and is readily accessible for consultation if not present.

3.3 Regular and frequent attendance and presentations in the format of journal club, case presentation, clinical-pathological conference etc. is required in the training programme. The trainee should carry out these activities in close consultation of his/her trainer.

3.4 The dissertation preparation should be prepared in close consultation with the trainer, from the proposal to carrying out study to the final write up.

ENDOCRINOLOGY, DIABETES AND METABOLISM

I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Endocrinology, Diabetes and Metabolism.

2 To ensure a thorough and up-to-date understanding of the normal physiology of the endocrine system including the physiology and biochemistry of hormones and their actions.

3 To ensure that the trainee understands the principles and practice of hormone assay methods and the use of diagnostic tests.

4 To encourage critical thinking, self-learning and a commitment to continuing medical education in Endocrinology, Diabetes and Metabolism.

5 To provide an understanding of various health care delivery issues regarding diabetes care and education in the community.

6 To lay the ground work for in-depth scientific research, both clinical and basic, in Endocrinology, Diabetes and Metabolism.

7 To acquire professional competence in training future trainees in Endocrinology, Diabetes and Metabolism.

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Endocrinology, Diabetes and Metabolism. The three-year training programme comprises two years of core training in Endocrinology, Diabetes and Metabolism as described below (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College) plus one year of training in any of the following:

1.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

1.2 A broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, which may be accredited for a maximum of 12 months, AND/OR

1.3 Overseas training in Endocrinology (and Metabolism) or Diabetes, which may be accredited for a maximum of six months, with prior approval by Specialty Board, AND/OR

1.4 Research in Endocrinology (and Metabolism) or Diabetes, which may be accredited for a maximum of six months, with prior approval by Specialty Board.

2 To ensure the acquisition of a broad-based physician training for all Higher Physician Trainees undergoing Endocrinology, Diabetes and Metabolism training, the College requires that all registered Higher Physician Trainees undergo dual training programmes which consist of a minimum of core training in a specialty and core training in a broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine. Fellows who have been trained in Endocrinology, Diabetes and Metabolism without a broad-based specialty will not be accepted as Trainer in any specialty in the future.

3 The structures of dual training programmes approved by the College include the following, and Trainees must clearly indicate the programme chosen at the time of application to be registered as Higher Physician Trainee of the College:

3.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in a broad-based specialty and 24 months (cumulative) of core training in Endocrinology, Diabetes and Metabolism.

3.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Endocrinology, Diabetes and Metabolism or the broad-based specialty, followed by 24 months of core training in the other specialty.

4 The two-year period of core training should consist of: (a) one year of training in Endocrinology (and Metabolism) and (b) one year of training in Diabetes.

5 A minimum of three months should be spent in a hospital with accredited training programme in multi-disciplinary pituitary care.

6 A minimum of 40 hours should be spent in a hospital-based chemical pathology laboratory to acquire practical experience in common endocrine assays as required in the structured laboratory training programme.

III) CONTENTS

(1) Knowledge

This should include a thorough understanding of, and updated knowledge in, the normal physiology of the endocrine system, including the physiology and biochemistry of hormones and their actions.

There should also be ample opportunities for the trainee to observe, manage and assume continuing responsibility for patients with the following disorders in Endocrinology, Diabetes and Metabolism.

1.1 Endocrinology - Disorders affecting the
Thyroid gland
Neuroendocrine system, hypothalamus and pituitary gland
Adrenal gland
Gastrointestinal hormones including insulin
Endocrine function of the gonads

Hormonal control of blood pressure
Endocrine system in pregnancy, growth, development and malignancy.

1.2 Diabetes and its complications

Retinal, neurological, vascular and kidney disease
Acute diabetic complications
Diabetic pregnancy and antenatal care
Perioperative care of the diabetic patient
Diabetes education.

1.3 Metabolism

Metabolic bone disease and calcium disorders
Lipid disorders
Obesity and anorexia nervosa
Fluid and electrolyte disorders
In-born errors of metabolism.

(2) Skills

2.1 Understanding of basic principles and practice of hormone assay methods.

2.2 Practical experience in endocrine assays in a chemical pathology laboratory with accredited trainer(s).

2.3 Supervision and interpretation of endocrine function tests including the combined pituitary function tests, CRF tests, water deprivation test, short synacthen tests, dexamethasone suppression tests, oral glucose tolerance test and other clinical endocrine tests.

2.4 Interpretation of endocrine imaging modalities, including CT scan, MRI, ultrasonogram, radio-isotopic scanning of the endocrine organs and bone densitometry.

(3) Additional knowledge in the following is desirable subject to availability of training facilities.

3.1 Management of infertility.

3.2 Disorders of sexual differentiation and puberty.

3.3 Molecular biology.

(4) Attitudes

4.1 The well-being and health of patients are of paramount consideration.

4.2 Empathy and good rapport with patients and relatives is important.

4.3 Ability to recognise the importance of a multidisciplinary approach in the management of endocrine and metabolic diseases, and collaborate with medical professionals in internal medicine and other specialties in providing optimal care to patients.

4.4 Ability to act as team-leader in total patient care involving allied health professionals, including nurses, dietitians, podiatrists, clinical psychologists, social workers and physiotherapists.

4.5 Ability to recognise the cost-effectiveness of various investigations and treatment modalities in the consideration of patient care.

4.6 Ability to respect and observe the privacy and confidentiality of patients and the sanctity of life.

IV) INSTITUTIONAL REQUIREMENTS

1 The training programme may be completed in one or more hospitals, which provide accredited training for Endocrinology and/or Diabetes.

2 In all hospitals providing training programmes in Diabetes, the following provisions must be available.

2.1 Inpatient and outpatient service for patients with diabetes, of both genders, including pregnant women.

2.2 Adequate facilities for the detection and management of diabetes and its complications, including an up-to-date service in clinical chemistry, ambulatory diabetes care and education, dietetic, podiatric and ophthalmological services. Most of these facilities should be on-site.

2.3 Sufficient number of trainers in Diabetes and Endocrinology, to provide a minimum trainer to trainee ratio of not less than 1:2 at any one time, directly supervising all aspects of patient management, including daily ward rounds, consultations, emergency calls, perioperative and antenatal management of patients with diabetes, ambulatory diabetes care and education, and out-patient service in a specialist Diabetes Clinic.

3 In all hospitals providing training programmes in Endocrinology, the following provisions should be available.

3.1 Inpatient and outpatient service for patients of both genders, who suffer from a wide variety of endocrine and metabolic disorders as listed under 2.1 and 2.2 of Section IV.

3.2 Sufficient number of trainers in Endocrinology and Diabetes, to provide a minimum trainer to trainee ratio of 1:2 at any one time, directly supervising all aspects of patient management, including daily ward rounds and emergency calls, perioperative management of pituitary, thyroid, adrenal and other endocrine diseases, endocrine consultations and out-patient service in a specialist Endocrine Clinic.

3.3 Laboratory and diagnostic facilities

3.3.1 An up-to-date, comprehensive hormone assay and clinical chemistry service within the hospital to provide quality-

controlled hormone assays. Availability of a senior chemical pathologist for consultation on-site is preferred.

3.3.2 Availability of a metabolic and endocrine investigation unit in which there are well-trained specialist nurses to carry out special endocrine and metabolic function tests.

3.3.3 Access to radiology services, most of which should be on-site, including X-rays, CT scan, MRI, ultrasonogram, radio-isotopic scans, angiograms, and selective venous sampling for localisation of endocrine tumours; pathology service including aspiration cytology and facilities for measuring bone density.

3.4 Therapeutic facilities

Easy access to medical, radiotherapeutic, surgical, neurosurgical and gynaecological support for the optimal and up-to-date management of endocrine and metabolic disorders.

4 Hospitals providing training programmes in Diabetes or Endocrinology should have the following provisions.

4.1 Regular medical audit activities and performance of autopsies to assure the quality of care.

4.2 Maintenance of high quality medical records with easy and prompt accessibility at all times.

4.3 Structured educational programme including teach-ins, journal club, grand rounds, and, if possible, research-meetings in Endocrinology and/or Diabetes.

4.4 Adequate educational facilities which include

4.4.1 Access to medical library facilities and computerised literature search systems.

4.4.2 Space and equipment for continuing education including computers and audiovisual aids for the production and presentation of clinical or research materials.

4.5 Networking with other hospitals providing training for Endocrinology and/or Diabetes is highly desirable. This may involve exchange of trainees among different training centres (between Endo/DM and Endo/DM, or between Endo/DM and IM) and joint meetings to discuss cases.

GASTROENTEROLOGY AND HEPATOLOGY
(APPLICABLE TO HPT TRAINEES WHO START HPT AFTER 1 JUL 2020)

I) OBJECTIVES

1 To provide a broad training and in-depth experience in Gastroenterology and Hepatology, including inter-relationship with other specialties such as Gastrointestinal Surgery, Histopathology, Microbiology and Radiology, at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Gastroenterology and Hepatology.

2 To develop clinical skills, knowledge and competence in basic Gastrointestinal (GI) Endoscopy including upper gastrointestinal endoscopy, sigmoidoscopy, and colonoscopy as well as in other procedures such as abdominal ultrasound and liver biopsy.

3 To develop commitment in continuing medical education and to cultivate enthusiasm in research related to patient management.

4 To acquire professional competence in training future trainees in Gastroenterology and Hepatology.

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Gastroenterology and Hepatology. The three-year training programme comprises two years of core training in Gastroenterology and Hepatology as described below (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College), plus one year of training in any of the following:

1.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

1.2 A broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, which may be accredited for a maximum of 12 months, AND/OR

1.3 Overseas training in Gastroenterology and Hepatology, which may be accredited for a maximum of six months, with prior approval by the specialty board, AND/ OR

1.4 Research in Gastroenterology and Hepatology, which may be accredited for a maximum of six months, with prior approval by the specialty board.

2 To ensure the acquisition of a broad-based physician training for all Higher Physician Trainees undergoing Gastroenterology and Hepatology training, the College requires that all registered Higher Physician Trainees undergo dual training in a broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, together with training in Gastroenterology and Hepatology. Fellows who have been trained in Gastroenterology and Hepatology without a broad-based specialty will not be accepted as Trainer in any specialty.

3 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen at the time of application to be registered as Higher Physician Trainee of the College:

3.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in a broad-based specialty and 24 months (cumulative) of core training in Gastroenterology and Hepatology.

3.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Gastroenterology and Hepatology or the broad-based specialty followed by 24 months of core training in remaining specialty.

III) CONTENTS

1 CORE

(A) Scientific basis and clinical knowledge

Trainees will be expected to have broad knowledge-based education in the normal structure and function of the gastrointestinal tract and the aetiology, pathophysiology, natural history, clinical manifestation, investigation and management of the entire spectrum of diseases of the gastrointestinal system.

(B) Clinical care and expertise

Trainees should have supervised practical experience in the clinical care of inpatients and outpatients with gastrointestinal disorders. Clinical experience must be gained in recognized posts linked with appropriate clinical responsibilities.

(C) Skills

I) Basic diagnostic endoscopy techniques

Trainees will be expected to be competent in upper gastrointestinal endoscopy (including push enteroscopy), sigmoidoscopy and colonoscopy as well as recognition of early neoplastic lesions. Trainees should understand the principles of GI endoscopy which includes indications, contraindications, informed consent, procedural risk, procedural sedation, intraprocedural monitoring, radiation protection, endoscope reprocessing, Trainees should undergo the mandatory College-recognised theoretical and practicum training on procedural sedation, and safety in endoscopic procedure, during the course of their Higher Physician Training, by attending endoscopy simulation training course. Although skill training in endoscopic retrograde cholangio-pancreatography (ERCP) and endoscopic ultrasound (EUS) are regarded as post-fellowship Advanced Gastrointestinal Endoscopy training, understanding in the principles and role of these procedures in management is required.

II) Basic therapeutic endoscopy techniques

These should include stricture dilatation, injection or banding of varices, haemostatic techniques for peptic ulcer bleeding, snare polypectomy, feeding tube insertion and percutaneous endoscopic gastrostomy. The indications, contraindications, and complications of these procedures should be understood.

III) Non-endoscopic techniques

At completion of the Training Programme, Trainees are expected to be competent in abdominal paracentesis and have acquired considerable experience in liver biopsy and abdominal ultrasound. Knowledge in other investigative techniques such as capsule endoscopy, manometry, pH monitoring, gastrointestinal breath tests, gastric and intestinal function tests, pancreatic and biliary secretory tests, non-invasive liver stiffness measurement, radiological examinations such as CT colonography, MR enteroclysis, nuclear medicine procedures, percutaneous cholangiogram, biliary drainage procedures is also required.

2 PROCEDURE REQUIREMENT

Upper gastrointestinal endoscopy

During the training period, trainees are required to perform no fewer than 100 diagnostic examinations independently under supervision and no fewer than 50 successful therapeutic procedures for bleeding upper gastrointestinal lesions, nasogastric tube insertion and snare polypectomies.

Colonoscopy

During the training period, trainees are required to perform no fewer than 100 complete colonoscopies / ileo-colonoscopies independently under supervision with at least 50 successful therapeutic procedures such as snare polypectomies and control of bleeding lesions.

Liver biopsy

During the training period, trainees are required to perform no fewer than 5 successful liver biopsies with or without imaging guidance independently but under supervision.

3 OPTION MODULES

Trainees may undertake a variety of OPTION modules in designated centres during the two years of core training after discussion with their trainers. These options can be run on full-time or part-time basis for a period no more than three months for each module.

The OPTION modules are
a. Gastrointestinal (GI) Oncology.
b. Liver transplantation.

c. Physiological measurement, e.g. manometry, gastric and pancreatic function testing.
d. GI Imaging, e.g. CT, MRI, nuclear medicine.
e. GI Infection and Immunology, e.g. AIDS, tropical diseases, H. pylori infection.
f. GI Histopathology.
g. Nutrition.
h. Paediatric and adolescent gastroenterology.

IV) INSTITUTIONAL REQUIREMENTS

1 Staffing in the training unit should include at least one fully trained gastroenterologists with trainer status, and one surgeon with special interest in gastrointestinal surgery but there is no stipulation for 24-hour service for emergency surgery. The trainer to trainee ratio should not be less than 1:2. The unit should receive gastroenterological consultations from other clinical services in the hospital and operate gastroenterology clinics.

2 Modern endoscopic equipment should be available in the training unit. Fluoroscopy, not necessarily in an endoscopy unit, should be available for selected cases such as ERCP and endoscopic intubation. At least one video endoscopy system should be available.

3 The training unit should undertake sufficient volume of diagnostic and therapeutic upper gastrointestinal endoscopies and colonoscopies to enable trainees to acquire basic endoscopic skills.

4 Where endoscopy is taught, it should be part of an overall gastroenterology service with co-operation among gastroenterologists, surgeons, radiologists and pathologists.

5 The training unit should have a structured educational programme including regular GI ward rounds and joint gastrointestinal conferences attended by other specialists such as surgeons, radiologists and pathologists.

6 The hospital of the training unit should have all the facilities needed for physician training in general medicine, such as access to medical library and computerised literature search systems.

7 Opportunities for gastroenterology research should be available.

GENETICS AND GENOMICS (MEDICINE)

I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism of a specialist in Genetics and Genomics.

2 To enhance clinical skills, practical and scientific knowledge, and proper attitudes in the utilization of genetic and genomics information in the diagnosis and clinical management.

3 To provide in-depth supervised training in managing patients and families suffering from known or suspected genetic diseases.

4 To enhance the appropriate and effective use of genetic tests in clinical diagnosis, risk stratification, treatment decisions and disease prevention.

5 To encourage and provide opportunities in the pursuance of research in Genetics and Genomics.

6 To inculcate and enhance critical thinking, self-learning and a commitment to continuing medical education in Genetics and Genomics.

7. To acquire professional competence in training future trainees in Genetics and Genomics.

8. To acquire knowledge and understanding of medical ethics relating to the practice of Genetics and Genomics.

II) STRUCTURE

1 The program is at a post-fellowship level and only accepts College Fellows.

2. This period consists of two years of supervised and accredited training in Genetics and Genomics. The two-year training programme comprises full-time or part-time equivalent experience in one or more accredited hospitals.

3. Trainees should rotate through specialty(ies) with adequate scope of exposure to the practice of Genetics and Genomics in both heritable and acquired diseases. Rotation to other relevant service(s)/unit(s) may be undertaken subject to advice of the specialty board. Such rotation can be taken in modular or sessional basis.

4. A minimum of 20 hours of supervised experience in laboratories (cytogenetics, molecular genetics, clinical biochemistry) and clinical-laboratory consultation sessions is required within the 2-year clinical training program stated in (2).

5. Elective training (full-time or part-time equivalent) in the following modules can be accredited for up to a maximum of 3 months:

5.1 Laboratory (e.g. laboratory under the Hong Kong Genome Project)

5.2 Paediatrics genetics and genomics

5.3 Prenatal counselling or preimplantation genetics

5.4 Completion of prior approved post graduate certificate courses or modules in master or diploma (see Appendix)

6. Training in overseas centres with established services in Genetics & Genomics can be accredited for a maximum of 12 months with prior board approval.

7. Research in the relevant field of Genetics & Genomics can be accredited for a maximum of 6 months with prior board approval.

III) CONTENTS

(A) Knowledge

The trainee shall acquire a thorough understanding of the structure and functions of the human genome, inheritance pattern, molecular genetics, mechanisms of mutation and polymorphism, advances in gene sequencing technologies, selection and interpretation of genomic tests, ethics and counselling. Subject to his/her specialty(ies), the trainee should be familiar with:

1. major genetic practice in adult medicine, including but not limited to genetics and genomics of common and rare diseases ;

2. genetics of pathogens and infectious diseases and how the information can be applied at clinical, hospital management and community levels;

3. principles and clinical relevance of pharmacogenomics in the setting of not only specialist but also general medicine, in which polypharmacy is frequently encountered. Trainee should be able to apply such information in clinical practice, and in partnership with clinical pharmacologists and pharmacists.

(B) Experience

The trainee should be directly involved in the management and delivery of genetics services for patients primarily within the remit of his/her specialty(ies) while offering support and advice under supervision to other major genetics practices. The trainee should develop competence in the utilization and interpretation of various genetic tests to guide the diagnosis, risk stratification, treatment decision, response monitoring and prognostication of various conditions with genetic basis, as well as counselling of patients and families.

(C) Skills

The trainee must acquire sufficient background knowledge in genetics and genomics through guided learning or exposure to clinical-laboratory review sessions on genomic interpretation.

The trainee should be able to perform a pedigree analysis, become familiar with various diagnostic techniques in genetic and genomic tests, including but not limited to karyotyping and FISH analysis; Polymerase Chain Reaction-based assays; Sanger Sequencing; Next Generation Sequencing and their

interpretation with particular reference to the underlying principles as well as limitations of panel-based tests, exome sequencing and whole genome sequencing. In addition, the trainee should understand the principles and methodology involved in genome-wide association studies of complex and polygenic diseases and how such information can be integrated into polygenic risk score to predict patient susceptibility to these diseases and related complication. Furthermore, he/she needs to acquire the ability to present genetic information to patients in a sensitive and understanding manner in order to assist them to make informed decisions, independently or in collaboration with genetic counsellors.

The trainee needs to know, understand and apply appropriately the principles, guidance and laws regarding medical ethics and confidentiality in the delivery of genetic care.

(D) Attitude and Additional Attributes

Trainees are expected to focus more on the G&G aspects of his/her own specialty(ies) in clinical practice and benefit patients with their expertise. In addition, he/she should recognize one's limitation in the vast field of genetics and promptly refer clients to relevant specialists for advice on genome interpretation and joint care, when need arises. As part of a multidisciplinary team, the trainee should learn how to collaborate and build an effective team in the delivery of genetic care.

Commitment to on-going improvement in genetics and genomic practices requires that the trainee be involved in research relevant to his/her area of practice. There should be exposure to the development of research strategies, methodology and evaluation. Such opportunities should be available throughout the training period, and may be accredited as elective training as per Section (II).

IV) INSTITUTIONAL REQIREMENTS

1 The institution has a recognized Genetics & Genomics service staffed by a College-accredited trainer in Genetics and Genomics. The trainer to trainee ratio should be no less than 1:2 at any one time.

2 In all training units for programmes detailed in Section (III), there should be the following provisions:

2.1 A structural continuing educational programme including attendance and participation in seminars, pathology meetings, journal clubs or grand rounds in Genetics & Genomics

2.2 Access to laboratory facilities in Genetics and Genomics

2.3 Library and facilities for clinical meetings and presentations

2.4 Affiliation with other clinical services in the field of Genetics and Genomics

2.5 Regular audits and quality assurance programmes.

3 Approval of the Specialty Board should be sought in advance if training in any part(s) of the programme is planned to be undertaken in an overseas institution.

Appendix

The Specialty Board will take into considerations, on an individual basis, a variety of factors in evaluating if the specific diploma, certificate or modular courses can fulfill the learning purpose of the candidates and hence be accredited for elective training. These factors include, but are not limited to the reputation of the hosting institutions, course contents and their relevance to the Genetics & Genomics curriculum, duration of the courses. Examples of genetics & genomics courses recommended for trainees are listed as follows and other courses will also be considered.

1. Genetics courses organized by Harvard University
2. Genetics courses organized by Stanford University
3. Genetics courses organized by the University of Hong Kong
4. Genetics courses organized by the Chinese University of Hong Kong

GERIATRIC MEDICINE

I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Geriatric Medicine.

2 To develop the knowledge, skill and attitude to the specific physical and psycho-social needs of older patients and be able to provide holistic care with respect to these aspects

3 To understand the need of individualized disease management in older patients due to the presence of altered state of homeostasis, comorbidity and multimorbidity

4 To assess and manage older patients in acute, post-acute, rehabilitative, and post-discharge phases, as well as in planning transfer of care and ongoing care outside hospital.

5 To coordinate the management of older patients across the whole continuum of care settings including inpatient, outpatient, day hospital, community programs and long-term care facilities.

6 To contribute to medical education and continuing professional development through critical review of the literature and evidence-based practices, as well as understanding its potential applicability / limitations in older patients.

7 To lead an interdisciplinary team to provide holistic service towards meeting the needs of older patients.

8 To acquire knowledge in conducting quality assurance, audits and service evaluation.

9 To acquire professional competence in training future trainees in Geriatric Medicine.

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Geriatric Medicine. The three-year training programme comprises two years of core training in Geriatric Medicine as described below (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College), plus one year of training in any of the following:

1.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

1.2 Any other specialties of the College, which may be accredited for a maximum of six months each, AND/OR

1.3 Overseas training in Geriatric Medicine which may be accredited for

a maximum of six months, with prior approval by the specialty board, AND/OR

1.4 Research in Geriatric Medicine, which may be accredited for a maximum of six months, with prior approval by the specialty board.

2 Apart from single specialty training in Geriatric Medicine as stated above, Higher Physician Trainees in Geriatric Medicine may also undergo dual training together with another specialty (except for Palliative Medicine). In such dual training programmes, Geriatric Medicine is considered to be the broad-based specialty. However, for Trainees undergoing dual training in Advanced Internal Medicine (AIM) and Geriatric Medicine, AIM is considered to be the broad-based specialty.

3 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen at the time of application to be registered as Higher Physician Trainee of the College:

3.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in Geriatric Medicine and 24 months (cumulative) of core training in another specialty*

3.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Geriatric Medicine or another specialty* followed by 24 months of core training in remaining specialty.

* In case Dermatology and Venereology is selected as the other specialty, it should be noted that the core training programme of Dermatology and Venereology comprises 36 months of core training in both concurrent and sequential training.

4 The Specialty Board in Geriatric Medicine adopts a modular approach in the accreditation of training units/programmes. The minimum requirements for the modules to be completed are detailed in Appendix I. Trainees are encouraged to rotate between centres during the training.

III) CONTENTS

To attain the stated objectives, the contents of the training should include the following:

(1) Knowledge

1.1 The epidemiology of ageing – worldwide and local, its implication.

1.2 Normal ageing (biological, physical, psychosocial) and its clinical significance.

1.3 Preventive aspects including healthy ageing, compression of morbidity, strategies for personal and population illness prevention and screening.

1.4 Atypical presentation and multi-factorial nature of clinical presentation in older patients.

1.5 Common system disorders in older people.

1.6 Common geriatric syndromes / conditions, including but not exclusive to the followings:
   a. Instability: syncopal / non-syncopal falls
   b. Immobility
   c. Incontinence
   d. Impaired vision/hearing
   e. Intellectual syndromes and / or decline: dementia, delirium and depression
   f. Impaired feeding, dysphagia and malnutrition
   g. Iatrogenesis from under- / over- investigations or drug treatment
   h. Osteoporosis and related fragility fracture
   i. Sarcopenia and frailty syndrome
   j. Peri-operative assessment and prevention of complications
   k. Pressure ulcers prevention, assessment and management
   1 Immuno-deficiency and vaccination
   m. Elder abuse
   n. End-of-life care including symptom control and related medico-legal issues.

1.7 Comprehensive geriatric assessment with competence in the application and interpretation of commonly used assessment tools and investigations in the following functional domains / conditions:
   a. Mood and cognition
   b. Physical function
   c. Fall and syncope
   d. Swallowing
   e. Continence

1.8 Appropriate use of investigations and treatment (pharmacological and non-pharmacological), balancing risk against benefit for individual older patients.

1.9 Drug therapy: A working knowledge of the basic principles of therapeutics including adverse drug reactions, drug interactions, and effects of ageing and disease states on drug pharmacokinetics. Ability to explain the indications, effectiveness, potential adverse effects, potential drug interactions and alternatives for medications commonly used in older patients.

1.10 Rehabilitation as applied to management of acute and chronic illness in older people; with the understanding of the principle of goal setting and concepts of impairments of body functions, activity limitations and participation restrictions. Knowledge in prescription of therapeutic exercises for successful ageing and disease states. Knowledge in use of various assistive or adaptive devices in enhancing independence of older people.

1.11 Knowledge on quality indicators of hospital-based infirmary and residential care home, including but not exclusive to: infection control, pressure ulcer prevention and management, fall prevention and management, contracture prevention and management, appropriate use of physical restraints, nutritional assessment and maintenance, promoting continence, optimizing drug use, preserving autonomy and person-centered care issues.

1.12 Knowledge on the ethical principles and medico-legal issues of end-of-life care in older people, including Advance Care Planning, Advance Directive, Do Not Attempt Cardio-Pulmonary Resuscitation (DNACPR) order, assessment of mental capacity.

1.13 Understanding of the complex interaction between normal ageing (including altered homeostasis), disease processes, medical treatment and related psychosocial factors in the delivery of optimal patient-centred care to older patients.

1.14 Appropriate management of frail elders with complex and multi-factorial (medical, functional, psychological and socioeconomic) health problems after comprehensive geriatric assessment by geriatricians and interdisciplinary geriatric team.

1.15 Interface between clinical and caring issues including elder abuse, surrogate decision-making including application of guardianship, caregiver stress, social isolation and support networks.

1.16 Knowledge on objectives and up-to-date spectrum of care provided by residential care homes and community supporting services.

1.17 Determinants of successful transfer of care outside hospital which meet the perspectives and needs of patients and their caregivers, and suitability for different care levels within the community.

1.18 Appreciate the importance of collaborative and interdisciplinary team approach, and the role of interdisciplinary case conference and communication for goal setting, care planning and discharge planning in older patients.

(2) Skills

2.1 Comprehensive geriatric assessment including the evaluation of physical health, mental health, functional status, socioeconomic status and environmental factors related to illnesses in old age, as applied to various settings including acute, post-acute and rehabilitation, out-patient, geriatric day hospital, and home visits.

2.2 Ability to solve complex clinical problems and interpret investigation results related to the characteristics of older patients

2.3 Clinical decision-making skills, including appropriate application of ethical principles related to the clinical care of older patients.

2.4 Care planning and discharge planning skills.

2.5 Communication and counselling skills to older patients, caregivers, para-medical & other colleagues of the health care team.

2.6 Ability to appraise medical literatures and to evaluate their applicability in older population; and to conduct quality assurance and clinical audit.

2.7 Managerial and organizational skills including leadership in interdisciplinary team approach to patient management, conducting case conferences, and organizing geriatric services in different care settings.

2.8 Skills in safe prescribing and medication management aiming to prevent, detect and address medication-related problems and achieve optimum use of medicines.

2.9 Procedural skills which are essential to the diagnosis and management of common conditions in older patients.

(3) Attitude

3.1 To recognize older population is heterogeneous ranging from healthy people to frail people with limited life expectancy. Clinical decision should take reference to biological instead of chronological age, comorbidity and multimorbidity and evidence relevant to older population whenever available

3.2 To adopt a comprehensive and holistic approach to the care of older patients.

3.3 To appreciate the importance of inter-disciplinary team approach and collaboration with different specialties for optimal management of older patients in all care settings,

3.4 To appreciate the need for continuity of care across different care settings for older people and their caregivers.

3.5 To demonstrate sensitivity to the balance between prolongation of life and quality of life, and to understand the concept of end-of-life issues; to be compassionate to the suffering of older patients and their caregivers and assist them to make a sound balance between the risks and benefits of medical investigation and treatment.

3.6 Being committed to continuous professional development, advancement of knowledge and skills towards the specialty and to the care of older people.

3.7 Being alert to socioeconomic changes that would affect the health care of older people in particular with respect to issues of health inequalities and ageism; and to act as advocate for older people.

IV) INSTITUTIONAL REQUIREMENTS

A hospital-based Geriatric Training Centre with the following provisions under the supervision of a Geriatric specialist and may not necessarily be located physically in one site:

1 Acute Geriatric beds: acute beds with A&E admissions for older patients.

2 Post-acute and rehabilitation beds for older patients.

3 Long-term care (hospital-based infirmary care) beds for older patients. The criteria required for training purpose are: at least one clinical session per week under supervision by a trainer in Geriatric Medicine.

4 Geriatric Day Hospital: the criteria required for training purpose are: geriatrician-run, not less than 20 day-place for at least 5 days per week.

5 Outpatient clinic and inpatient consultation service.

6 Community Geriatrics: e.g. Community Geriatric Assessment Service, Discharge Support Program, Home Visits & Assessments. The criteria for training purpose are: interdisciplinary case conferences and management.

7 Close working relationships with psycho-geriatrics, orthopaedics and other specialties.

8 Access to all necessary investigations and procedures without age limits.

9 Adequate staffing: For full accreditation within the training centre, a minimum of two physicians accredited as trainers in Geriatric Medicine supported by a multidisciplinary team including (but not exclusive to) nurses, therapists, social workers, and community nurses. The trainer to trainee ratio should not be less than 1:2 at any one time. Institutions with single trainer would be accredited for not more than 18 months of the training period.

10 Access to adequate medical literature support either through medical library service or a web-based one

11 Availability of Geriatrics-specific CME program in the form of inter-hospital or inter-departmental clinical meetings and presentation.

Minimal requirements for the modules to be completed for accreditation of training units/ programmes

(The modules may be conducted concurrently)

Modules	**Minimum Requirement**
Weekly geriatric specialist rounds	24 months
Weekly interdisciplinary case conferences	24 months
Geriatric consultations/assessments	24 months
Acute inpatient geriatrics	12 months
Geriatric specialist outpatient clinics	24 months
In-patient rehabilitation	6 months
Geriatric day hospital	3 months
Home visits and assessments	10 visits
Community geriatrics (incl. community geriatric assessment service and discharge support program)	6 months *(not less than 3 months at CGAS)*
Long-term care (hospital-based infirmary care)	3 months

Trainees may opt to substitute Geriatric Medicine for AIM as the broad-based specialty in Dual Specialty Training. Under such circumstances, the trainees should take note of the following requirements:

1 Undergo three months' training in a medical unit of a hospital with acute surgical and obstetric service and three months' training in ICU/CCU/HDU during Basic Physician Training or Higher Physician Training. Such training may be undertaken during training in Geriatric Medicine or concurrent training in the second specialty. If this is not fulfilled, additional training to enable such exposure outside the four years of concurrent training is required. Trainers and Programme Directors of Trainees who propose to undertake concurrent training in Geriatric Medicine with Rehabilitation should specifically draw their attention to these requirements and assist them to plan their training with the respective Chiefs of Service.

2 Complete the annual Self Learning Tool (SLT) requirement before Interim and Exit Assessment in the specialty. SLT is a web-based interactive training modules jointly developed by the College and Hospital Authority.

* ICU/CCU/HDU training exposure refers to designated beds for monitoring and active management of acutely ill patients.

HAEMATOLOGY AND HAEMATOLOGICAL ONCOLOGY

I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Haematology and Haematological Oncology (Haem & Haem Onc).

2 To enhance clinical and procedural skills, practical and scientific knowledge and proper attitudes in the management of patients with Haem & Haem Onc disorders.

3 To inculcate and enhance critical thinking, self-learning, and commitment to continuing medical education in Internal Medicine in general and Haem & Haem Onc in particular.

4 To encourage and provide opportunities in the pursuance of scientific enquiry and basic research in Haem & Haem Onc.

5 To inspire trainees to be leaders of teams of health care workers for the holistic management of patients with Haem & Haem Onc disorders; to respond to the cost effective issues of various treatment modalities; to be sensitive to community needs and to plan for future services in Haem & Haem Onc.

6 To provide supervision, guidance and opportunities to acquire the necessary competence for accreditation in this specialty.

7 To acquire professional competence in training future trainees in Haem & Haem Onc.

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Haem & Haem Onc. The three-year training programme comprises two years of core training in Haem & Haem Onc as described below (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College), plus one year of training in any of the following:

1.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

1.2 A broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, which may be accredited for a maximum of 12 months, AND/OR

1.3 Overseas training in Haem & Haem Onc, which may be accredited for a maximum of twelve months, with prior approval by the specialty board, AND/ OR

1.4 Research in Haem & Haem Onc, which may be accredited for a maximum of six months, with prior approval by the specialty board.

2 The two years of core training should include experience in the following:

2.1 Haemopoietic Stem Cell Transplantation: A minimum of three months full-time or part-time equivalent service in a unit of international standard. Training in this area can be accredited for a maximum of six months.

2.2 Laboratory Haematology: A minimum of three months full-time or part-time equivalent service in a laboratory which offers a full range of diagnostic services in Haematology and exposure to hospital blood banking. Training in this area can be accredited for a maximum of six months.

2.3 Blood Transfusion: One month of full-time service in a blood bank with comprehensive service and laboratory support. Attachment to the Hong Kong Red Cross Blood Transfusion Service is encouraged.

3 To ensure the acquisition of a broad-based physician training for all Higher Physician Trainees undergoing Haem & Haem Onc training, the College requires that all registered Higher Physician Trainees undergo dual training in a broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, together with training in Haem & Haem Onc . Fellows who have been trained in Haem & Haem Onc without a broad-based specialty will not be accepted as Trainer in any specialty in the future.

4 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen at the time of application to be registered as Higher Physician Trainee of the College:

4.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in a broad-based specialty and 24 months (cumulative) of core training in Haem & Haem Onc.

4.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Haem & Haem Onc or the broad-based specialty followed by 24 months of core training in remaining specialty.

III) CONTENTS

1 Knowledge

There should be ample opportunities for the trainee to observe, manage and assume responsibility for the investigation and treatment of patients suffering from a wide variety of acute and chronic haematological and haemic-oncological problems in a Haematology Unit or Medical Unit which deliver expert specialised care to such patients.

The knowledge required can be addressed by competence in the following areas of activities of the Haem & Haem Onc specialist.

1.1 In-hospital management of patients with various blood disorders, including anaemias, abnormalities in white cells and platelets, marrow failures, leukaemias and lymphomas, chronic myeloproliferative neoplasms, chronic lymphoproliferative diseases, splenomegalies as well as thromboembolic disorders.

1.2 Chemotherapy and supportive management of patients suffering from leukaemias and lymphomas.

1.3 Competence in interpretation of morphological haematology and routine and specialised haematological tests.

1.4 Ambulatory care of patients and special outpatient follow-up.

1.5 Consultation by other specialties on general haematology, bleeding and blood transfusion problems.

1.6 Anticoagulant clinic for the management of acquired and inherited thrombotic diseases.

1.7 Haemophilia Centre for the management of inherited bleeding diseases.

1.8 Working and advanced knowledge in the following specialised areas.

a. Haematopoietic stem cell transplantation.

b. Plasmapheresis and other apheresis procedures.

c. Blood component collection, processing and blood banking.

d. Routine as well as specialised haematological laboratory procedures.

2. Skills and Attitudes

2.1 Competence in eliciting relevant clinical features and in interpreting morphology of peripheral blood smears and marrow biopsy.

2.2 Appropriateness in the ordering and interpretation of special haematology tests, e.g,

a. Measurement of haematinics, including serum ferritin, serum B12 and folate, Schillings tests.

b. Immune causes of cytopenias including characterisation of antibodies to red cells and platelets.

c. Red cell enzyme deficiencies.

d. Immunophenotyping, cytogenetics and molecular studies of leukaemias and lymphomas.

e. HLA typing for stem cell matching.

f. Coagulation factor assays and tests for inhibitors.

g. Tests for thrombophilias.

h. Molecular diagnosis and monitoring of haematological disease.

2.3 Procedural skills including marrow aspiration and trephine biopsy, management of venous assess catheters, plasmapheresis and cytapheresis, peripheral blood stem cell and marrow harvest and processing, intrathecal administration of drugs.

2.4 Cost effectiveness of cytotoxic therapy for haemic malignancy.

2.5 Risk-benefit assessment of different treatment modalities.

2.6 Assessment of new and innovative therapies for various blood disorders.

2.7 Choice of drugs and procedures for management of immuno-suppressed patients with opportunistic infections.

2.8 Counselling of patients and relatives on alternative strategies for the treatment of malignant and non-malignant blood diseases.

2.9 Ability to communicate with patients and relatives in handling expectation, emotional problem and ethical issues relating to the management of malignant blood diseases.

2.10 Ability to deal with treatment failures, to manage and give appropriate counselling in "do not resuscitate" cases, and to provide bereavement support.

2.11 Ability to communicate and cooperate with medical, scientific and technical staff in haematology laboratory.

IV) INSTITUTIONAL REQUIREMENTS

1 The minimum trainer to trainee ratio should not be less than 1:2 at any one time.

2 Sufficient haematology beds supervised by fully trained haematologist/ haematological oncologist for acute and clinical admissions of patients with non-malignant and malignant blood disorders. This can take place in an independent haematology unit or as part of a General Medical Unit.

3 Sufficient reverse isolation facilities for the management of patients with immuno-suppression and agranulocytosis.

4 Access to intensive or high dependency care.

5 Access to 24-hours laboratory and imaging services for management of acute haematological problems including hypercalcaemia, hyperviscosity, disseminated intravascular coagulation and bleeding problems.

6 Access to specialised procedures for the acute and chronic management of blood diseases, including plasmapheresis and cytapheresis, haematopoietic stem cell transplantation, etc.

7 Access to services of specialised haematology diagnostic laboratory, blood transfusion services and drug level monitoring.

8 Acute medical audit and postgraduate education programmes.

9 Access to library and audiovisual facilities.

IMMUNOLOGY AND ALLERGY

I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism of a specialist in Immunology & Allergy.

2 To provide broad-based education towards the understanding of immunological mechanisms underlying clinical diseases.

3 To provide in-depth supervised training in managing patients suffering from immunological disorders.

4 To enhance the appropriate and effective use of immunological investigations in clinical diagnosis and treatment.

5 To stimulate research in Clinical Immunology.

6 To acquire professional competence in training future trainees in Immunology & Allergy.

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Immunology and Allergy. The three-year training programme comprises two years of core training in Immunology and Allergy as described below (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College) plus one year of training in any of the following:

1.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

1.2 A broad-based specialty, defined as Advanced Internal Medicine (AIM), which may be accredited for a maximum of 12 months, AND/OR

1.3 Overseas training in Immunology and Allergy may be accredited for a maximum of twelve months, with prior approval by the specialty board

2 To ensure the acquisition of a broad-based physician training for all Higher Physician Trainees undergoing Immunology and Allergy training, the College requires that all registered Higher Physician Trainees undergo dual training in a broad-based specialty, defined as Advanced Internal Medicine (AIM), together with training in Immunology and Allergy. Fellows who have been trained in Immunology and Allergy without a broad-based specialty will not be accepted as Trainer in any specialty in the future.

3 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen when applying to be registered as Higher Physician Trainee of the College:

3.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in AIM and 24 months (cumulative) of core training in Immunology and Allergy.

3.2 Sequential training: A minimum of five years of supervised training is required in Immunology and Allergy. The training programme comprises 36 months training in either Immunology and Allergy or AIM followed by 24 months of core training in remaining specialty.

4 The trainee should rotate through a minimum of two units/institutions to ensure optimal exposure to the practice of Immunology and Allergy.

5 The trainee should acquire clinical experience and become competent in the major areas of immunological practice as listed in Section III) A. A minimum of 6 months of supervised training in each of Allergy & Hypersensitivity and Primary & Secondary immunodeficiency is required. Supervised training in Autoimmune & immune-complex diseases and Transplantation each of minimum 3 months and maximum 6 months duration is required.

6 Laboratory experience constitutes an integral part of the training programme. In addition, full-time training in laboratory immunology for 3 months is required during the 24-month training. Refer to Section III) C for core laboratory components.

7 Fellows in related subspecialty may choose to be exempted from training in relevant areas in III) A.

III) CONTENTS

(A) Knowledge

The trainee shall acquire a thorough understanding of the structure and functions of the immune system, mechanisms of immunological tissue damage and immunopathogenesis of common diseases. The trainee should be familiar with the following areas which constitute major immunological practices:

1 Allergy and hypersensitivity

2 Primary and secondary immunodeficiency

3 Autoimmune and immune-complex diseases

4 Transplantation

(B) Experience

The trainee should be directly involved in the management of all four areas of major immunological practices in Section III) A. He/she should develop competence in the diagnosis, management and the use of immunologically-based therapeutic intervention, as well as allergen avoidance and desensitization in patients with allergic hypersensitivity.

(C) Skills

The trainee must acquire sufficient background knowledge in basic and applied immunology through guided learning and exposure to laboratory immunology. He/she should become familiar with diagnostic techniques in Immunology and Allergy, their interpretation, quality assurance and their relevance in the major immunological practices areas. Such immunological investigations include:

1 Autoimmune serology.

2 Immunochemistry.

3 Cellular immunology techniques, including flow cytometry, lymphocyte and neutrophil function tests.

4 Tissue typing.

5 Various forms of allergy tests including skin tests and specific IgE assays.

(D) Additional Knowledge

Commitment to on-going improvement in clinical immunological practices requires that the trainee be involved in research relevant to his/her area of practice. There should be exposure to the development of research strategies, methodology and evaluation. Such opportunities should be available throughout the training period, and may be accredited as training in laboratory as per Section (II) 6.

IV) INSTITUTIONAL REQIREMENTS

A trainee in Immunology and Allergy should enrol in at least two College recognised units/institutions

1 The unit/institution providing training must be staffed by a College-accredited trainer in Immunology and Allergy. Local trainer must be a Fellow of the College who possesses at least two years of relevant post-Fellowship experience, and must be a College accredited specialist in Immunology and Allergy. The trainer to trainee ratio should be no less than 1:2 at any one time.

2 In all training units for programmes detailed in Section (III), there should be the following provisions:

2.1 Education activities to provide the necessary grounding in basic and clinical immunology in general;

2.2 Relevant laboratory facilities in Immunology and Allergy;

2.3 Library and facilities for clinical meetings and presentations;

2.4 Affiliation with extended care facilities;

2.5 Quality assurance programmes.

3 An immunology laboratory described under Section (II) 6 and (III) C shall be a service laboratory which provides a full range of diagnostic investigations on a routine basis. A trainee may acquire the experience through rotation to more than one laboratory if a full service laboratory is not available or accessible. For those who choose to gain laboratory experience through research, a project which employs a reasonably broad range of immunological investigations should be organised. Supplementary laboratory attachment shall be arranged should the above facilities fail to give adequate exposure to a comprehensive range of immunological investigations.

4 Approval of the Specialty Board should be sought in advance if training in any part(s) of the programme is planned to be undertaken in an overseas institution.

INFECTIOUS DISEASE

I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Infectious Disease

2 To develop clinical skills, knowledge, and competence in the prevention and management of infectious disease.

3 To acquire the fundamental concepts of epidemiology of infectious disease, infection prevention and control, antimicrobial use and related policies, in both community and institutional settings.

4 To inculcate in trainees a commitment to continuing medical education and scientific research in Infectious Disease.

5 To acquire professional competence in training future trainees in Infectious Disease.

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Infectious Disease. The three-year training programme comprises TWO years of core training in Infectious Disease as described in section 1.1 (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College), plus ONE year of training in any of the options as described in section 1.2:

1.1.1 Six months of training in 'Notifiable and other Communicable Diseases' (with at least 3 months in the Hospital Authority Infectious Disease Centre; and at other approved clinical / public health units)

1.1.2 Three months of training in HIV and AIDS medicine

1.1.3 Three months of training in management of tuberculous diseases

1.1.4 A period of 9 months of training in General Infectious Diseases is required. The trainee should have full-time duties in the Internal Medicine service to gain experience relating to a wide range of infectious diseases. These should include management of infections in non-HIV immunocompromised and critically ill patients.

1.1.5 Three months of dedicated training at a College-approved microbiology laboratory. Moreover, throughout the entire training period, the trainee should be provided with ample opportunities to interact with clinical microbiologists and to act as a liaison officer, and is required to attend joint Infectious Disease and Microbiology clinical rounds. The trainee should be able to acquire good knowledge on microbiology methods, techniques, and laboratory practice, as well as principles and practices of infection control and prevention.

1.1.6 The trainee should learn about antimicrobial stewardship program(s) (ASP), outpatient parental antimicrobial therapy (OPAT), and related policies during the training period.

1.1.7 A minimum of 20 clinical training sessions on the management of Sexually Transmitted Disease in a College-recognised unit is required.

AND

1.2.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

1.2.2 A broad-based specialty, Advanced Internal Medicine (AIM), may be accredited for a maximum of 12 months, AND/OR

1.2.3 Overseas training in Infectious Disease or Medical Microbiology / Virology or Clinical Epidemiology / Public Health related to infectious diseases, which may be accredited for a maximum of 12 months, with prior approval by the Specialty Board, AND/ OR

1.2.4 Research in Infectious Disease or Medical Microbiology / Virology or Clinical Epidemiology / Public Health related to infectious diseases, which may be accredited for a maximum of 6 months, with prior approval by the Specialty Board.

2 To ensure the acquisition of a broad-based physician training for all Higher Physician Trainees undergoing Infectious Disease training, the College requires that all registered Higher Physician Trainees undergo dual training in a broad-based specialty (Advanced Internal Medicine, AIM), together with training in Infectious Disease. Fellows who have been trained in Infectious Disease without a broad-based specialty will not be accepted as Trainer in any specialty in the future.

3 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen at the time of application to be registered as Higher Physician Trainee of the College:

3.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in a broad-based specialty and 24 months (cumulative) of core training in Infectious Disease.

3.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Infectious Disease or the broad-based specialty followed by 24 months of core training in remaining specialty.

III) CONTENTS

During the course of training, the trainee is expected to acquire experience, knowledge, and skills related to the field of Infectious Disease. Familiarity with inter-related subjects is also expected.

(1) Knowledge

1.1 Aetiology, pathogenesis, natural course, clinical manifestations, diagnosis, and management of various global, epidemic, and endemic infectious diseases (including acute and chronic infections, emerging infections, tropical medicine & international health)

1.2 Epidemiology of common and important infections in the territory and neighboring regions, including hospital epidemiology and healthcare associated infections

1.3 Institutional and outpatient antimicrobial policies, pharmacology of antimicrobials, and their judicious use under different clinical settings

1.4 Hospital-based and community-based infection control practices and programs; outbreak reporting and management; public health measures to reduce disease transmission; risk communication

1.5 Diagnostic techniques and other common laboratory procedures in clinical microbiology, virology, mycology, and parasitology

1.6 Immunodeficiency and its assessments; immunopathogenesis of diseases; management of HIV and non-HIV immunocomprised patients

1.7 Vaccinology

1.8 Tropical medicine and international health

1.9 Various imaging modalities for the diagnosis and monitoring of infections

1.10. Clinical research methods and statistical analysis

1.11 Quality assurance and cost-effectiveness in the practice of Infectious Disease

(2) Skills

2.1 Clinical management of adult patients with acute, subacute, and chronic infections, and their complications and sequelae

2.2 Managing patients with communicable and tropical infections (e.g. malaria, cholera, typhoid; vector-borne diseases; airborne infections)

2.3 Managing infections in immunocompromised patients (e.g. neutropenic fever, transplant-related infections, immunosuppressant and biologics recipients, HIV/AIDS)

2.4 Treating severe infections in critical care settings

2.5 Treating healthcare-associated infections and antimicrobial resistant pathogens; application of appropriate infection control measures, and liaison with laboratory services

2.6 Essential diagnostic techniques such as staining, microscopy, and culture for important micro-organisms with various clinical specimens (e.g. malaria parasites, meningococci)

IV) INSTITUTIONAL REQUIREMENTS

1 The training programme may involve more than one recognised training hospital/institution. A training institution for Infectious Disease should be an acute care hospital with the following features:

1.1 Twenty-four-hour emergency admission

1.2 General medical and surgical beds, for which Infectious Disease consultations are called upon on a regular basis

1.3 Isolation facilities

1.4 Outpatient referral clinic for Infectious Disease management including travel associated infections

1.5 A designated team composed of infectious disease physicians and microbiologists responsible for the management of a wide spectrum of infectious diseases

1.6 Laboratory support including microbiology, virology, parasitology, histopathology, biochemistry and haematology

1.7 Radiology support

1.8 Bronchoscopy and gastrointestinal endoscopy facilities

2 In all training institutes for Infectious Disease, the following features should be available:

2.1 Staffed by at least one fellow of the College who has been accredited as trainer in Infectious Disease. Regular ward rounds, supervised emergency calls and outpatient services should be provided. The minimum trainer to trainee ratio should not be less than 1:2

2.2 Laboratory and diagnostic facilities including radiology, histopathology, microbiology, clinical chemistry and haematology

2.3 Adequate educational facilities such as access to medical library, computerised literature search systems, educational equipment, etc.

2.4 Regular education programmes and audit meetings

2.5 Opportunities for research throughout the training period

MEDICAL ONCOLOGY

I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for the trainee to acquire competency and professionalism as a specialist in Medical Oncology, so as to be able

a To provide a consultative and advisory oncological service to general physicians and other specialists in general hospitals in terms of available diagnostic and therapeutic modalities and the appropriateness of tertiary referral.

b To provide specific oncologic therapy and support for intensive chemotherapy of solid tumours and haematological malignancies.

c To provide input into multidisciplinary clinics conducted in conjunction with other specialties towards the provision of multi-modality anticancer treatment.

d To provide service for, and advise on, palliative management of incurable disease and terminally-ill cancer patients.

2 To inculcate and enhance critical thinking, self-learning and a commitment to continuing medical education in Medical Oncology.

3 To lay the groundwork for future in-depth commitment to scientific research in Medical Oncology.

4 To understand the bioethics, legal, economic and cost effectiveness issues of cancer care delivery in the community.

5 To develop a sense of responsibility and leadership in relevant policy-making, implementation and public education regarding cancer prevention.

6 To acquire professional competence in training future trainees in Medical Oncology.

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Medical Oncology. The three-year training programme comprises two years of core training in Medical Oncology as described below (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College) plus one year of training in any of the following:

1.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

1.2 A broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, which may be accredited for a maximum of 12 months, AND/OR

1.3 Overseas training in Medical Oncology, which may be accredited for a maximum of twelve months, with prior approval by the specialty board, AND/ OR

1.4 Clinical, translational or basic research in Medical Oncology or relevant subjects, which may be accredited for a maximum of six months, with prior approval by the specialty board.

2 To ensure the acquisition of a broad-based physician training for all Higher Physician Trainees undergoing Medical Oncology training, the College requires that all registered Higher Physician Trainees undergo dual training in a broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, together with training in Medical Oncology. Fellows who have been trained in Medical Oncology without a broad-based specialty will not be accepted as Trainer in any specialty in the future.

3 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen at the time of application to be registered as Higher Physician Trainee of the College:

3.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in a broad-based specialty and 24 months (cumulative) of core training in Medical Oncology.

3.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Medical Oncology or the broad-based specialty followed by 24 months of core training in remaining specialty.

4 The two years of "core training" in Medical Oncology should include:

4.1 18 months in College accredited Medical Oncology training unit(s) with major clinical activities in comprehensive cancer service.

a Solid tumours (e.g. lung, breast, gastrointestinal, hepatobiliary, head and neck, central nervous system, gynaecological, genitourinary, endocrine, bone, skin and soft tissue malignancies) : minimum of 12 months.

b Haematology /Haematological Oncology /Haematopoietic Stem Cell transplantation : minimum of three months to maximum six months.

These units must be accredited by the respective Specialty Boards and recognised to have sufficient volume of work in Medical Oncology to be suitable for training. Trainees in these units may be under the supervision of other Academy Colleges, as well as the combined supervision of an Academy trainer in the Specialty concerned, together with a College recognised trainer in Medical Oncology.

4.2 Radiotherapy planning and delivery

Preferably a minimum of three months full-time or part-time equivalent as member of radiotherapy team.

4.3 Palliative Care and Hospice

Up to three months full-time or part-time equivalent as member of palliative care team and experience in a hospice unit.

5 An elective period of one year, which may comprise 3-6 month in two or more of the following.

Surgical oncology.

Gynaecological oncology.

Paediatric oncology.

Clinical Pharmacology of anticancer drugs.

Basic laboratory research.

Tumour pathology/molecular biology/tumour imaging, or

A further period in one or more of the core curriculum subjects.

III) CONTENTS

During the three-year period, the trainee would be expected to gain experience in the following areas.

(1) Knowledge

1.1 Elements of cancer biology, including the mechanisms of oncogene activation, tumour suppressor genes, signaling pathways, stepwise evolution of invasive neoplasia, etc.

1.2 Principles of cytotoxic chemotherapy (systemic and regional), endocrine (hormonal) and immunotherapy, biological and molecular targeted therapeutics. Principles of pharmacoepidemiology and ethnopharmacology. Interaction of cytotoxic drugs with other treatment modalities, adverse reactions and reporting. Retrieval of drug information for advice on clinical use, overdose management and research. Acknowledgement of the use and adverse effects of Traditional Chinese Medicines.

1.3 Elements of radiation physics; principles and practice of radiotherapy including late effects and complications of radiotherapy and their management; normal tissue tolerance.

1.4 Research methodology and evaluation. Design, execution and critical analysis of clinical trials together with elements of statistics as applied to cancer trials and cancer epidemiology. Stages of drug development and post marketing surveillance.

1.5 Staging procedures and classifications of the various tumours. Assessment of performance status/quality of life assessment.

1.6 Methods of assessing tumour response and treatment-related toxicities: clinical, radiological and biochemical.

1.7 Management of oncological emergencies, paraneoplastic syndromes and the neutropenic patient.

1.8 Supportive, rehabilitation and palliative care, including psychosocial aspects and symptomatic control of pain and emesis.

1.9 General principles of transplantation as applied to cancer treatment.

1.10 Preventive medicine in relation to oncology, mass screening and early detection.

1.11 Pathology of malignant disease.

1.12 Access to, and use of, Cancer Databases.

1.13 Planning and management of health care for cancer patients.

1.14 Audit and quality assurance in oncological practice.

(2) Skills

2.1 Principles of management of cancers of specific sites

Head and Neck

Central nervous system.

Endocrine

Breast

Thorax

Gastrointestinal tract and hepatobiliary system

Genitourinary system

Gynaecological malignancies

Bone, skin and soft tissue malignancies

Haematological malignanices

Cancer of unknown primary site

2.2 Practical knowledge, techniques and skills

Biopsy – Skin, pleural, bone-marrow aspiration and biopsy.

Cytology – fine needle aspiration.

Methods of vascular access.

Pleural tap and drainage.

Peritoneal paracentesis

Diagnostic and therapeutic lumbar puncture.

Cytotoxic drug preparation and administration.

Bereavement counselling, talking to dying patients and their families.

Approaches to nutritional support, enteral and parenteral.

Supervision of plasmapheresis, harvesting of haematopoietic stem cells.

(3) Attitudes

3.1 The recovery of health of the patient should be of paramount consideration; but active total care of the patient and his/her family when the medical expectation is not to cure and the primary aim of treatment is no longer to prolong life, is also central to the management of most cancer patients.

3.2 Ability to act as team-leader in a multidisciplinary approach to offer total patient care which encompasses physical, psychological and spiritual support during life and in bereavement. The team should involve allied medical professionals including physiotherapists, nurses, social workers, home care personnel and counsellors. The trainee should also be aware of the stress encountered by junior colleagues and allied health professionals in the management of patients with cancer.

3.3 Ability to recognise the cost-effectiveness, indications, contraindications, and potential complications of various procedures in the course of patient care.

3.4 Ability to respect and observe the privacy and confidentiality of patients and the sanctity of life.

3.5 Ability to be aware of the conflicts between the rights of individual and the interest of society as a whole in the treatment of cancer, in particular in clinical trials.

3.6 A mature and reasoned attitude to the interaction of a Medical Oncologist with the pharmaceutical industry and its representatives.

IV) INSTITUTIONAL REQUIREMENTS

1 For Palliative Care

1.1 Presence of a qualified trainer in Palliative Medicine. A recognised trainer in Palliative Medicine must be a Fellow of the College or College of Radiologist, and must be recognised by the College to have suitable experience and training in this area.

1.2 Regular referrals of sufficient numbers of patients with incurable cancer.

1.3 Presence of either home care, day care or outpatient clinical facilities.

1.4 Regular academic activities and evaluation.

2 For Radiotherapy

2.1 These must be training units accredited by the College of Radiologists for training in Clinical Oncology, and the presence of an accredited specialist in Clinical Oncology recognised by the College of Physicians or the College of Radiologist as trainer. There should be sufficient numbers of radiographers and physicists in each unit. To render training, there should be regular new case loads of sufficient size and spectrum of malignancies from different organs.

2.2 Radiotherapy facilities with a range of equipment the College would consider to be sufficient.

2.3 Regular academic activities.

2.4 Presence of regular interdisciplinary activities in the form of meetings and clinics.

3 For Medical Oncology

3.1 Beds of both sexes to admit patients with a wide variety of oncology related diseases, with 24-hour admission for emergency cases.

3.2 Regular out-patient clinics in various aspects on oncology, with emphasis on joint clinics conducted in collaboration with other departments.

3.3 A sufficient number of fully trained staff with specialist accreditation and trainer status to provide a trainer to trainee ratio of not lower than 1:2 at any one time.

3.4 Laboratory and diagnostic facilities

Radiology (Plain XR, CT scan, radionucleotide scan, ultrasound mammography, magnetic resonance imaging) and preferably, positron emission scanning.

Diagnostic histopathology, including cytology, immuno-histochemistry, and access to molecular studies.

Microbiology.

Clinical chemistry, including tumour marker service.

Haematology.

Endoscopic, bronchoscopic, neurological and cardiac services.

3.5 Regular medical audit and structured continuing education including journals clubs and grand rounds.

3.6 Affiliation with hospice care.

3.7 Library with access to Oncology databases.

4 For Haematology

4.1 Presence of qualified haematology trainer recognised by the College.

4.2 Recognised centre for treatment of acute leukaemia, lymphoma and plasma cell dyscrasias.

4.3 Recognised laboratory haematology service.

Access to specialised services including haematopoietic stem cell transplantation and plasmapheresis.

NEPHROLOGY

I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Nephrology.

2 To facilitate a trainee to acquire the knowledge, clinical skills, procedural competence and professional attributes in Nephrology.

3 To cultivate a commitment to continuous medical education and self-learning, critical thinking and a drive towards advancing knowledge and clinical excellence in Nephrology.

4 To enhance understanding of all healthcare issues related to the practice of Nephrology for holistic patient care, including healthcare administration, policy making and implementation.

5 To acquire professional competence in training future trainees in Nephrology.

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Nephrology. The three-year training programme comprises two years of core training in Nephrology as described below (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College), plus one year of training in any of the following:

1.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

1.2 A broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, which may be accredited for a maximum of 12 months, AND/OR

1.3 Overseas training in Nephrology, which may be accredited for a maximum of twelve months, with prior approval by the specialty board, AND/ OR

1.4 Research in Nephrology or Nephrology related specialties (hypertension, cardiovascular medicine, metabolic medicine, endocrinology, immunology or infectious disease), which may be accredited for a maximum of six months, with prior approval by the specialty board.

2 Within the 2-year period of core training, the trainee should devote: (a) a minimum of 12 months to general nephrology; (b) a minimum of six months to dialysis; and (c) a minimum of six months to renal transplantation in an accredited renal transplant unit/institution, which can be local or overseas.

3 Within the 2-year period of core training, the trainee should work in a hospital that provides obstetric service and actively take part in managing pregnant

patients with renal problems (e.g. attending external consultation in obstetric wards) for at least 3 months, either during the period of general nephrology training or concurrently during the period of renal transplantation training.

4 To ensure the acquisition of a broad-based physician training for all Higher Physician Trainees undergoing Nephrology training, the College requires that all registered Higher Physician Trainees undergo dual training in a broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, together with training in Nephrology. Fellows who have been trained in Nephrology without a broad-based specialty will not be accepted as Trainer in any specialty in the future.

5 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen at the time of application to be registered as Higher Physician Trainee of the College:

5.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in a broad-based specialty and 24 months (cumulative) of core training in Nephrology.

5.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Nephrology or the broad-based specialty followed by 24 months of core training in remaining specialty.

III) CONTENTS

There should be ample opportunities for the trainee to observe and directly manage, and take on continuing responsibility for both outpatients and inpatients with a wide variety of acute and chronic kidney diseases. The trainee should acquire and develop the following knowledge, skills and attributes.

(A) Knowledge

1 Diagnosis of renal diseases, including the assessment of renal function, interpretation of hematology and biochemistry data, renal histology, radiology, ultrasound, renal angiography, CT, MRI, radionuclide imaging, and other imaging results.

2 Identification and management of different clinical renal syndromes.

3 Management of hypertension including hypertensive disorders in pregnancy.

4 Problems of fluid, electrolyte, and acid-base disorders.

5 Management of acute kidney injury, including acute renal replacement therapies and continuous renal replacement therapy (CRRT).

6 Management of chronic kidney disease, including its complications and preservation of renal function.

7 Management of end stage kidney disease with dialysis, including the different modes of hemodialysis (intermittent hemodialysis, short daily hemodialysis, nocturnal home hemodialysis and on-line hemodiafiltration), and the different modes of peritoneal dialysis (continuous ambulatory peritoneal dialysis CAPD, nocturnal intermittent peritoneal dialysis NIPD, continuous cyclic peritoneal dialysis CCPD).

8 Renal transplantation – preparation, peri-operative and long-term management of recipients, life donors and deceased donors.

9 Other renal diseases, examples include urinary tract disorders, and urolithiasis.

10 Knowledge of managing renal problems in surgical, obstetric, gynecological, and oncology patients.

11 Collaborative management with surgical colleagues in pre- and post-operative urological problems, and knowledge of surgical procedures employed in the management of urinary tract diseases.

12 Renal physiology, pathology, immunology, microbiology, pharmacology and therapeutics.

13 Rehabilitation and palliative care for renal patients.

14 Alterations in drug metabolism in renal disease and nephrotoxicity.

15 Cardiovascular risk factors and consequences in chronic kidney disease.

16 Nutrition: general, enteral and hyperalimentation in renal failure.

17 Quality assurance in renal services.

(B) Procedural Skills and Knowledge

1 Renal biopsy

To understand the indications and contraindications, and be competent in the techniques, preparation for, and post-biopsy care of native and transplant kidney biopsies, including the management of complications.

To understand the diagnostic and prognostic implications of the light microscopic, immunofluorescent and electron microscopic findings in renal biopsies.

A trainee must have performed no fewer than 20 native kidney biopsies and no fewer than 5 allograft kidney biopsies prior to the Exit Assessment.

2 Peritoneal dialysis

To be competent in prescribing peritoneal dialysis treatment, including manual fluid exchange and cycler-assisted dialysis regimens.

To understand the principles and practice of insertion of peritoneal dialysis catheter.

3 Extra-corporeal renal replacement therapy

Creation and care of temporary non-cuffed dialysis catheter for hemodialysis, continuous veno-venous hemofiltration or hemodiafiltration, hemoperfusion, plasmapheresis and related procedures.

A trainee must have performed no fewer than 25 hemodialysis catheter insertion procedures prior to the Exit Assessment.

To understand the principles and practice of insertion of permanent cuffed tunneled hemodialysis catheter.

4 Extracorporeal shock wave lithotripsy (ESWL) and percutaneous nephrostomy.

To understand the principles and practice of these procedures.

5 Interventional radiology, e.g. angioplasty for renal artery stenosis or arteriovenous fistula.

To understand the principles and practice of these procedures.

(C) Clinical Skills

1 Ability to obtain and present precise, reliable and thorough medical history, including relevant psycho-social issues.

2 Ability to conduct expert and focused physical examination that are directed towards patients' problems.

3 Ability to demonstrate understanding and proficiency, while minimizing risks and discomforts to patients, in the choice and performance of diagnostic and technical procedures.

4 Ability to integrate medical facts and clinical data, and to develop a logical plan for evaluation and for immediate and long-term management.

(D) Professional Attitudes

1 Ability and willingness to describe the diagnosis and likely clinical course to patients and their families.

2 Ability and willingness to explain to patients and their families all available therapeutic options, including their potential benefits, risks and side effects.

3 Ability and willingness to prepare comprehensive consultation notes in medical records and letters to referring physicians, patients and appropriate agents.

(E) Humanistic Qualities

1 Be empathetic.

2 Ability to gain patients' trust.

3 Ability to listen to and appreciate patients' wishes and concerns.

4 Ability to maintain credibility and support for patients and families.

(F) Commitment to Continuing Medical Education and Continuing Professional Development

1 Commitment to the maintenance and updating of clinical skills throughout one's professional career.

2 Commitment to the acquisition of new knowledge by reading current medical literature, and attending clinical and scientific meetings.

3 Commitment to participation in clinical and/or basic science research.

4 Commitment to the maintenance and improvement in standards of renal services, through implementation of quality assurance and other relevant methodology.

5 Commitment to the critical evaluation of new medical and scientific information relevant to the specialty.

(G) Management Skills

1 Ability and willingness to assume leadership roles in total patient care that involves the participation of other professionals including nurses, dietitians, social workers, and other allied health professionals.

2 Ability and willingness to recognize the cost-effectiveness of alternative treatment modalities.

IV) INSTITUTIONAL REQUIREMENTS

A hospital will be accredited to provide full or partial training in Nephrology if it contains some or all of the following facilities.

1 General Nephrology

1.1 Provision of inpatient (emergency and non-emergency) and outpatient nephrology services.

1.2 Regular outpatient subspecialty clinics in nephrology.

1.3 Obstetric service

If a Hospital does not provide obstetric service, arrangement must be made for the trainees to be seconded to a Hospital with obstetric service for a least three months, either the during the period of general nephrology training or concurrently during the period of renal transplantation training.

If a Hospital does not offer the full 12-month training program in general nephrology, arrangement must be made for the trainees to be seconded to an accredited training center in order to complete the 12 months of core training in general nephrology.

2 Dialysis

2.1 Hemodialysis (HD)

2.1.1 This includes acute and chronic hemodialysis treatment as well as other related treatment modalities, including plasmapheresis, hemoperfusion and hemofiltration etc. The setting should also allow trainees to accumulate experience in the management of patients with acute kidney injury, multi-organ failure, and those who require intensive or high-dependency care.

2.1.2 Centers with 8 or more active hemodialysis stations may be accredited for a maximum of 6 months in HD training. Centers with 4-7 active hemodialysis stations may be accredited for a maximum of 3 months.

2.2 Peritoneal Dialysis (PD)

2.2.1 This includes chronic PD treatment.

2.2.2 The center must have an active PD training program with a PD population of 100 or more patients.

If renal replacement activities, whether HD or PD or both, in a center are deemed insufficient for the purpose of nephrology training, arrangements must be made for trainees to be seconded to an accredited dialysis unit for at least 3 to 6 months of training as required.

3 Renal Transplantation

3.1 This includes live-donor, either related or unrelated, and deceased-donor kidney transplantation.

3.2 Involvement in donor and recipient investigations and preparation, and the maintenance of potential deceased-donor, is required.

3.3 The center setup must allow a trainee to acquire the necessary experience in the prevention, diagnosis, and management of peri-operative and later complications after kidney transplantation.

3.4 If a center does not offer renal transplantation, arrangements must be made for a trainee to be seconded to a renal transplant center for at least 6 months.

3.5 For a center to be accredited for training in renal transplantation, it must perform no fewer than 8 renal transplantations annually.

4 The training hospital should also provide the following expertise.

4.1 A sufficient number of fully trained staff with accredited trainer status in Nephrology, to provide a minimum trainer to trainee ratio of not lower than 1:2 at any one time. Trainers should directly supervise

trainees in all aspects of patient management, including daily ward rounds, consultations, acute care to patients with renal emergencies, and outpatient service. There should also be an accredited urological service within the hospital to provide regular combined case conference or ward round on a regular basis.

4.2 Designated team of renal doctors and nurses, which is structured to provide supervised clinical care of patients with renal diseases/conditions and training of doctors and nurses.

4.3 Laboratory and diagnostic facilities which include:

- 4.3.1 radiology service (i.e. X-ray, radionuclide scan, ultrasound, CT Scan, MRI, renal angiogram)
- 4.3.2 histopathology service including renal biopsy interpretation
- 4.3.3 microbiology service
- 4.3.4 clinical chemistry service
- 4.3.5 hematology service

4.4 Regular medical audit procedures.

4.5 Maintenance of a high quality medical record system permitting prompt accessibility at all times.

4.6 Structured educational program, including journal club, biopsy review, radiology review and case conference. Research meetings can be included in the training program.

4.7 Adequate educational facilities, which include:

- 4.7.1 access to medical library facilities and computerized literature search systems.
- 4.7.2 space and education equipment including audiovisual aids for clinical or research presentations.

NEUROLOGY

I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Neurology.

2 To ensure a high level of clinical skills as well as procedural competence in Neurology.

3 To promote critical thinking, self-learning, and a commitment to continuing medical education in Neurology.

4 To enhance scientific knowledge as a necessary groundwork for research in Neurology.

5 To develop an awareness of health care issues concerning Neurology in the community, and a sense of responsibility and leadership in related policy-making and implementation.

6 To acquire professional competence in training future trainees in Neurology

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Neurology. The three-year training programme comprises two years of core training in Neurology as described below (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College), plus one year of training in any of the following:

1.1 The same specialty which may be accredited for a maximum of 12 months, OR

1.2 A broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, which may be accredited for a maximum of 12 months.

2 The trainee is required to have working experience in ICU for 3 months. If the trainee has had 3 months rotation to the ICU during the BPT phase or broad-based specialty training, then he/she would be exempted.

3 The trainee should have adequate exposure to the wide spectrum of diseases in Neurology. It is desirable to have part of the training acquired from overseas or other local training centres, which offer complementary training.

4 The trainee is required to take regular emergency on-call service to have adequate exposure in management of patients with acute neurological emergencies.

5 A minimum of 18 months should be spent in an acute care hospital as defined in Section IV below.

6 A maximum of six months may be accredited for experience relevant to Neurology, e.g. neurorehabilitation, neurophysiology, research, etc. with prior approval by the Specialty Board.

7 To ensure the acquisition of a broad-based physician training for all Higher Physician Trainees undergoing Neurology training, the College requires that all registered Higher Physician Trainees undergo dual training in a broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, together with training in Neurology. Fellows who have been trained in Neurology without a broad-based specialty will not be accepted as Trainer in any specialty in the future.

8 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen when applying to be registered as Higher Physician Trainee of the College:

8.1 Concurrent training: A minimum of four years of supervised training is required. The training programme should comprise 24 months (cumulative) of core training in a broad-based specialty and 24 months (cumulative) of core training in Neurology.

8.2 Sequential training: A minimum of five years of supervised training is required. The training programme should comprise 36 months training in either Neurology or the broad-based specialty followed by 24 months of core training in the remaining specialty.

III) CONTENTS

(A) Knowledge

There should be ample opportunities for the trainee to observe, manage, and assume continuing responsibility for patients suffering from a wide variety of acute and chronic neurological diseases as listed below. The trainee should acquire knowledge of the aetiology, pathophysiology, clinical manifestations, investigations, and management, including cost-effectiveness of treatment modalities of the following.

1 Cerebrovascular disease.

2 Epilepsy.

3 Movement disorders.

4 Infections of the nervous system.

5 Neurological emergencies.

6 Headache and Pain disorders.

7 Dementia and other cognitive disorders.

8 Neuromuscular diseases.

9 Spinal cord disorders.

10 Genetic diseases of the nervous system.

11 Demyelinating diseases.

12 Immune mediated CNS disorders.

13 Neurological manifestations of systemic diseases.

14 Neurological diseases due to metabolic/toxic causes.

15 CNS neoplasms.

16 Sleep disorders.

17 Neurological rehabilitation.

18 Ethical issues and Evidence Based Medicine

(B) Skills

1 Lumbar puncture.

2 Muscle biopsy.

3 Nerve conduction study (NCS) / Electromyography (EMG).

4 Evoked potentials (EP) – Interpretation.

5 Electroencephalography (EEG) – Interpretation.

6 Neuroradiology (Interpretation).

7 Intravenous stroke thrombolysis

8 Botulinum toxin injection.

9 EEG telemetry.

10 Neurosonology (Interpretation)

(C) Additional experience in the following are desirable, subject to availability of training facilities

1 Neurorehabilitation.

2 Neurosurgery.

3 Paediatric neurology.

4 Neuro-intensive care.

5 Neuroradiology.

6 Neuro-ophthalmology.

7 Neuropathology.

8 Epilepsy Surgery.

9 Deep Brain Stimulation.

10 Endovascular intervention

11 Clinical or laboratory research.

(D) Additional procedural skills in the following is desirable, subject to availability of training facilities

1 Sleep studies (interpretation).

2 Magnetic stimulation.

(E) Attitudes

1 The ability to respect the sanctity of life and dignity of the patient, and to ensure adherence to the Hippocratic Oath and its spirit.

2 The ability to establish rapport and effective communication with patients and families.

3 The ability to assume a leading role in the multidisciplinary effort towards providing total patient care.

4 Awareness of the potential conflicts between the rights of individual and the interest of the society as a whole in the treatment of neurological disorders and in clinical trials.

5 A mature and reasonable attitude to the interaction with other stake-holders in the healthcare system and the pharmaceutical industry.

IV) INSTITUTIONAL REQUIREMENTS

For recognition on core specialty training in Neurology, the training programme consisting of one or more hospitals should fulfill the following criteria.

1 Acute care hospitals providing Neurological training should have the following facilities.

1.1 An intensive care unit where full facilities are provided for critically ill patients.

1.2 General medical and surgical beds for which neurological consultations are called upon on a regular basis.

2 In training hospitals, the following features should be available. The facilities may be either on-site or with access in networking hospitals.

2.1 Beds admitting patients of both genders with a variety of neurological diseases. Neurology patients should be under the direct care of the trainee and supervised by accredited Neurology trainers.

2.2 Regular outpatient subspecialty clinics in Neurology.

2.3 Sufficient number of fully trained staff with specialist accreditation and trainer status in Neurology, to provide a minimum trainer-to-trainee ratio of 1:2 at any one time, directly supervising all aspects of patient management, including ward rounds, emergency calls, critical care, and out-patient service.

2.4 Laboratory and diagnostic facilities.

2.4.1 Clinical neurophysiology: EEG, EMG, NCS, EP.

2.4.2 Radiology: Computed tomography (CT) on site, access to Magnetic resonance imaging (MRI), cerebral angiography, interventional radiology, ultrasonography, radionuclide scans.

2.4.3 Neuropathology.

2.4.4 Microbiology.

2.4.5 Clinical chemistry.

2.5 Regular quality control procedures including medical audit and autopsy.

2.6 Maintenance of high quality medical records with easy accessibility.

2.7 Affiliation with extended care facilities which provide neurological rehabilitation and hospice care.

2.8 Structured educational programme including teach-in, journal club and grand rounds in Neurology.

2.9 Adequate educational facilities which include

2.9.1 Access to medical library facilities and computerised literature search systems.

2.9.2 Conference facilities including audio-visual aids.

3 For an institution accredited for neurology training of the whole 2 year duration, the institution must be able to provide regular intravenous stroke thrombolysis service.

PALLIATIVE MEDICINE

I) OBJECTIVES

1. To provide a broad-based training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Palliative Medicine, so as to be able:

    1.1 To provide consultative and advisory service to physicians and surgeons in general hospitals regarding the palliative care of patients and their significance, the modalities of palliative care service available and the appropriateness of referral.

    1.2 To provide specialist palliative care service in palliative care and non-palliative care wards, clinics, day settings and residences.

2 To cultivate compassion, and to enhance critical thinking, self-learning and a commitment to continuing medical education in Palliative Medicine.

3 To encourage contributions which aim at advancement of knowledge in Palliative Medicine and the teaching of trainees.

4 To develop a sense of responsibility and leadership in the service development of palliative care.

5 To acquire professional competence in training future trainees in Palliative Medicine.

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Palliative Medicine. The three-year training programme comprises two years of core training in Palliative Medicine as described below (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College), plus one year of training in any of the following:

    1.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

    1.2 A broad-based specialty, defined as Advanced Internal Medicine, which may be accredited for a maximum of 12 months, AND/OR

    1.3 Overseas training in Palliative Medicine, which may be accredited for a maximum of six months, with prior approval by the specialty board, AND/OR

    1.4 Research in Palliative Medicine which may be accredited for a maximum of six months, with prior approval by the specialty board.

2 The structures of dual training programmes in Palliative Medicine and AIM approved by the College include the following and trainees must clearly indicate the programme chosen at the time of application as Higher Physician Trainee of the College :

2.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in AIM and 24 months (cumulative) of core training in Palliative Medicine.

2.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Palliative Medicine or AIM followed by 24 months of core training in the remaining specialty.

3 Trainees in Palliative Medicine must have completed training and passed the Exit Assessment in AIM before they are eligible to be College Fellows. Trainees who opt to take the Exit Assessment in Palliative Medicine at the end of three years of Higher Physician Training (i.e. as the first specialty) are thus eligible to be admitted as College Fellows only after they have also completed training and passed the Exit Assessment of AIM, i.e. at least four years after commencement of Higher Physician Training. Should Trainees in Palliative Medicine wish to become College Fellow three years after commencing Higher Physician Training, they may opt to take the Exit Assessment with dissertation in AIM as the first specialty. It should be noted that such Trainees would still be required to submit a second dissertation for their subsequent Exit Assessment in Palliative Medicine.

III) CONTENTS

(1) Knowledge

1.1 Pharmacology of drugs used for symptoms control.

1.2 Understanding symptoms in terms of:

1.2.1 Prevalence, complexity and progression along the trajectory of disease, including those prevalent at end-of-life (EOL).

1.2.2 Symptom as multidimensional in nature and symptom distress as unique experience of patients.

1.2.3 Elucidation of underlying causes and mechanisms of various symptoms.

1.2.4 Methods of assessment, diagnosis and management of various symptom complexes.

1.2.5 Development of appropriate management strategies taking into consideration the personal priorities of the patient.

1.2.6 Identification of potential refractory symptoms.

1.3 Management of common emergencies encountered in palliative care.

1.4 The role of disease-specific treatments in the practice of Palliative Medicine for cancer (such as palliative surgery, radiotherapy, chemotherapy, hormonal therapy, anaesthetic techniques) and

non-cancer chronic debilitating diseases including end-stage renal, respiratory, heart and neurological diseases.

1.5 Psychological response of the patients and their families to terminal illness, including psychological morbidities and grief reactions.

1.6 Understanding of the spiritual element as an integral part of palliative care.

1.7 Effects of religious beliefs and cultural influences.

1.8 Ethical principles including beneficence, non-maleficence, the principle of double effect, equity, privacy and confidentiality, respect for autonomy, respect for life, and issues related to request to hasten death, physician assisted suicide and euthanasia.

1.9 Familiarity with Drug Ordinances related to the use of controlled or dangerous drugs.

1.10 Familiarity with the various modes of palliative care provision, including inpatient care, outpatient care, home care, day care and consultative services.

1.11 Functions of the multidisciplinary team, including the role of rehabilitation in palliative care.

1.12 Characteristics of a palliative care team, team dynamics and conflict resolution.

1.13 Knowledge concerning staff stress and burnout.

1.14 Knowledge in research and evaluation methods relevant to palliative care.

(2) Skills

2.1 Ability to use drugs for symptom relief, including strong opioids, in a safe and effective manner; and to formulate a care plan for potentially refractory symptoms.

2.2 Ability to perform bedside diagnostic and therapeutic interventions, e.g. thoracocentesis and abdominal tapping for symptom relief.

2.3 Communication skills with respect to other health care professionals in palliative care consultation: regarding information and knowledge transfer to facilitate on-site management, and facilitation of patient's psychological transition from curative to palliative care.

2.4 Ability to develop therapeutic relationship and communicate with empathy and compassion in breaking bad news and prognosis telling to patients and families.

2.5 Counselling skills to enhance the patient's and the family's coping with terminal illness, to facilitate communication among family members

including holding family conferences.

2.6 Ability to elicit the values and preferences of patients and families, balance between benefits and burdens of treatments, and take into consideration the prognosis in advance care planning and in making Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) and difficult treatment decisions.

2.7 Ability to apply sound ethical and legal decision making to situations arising from symptom management and withholding and withdrawing life-sustaining treatment.

2.8 Ability to resolve conflicts over futility and requests for hastening death, assisted suicide and euthanasia.

2.9 Ability to guide the family during the patient's final hours and provide support for anticipatory grief.

2.10 Ability to identify family members who are at risk of complicated grief and to refer for appropriate professional service.

2.11 Ability to work in a multi-disciplinary team to handle team dynamics and team conflicts, and to support the team in crisis.

2.12 Ability to undertake clinical audit and take appropriate actions arising from the audit exercise.

2.13 Ability to manage staff stress and burnout arising from the provision of palliative care, including self care and support of other team members.

(3) Attitudes

3.1 To recognise that all days of human life are deserving of dignity, meaning and concern and that dying is a normal phase of life.

3.2 To recognise that when cure is not possible, active total care of the patient and the family is central to patient management, and quality of life is more important that quantity.

3.3 To recognise the limits of medicine, including symptom control measures.

3.4 Awareness of the importance of assessing cost-effectiveness and risk-benefits of various treatments based on best evidence and the patient's values and preferences.

3.5 To recognise that hastening and artificial termination of life should not be the intention of care or as a method of symptom control.

3.6 To respect and observe the privacy and confidentiality of patients.

3.7 To be empathic and to have self awareness.

3.8 To be willing to advocate for the dying.

IV) INSTITUTIONAL REQUIREMENTS

1 Presence of a trainer who possesses specialist accreditation in Palliative Medicine recognised by the Hong Kong College of Physicians with a trainer to trainee ratio should not be less than 1:2 at any one time.

2 Sufficient numbers of regular referrals of patients with incurable cancers and non-cancers.

3 Presence of a multidisciplinary team comprising medical, nursing and allied health professionals, in particular clinical psychologists, social workers, counsellors and workers from religious sectors to assist the trainer in the training of junior doctors, in communication skills and family and bereavement care.

4 Presence of home care and out-patient clinic facilities in addition to designated in-patient facilities.

5 Designated time for regular academic activities and evaluation.

6 Presence of regular interdisciplinary activities including inpatient and home care conferences.

7 Adequate educational facilities including library and audio-visual facilities.

8 Maintenance of high quality medical records with easy and prompt accessibility.

REHABILITATION

I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Rehabilitation.

2 To develop clinical skills in the assessment and rehabilitation management of patients with impairments, activity limitations and participation restrictions with single or multiple comorbidities across a wide range of adult age groups

3 To provide practical experience in the establishment and co-ordination of various streams and programmes of Rehabilitation.

4 To develop competence in fostering close working relationship with allied health and nursing professionals to deliver effective rehabilitation service using team approach.

5 To enhance the skills in organization, leadership and management of multidisciplinary rehabilitation teams.

6 To promote interest in research and understanding of the literature in Rehabilitation.

7 To acquire professional competence in training future trainees in Rehabilitation.

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Rehabilitation. The three-year training programme comprises two years of core training in Rehabilitation as described below (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College), plus one year of training in any of the following:

1.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

1.2 A broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, which may be accredited for a maximum of 12 months, AND/OR

1.3 Overseas training in Rehabilitation Medicine, which may be accredited for a maximum of 6 months, with prior approval by the specialty board, AND/OR

1.4 Research in Rehabilitation Medicine, which may be accredited for a maximum of 6 months, with prior approval by the specialty board.

2 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen at the time of application to be registered as Higher Physician Trainee of the College :

2.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in a broad-based specialty and 24 months (cumulative) of core training in Rehabilitation.

2.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Rehabilitation or the broad-based specialty followed by 24 months of core training in remaining specialty.

3 Trainees in Rehabilitation must have completed training and passed the Exit Assessment in a broad-based specialty before they are eligible to be College Fellows. Trainees who opt to take the Exit Assessment in Rehabilitation at the end of three years of Higher Physician Training (i.e. as the first specialty) are thus eligible to be admitted as College Fellow only after they have also completed training and passed the Exit Assessment of their broad-based specialty, i.e. at least four years after commencement of Higher Physician Training. Should trainees in Rehabilitation wish to become College Fellows three years after commencing Higher Physician Training, they may opt to take the Exit Assessment with dissertation in their broad-based specialty as the first specialty. It should be noted that such Trainees would still be required to submit a second dissertation for their subsequent Exit Assessment in Rehabilitation.

4 The two years of core training in Rehabilitation should include the full-time equivalents of supervised training in the specialty programmes listed under 4.1-4.5. The training should take place in rehabilitation settings which provide demonstrable exposure to multidisciplinary or interdisciplinary approach in the performance of patient assessment and management, discharge planning, and active psychosocial care processes in in-patient, out-patient, out-reach settings and community rehabilitation.

4.1 Neurological Rehabilitation (6 months)

4.2 Rehabilitation for Visceral Impairment (including Cardiac and Pulmonary/Renal Rehabilitation and others) (3 to 6 months)

4.3 Geriatric Rehabilitation (3 to 6 months)

4.4 Musculoskeletal and Spinal Rehabilitation (6 months)

4.5 Elective: Either one of the following is acceptable (3 months)
Rehabilitation as listed under 4.1-4.4
Rehabilitation after fracture and joint replacement
Rehabilitation after amputation
Rehabilitation after spinal injury
Rehabilitation after nerve injury
Rehabilitation of cancer patients
Rehabilitation treatment of pathological conditions, related to lifestyle, exercise, recreation and stress.

III) CONTENTS

(1) General Knowledge and Skills in Rehabilitation

1.1 Knowledge and skills in assessment of impairment, limitation of activity and participation restriction using the World Health Organization – International Classification of Functioning, Disability, and Health (WHO-ICF) model or equivalent

1.2 Knowledge and skills of application of appropriate measures in assessing functions and outcome for a broad range of impairment groups.

1.3 Skills in planning and leading a multidisciplinary/interdisciplinary/ transdisciplinary rehabilitation programme, and mediating constructive exchange of multidisciplinary clinical perspectives.

1.4 Knowledge and understanding of the allied health disciplines to effectively integrate their contributions into the process of rehabilitation.

1.5 Skills in liaising with community care providers to meet the psychosocial needs of disabled persons, and to formulate effective pre-discharge planning.

1.6 Understanding and application of concepts of community re-integration including occupational and vocational rehabilitation needs.

1.7 Understanding of the behavioral and social sciences as they relate to rehabilitation and carer dynamics, psychopathology, motivation and learning in relation to adjustment, and compensation for lost or impaired mental and social abilities associated with physical disabilities.

1.8 Knowledge and skills in the prescription of therapeutic exercises in neurological and musculoskeletal disabilities

1.9 Knowledge and skills in the prescriptions of various forms of exercises (especially aerobic training) in the management of a single or a combination of visceral organs or metabolic and vascular conditions like chronic heart, lung, kidney diseases, diabetes mellitus, obesity and peripheral vascular disease …etc. .

1.10 Knowledge in the prescription of, and indications and contraindications for, the use of adaptive devices and training required for their use.

1.11 Knowledge of the prescription of, and indications and contraindications for prosthetic and orthotic devices, together with their biomechanical principles, methods of assessment, follow-up and check out procedures.

1.12 Knowledge of physical modalities employed in rehabilitation including prescription, indications and contraindications of heat and cold therapy, ultrasound, traction, lasers, transcutaneous electrical nerve stimulation (TENS), hydrotherapy, interferentials, transcranial direct current stimulation and transcranial magnetic stimulation, and others.

1.13 Knowledge and skills in the management of specific rehabilitation problems and complications such as spasticity, swallowing disorder, chronic pain, deconditioning, pressure ulcers, bladder and bowel problems.

1.14 Basic knowledge in neuropsychology as related to the practice of neurorehabilitation.

1.15 Knowledge of the indications for, and skills in, the administration of soft tissue injections, intra-articular injections and motor/nerve blocks are encouraged. Ability to use USG or electric stimulation to guide injections is encouraged.

1.16 Knowledge of impairment, activity limitation (disabilities) and participation restrictions (handicaps) in conducting an Independent Medical Examination (IME).

1.17 Knowledge and skills in making recommendations in rehabilitation areas including return-to-work, driving, and sexuality

1.18 Knowledge in the pathophysiology of conditions related to lifestyle, exercise, recreation and stress.

1.19 Other related areas of knowledge and skills

1.19.1 Knowledge and design of architecture which affects persons with disabilities.

1.19.2 Rehabilitation engineering principles, which are relevant to clinical rehabilitation, especially mechanical, electrical and hydrodynamic principles.

1.19.3 Understanding the concepts of quality assurance and peer review.

1.19.4 Understanding of clinical research designs, programme evaluation and interpretation of scientific data.

(2) Knowledge and Skills in Specialised Rehabilitation Programmes

2.1 Cardiac Rehabilitation

2.1.1 Ability in setting up and leading a cardiac rehabilitation team in the operations of a comprehensive inpatient, outpatient, and community-based cardiac rehabilitation programs.

2.1.2 Knowledge of clinical components of cardiac rehabilitation programmes.

2.1.3 Understanding of the concepts of aerobic exercise, activities counselling and behavioral modification as applied to cardiac patients.

2.1.4 Knowledge and skills in the assessment of suitability for entry into rehabilitation programmes, risk stratification, exercise prescription, and the performance of exercise testing.

2.1.5 Knowledge of making recommendations including return-to-work, driving, and sexuality after appropriate rehabilitation assessment and intervention.

2.1.6 Understanding of outcome evaluation of cardiac rehabilitation programmes.

2.1.7 Other general rehabilitation knowledge and skills as relevant to the rehabilitation of the cardiac patients

2.2 Pulmonary Rehabilitation

2.2.1 Knowledge of pathophysiological basis of pulmonary rehabilitation including alteration of lung gaseous exchange, respiratory muscle dysfunction and control of ventilation in normal and disease states.

2.2.2 Knowledge and skills in the performance and interpretation of static and dynamic pulmonary function tests and the interpretation of radiological findings of common obstructive and restrictive pulmonary diseases.

2.2.3 Knowledge of the clinical components of pulmonary rehabilitation programmes and understanding of the various strategies for smoking cessation.

2.2.4 Knowledge and skills in prescribing exercise, and conducting and interpreting exercise tests for pulmonary patients.

2.2.5 Knowledge and skills in the prescription and application of long-term oxygen therapy, long-term tracheostomy care and devices for domiciliary ventilation support, management of airway secretion and related devices like in-exsufflator, management of sleep apneas in patients undergoing rehabilitation.

2.2.6 Understanding of outcome evaluation of pulmonary rehabilitation programmes.

2.2.7 Other general rehabilitation knowledge and skills relevant to the rehabilitation of the pulmonary patient.

2.3 Neurological Rehabilitation

2.3.1 Understanding the natural history, treatment and prognosis of neurological disorders which result in chronic disability. These include vascular, traumatic, degenerative, infective, and immunologic diseases.

2.3.2 Functional anatomy and pathophysiology of the central and peripheral nervous system, including the autonomic system.

2.3.3 (a) Knowledge of and preferably skills in performing and interpreting diagnostic techniques including special investigations such as electrodiagnostic studies (NCS, EMG), and urodynamic studies in evaluating urinary problems.

(b) Knowledge of and preferable skills in performing fibreoptic-endoscopic examination of swallowing and interpreting video fluoroscopy data for evaluation of swallowing problems.

2.3.4 Selection and interpretation of the results of investigations related to diagnosis of neurological disorders including neuro-imaging studies, EEG, CSF analysis, muscle and nerve biopsies.

2.3.5 Knowledge and skills of clinical pharmacology with particular emphasis on drugs used in the treatment of spasticity, chronic pain, incontinence, chronic infection, adverse drug reactions that might occur and problems related to the long term use of such medications.

2.3.6 (a) Knowledge about appropriate selection of various surgical and pharmacological interventions for neurological disorders and understanding of their limitations and complications.

(b) Procedural skills in performing chemo-denervation with Botulinum toxin, phenol or other neurolytic drugs with or without USG or EMG guidance is encouraged.

(c) Knowledge of advanced technologies in neuro-rehabilitation including the clinical use and application of transcranial magnetic stimulation and robotics.

2.3.7 Knowledge of neuropsychology with respect to the management of major neuropsychological syndromes, and the skill to perform a comprehensive cognitive assessment of patients with cognitive impairment.

2.4 Musculoskeletal Rehabilitation

2.4.1 Understanding the necessary basic science and clinical knowledge required for competent clinical practice in the following musculoskeletal disorders:

Osteoporosis and osteoporotic fractures

Pressure ulcer prevention and management

Spinal cord and peripheral nerve injuries

Acute and chronic spinal pain or painful conditions of the limb

Rheumatological diseases

Amputations and joint replacement

Common musculoskeletal injuries and fractures and related complications

Normal and abnormal gait and postures

2.4.2. Knowledge and skills to obtain and perform a relevant and organized physical and functional history and examination of the musculoskeletal system and to select appropriate investigations and accurately interpret the results.

2.4.3 (a) Knowledge and skills to prescribe appropriate medical, physical, occupational and psychosocial treatments, and adaptive devices for the management of disability, including orthotics and prosthetics,

(b) Procedural skills in soft tissue and peripheral joints injection with or without USG guidance is encouraged.

(c) Knowledge and preferably skills in musculoskeletal ultrasonogram of major joints for diagnostic and guided therapeutic interventions.

2.4.4 Understanding the limitations of conservative managements and to identify surgical options available based on the understanding of the biomechanics and pathomechanics of the musculoskeletal diseases.

(3) Attitudes

3.1 Attitudes acquired during basic physician training should be reinforced.

3.2 Capacity for self-examination, and ability to recognize and acknowledge the expertise and contribution made by other team members including the families and friends of the patient.

3.3 Ability to communicate effectively at all levels with staff members, the patient and family, and medical and surgical colleagues.

3.4 Ability to view the problems of the disabled as a challenge and with empathic and supportive attitudes.

3.5 Ability to view specialization as a continuing process of education and skill enhancement.

IV) INSTITUTIONAL REQUIREMENTS

1 Core Training

1.1 The two years of the core program must provide active inpatient rehabilitation service in a multidisciplinary setting, under direct supervision by trainers who are Fellows of the College accredited in Rehabilitation. The trainer to trainee ratio should not be less than 1:2 at any one time.

2 Treatment and Training Facilities

2.1 There should be adequate treatment areas for physical, occupational and other rehabilitation-related therapies. The design of rehabilitation units should be appropriate to the rehabilitation programs offered and should be accessible to disabled persons.

2.2 Physical therapy equipment, gait training equipment, equipment for training in activities of daily living and for recreation should be provided.

2.3 For cardiac and pulmonary rehabilitation, appropriate equipment for functional testing should be provided.

2.4 Access to medical library, which contains updated journals and textbooks in Rehabilitation as well as computerised literature search systems, is essential.

2.5 Case conferences, in-service training programs and continuous quality improvement.

RESPIRATORY MEDICINE
(to be effective for HPT trainees who start HPT on or after 1 July 2023)

I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for trainees to acquire competence and professionalism required of a specialist in Respiratory Medicine.

2. To enhance scientific knowledge, clinical skills, and procedural competence in Respiratory Medicine.

3. To inculcate and enhance critical thinking, self-learning, and a commitment to continued medical education in Respiratory Medicine.

4. To lay the groundwork for future in-depth commitment to scientific research in Respiratory Medicine.

5. To understand the various health care delivery issues concerning Respiratory Medicine in the community, and to develop a sense of responsibility and leadership in related policy-making and implementation.

6. To acquire professional competence in training future trainees in Respiratory Medicine.

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Respiratory Medicine. The three-year training programme comprises two years of core training in Respiratory Medicine as described below (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College), plus one year of training in any of the following:

A. The same specialty which may be accredited for a maximum of 12 months, AND/OR

B. A broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, which may be accredited for a maximum of 12 months.

1.1 Under the three year program, the trainee should rotate between a minimum of two training hospitals to ensure a broad exposure to the wide spectrum of acute and chronic respiratory diseases and their management. The maximum accreditation period for any training centre is 30 months. The training hospitals should be complementary in their provision of the various aspects of training. Part of the training may be acquired from training centres overseas, which may be accredited for a maximum of six months, with prior approval by the specialty board.

1.2 A minimum of 12 months should be spent in an acute hospital as defined in Section IV below. Within this period, a minimum of three months should be spent in a College-accredited critical care facility. For dual training in Respiratory Medicine and AIM/Geriatric Medicine, only 3 months of ICU working experience is required.

1.3 A minimum of three months should be spent in a facility which provides tuberculosis care, and another minimum of three months in a facility which provides pulmonary rehabilitation training.

1.4 A cumulative maximum of 12 months may be accredited for training undertaken in an ambulatory or extended care facility which provides tuberculosis care (maximum six months), pulmonary rehabilitation (maximum six months), chronic ventilatory care, and hospice care (maximum three months).

1.5 Basic and/or clinical research relevant to Respiratory Medicine may be accredited for a maximum of six months, with prior approval by the specialty board.

2 To ensure the acquisition of a broad-based physician training for all Higher Physician Trainees undergoing Respiratory Medicine training, the College requires that all registered Higher Physician Trainees undergo dual training in a broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, together with training in Respiratory Medicine. Fellows who have been trained in Respiratory Medicine without a broad-based specialty will not be accepted as Trainer in any specialty in the future.

3 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen at the time of application to be registered as Higher Physician Trainee of the College:

3.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of core training in a broad-based specialty and 24 months (cumulative) of core training in Respiratory Medicine.

3.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Respiratory Medicine or the broad-based specialty followed by 24 months of core training in remaining specialty.

III) CONTENTS

(1) Knowledge

There should be ample opportunities for the trainee to observe, manage and assume continuing responsibility for patients with a wide variety of acute and chronic respiratory diseases as listed below in outpatient and inpatient settings.

The aetiology, pathophysiology, clinical manifestations, investigations, and management, including critical analysis of cost-effectiveness and cost-utility of

treatment modalities of

1.1 Chronic obstructive pulmonary disease.

1.2 Asthma and allergic rhinitis.

1.3 Pulmonary infections in immunocompromised hosts.

1.4 Upper and lower respiratory tract infections.

1.5 Tuberculosis/other mycobacterium infection.

1.6 Bronchiectasis.

1.7 Carcinoma of lung and other intrathoracic malignancies, and hospice care.

1.8 Respiratory failure and oxygen therapy.

1.9 Respiratory critical care, including mechanical ventilation.

1.10 Interstitial lung diseases.

1.11 Restrictive lung diseases from chest wall or neuromuscular problems.

1.12 Sleep-related breathing disorders.

1.13 Pleuropulmonary manifestations of systemic diseases.

1.14 Occupational, environmental and drug-induced lung diseases.

1.15 Pulmonary vascular disease.

1.16 Disorders of the pleura and mediastinum.

Trainees should acquire the knowledge and develop clinical skills of

1 Clinical approach to common respiratory symptoms, including cough, dyspnoea, haemoptysis and chest pain.

2 Approach to respiratory emergencies.

3 Pre-operative respiratory assessment and post-operative respiratory care for pulmonary and general surgery.

4 Pulmonary rehabilitation.

5 Ethical issues

6 Procedural sedation

- Pharmacology of sedation medications and reversal agents
- Indications and contraindications
- Assessment and monitoring: before, during and after procedure
- Management of complications and emergency

- Must have successfully completed the procedural sedation workshop organized by the Respiratory Medicine Specialty Board before Exit Assessment (for those who started their training on or after 1 July 2023)

  Remark: Trainees who successfully pass the Exit Assessment are expected to be competent in managing conscious sedation during respiratory procedures.

(2) Procedural skills in the following are required unless otherwise specified. Trainees are expected to be conversant with all diagnostic and therapeutic procedures available but are not expected to become expert in all techniques.

2.1 Lung function tests (understanding of technical procedures and interpretation of results) including spirometry, static lung volumes, diffusing capacity, flow-volume loops, airway resistance and lung compliance using body plethysmograph.

2.2 Exercise lung function tests (supervision and interpretation).

2.3 Flexible bronchoscopy (minimum number of procedures under supervision is 100 and it must fulfil the following requirement:

a. ≥10 each: bronchial aspirate/wash/bronchoalveolar lavage, bronchial brush, endobronchial biopsy, transbronchial biopsy

b. ≥3 in mechanical ventilated patients.)

Remark: Trainees who successfully pass the Exit Assessment are expected to be competent in performing flexible bronchoscopy with the aforementioned procedures (e.g. transbronchial lung biopsy) independently. Other more advanced bronchoscopy-related procedures (e.g. endobronchial ultrasound-guided transbronchial needle aspiration) can be acquired in the post-specialist status subject to the prevailing credentialing criteria under HKCP.

2.4 Thoracic ultrasonography and USG-guided intervention if indicated

2.5 Pleural tap and biopsy.

2.6 Chemical pleurodesis.

2.7 Endotracheal intubation.

2.8 Mechanical ventilation including set-up, monitoring and weaning from commonly used modes.

2.9 Non-invasive ventilation.

2.10 Central venous line insertion.

2.11 Arterial punctures and interpretation of arterial blood gas

2.12 Arterial line insertions.

2.13 Pulmonary arterial line insertion and pressure monitoring.

2.14 Chest imaging - interpretation of CXRs; interpretation of CT imaging for important respiratory diseases; and interpretation of other imaging results e.g. PET scan

2.15 Bronchial challenge tests -- procedure and interpretation.

2.16 Sleep studies and CPAP titration – indications, techniques of performing the tests and interpretation of results.

2.17 Skin tests – tuberculin tests and atopy skin tests.

2.18 Percutaneous needle lung aspiration -- indication and understanding of the procedure.

2.19 Rigid bronchoscopy -- indications and understanding of the procedure.

2.20 Pleuroscopy --indications and understanding of the procedure.

Remark: The necessary training and experience for performing medical pleuroscopy can be acquired in the post-specialist status subject to the prevailing credentialing criteria under HKCP.

2.21 Endobronchial Ultrasonography, EBUS-TBNA and other endobronchial therapies -- indications and understanding of the procedures.

Remark: The necessary training and experience for performing these special procedures can be acquired in the post-specialist status subject to the prevailing credentialing criteria under HKCP.

(3) Additional knowledge in the following in relation to Respiratory Medicine is desirable, subject to availability of training facilities

3.1 Palliative medicine.

3.2 Microbiology.

3.3 Pathology.

3.4 Immunology.

3.5 Cellular biology.

3.6 Molecular medicine.

3.7 Anaesthesia.

3.8 Lung volume reduction surgery.

3.9 Video assisted thoracic surgery.

3.10 Lung transplantation.

3.11 Infection control.

3.12 Pulmonary oncology.

(4) Attitudes

To enhance and reinforce the attitudes inculcated during basic physician training.

IV) INSTITUTIONAL REQUIREMENTS

To be recognised for specialty training in Respiratory Medicine, the programme should be completed in two or more hospitals fulfilling the following criteria.

(1) At least one hospital should be an acute care hospital with the following facilities.

1.1 A general or medical intensive care unit where full cardio-respiratory support is provided for the critically ill patients.

1.2 General medical and surgical and obstetric beds for which respiratory consultations are called upon on a regular basis.

(2) In all training hospitals, the following features should be available.

2.1 Beds of both sexes for admitting patients with a variety of respiratory diseases

2.2 Regular specialty outpatient clinics in Respiratory Medicine.

2.3 A sufficient number of fully trained staff with specialist accreditation and trainer status in Respiratory Medicine to provide a minimum trainer to trainee ratio of 1:2 at one time, directly supervising the trainee in all aspects of patient management, including daily ward rounds, emergency calls, Intensive Care Unit care, and outpatient service.

2.4 Laboratory and diagnostic facilities.

a Pulmonary function laboratory:-

Mandatory: Spirometry, flow-volume loop, static lung volumes and diffusing capacity.

Preferable: Exercise testing, skin tests, bronchial challenge test, sleep studies, airway resistance and lung compliance.

b Bronchoscopy facilities, including fluoroscopy.

c Radiology, including X-rays and ultrasound. Access to CT Scan, radionuclide scans and pulmonary angiograms should be available.

d Pathology, including exfoliative cytology.

e Microbiology.

f Clinical chemistry.

g Haematology.

2.5 Regular medical audit procedures and perform autopsies to resolve diagnostic problems.

2.6 Maintenance high quality medical records with easy and prompt accessibility at all times.

2.7 Affiliation with facilities for thoracic surgery.

2.8 Affiliation with facilities providing tuberculosis care and extended care, including pulmonary rehabilitation, chronic ventilatory care and hospice care.

2.9 Structured educational programme including teach-in, journal club and grand rounds in respiratory medicine.

2.10 Adequate educational facilities which include

a Access to medical library facilities and computerized literature search systems.

b Space and education equipment including audiovisual aids, and slide production for clinical presentation.

RHEUMATOLOGY

(effective for trainees who start HPT from 1 Jul 2021 onwards)

I) OBJECTIVES

1. To provide a broad-based training and in-depth experience at a level sufficient for the trainee to acquire competency and professionalism of a specialist in Rheumatology.

2 To enhance scientific knowledge, clinical skills, and procedural competence in Rheumatology.

3 To inculcate and enhance critical thinking, self-learning, and a commitment to continued medical education in Rheumatology.

4 To lay the groundwork for future in-depth commitment to scientific research in Rheumatology.

5 To understand the various health care delivery issues concerning rheumatological diseases in the community, and to develop a sense of responsibility and leadership in related policy making and implementation.

6 To acquire professional competence in training future trainees in Rheumatology.

II) STRUCTURE

1 This period consists of three years of supervised and accredited training in Rheumatology. The three-year training programme comprises two years of core training in Rheumatology as described below (with a minimum of 12 months of core training to be undertaken in training units that have been formally accredited by the College) plus one year of training in any of the following:

1.1 The same specialty which may be accredited for a maximum of 12 months, AND/OR

1.2 A broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, which may be accredited for a maximum of 12 months, AND/OR

1.3 Overseas training in Rheumatology which may be accredited for a maximum of six months, with prior approval by the specialty board,

2 To ensure the acquisition of a broad-based physician training for all Higher Physician Trainees undergoing Rheumatology training, the College requires that all registered Higher Physician Trainees undergo dual training in a broad-based specialty, defined as either Advanced Internal Medicine (AIM) or Geriatric Medicine, together with training in Rheumatology. Fellows who have been trained in Rheumatology without a broad-based specialty will not be accepted as Trainer in any specialty in the future.

3 The structures of dual training programmes approved by the College include the following and Trainees must clearly indicate the programme chosen at the time of application to be registered as Higher Physician Trainee of the College:

3.1 Concurrent training: A minimum of four years of supervised training is required. The training programme comprises 24 months (cumulative) of

core training in a broad-based specialty and 24 months (cumulative) of core training in Rheumatology.

3.2 Sequential training: A minimum of five years of supervised training is required. The training programme comprises 36 months training in either Rheumatology or the broad-based specialty followed by 24 months of core training in remaining specialty.

4 The trainee should rotate between a minimum of two training units or hospitals and must spend not less than three months in either unit or hospital to ensure adequate scope of exposure to a wide spectrum of rheumatological diseases. The training units or hospitals should be complementary in the provision of various aspects of training.

5 During the two-year training period, exposure to the following areas can be accredited up to a maximum of 3 months.

i. Laboratory medicine particularly Immunology

ii. Related specialty in Internal Medicine except AIM, Geriatrics, Medical Oncology, Palliative Medicine, Endocrinology, Diabetes & Metabolism

iii. Orthopaedic surgery

iv. Radiology

v. Nuclear medicine

vi. Epidemiological surveys

vii. Clinical or basic research relevant to Rheumatology

III) CONTENTS

(1) Knowledge

There should be ample opportunities for the trainee to observe, manage, and assume continuing responsibility for patients with a wide variety of acute and chronic rheumatological diseases in outpatient and inpatient settings as listed below.

The aetiology, pathophysiology, clinical manifestations, investigations, and management, including critical analysis of cost-effectiveness and cost-utility of treatment modalities of

1.1 Connective tissue diseases including systemic lupus erythematosus and variants, systemic sclerosis and related syndromes, Sjogren's syndrome, inflammatory myopathies, primary and secondary vasculitides.

1.2 Rheumatoid arthritis, psoriatic arthritis.

1.3 Spondyloarthritis and related diseases.

1.4 Degenerative bone and joint disorders.

1.5 Crystal arthropathies.

1.6 Soft tissue rheumatism and fibromyalgia.

1.7 Juvenile rheumatological disorders including juvenile idiopathic arthritis and systemic Still's disease.

1.8 Rheumatic manifestations of systemic disease.

1.9 Pharmacological and non-pharmacological therapies for rheumatological diseases.

1.10 Perioperative management in relation to surgical and orthopaedic intervention for rheumatological diseases.

1.11 Management of rheumatological diseases complicating pregnancy.

1.12 Osteoporosis including glucocorticoid induced osteoporosis.

(2) Skills

2.1 Interpretation of skeletal and soft tissue radiographs and other imaging modalities, including MRI and Dual Energy X-ray Absorptiometry (DEXA) scan.

2.2 Familiarity with the techniques of synovial, bone and muscle biopsy and their pathological interpretation.

2.3 Joint aspiration and injection techniques.

2.4 Examination of synovial fluid and its pathological interpretation.

2.5 Sound knowledge in immunological tests and clinicohistopathological correlations relevant to rheumatological disorders.

2.6 Familiarity with the interpretation and/or use of electrophysiological diagnostic tests.

2.7 Physical methods used in the treatment of patients with musculoskeletal disorders.

2.8 Musculoskeletal ultrasound scanning technique relevant to rheumatic diseases. Basic standard ultrasound scanning of at least two examinations per joint including hands and wrists, elbows, knees, ankles and feet, to identify basic pathologies such as synovitis, tenosynovitis, bursitis, bone erosion and joint effusion.

(3) Additional knowledge in the following is desirable, subject to availability of training facilities

3.1 Microbiology.

3.2 Pathology.

3.3 Immunology.

3.4 Molecular biology.

3.5 Physical medicine including physiotherapy and occupational therapy.

3.6 Clinical psychology.

(4) Attitudes

To enhance and reinforce the attitudes inculcated during Basic Physician Training.

IV) INSTITUTIONAL REQUIREMENTS

To be recognised for specialty training in Rheumatology, the programme should be completed in two or more hospitals which should fulfill the following criteria.

1 At least one hospital should be an acute care hospital with the following facilities:

- 1.1 General medical, surgical & obstetric beds, for which Rheumatological consultations are called upon on a regular basis.
- 1.2 A full complement of facilities for Rehabilitation Medicine, including physiotherapy and occupational therapy.

2 In all training hospitals, the following features should be available:

- 2.1 Beds of both sexes for admission of patients with a variety of rheumatological diseases.
- 2.2 Regular subspecialty outpatient clinics in Rheumatology.
- 2.3 A sufficient number of fully trained staff with specialist accreditation and trainer status in Rheumatology, to provide a minimum trainer to trainee ratio of 1:2 at any one time, directly supervising the trainee in all aspects of patient management, including daily ward rounds, emergency calls and outpatient service.
- 2.4 Laboratory and diagnostic facilities
  - 2.4.1 Radiology (X-rays, CT Scan, radionuclide scans, angiography, ultrasound, MRI)
  - 2.4.2 Pathology, including immunopathology
  - 2.4.3 Microbiology
  - 2.4.4 Clinical chemistry
  - 2.4.5 Haematology.
- 2.5 Regular medical audit procedures and facilities to perform autopsies to resolve diagnostic problems.
- 2.6 Maintenance of high quality medical records with easy and prompt accessibility at all times.
- 2.7 Affiliation with extended care facilities for physical rehabilitation.
- 2.8 Structured educational programme including teach-ins, journal clubs and grand rounds in rheumatology.
- 2.9 Adequate educational facilities which include
  - 2.9.1 Access to medical library facilities and computerised literature search systems.
  - 2.9.2 Space and education equipment, including audiovisual aids and facilities for slide production to assist in clinical presentations.

V. Assessment

INTERIM AND EXIT ASSESSMENT

Assessment of physician trainees adopts a continuous programmatic approach, and the elements and contents of Assessments in the physician training process are mapped and blueprinted to the curricula in the training Guidelines, which is reviewed on a regular basis by Specialty Boards or Subcommittees and the Council, to ensure validity and reliability.

For Higher Physician Training, all Trainees must enroll in at least one broad-based specialty. Either Advanced Internal Medicine (AIM) or Geriatric Medicine is accepted as the broad-based Specialty. All Trainees registered in a broad-based specialty must complete the Self Learning Tool (SLT) requirement, which is administered by the AIM Board. Additional information on Dual Specialty and Single Specialty training related to Dermatology & Venereology, Palliative Medicine, and Rehabilitation, is detailed in Appendix 1 *Additional Information on Dual or Single Specialty Training*.

Before 1 July 2011, every Higher Physician Trainees (HPT) were required to pass two Annual Assessments and one Exit Assessment for each Specialty that they have enrolled in. The Assessment process was revised in 2011, so that Trainees who entered into Higher Physician Training programmes on or after 1 July 2011 are required to pass one Interim Assessment followed by one Exit Assessment for each specialty.

During the Interim Assessment, in addition to being assessed the knowledge and competencies of subjects in the training curricula, Trainees are also asked to comment on the effectiveness of training programmes and problems encountered in the training programmes and sites. Documented evidence of training activities (including but not limited to attendance records, case presentations, portfolios of specific categories of patients seen or managed, records of clinical procedures or other relevant items) is also reviewed, but such records are not ascribed formal assessment scores. The Exit Assessment serves as a summative and qualifying assessment exercise with comprehensive coverage of the training curricula, and is prerequisite to being accredited as a Specialist and Fellow in a specialty.

I) ROLES OF SPECIALTY BOARDS AND PROGRAMME DIRECTORS

1 In relation to Interim and Exit Assessment, Specialty Boards have the following roles:

a) To admit Trainees, continuously monitor their progress, and recommend timely remedial action when appropriate;

b) To receive, discuss and monitor results of individual Trainees and the overall performance, and to report results and observations to the Education & Accreditation Committee;

c) To report to the Education & Accreditation Committee regarding completion of training for individual Trainees; and

d) To submit recommendations to the Education & Accreditation Committee towards continuing improvement of Training programmes and Assessment formats.

2 Specialty Programme Directors (SPD), and Assistant SPDs where appropriate, are appointed by Specialty Boards and endorsed by the Education & Accreditation Committee and the College Council. The responsibilities of SPD include:

a) Updating the lists of Trainers, Supervisors, and Trainees;

b) Monitoring of training programmes and the progress of Trainees, and maintaining an updated record of Trainees;

c) Assisting in the organization of Assessment exercises in Physician Training Programmes; and

d) Reporting of the above and other relevant information to the Specialty Board every six months.

II) CONTINUOUS ASSESSMENT AND THE DUTIES OF TRAINEES AND SUPERVISORS

1 The progress of Trainees throughout the course of training is monitored through continuous assessment, which includes a formal Interim Assessment, held after not less than 12 months of training, and a formal Exit Assessment held upon completion of training and not less than 12 months after the Interim Assessment.

2 A Training Record Book (Log Book) is given to every Trainee at the commencement of Specialty training. It will become the property of the trainee, in which he/she will record

a) All supervised procedures;

b) Additional relevant training experience, including special patient categories, journal reading, and other items; and

c) CME/CPD, lectures, clinical meetings/conferences and other relevant activities.

3 Trainees have the following duties:

a) Trainees are required to complete, at 3-monthly intervals, the Record of Higher Training (IA *Training Record*), documenting relevant information and data on supervised clinical service, procedures, educational sessions, participation in research, and attendance of conferences and other CME/CPD activities.

This Record must be validated and signed by the Trainee's Supervisor and then submitted to the relevant SPD.

b) Regarding Case Reports or Dissertations to be submitted for Assessment, Trainees must meet with their Supervisors on a timely and regular basis to ensure appropriateness of topics chosen, format, methodology and procedures (including but not limited to statistics, copy-right requirements, etc), and no plagiarism.

Prior to the submission of written materials for Assessment, Trainees must ensure that their Supervisors have sufficient time (not less than two weeks) to go over the document(s), and that there is sufficient time for further amendments when necessary. Starting with the Exit Assessment in Nov/Dec 2018, each Dissertation submitted for Exit Assessment must be accompanied by an Originality/Similarity Report countersigned by the Supervisor. The Report should be generated with a commonly used originality checking software (e.g. VeriGuide, Turnitin, iThenticate, etc) and should include information on the similarity percentage of the work (Appendix 2).

c) To inform the Programme Director, Specialty Board, and College when there is a change in the plan of Physician Training, for example suspension or termination.

4 Supervisors have the following duties:

a) Supervisors should meet with their Trainees at regular intervals to ensure satisfactory progress of training and early identification of issues that require rectification.

b) Supervision of Case Reports or Dissertations to be submitted for Assessment - Supervisors must have regular meetings with Trainees to ensure appropriateness of topics chosen, format, methodology and procedures (including but not limited to statistics, copy-right requirements, etc), no plagiarism, and satisfactory progress .

Prior to the submission of written material for Assessment, Supervisors must go over the document(s) and advise Trainees whether further amendments are necessary. Supervisors must also review the Originality/ Similarity Report prepared by Trainees, sign on the Report, and remind Trainees on issues related to copyright and plagiarism (Appendix 2).

c) Supervisors are required to complete, at 6-monthly intervals and at completion of a Trainee's Specialty training programme, the Evaluation of Clinical & Professional Competence Form (IA *Supervisor Evaluation*), and to assign grades according to the Trainee's clinical competence, humanistic qualities, professional attitudes, commitment to CME/CPD, scholarship, leadership, and other relevant attributes.

This Evaluation must be discussed with the Trainee before submission to the relevant Specialty Programme Director. Trainees who do not attain the passing score of 5 are reviewed and counselled by their Trainer(s) and Programme Director, and reviewed by the Specialty Board, which will decided whether or not to allow the Trainee to proceed to formal Assessment and subsequent stages in the training programme.

5 A minimum of 12 months of training in a Specialty is required before a Trainee is allowed to attempt Interim Assessment. It is preferable that, for Trainees in Dual Specialty training programmes, Interim Assessments for the two specialties are undertaken at least six months apart.

6 Trainees must have attained a Pass in the Interim Assessment before they are allowed to proceed to the Exit Assessment. This requirement may be exempted for Trainees who have undertaken training under the supervision of overseas national accreditation bodies (and have duly acquired the respective specialist qualification(s) as required by the respective bodies) which is recognized by the College as equivalent to the standards prescribed for the Interim Assessment.

7 Candidates undertaking training overseas may write to the respective Specialty Board through their SPD to apply for postponement of Interim or Exit Assessment, and to attempt the next available Assessment after returning to Hong Kong.

8 There is no limit to the maximal number of Interim or Exit Assessment attempts for a Trainee.

III) INTERIM ASSESSMENT – GENERAL INFORMATION

1 Interim Assessment normally takes place in June and/or December each year, at a venue decided by the Chairman of the Assessment Board.

2 The Assessment takes the form of an interview of the trainee by an Assessment Board for 30 minutes.

3 A minimum of 12 months of training in a Specialty is required before a Trainee is allowed to attempt Interim Assessment. It is preferable that Interim Assessments for the two specialties in Dual Specialty training programmes be undertaken at least six months apart.

4 For Interim Assessment in Specialties other than AIM, the Assessment Board comprises three Examiners. The Assessment Board is chaired by the Specialty Board Chairman or a Specialty Programme Director, who also serves as one of the three Examiners. At least one of the other two Examiners must be a Specialty Board member or member of the Education & Accreditation Committee. The Supervisor of the Trainee being assessed is invited to be present during the Interim Assessment to provide comments on the Trainee where appropriate, but does not participate in the clinical viva or the marking of the Trainee's performance in the clinical viva.

5 During the Interim Assessment, the Assessment Board will

a Examine the Trainee's Log Book, Record of Higher Professional Training, and Evaluation of Clinical & Professional Competence Form *(AA Supervisor Evaluation)*;

b Examine the Trainee's clinical and professional competence by way of a clinical viva consisting of at least three clinical questions;

c Receive the Trainee's comments on the strengths and weaknesses of the training programme and learning facilities of the institution(s);

d Recommend continuation of training programme or otherwise;

e. Discuss with the Trainee the preparation and progress of Dissertation for Exit Assessment, including the topics considered, perceived feasibility, and obstacles envisaged;

f Decide on recommendations regarding remedial actions where necessary; and

g Document the process and outcome on the appropriate forms *(IA Individual Scoring, IA Assessment Board, IA E&AC Report).*

6 All Assessment Reports must be submitted to, and endorsed by, the respective Specialty Boards and then the Education & Accreditation Committee.

7 All forms relevant to the Interim Assessment process may be found at the end of this Section.

IV) INTERIM ASSESSMENT IN AIM – FORMAT AND SCORING SYSTEM

(1) ALL Trainees undertaking Interim Assessment in AIM must submit TWO Case Reports to the AIM Board before the Interim Assessment. Information on the format and assessment of Case Reports is available in Appendix 3 *Guidelines on Case Report Writing and Assessment*. The topics of the Case Reports MUST NOT be directly related to the concurrently trained Specialty, or previously published, or submitted to any other Assessment Board. Case Reports should be submitted together with the application form for Interim Assessment at least EIGHT Weeks before the date of Assessment, which is usually the first Saturday in June or December every year.

If the overall score of a candidate in Interim Assessment is a FAIL, the Trainee is to repeat Interim Assessment in the failed section(s), i.e. either Case Report or Clinical Viva, or both. Details of consequences based on possible results are provided in Tables 1, 2 and 3 on the following pages.

(2) Calculation of Interim Assessment scores in AIM

The Clinical Viva consists of standardized clinical scenario questions (basic knowledge on diseases, diagnostic approach and procedures, investigations and management) and interpretation of investigation results (e.g. laboratory results, ECG, imaging, etc). The Clinical Viva scores given by each of the three examiners (E1, E2, E3) are added to give Score A (maximum 30). Scores for the two Case Reports (C1, C2) are added to the Supervisor's assessment score (S), and the sum is divided by three to give Score B (maximum 10).

In addition to the Clinical Viva, TWO questions that are based on topics covered in the three mandatory scientific meetings (i.e. Annual Scientific Meeting of Hong Kong College of Physicians; Hong Kong Medical Forum by The University of Hong Kong; Advances in Medicine by The Chinese University of Hong Kong) held in the past 12 months will be asked. The Trainee's responses to these questions yield an extra 1, 0 or -1 mark (1 mark when the answers to both questions are correct; 0 mark when one answer is correct and the other answer is wrong; -1 mark when both answers are wrong. No response or stating not knowing the answer is regarded as a wrong answer), and this is added to the sum of Score A + Score B to give the final Total Score.

In summary, the Total Score has a maximum of 40, and is calculated as follows:

Total Score = Score A + Score B + conference questions score = [E1+E2+E3] + [(C1+C2+S)÷3] + conference questions score

Individual constituents of the Interim Assessment Score are as follows:
Clinical Viva 75%
Case Reports 16.7%
Supervisor score 8.3%

The Supervisor is required to provide written comments when a Trainee is given a Supervisor score of 'below 5' (i.e. FAIL) or '10' (i.e. full mark).

Table 1 Possible results and consequences for a standard AIM Interim Assessment inclusive of both Case Reports and Clinical Viva

Overall Score	Verdict	Recommendation
≥ 20*	PASS	Proceed to Exit Assessment
≥ 20* But Viva score of every examiners is <5	Borderline FAIL	Repeat Interim Assessment after remedial action regarding training programme and repeat assessment on Viva section only
16-19*	Borderline FAIL	Repeat Interim Assessment after remedial action regarding training programme
FAIL in one section: Viva Score (A) < 15* OR Case report + Supervisor Score (B) < 5*		Repeat Assessment on the failed section(s) only
FAIL in two sections Viva Score (A) < 15* AND Case Report + Supervisor Score (B) < 5*		Repeat Assessment on both sections
≤ 15*	FAIL	Repeat Interim Assessment after an additional 6-month training in AIM
Two consecutive Borderline FAIL one FAIL followed by a Borderline FAIL		Repeat Interim Assessment after an additional 6-month training in AIM
≥ two consecutive FAIL one Borderline FAIL followed by a FAIL		Repeat Interim Assessment after an additional 12-month training in AIM

* Aggregate marks with decimal points ≥ 0.5 will be counted as 1 while those with decimal points <0.5 will be ignored.

For candidates retaking the Clinical Viva section only, the Total Score has a maximum of 30, and is calculated as follows:

Total Score = Score A + conference questions score = [E1+E2+E3] + conference questions score

Table 2 Possible results and consequences for AIM Interim Assessment applicable to candidates retaking the Clinical Viva section only

Overall Score	Verdict	Recommendation
≥ 15*	PASS	Proceed to Exit Assessment
13-14*	Borderline FAIL	Repeat Interim Assessment after additional 6 months of training in AIM
≤ 12*	FAIL	Repeat Interim Assessment after additional 12 months of training in AIM

For candidates retaking the Case Report section only, the Total Score has a maximum of 20, and is calculated as follows:

Total Score = [C1+C2]

Table 3 Possible results and consequences for AIM Interim Assessment applicable to candidates retaking the Case Report section only

Overall Score	Verdict	Recommendation
≥ 10*	PASS	Proceed to Exit Assessment
8-9*	Borderline FAIL	Repeat Interim Assessment after additional 6 months of training in AIM
≤ 7*	FAIL	Repeat Interim Assessment after additional 12 months of training in AIM

V) INTERIM ASSESSMENT IN SPECIALTIES OTHER THAN AIM - SCORING SYSTEM

1 Both the Supervisor's Interim Evaluation Score and the score by each of the three members of the Examination Board follow the 10-point system as detailed below:

10 Outstanding
9 Excellent
8 Very good
7 Good
6 Fairly good
5 Definite PASS
4 Borderline FAIL
3 Definite FAIL
2 Bad FAIL
1 Very bad FAIL
0 Exceptionally bad FAIL

2 Calculation of Interim Assessment Scores

The total of scores given by the three examiners during the Interim Assessment is multiplied by three and added to the Supervisor's score so that the maximum overall score that can be attained is 100. The Supervisor's score thus accounts for 10% of the Interim Assessment score. The Supervisor is required to provide written comments on Trainees given Supervisor scores of 'below 5' (i.e. FAIL) or '10' (i.e. full mark). Consequences based on possible results are illustrated in Table 4.

Table 4 Possible results and consequences for Interim Assessment of Specialties other than AIM

Overall Score	**Verdict**	**Recommendation**
≥ 50	PASS	Proceed to Exit Assessment
≥ 50 But Viva score of every examiner is <5	Borderline FAIL	Repeat Interim Assessment after six months
≥ 45-49	Borderline FAIL	Repeat Interim Assessment after six months
≤ 44	FAIL	Repeat Interim Assessment after an additional 6-month training in the relevant Specialty
For candidates re-sitting the Interim Assessment		
Two consecutive Borderline FAIL one FAIL followed by a Borderline FAIL		Repeat Interim Assessment after an additional 6-month training in the relevant Specialty
≥ two consecutive FAIL one Borderline FAIL followed by a FAIL		Repeat Interim Assessment after an additional 12-month training in the relevant Specialty

VI) EXIT ASSESSMENT - FORMAT

1 Every Trainee must have attained a pass in Interim Assessment before he/she is allowed to apply to take an Exit Assessment. Application must be made using the *EA Application Form*. Interim Assessment in a Specialty must be passed at least 12 calendar months before attempting Exit Assessment in that Specialty. This requirement may be exempted for overseas candidates who had undergone Higher Physician Training prescribed by the relevant national accreditation bodies and had duly acquired the respective specialist qualifications recognized by the College.

2 Exit Assessment is usually held in May/June and/or November/December. Trainees with anticipated completion date of their training programmes on or before mid-April (14 April) of the following calendar year are eligible to take the Exit Assessment in November/December. Trainees with anticipated completion date of their training programmes on or before mid-October (14 October) of the same calendar year are eligible to take the Exit Assessment in May/June.

3 The contents of a standard Exit Assessment include a Dissertation (where applicable) and a Clinical Viva. Dissertation is obligatory in the training programme of all Specialties, except for AIM when it serves as the broad-based Specialty in Dual Specialty training – under such circumstances the Dissertation in AIM is optional. A Trainee is required to submit and obtain a PASS with at least ONE Dissertation before he/she can be accredited as a Specialist and conferred Fellowship of the College of Physicians.

4 Dissertation

4.1 The Dissertation Appraisal and Dissertation Viva together account for 40% of the Exit Assessment score. The objective of the Dissertation is to develop in the Trainee the ability of critical appraisal and application of relevant knowledge in specialist practice.

4.2 A Dissertation may be in the form of a critical review of the literature on focused topic(s), or original clinical research based on work carried out in the training unit(s). Information on Dissertation format and assessment is available in *Appendix 4 Guidelines on Dissertation Writing and Assessment*.

4.3 Trainees should start preparations for the Dissertation at the latest by the beginning of the final year of training. The Dissertation should be on a topic in the Specialty being trained, and the length of the manuscript should be approximately 5,000 words (excluding references). Trainees and Supervisors must have regular meetings to ensure that there is optimal progress, correct methodologies are used, there is no violation of copyright, and also no plagiarism. The Dissertation must reach the Exit Assessment Board through the Supervisor no later than TWO MONTHS before the date of Assessment. In order that Supervisors have at least two weeks to go over the Dissertation, a Trainee should submit the Dissertation to the Supervisor TWO AND A HALF MONTHS before the date of Exit Assessment.

4.4 The Dissertation document will be assessed and given scores prior to the day of Exit Assessment. On the day of Exit Assessment, the Trainee will be assessed by an Assessment Board in viva format on issues related to the Dissertation.

5 Clinical Viva

The second part of the Exit Assessment will take the form of an oral Clinical Viva, which aims to assess the Trainee's knowledge, clinical expertise, professionalism, as well as ethical and humanistic attributes over a wide range of topics pertinent to the Specialty being assessed.

6 Format of Exit Assessment

6.1 The venue of Exit Assessment is determined by the Assessment Board of the Specialty.

6.2 The Assessment Board is chaired by the Chairman of the Specialty Board or his/her nominee. Members of the Assessment Board include at least one Specialty Programme Director, one additional Specialty Board Member or member of the Education & Accreditation Committee or Examination Committee, and another examiner for the Exit Assessment. An External Assessor may also be invited from outside the Specialty Board or from another relevant Specialty. Local or overseas experts may serve as External Assessors.

The above composition of Exit Assessment Board does not apply to Exit Assessment in AIM, which has a structured system of pre-set pool of examination questions and senior physicians serving as Assessors in rotation.

6.3 An Exit Assessment normally lasts for a minimum of 60 minutes. The Exit Assessment Board comprises no fewer than two Panels. Clear documentation on the standard scoring sheet and form is required.

6.3.1 The First Panel examines the Trainee's training records and Annual Assessment Reports, and conducts the Dissertation Viva, which normally lasts for 15 minutes, where applicable (i.e. when the Trainee has chosen or is required to submit a Dissertation in the Specialty).

The same Panel then continues with the assessment of other items (e.g. clinical and professional competence; ethics and humanistic attributes) for 15 minutes by way of a Clinical Viva, covering one or more of the following areas/domains determined by the Assessment Board:

i Clinical problems

ii Questions on clinical skills/practical knowledge, interpretation of laboratory/system function tests, or imaging investigation results

iii (a) evidence-based medicine, including landmark studies in the literature, important international or Hong Kong guidelines for the management of specific conditions; (b) Issues of specific local or regional relevance, such as disease patterns, clinical services delivery and access, healthcare financing; and (c) Medical ethics, professionalism, humanistic and communication issues.

6.3.2 The Second Panel (and additional Panels, where applicable) then examines the candidate for an additional 30 minutes in areas not covered by the First Panel.

6.3.3 Assessors should discuss the questions before the Exit Assessment to ensure adequate coverage of topics and domains, appropriate level of difficulty, and consistency of questions presented to different candidates, and consistency of marking scheme.

6.4 For Exit Assessment in AIM, each candidate is assessed by three Panels for a total of 45 minutes (15 minutes for each Panel) in Clinical Viva format. Questions should cover the following areas:

i. Acute Medical problems

ii. Chronic Medical problems

iii. Medical Ethics, Communication, Humanities; Evidence-based Clinical Practice Guidelines; or other locally relevant topics

Trainees who have chosen to include Dissertation in their AIM training and assessment will have formal Assessment of the Dissertation including the Dissertation Appraisal and Dissertation Viva as described previously.

6.5 The Assessment Board then convenes a meeting at the end of the Exit Assessment and decides the recommendations for each candidate based on the scores obtained at the Assessment.

7 Specialty Boards must submit all Assessment Reports *(IA E&AC report, EA Individual report and EA E&AC report)* to the Education & Accreditation Committee for endorsement. The results are then forwarded to the College Council for discussion and approval.

8 Exit Assessments for the two Specialties registered for concurrent training normally take place towards the end of the third and fourth year of training respectively.

For Single Specialty training, as occurs with sequential training or in the case of some Trainees in Dermatology and Venereology, Exit Assessment is usually undertaken at the end of the third year of training in the Specialty.

9 All Trainees who have failed the Exit Assessment must be counselled by the respective Specialty Programme Director and Supervisor.

10 All forms relevant to the Exit Assessment process may be found at the end of this Section.

VII) EXIT ASSESSMENT - SCORING SYSTEM

1 Each Assessor is provided with an individual marking sheet *(EA Individual Scoring)* for each candidate. Each Assessor should mark independently based on the overall performance of the candidate, taking into consideration all the questions asked in the respective Assessment Panel.

At the end of the Exit Assessment the scores of all components in the assessment exercise are then added together according to the standard prescribed methodology.

The Assessment Board should discuss and provide written comments when there is significant discrepancy (defined as a difference of ≥3) between different Assessor's marks on the same question or section.

The Dissertation is normally appraised by two Assessors. When one Assessor gives the Dissertation a FAIL score and the other Assessor gives it a PASS score, the Dissertation will be assessed by a third Assessor and the Dissertation Appraisal score is the sum of all three scores multiplied by 2/3. In the event that a Dissertation is given a PASS Appraisal score by one Assessor and a FAIL score by the other Assessor AND the difference between the two scores is ≥3, the Dissertation will be further assessed by Senior Advisor who serves as the third Assessor.

After confirmation by the Assessment Board, the marks of candidates in the Exit Assessment exercise can no longer be altered. Any proposal to amend the results or recommendations must be presented for discussion at and approval by the Education & Accreditation Committee, which will only consider exceptional justifying circumstances and/or new information not previously known to the Assessor(s).

2 A summary of performance and recommendations for remedial training must be made known to Trainees who fail the Exit Assessment.

3 This scoring system is a 10-point scale, as follows:

10	Outstanding
9	Excellent
8	Very good
7	Good
6	Fairly good
5	Definite PASS
4	Borderline FAIL
3	Definite FAIL
2	Bad FAIL
1	Very bad FAIL
0	Exceptionally bad FAIL

Only integral scores are allowed. Non-integral scores (e.g. 0.5, 0.3, 0.7, etc), or 'plus' or 'minus' signs added to a score (e.g. 6-, 3+), are not accepted. A score of 0.5 to 1 is regarded as 1. A score of 0 to <0.5 is regarded as 0.

Dissertations with an overall Dissertation score of 75% or above may be nominated to compete for the "Hong Kong College of Physicians Exit Assessment Best Dissertation Awards". Nominations should be submitted annually in the beginning of a calendar year, and cover all Dissertations passed in the preceding 12 months. The AIM Board is to nominate no more than 3 Dissertations, and other Specialty Boards is to nominate no more than 1 Dissertation each, to compete for the Gold, Silver and Bronze Best Dissertation Awards.

4 In the Exit Assessment, Dissertation Appraisal and Dissertation Viva together account for 40% of the final score. An overall Dissertation Score of 20 (i.e. 50% of a maximum of 40) or above denotes a PASS in the Dissertation Assessment.

The Dissertation is normally appraised by two Assessors. When one Assessor gives the Dissertation a FAIL score and the other Assessor gives it a PASS score, the Dissertation will be assessed by a third Assessor and the Dissertation Appraisal score is the sum of all three scores multiplied by 2/3.

The maximum score for the Dissertation Viva is 20. Each of the two Assessors on the First Panel will give a score between 0 and 10.

<table>
<tr><td colspan="5">Dissertation Assessment Score Calculation</td></tr>
<tr><td colspan="3">Dissertation Appraisal</td><td colspan="2">Dissertation Viva</td></tr>
<tr><td>$DA_{max} = 10$</td><td>$DA_{max} = 10$</td><td>$DA_{max} = (10)$</td><td>$DV_{max} = 10$</td><td>$DV_{max} = 10$</td></tr>
<tr><td colspan="3">$DA_{total} = \sum DA_n$ if n = 2
Or
$\sum DA_n \times 2/3$
if n = 3</td><td colspan="2">$DV_{total} = \sum DV_n$</td></tr>
<tr><td colspan="5">Total Dissertation Score = $DA_{total} + DV_{total}$</td></tr>
</table>

Note: DA = Dissertation Appraisal score
DV = Dissertation Viva score

5 For the Clinical Viva, each of the two Assessors on a Panel gives a score between 0 and 10. The maximum Clinical Viva score obtainable from all Panels is 60, and a total score from Clinical Viva of 30 (i.e. 50% of maximum) or above denotes a PASS.

In AIM Exit Assessment, which includes THREE Panels for Clinical Viva, it is an ABSOLUTE REQUIREMENT to obtain a PASS in the aggregate score for Acute Medicine plus Chronic Medicine Panels. Candidates with total Clinical Viva scores of 30 or above but who fail to obtain a PASS in the aggregate score for Acute Medicine plus Chronic Medicine Panels are regarded as having FAILED the Clinical Viva.

6 The Exit Assessment score is calculated as follows:

6.1 Dissertation score (max 40) = Dissertation Appraisal score (max 20) + Dissertation Viva Score (max 20)

6.2 Clinical Viva score (max 60) = Summation of all individual Panel members' scores (2 members per Panel; max 10 from each member).

6.3 Exit Assessment score (max 100) = Dissertation score + Clinical Viva score

6.4 For candidates with NO Dissertation assessment, the Exit Assessment score is calculated by multiplying the Clinical Viva score (i.e. max 60) by 5/3 (i.e. max 100).

6.5 The Exit Assessment score must be an integral number. A score in the range of X to <X.5 becomes X, and a score in the range of X.5 to X+1 becomes X+1.

6.6 An Exit Assessment score of 50 or above denotes a PASS.

7 A score of 90-99% of the PASS mark denotes Borderline FAIL. For Dissertation, the range of Borderline FAIL scores is 18-19, and for Clinical Viva the range is 27-29. For candidates with no Dissertation and only Clinical Viva assessment, the range is 45-49.

When the result in one section is Borderline FAIL and that in the other section is a PASS, the candidate is regarded as having PASSED the Exit Assessment.

When the result in any one section is a definite FAIL (i.e. Dissertation Score ≤17, or Clinical Viva Score ≤26), the candidate is regarded as having FAILED the Exit Assessment irrespective of the score obtained in the other section and the overall score.

Details on consequences based on possible results obtained by candidates in the Exit Assessment are provided in Tables 5a and 5b on the following pages.

Table 5a Possible results and consequences at Exit Assessment (1)

Dissertation score	Clinical Viva score	Total	Compensation	Overall Result	Recommendation
≥ 20	≥ 30	≥ 50	---	PASS	Eligible for admission as College Fellow
≥ 90% of pass mark					Eligible for admission as College Fellow
19	≥ 31	≥ 50	Yes	PASS	
18	≥ 32	≥ 50	Yes	PASS	
	>90% of pass mark				Eligible for admission as College Fellow
≥ 21	29	≥ 50	Yes	PASS	
≥ 22	28	≥ 50	Yes	PASS	
≥ 23	27	≥ 50	Yes	PASS	

Table 5b Possible results and consequences at Exit Assessment (2)

Score*	Failure Category	Total Score	ONE section of Exit Assessment	TWO sections of Exit Assessment
90-99% of section Pass mark	Borderline FAIL	<50	Remedial action and repeat Exit Assessment in the failed section only, after an additional 6 months of training in the relevant Specialty.	Remedial action and repeat full Exit Assessment, after an additional 12 months of training in the relevant Specialty.
80-89% of section Pass mark	FAIL	Any	Remedial action and repeat full Exit Assessment, after an additional 6 months of training in the relevant Specialty.	Remedial action and repeat full Exit Assessment, after an additional 12 months of training in the relevant Specialty. Trainees should be exposed to Trainers in other institution(s) for six months.
<80% of section Pass mark	Bad FAIL	Any	Remedial action and repeat full Exit Assessment, after an additional 12 months of training in the relevant Specialty.	Remedial action and repeat full Exit Assessment, after an additional 12 months of training in the relevant Specialty, of which 6 months should be undertaken in programmes and/or training centres specified by the Specialty Board.

*Notes

1	(i)	Section PASS mark for Dissertation	=	20
		90% of PASS mark	=	18
		80% of PASS mark	=	16
	(ii)	Section PASS mark for Clinical Viva	=	30
		90% of PASS mark	=	27
		80% of PASS mark	=	24

2 Candidates who have FAILED Dissertation Appraisal are allowed to proceed to the Clinical Viva section of the Exit Assessment.

3 For candidates who have FAILED the Dissertation Assessment, it is not obligatory to change the topic of the Dissertation in subsequent attempts of Exit Assessment. Trainees should discuss with their Supervisors whether an extensive revision of the Dissertation might suffice.

4 Candidates who obtained a Borderline FAIL score in one section of the Exit Assessment need to re-attempt only the FAILED section.

5 Candidates who FAILED both sections are required to undertake remedial training as stipulated for the section with the lower score.

VIII) COMPLAINTS AND APPEALS

1 All Specialty Boards must ensure that reasonable channels for complaints or comments on training facilities, supervision or related matters are available to Trainees at the Specialty Board level, which may or may not be through the Regional Specialty Programme Director. Where applicable, Trainees may also approach the Education & Accreditation Committee and/or Council of the College of Physicians directly on such matters.

2 Appeals that concern Assessment results, decisions, or recommendations should be directed to the Council of the Hong Kong College of Physicians.

Additional Information on Higher Physician Dual or Single Specialty Training

1 Higher Physician Training in all Specialties requires a PASS in the Interim Assessment followed by a PASS in the Exit Assessment of the Specialty being trained, and a PASS in at least ONE Dissertation, before a Trainee can be recommended for accreditation as Specialist and conferment of Fellowship by the College.

2 Dissertation is obligatory for Trainees undertaking Single Specialty training. Training in a Single Specialty is allowed when the Specialty being trained is AIM or Geriatric Medicine, or Dermatology & Venereology.

3 For Trainees undertaking Dual Specialty training, one of the two Specialties must be a broad-based Specialty, i.e. AIM or Geriatric Medicine. The combination of Geriatric Medicine and Palliative Medicine is NOT allowed.

4 Dissertation is obligatory in the training programme of all Specialties, except for AIM when it serves as the broad-based Specialty in Dual Specialty training – under such circumstances the Dissertation in AIM is optional.

5 For Trainees undertaking Dual Specialty training, a Trainee can be accredited Specialist and Fellowship status by the College after obtaining a PASS in the first Exit Assessment that includes Dissertation, irrespective of whether the first Exit Assessment is for the broad-based Specialty or non-broad-based Specialty. This is NOT APPLICABLE when the non-broad-based Specialty is Palliative Medicine or Rehabilitation, for which accreditation as Specialist and College Fellow is only effected after obtaining a PASS in the Exit Assessment of the broad-based Specialty.

6 For Trainees in Dermatology & Venereology, a minimum of three years of training in the Specialty is required, irrespective of whether the Trainee is undertaking Single Specialty or Dual Specialty training.

Notes on "Similarity Detection" for Written Submissions for Assessment

1 Prevailing codes of internationally accepted scientific and scholarly conduct must be strictly followed in all written submissions for Assessment. Infringement of copyright and plagiarism are strictly prohibited, and Trainees involved in such actions will be penalized.

2 All written submissions for Assessment purpose, including Dissertations and Case Reports, will be randomly sampled for plagiarism checking. Plagiarism means taking another person's work or ideas and presenting them as if they are your work or ideas.

3 Starting with the Exit Assessment in Nov/Dec 2018, each Dissertation submitted for Exit Assessment must be accompanied by an Originality/Similarity Report which has been countersigned by the Supervisor. It is the Trainee's responsibility to generate this Originality/Similarity Report with a commonly used originality checking software (e.g. VeriGuide*, Turnitin, iThenticate, etc). The Report must include information on the similarity percentage. While a high percentage of similarities does not necessarily indicate plagiarism, and vice versa, Trainees may be asked to provide explanations when a submitted work shows a high total similarity index (such as over 25%). Also, when a work contains features that raise the suspicion of plagiarism, it will be checked for plagiarism irrespective of the percentage of similarities.

* For Trainees who choose to use free trials of VeriGuide, the Originality Report can be obtained according to the following procedures:
   i. go to the page displaying the Similarity statistics and choose 'View details'
   ii. choose 'side-by-side' comparison
   iii. select 'Export to PDF' for downloading

Guidelines on Case Report Writing and Assessment

1. All Trainees undertaking Interim Assessment in AIM must submit TWO Case Reports prior to the Interim Assessment. The topics of the Case Reports MUST NOT be directly related to the concurrently trained Specialty. Case Reports previously published or submitted to another Assessment Board are not acceptable.

2. Through the process of Case Report writing, it is expected that Trainees acquire not only in-depth knowledge in a focused topic but also the ability to critically appraise published literature, reinforce the desire and practice of continuous learning, keep abreast of latest developments in clinical medicine, refine their writing skills for effective and accurate communication, and are cognizant of prevailing codes of scientific and scholarly conduct, examples being issues related to copyright and plagiarism.

3. Case Reports should be submitted in the prescribed format together with the application form for Interim Assessment at least EIGHT Weeks before the date of Interim Assessment, which is usually the first Saturday in June or December every year.

4. Each Case Report should be between 1000 and 2000 words in length, containing no more than two figures, and no more than 10 references. The contents must be presented in complete sentences and paragraphs, i.e. point format is not acceptable. Abbreviations should be avoided. Generic names of drugs should be used instead of trade names. Case Reports on extremely rare conditions should be avoided.

5 Case Reports are ASSESSED with regard to:
   (i) *Clinical significance* and *local relevance* of the topic;
   (ii) *Clarity* of presentation;
   (iii) Adequacy of *relevant literature review*;
   (iv) Evidence of *critical appraisal* of *literature and clinical issues* related to the topic;
   (v) *Relevance of discussions*; and
   (vi) Responsible and acceptable *scholarly and professional conduct* (for example, on issues related to copyright and plagiarism).

6 Each Case Report is given a score between 0 (exceptionally bad failure) and 10 (outstanding), with 5 being the score for a PASS, by one Assessor. Assessors are required to provide written comments and justifications when the score is 4 or below, or 9 or above. Case report failed to adhere to the format will be regarded as FAIL (score between 0 and 4)

Guidelines on Dissertation Writing and Assessment

1 Each Higher Physician Trainee is required to obtain a PASS in at least one Dissertation before the Trainee is eligible to be accredited as a Specialist / conferred Fellowship of the Hong Kong College of Physicians. Dissertation is obligatory in all Specialty training programmes, except that it is optional in AIM training when this serves as the broad-based Specialty in a Dual Specialty training programme. Trainees in Dual Specialty training programmes should discuss with their Supervisor(s) and start preparations for their Dissertation(s) early.

1.1 Dissertation writing is an essential element in Higher Physician Training. Through the process of Dissertation writing, it is expected that Trainees acquire not only in-depth knowledge but also the ability to critically appraise published literature, reinforce the desire and practice of continuous learning, keep abreast of latest developments in clinical medicine, refine their writing skills for effective and accurate communication, and are cognizant of the prevailing codes of scientific and scholarly conduct, examples being issues related to copyright and plagiarism.

1.2 Trainees who wish to obtain College and Academy Fellowship after passing their first Exit Assessment must submit a Dissertation for the first trained Specialty, irrespective of whether or not this is the broad-based Specialty in their training programme.

1.3 Trainees undergoing Dual Specialty training normally would choose the non-broad-based Specialty as the first Specialty for Exit Assessment, although this is not obligatory. In the event that a Trainee attempts Exit Assessment for the broad-based Specialty first, and wishes to obtain College and Academy Fellowship after passing the first Exit Assessment, it is obligatory that Dissertation assessment be included in the Exit Assessment for the broad-based Specialty.

1.4 Trainees undergoing Single Specialty training should submit a Dissertation in the Specialty being trained.

2 By the end of the second year of training at the latest, a Trainee must discuss with the Supervisor(s) potential topics for the Dissertation. At the Interim Assessment, Trainees will be asked about the topic for the Dissertation and the progress, and whether there is any anticipated problem when writing up the Dissertation.

3 NINE MONTHS prior to Exit Assessment, and after passing the Interim Assessment, a Trainee must submit the title and the plan of the Dissertation, in approximately 100 words, to the Specialty Board for approval. Subsequent change of topic is allowed but must be submitted for approval no later than six months before the Exit Assessment.

4 Trainees must take the initiative to meet with their Supervisors on a regular basis to ensure satisfactory progress of the Dissertation. The Dissertation must reach the Exit Assessment Board through the Supervisor no later than TWO MONTHS before the date of Exit Assessment. The submission must include TWO properly bound hardcopies and ONE electronic copy in PDF format. In order that Supervisors have at least two weeks to go over the Dissertation, a Trainee should submit the Dissertation to the Supervisor TWO AND A HALF MONTHS before the date of Exit Assessment.

5 Trainees who failed the Dissertation assessment once may revise the original Dissertation without changing the title at the next Exit Assessment attempt, except when instructed by the Assessment Board to change to a different topic. Any change of Dissertation title, either pursuant to instructions by the Assessment Board or initiated by the Trainee, must be submitted to the Specialty Board for approval no later than FIVE MONTHS before the next Exit Assessment.

6 Prevailing codes of internationally accepted scientific and scholarly conduct must be strictly followed in Dissertation writing. Infringement of copyright and plagiarism are strictly prohibited, and Trainees involved in such actions will be penalized.

7 A Dissertation may be based on study(s) of practical clinical relevance performed by the Trainee in the course of the training programme, or a critical review of literature on a specific topic. The Dissertation is to contain no fewer than 5,000 words (excluding references). The Abstract is an obligatory component in the Dissertation.

7.1 A Dissertation typically includes, *in sequential order,* the following sections:

(i) Title Page
(ii) Acknowledgements / Dedication (where applicable)
(iii) Table of Contents
(iv) List of Abbreviations
(v) List of Tables
(vi) List of Figures
(vii) List of Articles related to the Dissertation published by the Trainee
(viii) List of Appendices (where applicable)
(ix) Abstract (of no more than 250 words)
(x) Chapters (the title of the first Chapter is 'Introduction', and that of the last Chapter 'Discussion and Conclusions')
(xi) Copyright permission documents for tables, figures, or other excerpted material from publications authored by others or the Trainee (where applicable)
(xii) Copy of published Article(s)/Paper(s) related to material presented in the Dissertation, as listed under (vii) (where applicable)
(xiii) Appendices (where applicable)
(xiv) Reference/Bibliography in <u>*either ONE*</u> of the following formats:

a. References cited as numerals in the text of the Dissertation (e.g.... according to the dissertation format as previously illustrated [1-3].), in sequential order as each reference is cited; and a Reference list is included at the end of the Dissertation, with the entries listed numerically in the same order as they are cited in the text, and the details presented in Vancouver style, for example: Smith AB, Jones CD, McDonald EF, et al. How to write a dissertation. J HK Soc Dissert. 2018;123:456-789.

b. References cited in the text in the format of first-author's surname and initials followed by publication year in brackets (e.g.... according to the dissertation format as previously illustrated [Smith, et al., 2018;

Watanabe, et al., 2011].); and a Reference list is included at the end of the Dissertation, with the entries listed *alphabetically* according to the surname of the first-author and the details presented in APA (American Psychological Association) format, for example: Smith, A. B., Jones, C. D., McDonald, E. F., et al. (2018). How to write a dissertation. J HK Soc Dissert, 18, 123-456.

7.2 For a Dissertation that is based on original studies conducted by the Trainee, information on the studies should be presented in the Chapters between the first Chapter (i.e. 'Introduction') and the last Chapter (i.e. 'General Discussion and Conclusions'), and should include subsections describing the Background, Objectives, Patients and Methods, Results, Data Interpretation and Conclusions, where appropriate. A critical review of the literature must be included in the last Chapter (i.e. 'General Discussion and Conclusions'). Reproduction of articles published by the Trainee *per se* is not accepted as a Dissertation.

7.3 For a Dissertation that is based on critical review of literature on a specific topic, the Trainee should include all relevant significant published articles on the topic, and local and/or personal experience where applicable.

8 A Dissertation related to paper(s) published bsy a Trainee in professional journals is acceptable, provided that a copy of the published papers is included as described under 7.1. Published work in its entirety *per se*, or a thesis / dissertation previously or simultaneously submitted to another institution, are not acceptable as Dissertation in Higher Physician Training programmes.

9 Should revisions to the Dissertation be required after the Exit Assessment, the Trainee must submit, through the Specialty Board, TWO properly bound hardcopies and ONE electronic copy in PDF format of the Final Version of the Dissertation to the College before the deadline as decided by the Assessment Board.

10 The ownership of all Dissertations submitted to the College to satisfy the requirements of Exit Assessment in physician training programmes rests with the Hong Kong College of Physicians.

11 For the purpose of Exit Assessment, the Dissertation is ASSESSED with regard to some or all of the following where applicable:

(i) *Clinical significance and local relevance* of the topic;
(ii) *Clarity* of presentation and *organization* of manuscript;
(iii) Adequacy of *relevant literature review*;
(iv) Evidence of *critical appraisal of literature and clinical issues* related to the topic;
(v) *Originality* (where applicable);
(vi) Appropriateness of *methodology*;
(vii) Responsible and acceptable *scholarly and professional conduct* (for example, on issues related to copyright and plagiarism); and
(viii) *Overall* volume of work involved.

For Dissertations that include original study(s) conducted by the Trainee, assessment of the contents also takes into account the following:

(i) Clarity and rationale of *study objectives*;
(ii) Appropriateness of *methodology* including data analyses, presentation and interpretations;
(iii) *Validity of conclusions*;
(iv) *Originality*; and
(v) Overall *contributions to knowledge*.

12 An archive of Dissertation previously submitted to the Hong Kong College of Physicians is available at the College website http://www.hkcp.org.

Samples of Forms and Reports Related to Training Documentation or Assessment

HONG KONG COLLEGE OF PHYSICIANS
RECORD OF HIGHER PHYSICIAN TRAINING
IN _____ SPECIALTY

To be completed every three months by Trainees

TRAINEE **SUPERVISOR**

Name_____M/F_____ Name_____

Qualification (m/y)_____(__ m _y) Title_____
_____ (__ m _y)

INSTITUTION/DEPARTMENT/UNIT_____

PERIOD OF TRAINING From _____ /_____/ _____to ____ /_____ /_____
(DD/MM /YY) (DD / MM /YY)

TRAINING RECORD

(A) SERVICE WARD ROUNDS

(1) Daily ward rounds · General beds No.___
· Specialty beds No.___Type _____
· Others (specify) _____No.___
_____No.___

(2) Consultation No.___

(3) Weekly Grand Rounds Total Sessions _____

(B) OUTPATIENT SESSIONS

(1) General Medical sessions/month_____
(2) Specialty ( ) sessions/month_____
(3) Specialty ( ) sessions/month_____
(4) Specialty ( ) sessions/month_____

(C) SPECIAL SESSIONS

(1) Grand Rounds sessions/month_____
(2) Clinical Seminars sessions/month_____
(3) Journal Club sessions/month_____
(4) Radiology Meeting sessions/month_____
(5) Pathology Meeting sessions/month_____
(6) Others _____ sessions/month_____
_____

(D) DIAGNOSTIC & PROCEDURAL TESTS RECORDS **Comments**

(1)	No._____	_____
(2)	No._____	_____
(3)	No._____	_____
(4)	No._____	_____
(5)	No._____	_____
(6)	No._____	_____
(7)	No._____	_____
(8)	No._____	_____
(9)	No._____	_____
(10)	No._____	_____
(11)	No._____	_____
(12)	No._____	_____
(13)	No._____	_____
(14)	No._____	_____
(15)	No._____	_____
(16)	No._____	_____
(17)	No._____	_____
(18)	No._____	_____
(19)	No._____	_____
(20)	No._____	_____
(21)	No._____	_____

(E) PARTICIPATION IN RESEARCH PROJECTS

_____
_____
_____

(F) MEDICAL CONFERENCES ATTENDANCE/PRESENTATIONS

_____
_____
_____

Supervisor

_____

(Name) (Signature) (Date)

Note: Please ensure that you have completed your training logbook, which is to be reviewed by your Programme Director every three months.

HIGHER PHYSICIAN TRAINING IN _____ SPECIALTY
EVALUATION OF CLINICAL AND PROFESSIONAL COMPETENCE

For distribution to Members of Interim & Exit Assessment Boards
To be completed every six months or at the end of each training period lasting <six months

TRAINEE

_____

SUPERVISOR (Name & Position)

_____

QUALIFICATION (m/y)

_____(__m__y)

_____(__m__y)

SPECIALTY PROGRAMME DIRECTOR

_____

INSTITUTION/DEPARTMENT/UNIT

_____

PERIOD OF TRAINING

____/____/____ to ___/___/___
(DD/MM/YY) (DD/MM/YY)

EVALUATION

Please use the following 10-point Scoring System.

10 Outstanding
9 Excellent
8 Very good
7 Good
6 Fairly good
5 Definite pass
4 Borderline failure
3 Definite failure
2 Bad failure
1 Very bad failure
0 Exceptionally bad failure

1 Clinical judgement

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
0 1 2 3 4 5 6 7 8 9 10

2 Medical knowledge

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
0 1 2 3 4 5 6 7 8 9 10

3 Clinical skill:

Medical history	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10
Physical examination	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10
Diagnostic/procedural skill Overall assessment	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10

Particular diagnostic/procedural skill
(Please specify)

	0	1	2	3	4	5	6	7	8	9	10
____________________________	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10
____________________________	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10
____________________________	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10
____________________________	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10
____________________________	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10
____________________________	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10

4 **Humanistic qualities**	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10
5 **Professional attitudes and behaviour**	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10
6 **Commitment to continued medical education and scholarship**	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10

Conferences/Research/Publications (append details if necessary)______________________
____
____
____
____
____

7 **Administrative ability and leadership**	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10
8 **Overall assessment**	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10

Comments _____

Has this evaluation been discussed with the trainee? ☐ Yes ☐ No Date __/___/__ (DD/MM/YY)

Has a copy of this evaluation been given to the trainee? ☐ Yes ☐ No Date __/__/__ (DD/MM/YY)

Supervisor	**Specialty Programme Director**
Name _____	Name _____
Title _____	Title _____
Signature _____	Signature _____
Date _____	Date _____

Note: Supervisors please review the trainee's logbook and ensure they have been completed in order. Please submit the completed logbooks to the Programme Directors before Interim Assessment process.

Hong Kong College of Physicians

(Incorporated in Hong Kong with limited liability)

Specialty _____

Interim Assessment

Higher Physician Training (HPT) Application Form

All sections are mandatory

1. Surname _____ 2. First name _____

3. ID Number _____ (the first 4 digits)

4. Hospital _____ 5. Unit _____

6. Region *(Hong Kong / Kowloon / New Territories)

7. Date started Higher Physician Training _____

8. Concurrent or completed training in other specialties _____

*9. I shall take part in Interim Assessment in June / December 20__.

*10. I shall not be able to take part in Interim Assessment in June / December 20__ as I shall be pursuing overseas study then.

11. Have you been rotated to a general medical unit of hospital with obstetric service for three months during BPT or HPT (applicable only for trainees who start BPT from 1 July 2009 onwards)? *Yes/*No

Note **Delete whichever is inappropriate*

_____ _____

Signature of Applicant Date

Note: Please ensure that you have submitted your completed logbook to your supervisor, for onward transmission to your Programme Director before your Interim Assessment process.

Hong Kong College of Physicians

Scoring Sheet for Interim Assessment

(To be kept by Specialty Board)

Specialty Board in _____

Date of Assessment_____

Name of Candidate _____ Hospital _____ PD _____

Date started training: _____ months (Minimum: 12 months in this Specialty)

	Examiner 1	Examiner 2	Examiner 3	**Supervisor's score**	**Formula for calculation**
Name of Examiner					**Maximum score for each examiner = 10**
Signature					**Total score = [(Scores of Examiners 1 + 2 + 3) x 3] + Supervisor's score = maximum 100**
Mark for Viva					

Total Score

Topics 1. _____

2. _____

3. _____

Comment _____

Result (pass/fail) _____

_____

Hong Kong College of Physicians

Scoring Sheet for Interim Assessment

(To be kept by Specialty Board)

Specialty Board in AIM

Date of Assessment_____

Name of Candidate _____ Hospital _____ PD _____

Date started training: _____ months (Minimum: 12 months in AIM)

	Examiner 1	Examiner 2	Examiner 3	CR1	CR2	S	Formula for calculation
Name of Examiner							**Maximum score for each examiner = 10**
Signature							**Total score = [(Scores of Examiners 1 + 2 + 3) + (CR1+CR2+S)/3] = maximum 40**
Mark							

Total Score

CR = Case Report score S = Supervisor's evaluation score

Topics 1. _____

2. _____

3. _____

Comment: _____

_____

Result (pass/fail) _____

HONG KONG COLLEGE OF PHYSICIANS
HIGHER SPECIALTY TRAINING INTERIM ASSESSMENT
IN _____ SPECIALTY
(To be kept by the Specialty Board)

To be completed by trainees

NAME_____

QUALIFICATION MBBS/specify _____ DATE_____(m/y)

HKCP Intermediate Exam/MRCP/specify _____DATE_____(m/y)

MHKCP Yes/No

Basic Physician Training From _____ (m/y) To _____(m/y)

Date of entry to higher specialty training in_____ Specialty_____(m/y)

Concurrent or completed training in other specialties Yes/No Specify_____

TRAINING RECORD Specialty _____ _____

PERIOD _____ to _____, INSTITUTION _____ _____
PERIOD _____ to _____, INSTITUTION _____ _____
PERIOD _____ to _____, INSTITUTION _____ _____
PERIOD _____ to _____, INSTITUTION _____ _____

DATE OF INTERIM ASSESSMENT _____ (At least 12 months' training in each specialty is required before attempting Interim Assessment in that specialty. Interim Assessment in a specialty must be passed at least 12 calendar months before Exit Assessment in that specialty.)

To be completed by Assessment Board

The scoring system is a 10-point system.

10 Outstanding
9 Excellent
8 Very good
7 Good
6 Fairly good
5 Definite pass
4 Borderline failure
3 Definite failure
2 Bad failure
1 Very bad failure
0 Exceptionally bad failure

1 **TRAINING RECORD BOOK (LOG BOOK) & SUPERVISOR'S EVALUATION**

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
0 1 2 3 4 5 6 7 8 9 10

Comments _____
_____
_____
_____

2 **CLINICAL VIVA**

- Clinical assessment
  Questions
  Topic _____ Questions_____

  Topic _____ Questions_____

  Topic _____ Questions_____

3 **ASSESSMENT SCORE (max score)**(For all specialty boards other than AIM)

Supervisor Score (Maximum 10)	**Clinical Viva Score [(Maximum 10x3) x 3]=90**			**Total Score (Maximum 100)**	**Status (P Pass BF Bare Fail F Fail)**

4 **TRAINEE'S COMMENTS**

On the training programme

_____
_____
_____
_____

On the training facilities of the institution(s)

_____
_____
_____

5 **RECOMMENDATION** (For all specialty boards other than AIM)

☐ **Overall score ≥ 50**, Pass; Satisfactory progress; to continue training programme
Comments_____
_____

☐ **Overall score ≥ 50 but ALL individual Scores of Examiners < 5**; Bare fail; **repeat Interim Assessment after six months**

_____
_____

☐ **Overall score ≥45-49**; Bare fail; **repeat Interim Assessment after six months**

_____
_____
_____

☐ **Overall score ≤ 44**; Fail; **repeat assessment after an additional 6-month training period.**
Areas of deficiency and remedial actions:

_____
_____
_____

☐ Two consecutive bare fails ☐ **A 'Fail' followed by a 'Bare Fail'**; repeat Interim Assessment after an additional 6-month training period

_____
_____
_____

☐ ≥ 2 consecutive failures ☐ **A 'Bare Fail' followed by a 'Fail'**; repeat Interim Assessment after an additional 12-month training period

_____
_____
_____

☐ Deficiency in learning facilities of institution noted; actions recommended

_____
_____
_____

Assessment Board

_____
( ) Examiner 1 (Chairman)

_____
( ) Examiner 2

_____
( ) Examiner 3

HONG KONG COLLEGE OF PHYSICIANS
HIGHER SPECIALTY TRAINING INTERIM ASSESSMENT
IN _____ SPECIALTY
(To be kept by the Specialty Board)

To be completed by trainees

NAME_____

QUALIFICATION MBBS/specify _____ DATE_____(m/y)

HKCP Intermediate Exam/MRCP/specify _____DATE_____(m/y)

MHKCP Yes/No

Basic Physician Training From _____ (m/y) To _____(m/y)

Date of entry to higher specialty training in_____ Specialty_____(m/y)

Concurrent or completed training in other specialties Yes/No Specify _____

TRAINING RECORD Specialty _____ _____

PERIOD _____ to _____, INSTITUTION _____ _____
PERIOD _____ to _____, INSTITUTION _____ _____
PERIOD _____ to _____, INSTITUTION _____ _____
PERIOD _____ to _____, INSTITUTION _____ _____

DATE OF INTERIM ASSESSMENT _____ (At least 12 months' training in each specialty is required before attempting Interim Assessment in that specialty. Interim Assessment in a specialty must be passed at least 12 calendar months before Exit Assessment in that specialty.)

To be completed by Assessment Board

The scoring system is a 10-point system.

10	**Outstanding**
9	**Excellent**
8	**Very good**
7	**Good**
6	**Fairly good**
5	**Definite pass**
4	**Borderline failure**
3	**Definite failure**
2	**Bad failure**
1	**Very bad failure**
0	**Exceptionally bad failure**

1 **TRAINING RECORD BOOK (LOG BOOK) & SUPERVISOR'S EVALUATION**

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
0 1 2 3 4 5 6 7 8 9 10

Comments _____
_____
_____
_____

2 **CLINICAL VIVA**

- Clinical Assessment Questions
  - Part 1 (scenario-based on diagnosis, investigation and management) Questions_____
  - Part 2 (interpretation of investigation results) Questions_____
  - Conference Questions_____

3 **ASSESSMENT SCORE (max score)** (for specialty board of AIM only)

Supervisor (S) and Case Reports (CR1&2) Scores (Max 10)			**Clinical Viva Score [(Maximum 10x3]=30**			**Conference questions (1 / 0 / -1)**	**Total Score (Maximum 40)**	**Status (P Pass BF Bare Fail F Fail)**
CR1	CR2	S						
(CR1+CR2+S) / 3 =								

CR = Case Report score S=Supervisor's evaluation score

4 **TRAINEE'S COMMENTS**

On the training programme
_____
_____
_____
_____

On the training facilities of the institution(s)
_____
_____
_____

5 **RECOMMENDATION** (For specialty board of AIM only)

☐ **Overall score ≥ 20**, Pass; Satisfactory progress; to continue training programme
Comments_____
_____

☐ **Overall score ≥ 20** ,but ALL individual scores of examiner < 5. Borderline Fail, repeat the assessment of Clinical Viva section with remedial actions recommended
_____
_____
_____

☐ **Overall score ≥ 16-19** ☐ Failure in 1 section: Failure in Clinical Viva section only with score <15 AND pass in Case Report + Supervisor's evaluation section with score ≥5; Borderline fail; repeat the assessment of Clinical Viva section with remedial actions recommended
_____
_____
_____

☐ **Overall score ≥ 16-19** ☐ Failure in 1 section: Failure in Case Report + Supervisor's evaluation section only with score <5 AND pass in Clinical Viva section with score ≥15; Borderline fail; repeat the assessment of Case Report + Supervisor's evaluation section with remedial actions recommended
_____
_____
_____

☐ **Overall score ≥ 16-19** ☐ Failure in both sections: Failure in Clinical Viva section with score <15 AND failure in Case Report + Supervisor's evaluation section with score <5; Borderline fail; repeat the assessment of both sections with remedial actions recommended
_____
_____
_____

☐ **Overall score ≤ 15** ☐ Failure in both sections; Fail; repeat assessment after an additional 6-month training in AIM.
Areas of deficiency and remedial actions:
_____
_____
_____

☐ Two consecutive borderline fails ☐ **A 'Fail' followed by a 'Borderline Fail'**; repeat Interim Assessment after an additional 6-month training period
_____
_____
_____

☐ ≥ 2 consecutive failures ☐ **A 'Bare Fail' followed by a 'Fail'**; repeat Interim Assessment after an additional 12-month training period

_____
_____
_____

☐ Deficiency in learning facilities of institution noted; actions recommended

_____
_____
_____

Assessment Board

_____

( ) Examiner 1 (Chairman)

_____

( ) Examiner 2

_____

( ) Examiner 3

Hong Kong College of Physicians

Report on Interim Assessment

Specialty Board in _____

(To be kept by E&AC Secretariat)

June/December 20___

Name of candidates	Hospital	MBBS/ MBChB	MRCP/ HKCPIE	Basic Physician Training			Date of Starting Higher Physician Training	Concurrent Training		Overall Score	Assessment Result		
				From	To	Duration		Yes (specify Specialty)	No (Specify Fellowship of other Specialty)		Pass	Bare Fail	Fail
		(mm/yy)	(mm/yy)	(mm/yy)	(mm/yy)		(mm/yy)						

Signature _____

Name _____

Board Chairman

Date_____

Hong Kong College of Physicians

(Incorporated in Hong Kong with limited liability)

Specialty _____

Exit Assessment

Higher Physician Training (HPT) Application Form

All sections are mandatory

1. Surname _____ 2. First name _____

3. ID Number _____(the first 4 digits)

4. Hospital _____ 5. Unit _____

6. Region *(Hong Kong / Kowloon / New Territories)

7. Date started Higher Physician Training _____

8. Information on concurrent or completed Higher Physician Training in other specialties _____

9. I hereby apply to undergo Exit Assessment in _____in *June / December 20___.
(specialty)
Applicable to Exit Assessment to be held in June 20___: I confirm that by 14 October 20___ I will have completed ___ months of Higher Physician Training in _____.
Applicable to Exit Assessment to be held in December 20___: I confirm that by 14 April 20___ I will have completed ___ months of Higher Physician Training in _____.

10. Training experience in a general medical unit with obstetric consultations for a minimum of three months during BPT or HPT (applicable to trainees who start BPT from 1 July 2009 onwards): *Yes/*No

11. *I confirm that I shall submit my Dissertation before the date as specified by the Specialty Board and I understand that failure to comply will automatically disqualify me for the Exit Assessment.

    11.1 The title of my Dissertation is: _____

    11.2 I do solemnly and sincerely declare that my Dissertation will comply with prevailing policies regarding plagiarism and copyright protection. I acknowledge that the copyright of my dissertation belongs to Hong Kong College of Physicians. My consent is hereby given to the College to retain a copy of my dissertation, in written and/or electronic format, at the College Secretariat and allow the public to have free access to the work for reference.

12. I shall not be able to take part in Exit Assessment in June / December 20__ as I shall be pursuing overseas study.

13. I have taken extended leave of absence (that is, in addition to my entitled Annual Leave and Study Leave) in the following categories during my Higher Physician Training period:
☐ Sick Leave - _____ weeks (from _____ to _____)
☐ Maternity Leave - _____ weeks (from _____ to _____)
☐ other types of Special Leave (please specify _____)
- _____ weeks (from _____ to _____)

Total duration of extended leave: _____ weeks
[Please be reminded that a Trainee who has a cumulative extended leave of absence in the above category(s) of over 14 weeks during the training period is considered to have insufficient duration of training and thus would need to defer the Exit Assessment.]

14. ***I hereby consent to the release of any and all information in any way pertaining to all my Exit Assessment results to Hospital Authority (HA), Specialty Programme Director (SPD) and Chief of Service (COS) or any government agency requiring the same whether or not listed above.***

Note 1 **Delete whichever is inappropriate*

2 Candidates who have to submit a Dissertation for Exit Assessment should refer to the Section *"Guidelines on Writing a Dissertation"* in the Training Guidelines for instructions.

_____ _____

Signature of Applicant Date

Application for Exit Assessment

TESTIMONIAL

Specialty in _____

To be completed by Trainers.

The College fully expect **Trainers** to refuse to sign testimonials for candidates whose training is considered to be inadequate or who are regarded as being unfit in moral character or professional conduct to be admitted to Fellowship. Should the candidate fail the examination badly, the College will notify the proposers and may require evidence of further training before the examination can be taken again.

We certify from personal knowledge and repute that

FULL NAME OF CANDIDATE _____

is as regards character and professional conduct, a fit and proper person to be admitted a Fellow of the Hong Kong College of Physicians, and also that he/she has had a period of training which complies with the most recent College Guidelines.

Signature of Proposer (1) _____ Date _____

Signature of Proposer (2) _____ Date _____

Details of Proposer (1)
(Normally the Candidate's Supervisor)

Name _____

Professional
Appointment _____

Address _____

_____

Relevant Qualification _____

_____

Details of Proposer (2)
(Normally the Candidate's Chief of Service)

Name _____

Professional
Appointment _____

Address _____

_____

Relevant Qualification _____

_____

Please return to:
Examination Co-ordinator of each Specialty Board before 31 January or July each year.

HONG KONG COLLEGE OF PHYSICIANS

Marking Sheet for Dissertation

(To be kept by the Specialty Board)

Specialty _____

Name of candidate _____ Hospital _____

Name of supervisor _____ Exit Assessment Day_____

Title of Dissertation

_____

_____

0 Exceptionally bad failure
1 Very bad failure
2 Bad failure
3 Definite failure
4 Borderline failure
5 Definite pass
6 Fairly good
7 Good
8 Very good
9 Excellent
10 Outstanding

	0	1	2	3	4	5	6	7	8	9	10
Originality	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Methodology & Interpretation	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Clarity of Presentation	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Review of Literature	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Overall Appraisal	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments _____

_____

Name of Examiner _____

Hong Kong College of Physicians
Scoring Sheet for Exit Assessment

(To be kept by the Specialty Board)

Specialty Board in _____

Date of Assessment_____

Name of Candidate _____ Hospital _____ PD _____

No. of months in _____ training from Interim to Exit _____

	Examiner 1	Examiner 2	Examiner 3	Examiner 4	
Name of Examiner					
Signature					
Dissertation Appraisal					Subtotal = ∑ DAn if n = 2 or =∑DAn x 2/3 if n = 3
Dissertation Viva					Subtotal = ∑ DVn
Clinical Viva					Subtotal = ∑ CV
					Total = DS + CVS

DA = Dissertation Appraisal
DV = Dissertation Viva
CV = Clinical Viva
DS = Dissertation Score
CVS = Clinical Viva Score

Hong Kong College of Physicians
Scoring Sheet for Exit Assessment

Specialty Board in _____

Questions asked in Clinical Viva

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Converted Score _____ Comment _____

Result (pass/fail) _____ _____

HONG KONG COLLEGE OF PHYSICIANS
HIGHER PHYSICIAN TRAINING
EXIT ASSESSMENT IN _____ SPECIALTY

(To be kept by the Specialty Board)

NAME _____

QUALIFICATION MBBS/specify _____ DATE _____(m/y)

HKCP Intermediate Exam/MRCP/specify _____ DATE _____(m/y)

Basic Physician Training From _____ (m/y) To _____(m/y)

Date of entry to higher specialty training in _____Specialty_____(m/y)

Concurrent or completed training in other specialties Yes/No Specify _____

TRAINING RECORD Specialty _____ _____

PERIOD _____ to _____, INSTITUTION _____ _____

PERIOD _____ to _____, INSTITUTION _____ _____

PERIOD _____ to _____, INSTITUTION _____ _____

PERIOD _____ to _____, INSTITUTION _____ _____

PERIOD _____ to _____, INSTITUTION _____ _____

PERIOD _____ to _____, INSTITUTION _____ _____

DATE OF ASSESSMENT _____ Previous Exit Assessment: Nil/Date _____
Interim Assessment: Date _____ Score _____

Please use the following 10-point Scoring System.

10 Outstanding
9 Excellent
8 Very good
7 Good
6 Fairly good
5 Definite pass
4 Borderline failure
3 Definite failure
2 Bad failure
1 Very bad failure
0 Exceptionally bad failure

1 **TRAINING RECORD BOOK (LOG BOOK) & SUPERVISOR'S EVALUATION**

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
0 1 2 3 4 5 6 7 8 9 10

Comments _____

_____

_____

2 **DISSERTATION ASSESSMENT**

Title _____

_____

Dissertation appraisal score (max 20) _____

Dissertation viva score (max 20) _____

Questions _____

_____

_____

_____

_____

_____

Dissertation (max 40)				
Dissertation Appraisal (max 20)			Dissertation Viva (max 20)	
DA_{max}=10	DA_{max}=10	DA_{max}=(10)	DV_{max}=10	DV_{max}=10
$DA_{total} = \Sigma DA_n$ if n=2 Or ΣDA_n x 2/3 if n=3			$DV_{total} = \Sigma DV_n$	
Total = $DA_{total} + DV_{total}$				

Note: DA = Dissertation Appraisal
DV = Dissertation Viva

3 **CLINICAL VIVA**

- Clinical assessment, questions

_____

_____

_____

_____

_____

_____

_____

Comments _____

- Other assessment, questions (ethical, humanistic qualities, resource management etc)

Comments _____

4 **ASSESSMENT SCORE (max mark)**

Total Dissertation Score		Clinical Viva Score (60)	Final (Dissertation + Clinical Viva) Score (100)	Status
Appraisal (20)	Oral (20)			☐ Pass ☐ Fail ☐ 2 Sections ☐ Dissertation ☐ Clinical Viva
If n = 3, Sub-total = $\Sigma_{n=3}$ x 2/3	Subtotal=			
Total =		Total =		

5 **TRAINEE'S COMMENTS**

On the training programme

On the training facilities of the institution(s)

6 **RECOMMENDATION**

☐ **Score ≥ 50 + Passes in both sections.**
☐ **Pass: Successful completion of training; for accreditation**
☐ Other Recommendation & Comments

_____
_____

☐ **Score ≥ 50 + Pass in one section & borderline fail in one section.**
☐ **Pass: Successful completion of training; for accreditation**
☐ Other Recommendation & Comments

_____
_____

☐ **Score <50 (90-99% of section pass mark)**
☐ **Borderline Fail in 1 section (Dissertation/clinical viva)**
☐ **Bare fail. Repeat Exit Assessment in failed section in six months**
☐ Areas of deficiency and remedial action(s): **Repeat Exit Assessment in the failed section after an additional 6-month training in the relevant specialty.**

_____
_____

☐ **Score <50 (90-99% of section pass mark)**
☐ **Borderline Fail in 2 sections**
☐ **Bare fail. Repeat Exit Assessment in failed section in 12 months**
☐ Areas of deficiency and remedial action(s): **Repeat full Exit Assessment after an additional 12-month training in the relevant specialty.**

_____
_____

☐ **Any Score (80-89% of section pass mark)**
☐ **Fail in one section. Repeat Exit Assessment in six months**
☐ Areas of deficiency and remedial action(s): **Repeat full Exit Assessment after an additional 6-month training in the relevant specialty.**

_____
_____

☐ **Any Score (80-89% of section pass mark)**
☐ **Fail in two sections. Repeat Exit Assessment in 12 months**
☐ Areas of deficiency and remedial action(s): **Repeat full Exit Assessment after an additional 12-month training in the relevant specialty. Trainees should be exposed to trainers in other institution(s) for six months.**

_____
_____

☐ **Any Score (<80% of section pass mark)**
☐ **Bad Fail in one section. Repeat Exit Assessment in 12 months**
☐ Areas of deficiency and remedial action(s): **Repeat full Exit Assessment after an additional 12-month training in the relevant specialty.**

_____
_____

☐ **Any Score (<80% of section pass mark)**
☐ **Fail in two sections. Repeat Exit Assessment in 12 months**
☐ Areas of deficiency and remedial action(s): **Repeat full Exit Assessment after an additional 12-month training in the relevant specialty, of which 6 months should be undertaken in programmes and/or training centres specified by the Specialty Board.**

_____
_____

☐ Deficiency in learning facilities of institution noted; actions recommended

_____
_____

Assessment Board (at least one member should represent HKCP Council/Education & Accreditation Committee/Examination Committee):

(	)	Examiner 1 (Chairman)
(	)	Examiner 2
(	)	Examiner 3
(	)	Examiner 4
(	)	Examiner 5
(	)	Examiner 6

HONG KONG COLLEGE OF PHYSICIANS
REPORT ON HIGHER SPECIALTY TRAINING EXIT ASSESSMENT
(To be kept by Specialty Board and E&AC Secretariat)

Name of Candidate _____ Hospital _____

Specialty Board _____

Date of Assessment _____

Previous Exit Assessment ☐ No ☐ Yes Date _____

Interim Assessment Date _____ Date _____

Score _____ Score _____

MBBS (m/y) _____

HKCP Intermediate Exam (m/y) _____

Basic Physician Training From _____(m/y)to _____ (m/y) Duration (yr) _____

Higher Physician Training From _____ (m/y)to _____ (m/y) Duration (yr) _____

Concurrent or completed training in other specialties Yes/No Specify _____

Assessment Score (max mark)

Total Dissertation Score		Clinical Viva Score (60)#			Final (Dissertation + Clinical Viva) Score (100)	Status
Appraisal (20)	Oral (20)					☐ Pass
		Panel A	Panel B	Panel C		☐ Fail
						☐ 2 Sections
If n = 3, Sub-total = $\Sigma_{n=3}$ x 2/3	Subtotal=	Panel D*				☐ Dissertation
						☐ Clinical Viva
Total =		Total =				

** If necessary (for a few Specialty Boards only)*

The Assessment Board should discuss and provide written comments on gross discrepancies between different examiners' mark (ie ≥ 3 for each section or subsection)

Recommendation ☐ Successful completion of training for accreditation

☐ Others: _____

_____

_____ _____ _____

Board Chairman (Block Letters) Signature Date

Hong Kong College of Physicians

Report on Higher Specialty Training Exit Assessment

Specialty Board in _____

(To be kept by the E&AC Secretariat)

Date _____

Name of Candidate	Hospital	Date of HPT Completion	Dissertation (15 minutes)						Clinical Viva (45 minutes)							Total Score [100]	Status (P: Pass F: Fail in 2 sections / dissertation / viva)
			Individual Appraisal Score*			Σ Appraisal [20]	Oral		Σ Oral [20]	Subtotal for Dissertation [40]	Individual Score**						Σ Clinical Viva Score [60]		
											A	A	B	B	C	C			

* If n = 3, Appraisal score = $\Sigma_{n=3}$ x 2/3 ** A = Panel A, B = Panel B, C = Panel C. Specific nature of Panels may be included in the boxes below.

Note 1 Normally, two examiners will read the dissertation. When the results of the appraisal are one failure and one pass, a third examiner will be required to read the dissertation. The total marks given by the three examiners will then be multiplied by a factor of 2/3 to obtain the Dissertation Appraisal Score.

Note 2 Effective from December 2002, candidates who do not have to be examined in the Dissertation need only attend the Clinical Viva for 45 minutes. The total Clinical Viva Score should be rounded up or down (≥0.5=1, <0.5=0) to the nearest integer

Signature _____

Name (Block Letters) _____
Board Chairman

Date _____

Document on Interim Assessment,
Dual Specialty Training, and Training in
Palliative Medicine, Rehabilitation, Dermatology & Venereology

-- March 2011

(Pages 218-223 superseded by the documents on Interim and Exit under Section V)

One Interim Assessment to replace Two Annual Assessment

AIM

- Change requirement from two Annual Assessments to one "Interim Assessment" during HPT.
- Two Case Reports are to be submitted for "Interim Assessment".
- Completion of all requirements from AIM Board regarding Self Learning Tool (SLT).
- NOTE: Since Geriatric Medicine is regarded as AIM for the elderly, Trainees may opt to substitute Geriatric Medicine for AIM as the broad-based specialty in Dual Specialty Training. Under such circumstances, Geriatric Medicine trainees should also complete SLT before proceeding to Interim and Exit Assessment in the specialty.

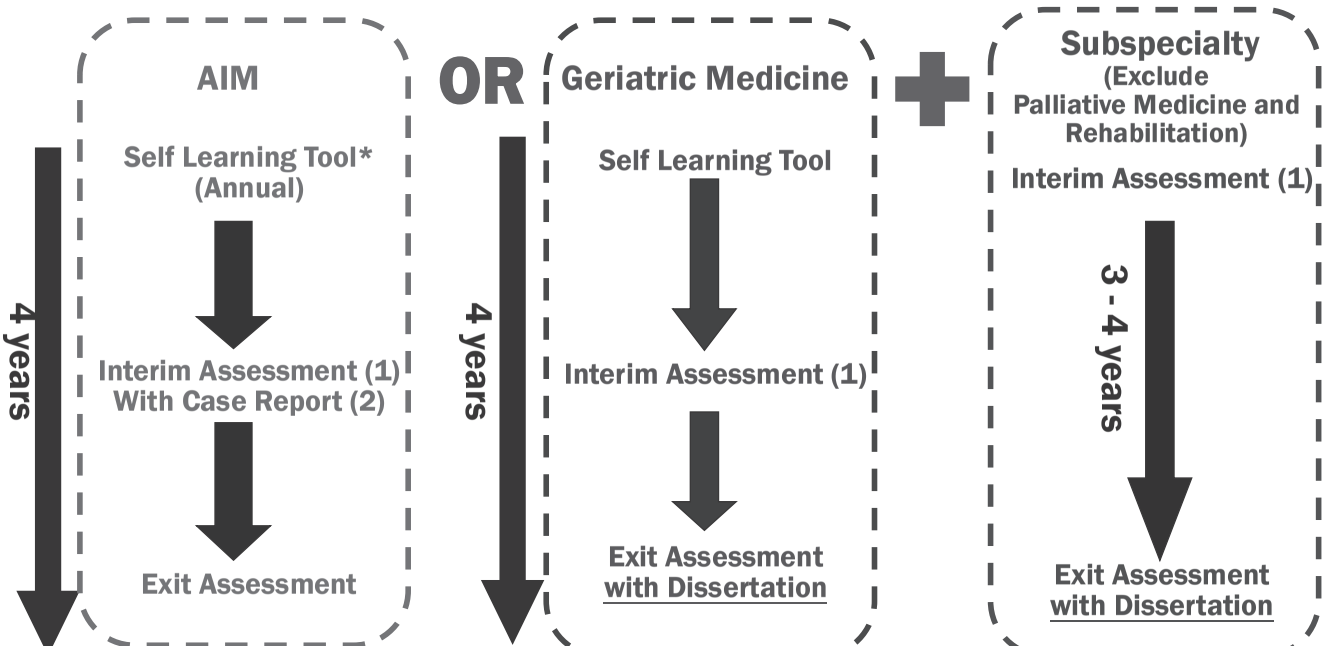
Other Specialties

- Change requirement from two Annual Assessments to one "Interim Assessments" during HPT.
- At Interim Assessment, individual Specialty Boards may require, but will not award formal scores to, documented evidence of continuing training activities including attendance/case presentation at inter-hospital or society meetings, portfolios of cases seen, etc. The submission of Case Reports is not required.

Applicable to ALL Specialties

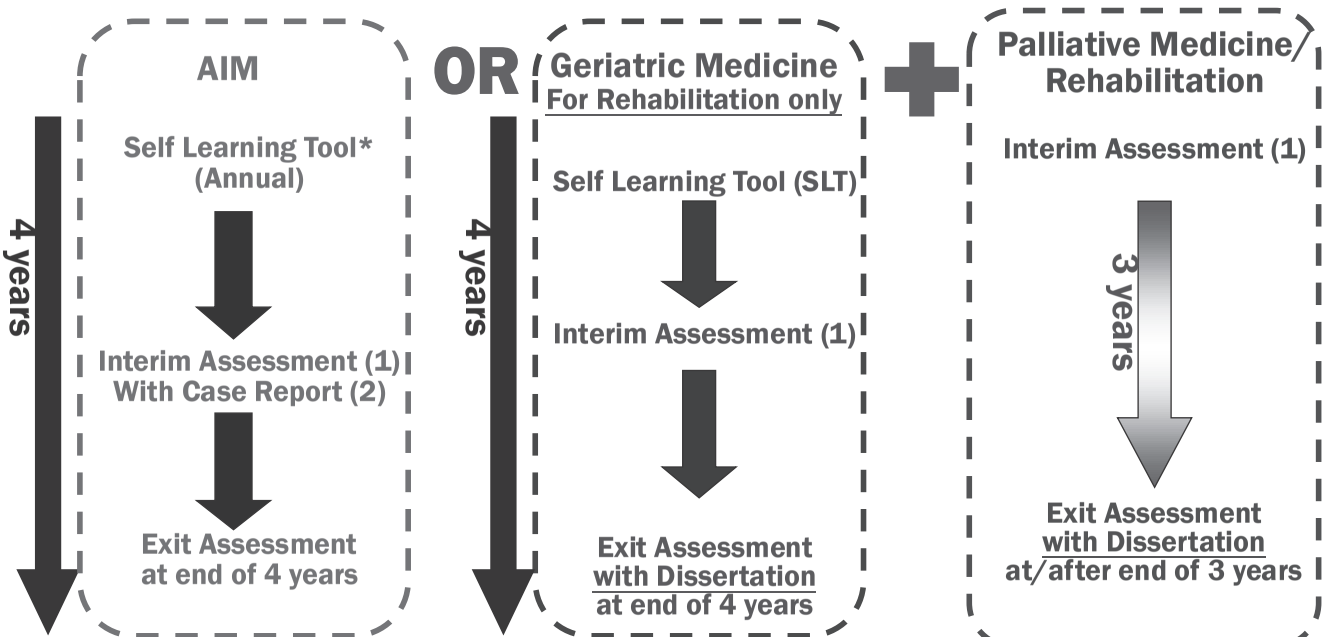
- At least 12 months' training in each specialty is required before attempting Interim Assessment in that specialty.
- As far as possible, Trainees should undergo Interim Assessment of two specialties at least six months apart.
- Trainees who fail at an Interim Assessment must repeat the Assessment after six months.
- A pass in Interim Assessment is a mandatory requirement for application to undergo Exit Assessment.
- Interim Assessment in a specialty must be passed at least 12 calendar months before Exit Assessment in that specialty.
- Other requirements related to Exit Assessment including submission of dissertations continue to apply.

Dual Specialty Training



** 1) Can be completed with the time frame set by AIM Board*
2) Electronic documentation of completion is mandatory
3) Scoring is not incorporated in the system: No pass or fail

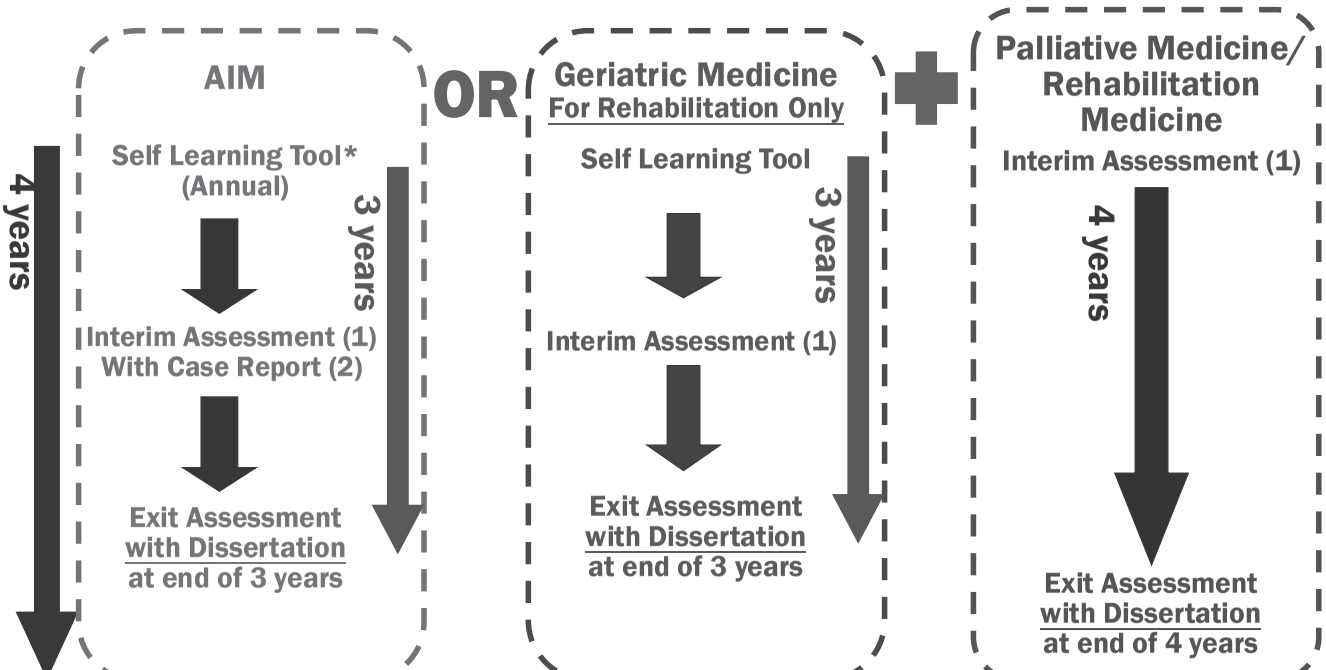
Dual Specialty Training
AIM/Geriatric Medicine (for Rehabilitation only) + Palliative Medicine/ Rehabilitation
Scenario 1: Specialist status + College Fellowship at end of 4 years



** 1) Can be completed with the time frame set by AIM Board*
2) Electronic documentation of completion is mandatory
3) Scoring is not incorporated in the system: No pass or fail

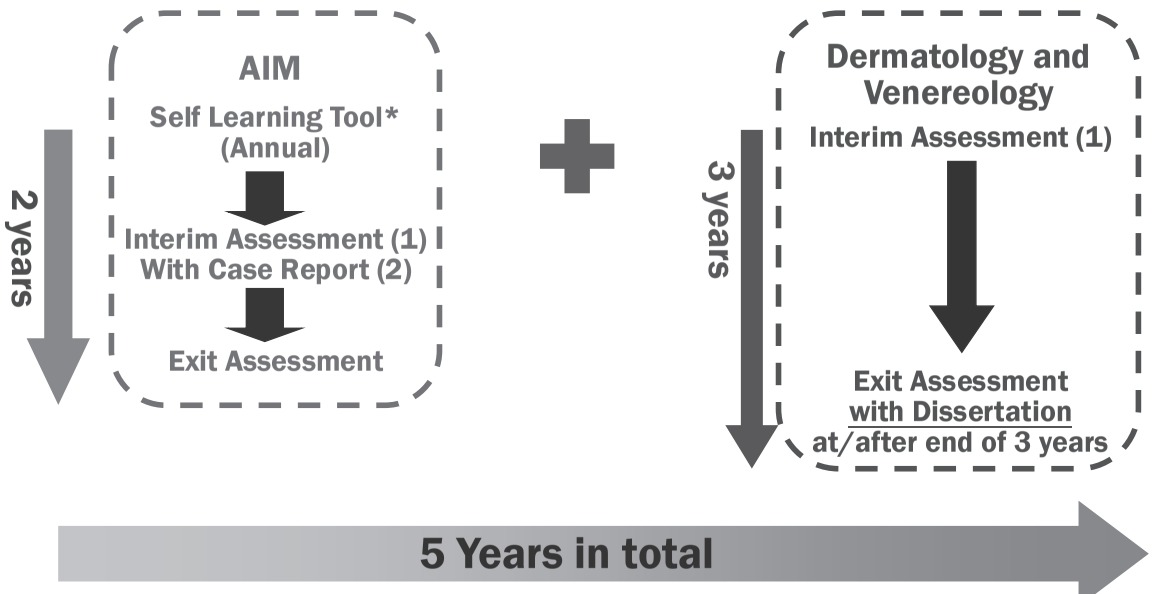
Dual Specialty Training
AIM/Geriatric Medicine (for Rehabilitation only) + Palliative Medicine/Rehabilitation

Scenario 2: Specialist status + College Fellowship at end of 3 years



** 1) Can be completed with the time frame set by AIM Board*
2) Electronic documentation of completion is mandatory
3) Scoring is not incorporated in the system: No pass or fail

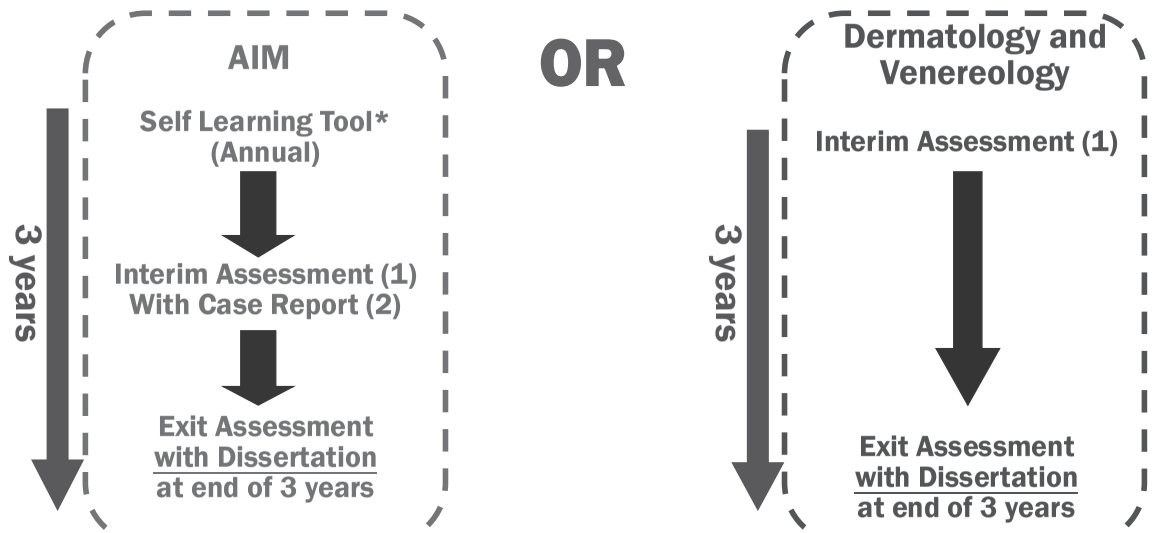
Dual Specialty Training or Sequential Training
AIM + Dermatology & Venereology
Scenario 3: Specialist status + College Fellowship at end of 5 years



** 1) Can be completed with the time frame set by AIM Board*
2) Electronic documentation of completion is mandatory
3) Scoring is not incorporated in the system: No pass or fail

Single Specialty Training

Either AIM OR Dermatology & Venereology ONLY



** 1) Can be completed with the time frame set by AIM Board*
2) Electronic documentation of completion is mandatory
3) Scoring is not incorporated in the system: No pass or fail