

GUIDELINES ON POSTGRADUATE TRAINING IN INTERNAL MEDICINE

SEVENTH EDITION

HONG KONG SAR

CHINA

JUL 2025

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I. Preface

PREFACE TO THE SEVENTH EDITION

Over thirty years have passed since our College published the First Edition of the Hong Kong College of Physicians (HKCP) Guidelines on Postgraduate Medical Training in July 1993. The Sixth Edition of the training guidelines was published in July 2018. The knowledge and practice of clinical medicine have advanced considerably since. The latest updating and revision of the training guidelines differed from previous revisions in several ways. In addition to amendments to the contents in line with the evolving spectrum of medical conditions and advances in investigations and management as in the earlier revisions, new features in the present edition include the following:

1. Competency-based training, and assessment, is the theme in the new training guidelines. In line with international best practice and recommendations from the Hong Kong Academy of Medicine (HKAM), the College is incorporating the principles and practice of Competency-Based Medical Education (CBME) into our Physician Training programmes. CBME has been shown to improve the effectiveness of training, the validity of assessments, and the monitoring of a trainee's progress, and has long been adopted in the physician training programmes in the U.K. and Australia. A chapter highlighting the generic professional competency domains has been added, and the training guidelines for individual specialties have been rewritten to highlight relevant competencies and capabilities to be acquired by the trainee under specific topics.

2. A new chapter on training guidelines for Genetics and Genomics (Medicine). Following the approval by the Medical Council of Hong Kong in December 2022, the Specialty has been established as a new specialty under our College, within the purview of the Board of Genetics and Genomics, which reports to E&AC.

3. The training guidelines for Basic Physician Training (BPT) now includes the Core Medical Skill Course (CMSC). After a period of pilot implementation, attendance of this course has become mandatory requirement for all BPT trainees who started the training programme on or after 1 July 2020.

4. The training guidelines for Advanced Internal Medicine (AIM) now includes the Advanced Medical Simulation Course (AMSC), which has become mandatory for all HPT trainees who started their broad-based training programme on or after 1 July 2022.

5. Training in Critical Care Medicine has adopted a joint training curriculum in collaboration with The Hong Kong College of Anaesthesiologists since 2021. The joint curriculum is CBME-based and includes workplace-based assessments.

Since the release of the past Edition, the College has updated the training Guidelines at various time-points in its electronic version available at our webpage https://www.hkcp.org/docs/TrainingGuidelines/HKCP%20GuideBooklet%202023.pdf. This approach would continue. Trainees, Trainers and Fellows should always refer to the latest online version of the Guidelines at the College website.

The College is grateful to the dedicated efforts of Specialty Boards / Subcommittees and the Education & Accreditation Committee in updating the Training Guidelines. The College thanks all our Physician Trainers, Program Directors and Assistant Program Directors, who have devoted much time and effort in delivering a high-quality physician training programme to train future generations of physicians. Also, the College appreciates the dedication by members of the Training Subcommittee to continuous enhancement of the structured training programmes under the College and also faculty development. The College also thanks the Hospital Authority, its administrative and clinical leadership, and Chiefs of Service at training units, for their support to our Physician Training programmes and Specialty Development initiatives, and for hosting the clinical bedside examination of the College's Intermediate Examination in BPT, jointly organized by the College and the Royal Colleges of Physicians in the United Kingdom. The contributions from all stakeholders have played a pivotal role in maintaining the professional standard of Internal Medicine in Hong Kong amongst the highest internationally.

Dr. CHAN Wai Man Johnny
Chairman
Education and Accreditation Committee

Prof CHAN Tak Mao Daniel
President

July 2025

MEMBERSHIP OF
THE EDUCATION AND ACCREDITATION COMMITTEE

May 2025

Chairman:	Dr Johnny WM Chan
Vice-Chairman:	Dr Maureen ML Wong
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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. Generic Professional Competencies as universal requirements in Physician Training

GENERIC PROFESSIONAL COMPETENCIES AS UNIVERSAL REQUIREMENTS IN PHYSICIAN TRAINING

In line with international best practice in post-graduate medical education, the College has increased the emphasis on Competency-based Medical Education (CBME) in its physician training programs, and has updated the training curricula accordingly. In addition to the competencies and capabilities specific to a specialty, there are Generic Professional Competency domains which are applicable to all specialties and are expected to be attained by all physician trainees. The respective generic competencies under each domain are described below.

GENERIC PROFESSIONAL COMPETENCY DOMAINS

1 Professional Expertise

- Possession of necessary knowledge and skills to conduct comprehensive patient-centred assessment and derive management plans for patients
- Focusing on patient safety and deliver effective quality care in clinical practice

2 Health Promotion

- Responding to individual patient's health needs by

  (a) Addressing harmful health determinants;

  (b) Providing advice on risk factor reduction and adoption of healthy behaviours
- Broad understanding of the approaches towards prevention and control of diseases, with greater emphasis on diseases that are common locally

3 Interpersonal Communication

- Ability to communicate effectively with patients and their carers

  (a) To obtain relevant clinical and psychosocial information during history taking;

  (b) To share healthcare information and engage patients/carers, to understand their needs and goals, before arriving at management plans and decisions; and

  (c) To conduct all communications in a sensitive, responsive and empathetic manner
- Effective and collaborative verbal and written communications with colleagues and healthcare professionals in clinical practice
- Ability to document clear, accurate and contemporaneous information in the course of clinical encounters

4 Team Working

- Ability to forge effective, positive and respectful working relationships with colleagues and other healthcare professionals
- Ability to make appropriate referral, consultation and handover in patient care
- Ability to call for assistance in a timely manner in appropriate circumstances

5 Academic

- Learning, by

  (a) Engaging in continuous improvement of professional knowledge and skills via ongoing learning and training

  (b) Fulfilling CME/CPD requirements of the College, Academy and Medical Council

- Teaching, by

  (a) Engaging in teaching of students, junior staff, other healthcare professionals, and the public

  (b) Fulfilling the role of a clinical supervisor to doctors at comparatively earlier training stages

- Research, by

  (a) Achieving an understanding of the scientific and ethical principles of research and academic writing

  (b) Adopting best available evidence into clinical practice and research projects as appropriate

  (c) Developing an ability to conduct critical appraisal of medical literature

6 Manager Leader

- Conscientious use of healthcare resources in clinical practice, with consideration of efficacies and cost-effectiveness of investigations and treatment modalities
- Ability to set rational priorities and demonstrate effective time management
- Where appropriate, ability to demonstrate clinical leadership and management skills in a unit, team, department or an institution
- Ability to acquire knowledge and conduct quality assurance, audit and service evaluation

7 Professionalism

- Understanding of basic ethical and medicolegal principles in clinical medicine
- Demonstration of appropriate professional attitudes, behaviours and attributes, such as honesty and integrity
- Adherence to prevailing ethical codes and professional standards of practice, in matters such as, but not limited to, patient privacy and confidentiality
- Demonstration of awareness of, and respect for, differences in cultural, ethnic and religious beliefs relevant to clinical practice

References:

1. *Hong Kong Academy of Medicine. Position paper on postgraduate medical education 2023.*
2. *Joint Royal College of Physicians Training Board, U.K. Curriculum for internal medicine stage 1 training, versions 2019 and 2022.*
3. *The Royal Australasian College of Physicians. Basic training curriculum standards: competencies. 1st edition, 2017*
4. *Porcel JM, Casademont J, Conthe P, et al. Core competencies in internal medicine (European Federation of Internal Medicine). European Journal of Internal Medicine 2012; 23: 338-341.*
5. *Royal College of Physicians and Surgeons of Canada Internal Medicine Specialty Committee. Pathway to competence: Internal Medicine, 2018.*

III. BASIC PHYSICIAN TRAINING

III. 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 of 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 rotations 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 actions 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 actions 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 is normally a Specialist registered with the Medical Council of Hong Kong and an accredited Fellow of the Hong Kong College of Physicians, or a Specialist registered with the Medical Council of Hong Kong who is not a College Fellow but is considered fitting to be appointed as Trainer by the College, who has been in active full-time institutional practice in respective specialty(-ies) for not less than two years after specialist accreditation.

4.2 A Trainer must be actively engaged in, and actively contributing to, full-time institutional practice in Internal Medicine and/or its specialty(-ies) 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 evaluations 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 to 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 procedural competence in bedside diagnostic and therapeutic procedures.

3 To cultivate the professional competence and capabilities in the management of common medical diseases in acute and non-acute settings.

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

II) STRUCTURE

The basic physician training programme should be organised with flexibility. Broad-based clinical exposure to various medical specialties and other related disciplines is encouraged.

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

2 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. Each trainee would normally be in charge of 10 or more beds in such unit. Trainees 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 At least 3 months of training in General Medical Units of Hospitals with obstetric and acute surgical services in their 6 years of physician training (BPT+HPT). Trainees should also possess the knowledge of handling medical problems and preparation of patients requiring obstetric and surgical operations or procedures.

4 Clinical exposure to various medical specialty services in parallel with duties in general medicine, including rehabilitation services, should be encouraged. Trainees should have at least 3 months of training in ICU/CCU/HDU in their 6 years of physician training (BPT+HPT).

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, Primary Outpatient Care (under Family 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 regarding 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 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 an online 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 improvement 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 an online remedial exercise. 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 simulation 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 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. Trainees who fail to fulfil this requirement will be subjected to possible penalty at the discretion of the E&AC.

III) CONTENTS

(A) Knowledge and Professional Competencies

Upon completion of Basic Physician Training, trainees are expected to have been cultivated and inculcated with the Generic Professional Competencies as stated in the universal requirements in Physician Training under Hong Kong College of Physicians. They should also be able to demonstrate a satisfactory standard of knowledge and clinical skills as described below:

1 Knowledge on aetiology, clinical manifestation, disease course and prognosis, investigation and management of common medical diseases.

2 Knowledge on scientific basis and recent advances in pathophysiology, diagnosis and management of medical diseases.

3 Knowledge on spectrum of clinical manifestations and interactions of multiple medical diseases in the same patient.

4 Knowledge on psychological and social aspects of medical illnesses

5 Ability in the effective use and interpretation of investigations and special diagnostic procedures.

6 Ability to critically analyse the efficacy, cost-effectiveness and cost-utility of various investigations and treatment modalities.

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

8 Ability to elicit abnormal physical signs and interpret their significance.

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

10 Ability to select appropriate investigations and diagnostic procedures for confirmation of diagnosis and patient management.

11 Ability to present clinical problems and literature reviews in grand rounds and seminars.

12 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.

(B) Procedural competencies

Ability to perform important bedside diagnostic and therapeutic procedures and have understanding of their indications, contraindications and possible complications. 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

Marrow aspiration and trephine biopsy

Abdominal paracentesis*

Pleural tapping*

Endotracheal intubation

At least 6 times during the three-year training period:

Lumbar puncture

Chest drain insertion*

Central venous cannulation*

*Performance of the above procedures under bedside ultrasound guidance is a good practice which should be encouraged, provided the Trainees have received appropriate supervision and guidance.

(C) Capabilities upon completion of Basic Physician Training

Trainees should be able to demonstrate their abilities to fulfil the following roles or tasks under supervision, with assistance obtained from their seniors or supervisors when necessary.

1 Management of patients admitted for acute medical problems from

Emergency Department.

2 Management under supervision of patients admitted for acute medical problems to Specialty Units (e.g. CCU, Acute Stroke Unit, etc.) from Emergency Department.

3 Applying timely and effective treatment for patients with medical emergencies and acutely deteriorating conditions.

4 Management of acute and chronic medical problems in hospitalized patients in General Medical units.

5 Management of patients with general and long-term medical problems in an outpatient clinic, ambulatory care day-ward, or community outreach setting.

6 Management of patients with irreversible medical conditions with appropriate palliative and end-of-life skills.

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 Electronic devices installed with literature search engines and online medical resources including e-journals & e-books in Internal Medicine and related disciplines for clinical management and research.

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. Candidates who reach 6 attempts at any examination will be allowed to apply for an exceptional additional attempt. Please refer to "Limit on attempts" at the MRCPUK webpage https://thefederation.uk/examinations/guidance-and-information/regulations/limit-attempts". Trainees are reminded to refer to the most updated information on the regulations of the examinations at its official website https://www.thefederation.uk/examinations/guidance-and-information/regulations.

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.

IV. Higher Physician Training

SPECIALTY BOARDS

1 **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.

2.8 Competencies and Capabilities

Trainees are expected to acquire relevant competencies as stipulated in the curricula progressively during Basic Physician Training (BPT) and Higher Physician Training (HPT). Upon successful completion of Higher Physician training with accreditation of specialist status, the College Fellow would be able to deliver clinical service and to supervise junior staff in respective subspecialty(s) mostly independently.

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, or a Specialist registered with the Medical Council of Hong Kong who is not a College Fellow but is considered fitting to be appointed as Trainer by the College, 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 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 stated under Sections 3.1 and 4.1 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 refer to Chapter VI "Assessment" 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 refer to the Training Programmes in these two specialties). 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)	
Fellow accredited in a broad-based specialty with or without another specialty	Sequential Training	Any specialty* (2)	3
		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.

V. 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 capability to manage patients with acute and chronic medical problems in different settings and in various parts of a patient journey.

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 of training in either Advanced Internal Medicine or another specialty* followed by 24 months of core training in the 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. 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. Trainees 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 Assessments 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 trainees to identify and prevent risks in clinical decision making and ultimately improvement 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) Knowledge and Professional Competencies:

Upon completion of the specialist training in Advanced Internal Medicine (AIM), trainees are expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians, as well as being able to demonstrate a satisfactory standard of knowledge in AIM as described below:

1.1 Ability in making 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 Ability to manage 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.

1.3 Ability to manage medical problems in the inpatient and outpatient settings, and able to select patients for referrals to tertiary care facilities and treatment modalities requiring high technology and/or the expertise of another specialty.

1.4 Ability to formulate differential diagnoses and management plan in complex cases, including those with unusual presentations.

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, palliative and long term care.

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

1.7 Understand the new trends and basic concepts towards training future trainees in Advanced Internal Medicine.

(2) Procedural competencies:

Ability to perform important diagnostic and therapeutic procedures and demonstrate understanding of their indications and complications. 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

(3) Capabilities of an AIM specialist

After the completion of the AIM training, the specialist should acquire the following capabilities to perform the daily clinical roles or tasks:

3.1 Management of patients admitted from Emergency Departments with acute medical problems.

3.2 Management of acute and chronic medical problems in hospitalized patients of general medical units.

3.3 Management of patients with acutely deteriorating medical conditions and acute medical emergencies.

2.3 Managing medical consultations initiated by other specialties at both inpatient and outpatient levels, and to refer to subspecialties where appropriate.

2.4 Managing general and long-term medical problems in ambulatory care settings such as Specialist Out-Patient Department, Dayward and outreach settings.

2.5 Provision of continuity of care for patients requiring convalescent care.

2.6 Management of patients with irreversible medical conditions with appropriate palliative and end of life care skills.

IV) INSTITUTIONAL REQUIREMENTS

To be recognised for AIM Training, a medical department in an institution or a rotational programme involving 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 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, 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 Computerised literature search systems for core journals in Internal Medicine.

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 following 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 * Each trainee would normally 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	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. Trainees are to be well-equipped to maintain patients' 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 II 3.2.

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 vii) Complete Advanced Medical Simulation Course
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 of 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 1: 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.

Note 2. The Advanced Medical Simulation Course is mandatory for all HPT trainees undergoing broad based training admitted after July 2022.

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 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 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 — **Minimum 15 months**

Training in recognised specialty centre is encouraged. (*Major specialties encouraged to be included.)

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 Anticoagulation 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 acquiring professional, clinical and procedural competence required of a specialist in Cardiology.

2 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 of training in either Cardiology or the broad-based specialty followed by 24 months of core training in the remaining specialty.

4 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 of 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. 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. 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 (Exercise test, Echocardiography, Ambulatory ECG monitoring, Cardiac MRI, Cardiac CT, Nuclear Medicine)

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)

(III) CONTENTS

1 Professional and Knowledge Competencies:

Upon completion of the specialist training, Cardiology trainees are expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians, as well as being able to demonstrate a satisfactory standard of knowledge in cardiology as described below:

1.1 Patient Care and Management

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

1.2 Understanding, Diagnosis, Prevention and Treatment of Cardiovascular Diseases

Pathogenesis and pathology
Risk factors
Natural history
Diagnosis by history, physical examination and laboratory methods
Medical management and principles of surgical management
Complication
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
- Cardiac genetics
- Cardio-oncology
- Cardio-Obstetrics

1.3 Follow-up Care after Cardiac Interventions

Management of a variety of cardiovascular conditions 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.

1.4 Electrocardiography
Ability to interpret:

- Surface Electrocardiography
- Ambulatory Electrocardiography
- Exercise electrocardiographic tests

1.5 Cardiac Catheterization and Cardiac Intervention

1.5.1 Fundamentals of cardiovascular physiology as related to clinical disease, analysis of haemodynamic records and interpretation of angiographic images.

1.5.2 Principles of radiation safety.

1.6 Diagnostic Radiology and Nuclear Medicine

Principles, indications, interpretation and limitations of nuclear cardiovascular procedures and magnetic resonance imaging (MRI) studies and computed tomography imaging.

1.7 Cardiovascular Implantable Electronic Devices (CIEDs)

1.7.1 Principles and limitations of, and indications for, cardiac pacemakers, implantable cardioverter defibrillators, cardiac resynchronization therapy, cardiac resynchronization therapy defibrillator, implantable loop recorder.

1.7.2 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.

1.8 Electrophysiology and Catheter Ablation

1.8.1 Indications for, limitations of and skill in, the selection of patients for electrophysiology studies and catheter ablation.

1.8.2 Principles of electrophysiology studies and catheter ablation in relations to the manifestations of clinical diseases and patient management.

1.9 Echocardiography

Fundamental principles of ultrasound imaging, analysis and interpretation of echocardiographic records in relation to clinical disease.

1.10 Peripheral Vascular Disease

1.10.1 Clinical features and treatment of peripheral vascular disease.

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

1.10.3 Selection of appropriate imaging studies and interpretation of peripheral angiography, other imaging and Doppler vascular studies.

1.11 Other Related Sciences / Specialties

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

1.11.2 Basic sciences including the aspects of anatomy, physiology, pharmacology, pathology, biophysics and biochemistry that are pertinent to Cardiology.

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

1.12 Related Fields of Medicine

1.12.1 Radiology: The interpretation of cardiovascular images.

1.12.2 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.

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

1.12.4 Pulmonary: Basic pulmonary disease physiology. Interpretation of pulmonary function testing, blood gases, pulmonary angiography and radioactive lung scanning. Management of acute pulmonary problems

1.12.5 Obstetrics: Clinical management of pregnant patients with heart diseases.

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

1.12.7 Pathology: Familiarity with the gross, microscopic pathology and application of cardiac genetics in management of all forms of heart disease

1.12.8 Procedural sedation: Pharmacology of sedation medications and reversal agents, indications and contraindications, applications, assessment and monitoring, management of complications and emergency.

1.12.9 Nuclear Medicine: The values and indications of different nuclear scans in the diagnosis of cardiac diseases.

2 Procedural Competency Trainees are required to be capable to perform the following procedures and to have performed a required number of certain procedures during the 2-year core training in Cardiology. The aim is to ensure adequate exposure to clinical materials and pathologies and to provide trainers with adequate opportunities to assess competency in these areas.

2.1 Ambulatory ECG monitoring	Interpret at least 100
2.2 Exercise testing	Interpret at least 50
2.3 Echocardiography	Participation in the performance of at least 200 echocardiographies including M-Mode and 2D-echocardiography Doppler echocardiography Colour flow imaging Transoesophageal echocardiography Exercise and pharmacological stress echocardiography (preferable). 3D Echocardiography (preferable)

2.4 Cardiac catheterization	Participation in at least 100 diagnostic cardiac catheterization procedures e.g. coronary angiogram, right and left heart catheterizations and haemodynamic assessment, ventriculography and angiography including coronary and major vessels arising from the aorta
2.5 Arrhythmia management and cardiac pacing	Participation in the implantation of single, dual chambers permanent cardiac pacemakers or leadless pacemaker. Perform at least 10 temporary pacemakers and participate in at least 25 Cardiovascular Implantable Electronic Devices (CIED) implantations
2.6 Mechanical Circulatory Support including	Participation in at least 5 cases Intra-aortic Balloon Pump/Impella/ECMO
2.7 Cardiac Interventional Procedures	Percutaneous coronary intervention, pericardiocentesis, myocardial biopsy. Management of Procedural Complications including radial and femoral vascular complication, large bore vascular access closure and application of ultrasound guided vascular access
2.8 Sedation administration	Complete sedation course according to HKAM requirement

3. Sub-specialty Skill Competency

Competencies in several advanced cardiac interventional procedures require additional training. Further post-Fellowship training for one year in one of such special procedures after completion of the Core Cardiology training is desirable though not mandatory. These include:

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

For Cardiology Higher Trainees, participation of such activities would be encouraged and desirable.

IV) INSTITUTIONAL REQUIREMENTS

1 Core training in Cardiology aims to provide a 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 including cardiac catheterization laboratory (fully-equipped and adequately-staffed angiographic and haemodynamic laboratory dedicated to cardiac procedures), non-invasive cardiology (24-hour ambulatory ECG, exercise test, echocardiography) and common cardiac imaging (CT, MRI and nuclear medicine)

2.2 Availability of other specific specialties with cardiac patients, e.g. Cardiothoracic Surgery (at least 1 month), O&G (at least 3 months), Nuclear Medicine (at least 1 month)

2.3 Scope and volume of activities in the programme.

2.4 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 acquiring professional and procedural competence required of a specialist in Clinical Pharmacology and Therapeutics.

2 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 of training in either Clinical Pharmacology and Therapeutics or the broad-based specialty followed by 24 months of core training in the remaining specialty.

III) CONTENTS

1 Knowledge and Professional Competency

Upon completion of the specialist training, clinical pharmacology and therapeutics trainees are expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians, as well as being able to demonstrate a satisfactory standard of knowledge in clinical pharmacology and therapeutics as described below:

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 Capabilities of a Clinical Pharmacology and Therapeutics specialist

By completion of specialist training, the Clinical Pharmacology and Therapeutics specialist should acquire the following capabilities:

2.1 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.

2.2 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.

2.3 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.

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

2.5 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.

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

2.7 To be leaders 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.

2.8 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, introducing and evaluating new drug therapy, poison prevention and control.

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, 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 acquiring professional and procedural competence 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 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 of training in either Clinical Toxicology or the broad-based specialty followed by 24 months of core training in the remaining specialty.

III) CONTENTS

1 Knowledge and Professional Competency

Upon completion of the specialist training, clinical toxicology trainees are

expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians, as well as being able to demonstrate a satisfactory standard of knowledge in clinical toxicology as described below:

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 toxicovigilance and toxicoepidemiology.

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 Capabilities of a Clinical Toxicology Specialist

By completion of specialist training, the Clinical Toxicology specialist should acquire the following capabilities:

2.1 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.

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

(I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for acquiring professional and procedural competence 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 acute life-threatening conditions and multiple organ failure.

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

4 To enhance the understanding of healthcare issues related to the practice of Critical Care Medicine for holistic patient care, including healthcare administration, policy making and implementation.

5 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 critical care training in accredited Critical Care Medicine Training Units. During this three-year training programme, at least 12 months of the training should be uninterrupted.

Additionally, it includes 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.

During the Advanced Internal Medicine training, training in Cardiology, Nephrology, and Respiratory Medicine subspecialties in acute hospitals can be counted in that 12 months of uninterrupted training.

2 Training Unit Rotation Requirement

2.1 The trainee must work in at least two training units during the core training.

2.2 At least six months of the core training in Critical Care Medicine must be posted in a Category A unit, and at least six months of the core training in Critical Care Medicine must be posted in a Category B unit. (Please refer to https://www.hksccm.org/images/pdf/INSTITUTIONAL_REQUIREMENT_FOR_ACCREDITATION_CCM_AUG_2024.pdf)

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

3.1 Internal Medicine

3.2 Anaesthesia

3.3 Bone Marrow Transplantation Unit

3.4 Cardiothoracic Intensive Care Unit

3.5 Neurologic/ Neurosurgical Intensive Care Unit

3.6 Traumatology

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

4 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.

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 AIM and 24 months (cumulative) of core training in Critical Care Medicine.

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

6 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.

7 Clinical training in intensive care units overseas is acceptable, provided such training programmes fulfill College accreditation requirements.

8 The trainee is required to attend at least twelve organized tutorials before undertaking the Exit Examination. Upon completing of the Critical Care Medicine training, trainees are required to finish at least 80% of the available tutorials on the CCM e-learning platform (https://lms.hkam.org.hk). This requirement applies to Critical Care Medicine trainees who will take their exit assessment from May 2026 onwards. Trainees who complete their training before this date must finish at least twelve tutorials.

9 Procedure log

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

b These procedures include:

9.2.1 Percutaneous tracheostomy: 5

9.2.2 Bronchoscopy: 10

9.2.3 Brainstem death test: 5

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

9.2.5 Echocardiography: 20

10 Workplace Based Assessment

Trainees that entered the Critical Care Medicine training after 1st July 2023 must undergo and complete the Workplace-Based assessment (WBA) and satisfy the minimum requirement according to the Guidelines on Workplace-Based Assessment (https://www.hksccm.org/index.php/icus/5588-joint-curriculum-workgroup-in-intensive-care-medicine-guidelines-on-workplace-based-assessment) during the core training period:

10.1 Eight Direct Observation of Procedure Skills (DOPS)

10.2 At least nine Mini-clinical Examination (CEX)

11 Concurrent Training with Advanced Internal Medicine

11.1 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) & (5.1).

11.2 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.

12 Sequential training subsequent to accreditation in other medical specialties

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

12.1.1 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.

12.1.2 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.

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

12.1.4 For the minimum period of 24 months of Critical Care Medicine training, the trainee is required to go through training as specified in (II) Structure, (2) & (5.2).

12.1.5 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).

12.2 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

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

12.2.2 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) CONTENTS

There should be ample opportunities for the trainee to observe and directly manage, and take on continuing responsibility for the patients with a wide variety of disease spectrum. The trainee should acquire and develop the following knowledge and skills.

Professional and Procedural Competency

Upon completion of the specialist training, Critical Care Medicine trainees are expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians, as well as being able to demonstrate a satisfactory capability of procedural competency in Critical Care Medicine according to the domains listed and described below.

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 Take responsibility for safe patient care

9.12 Formulate clinical decisions with respect for ethical and legal principles

9.13 Seek 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 Undertake 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 accessible at this link: https://www.hksccm.org/images/pdf/Joint_ICM_Syllabus_20210526-compressed.pdf

(IV) INSTITUTIONAL REQUIREMENTS
GENERAL INSTITUTIONAL REQUIREMENTS

The training hospital should fulfil the following criteria.

1 Comprehensive range of medical and surgical specialties;

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

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

1.3 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 Have access to a wide spectrum of investigative facilities;

2.1 24-hour access to the laboratory for arterial blood gas analysis, and cell count and biochemistry of body fluids.

2.2 24-hour blood banking facilities and imaging services (X-rays, CT Scan).

2.3 Laboratory and diagnostic facilities

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

2.5 Pathology, including exfoliative cytology.

2.6 Microbiology.

2.7 Clinical Chemistry.

2.8 Haematology.

3 The hospital must be prepared for the College, at intervals determined by the College, to carry out visits to the unit to assess its suitability for training. Information about caseload, staffing patterns and the rosters will be required.

For the full version of the Institutional Requirements for accreditation as training centre, please refer to the below link:

https://www.hksccm.org/images/pdf/INSTITUTIONAL_REQUIREMENT_FOR_ACCREDITATION_CCM_AUG_2024.pdf

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 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. The trainee should also undergo a minimum of 6 months training in hospital-based dermatology.

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

(A) Professional and Knowledge Competencies:

(1) Dermatology

Upon completion of the specialist training, trainees in dermatology and venereology are expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians, as well as being able to demonstrate a satisfactory standard of knowledge in this Specialty not limited to but including the following:

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, awareness of need for patient confidentiality particularly for sensitive conditions such as STI, leprosy.

1.2 Dermatopathology

Ability to interpret the histopathology of key skin conditions such as eczema psoriasis, interpretation of histopathology report, and clinical correlation.

1.3 Specific topics

i. Be able to diagnose and manage key skin conditions such as eczema (including contact dermatitis), psoriasis, cutaneous infection, papulosquamous disorders, exanthems, drug eruptions, erythroderma.

ii. Congenital and developmental disorders, pigmentary disorders, hair and nails disorder, oral diseases, anogenital diseases, allergy, and hypersensitivity disorders.

iii. Diagnosis and management of emergency and life threat threatening dermatological conditions such as toxic epidermal necrolysis, DRESS, severe cutaneous infections such as necrotizing fasciitis.

iv. Diagnosis and management of skin malignancies.

v. Be able to diagnose and manage bullous dermatoses,

cutaneous vasculitis, autoimmune conditions.

vi. Diagnose and manage neutrophilic and eosinophilic disorder, histiocytosis, mastocytosis, non-infective granulomatous conditions, subcutaneous fat disorders, disorders of the vascular and lymphatic system.

vii. Diagnose and manage skin manifestation of systemic diseases,

viii. Dermatology in specific patient groups: Psychocutaneous diseases, paediatric dermatology, dermatoses of the elderly, dermatoses in pregnancy

ix. Attachment to leprosy clinic and perform skin smear examination for leprosy.

x. To possess a working knowledge of newer treatments such as but not limited to biologics, JAK inhibitors.

(2) Sexually Transmitted Infection

At the end of training, the trainee should show an understanding of the following:

Fundamentals of sexually transmitted infection:

2.1 Diagnosis and management of disease characterized by genital, anal or perianal ulcers (chancroid, genital HSV infections, granuloma inguinale, lymphogranuloma venereum), syphilis

2.2 Diagnosis and management of diseases characterized by urethral discharge, epididymitis, vaginal discharge and cervicitis: chlamydia, gonorrhea, bacterial vaginosis, trichomoniasis, vulvovaginal candidiasis, pelvic inflammatory disease

2.3 Diagnosis and management of human papillomavirus infection, proctitis, pediculosis pubis and scabies.

2.4 Be aware of the principles behind partner referral.

2.5 Management of STI in 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 HIV-infected patients, management of STI patients who have a history of drug allergy, sexual assault

2.6 Familiarity with clinical prevention and counselling measures, be able to counsel STI patients and their partners.

(3) Procedural Dermatology

3.1 At the completion of training, the trainees should attain the knowledge and competence in procedural dermatology including, but not limited to the following fundamental aspects of procedural dermatology:

a. Pre-procedural: pre-procedural assessment, valid informed consent, awareness of anatomical danger zones, lesion and site selection, adequate clinical information is included on the biopsy request form, ensure correct identification of patient and lesion site.

b. Surgical technique: delivering local anesthetics, correct and safe handling of instruments, equipment and surgical materials, aseptic technique, hemostasis, correct selection of surgical technique

c. Post-surgical: after-care and follow-up, management of complications of surgery.

d. At the end of training, the trainee should understand the principles of therapeutic procedures such as phototherapy, wet-wrap therapy, iontophoresis.

e. At the end of training, the trainee should have observed: Cosmetic procedures such as laser surgery, botulinum toxin injection etc. The trainee should also be able to diagnose and manage complications of cosmetic procedures.

(B) Procedural Competency:

At the end of training, the trainee should be able to perform the following procedures:

a. Dermatology

i. Diagnostic procedures: Skin scraping for microscopy for fungus and scabies, dermoscopy, trichoscopy/hair pull test, patch test application and interpretation, Wood's light examination, lumbar puncture.

ii. Surgical procedures: punch/incision/excision skin biopsy, electrodessication, scissoring, curettage, cryosurgery, intralesional steroid injection via needle/Dermojet, scalp and genital skin surgery.

b. Venereology

Gram-staining and wet smear examination for pus cell, Trichomonas vaginalis and Gonococcus, specimen taking for sexually transmitted infections, speculum examination and proctoscopy.

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 centre 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 (Section 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. Supportive services 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 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.

1.8 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.

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.

2.6 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.

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

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 the 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 the 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) Professional and Knowledge competencies

Trainees are expected to have acquired the Generic Professional Competencies as stated in the requirements of Physician Training under the Hong Kong College of Physicians.

The scope of knowledge attained by trainees at the completion of training should include a thorough and updated knowledge in the normal physiology of the endocrine system, including the physiology and biochemistry of hormones and their actions.

1.1 Endocrinology - Disorders affecting the
Thyroid gland
Neuroendocrine system, hypothalamus and pituitary gland
Adrenal gland
Gastro-pancreatic intestinal system
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
Inborn errors of metabolism.

1.4 Additional knowledge in the following is desirable subject to availability of training facilities.
(a) Management of infertility.
(b) Disorders of sexual differentiation and puberty.
(c) Molecular biology.

(2) Procedural competency

At the completion of training, the trainees are expected to have acquired the following competencies in various endocrine tests and procedures:

2.1 Understanding the basic principles and practice of endocrine function tests and hormone assay methods.

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

2.3 Ability to conduct, supervise and have correct 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 Ability to interpret endocrine imaging modalities, including CT scan, MRI, ultrasonogram, radio-isotopic scanning of the endocrine organs and bone densitometry.

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 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 as stated above in (III)

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

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

3.2 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.

3.3 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.

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

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

4.2 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.

4.3 4Laboratory and diagnostic facilities

4.3.1 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.

4.3.2 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.

4.3.3 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.

4.4 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.

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

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

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

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

5.4 Adequate educational facilities which include

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

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

5.5 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

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 acquiring professional and procedural competence 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 ultrasonography and liver biopsy.

3. 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 of training in either Gastroenterology and Hepatology or the broad-based specialty followed by 24 months of core training in the remaining specialty.

III) CONTENTS

1 CORE

(A) Knowledge and professional competency

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. They are also expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians.

(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. They should have the ability to work with multidisciplinary teams, clinicians from other specialties and primary care physicians to manage gastrointestinal and hepatobiliary involvement in systemic diseases, and managing gastrointestinal and hepatobiliary conditions in patients with surgical, obstetric, gynaecological and oncological diseases. They should also understand the transition from paediatric to adult care in gastroenterology and hepatology.

(C) Procedural competency and capability

I) Basic diagnostic endoscopy techniques

Ability to perform upper gastrointestinal endoscopy (including push enteroscopy), sigmoidoscopy and colonoscopy as well as recognition of early neoplastic lesions.

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 ultrasonography (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

Ability to perform stricture dilatation, injection or banding of varices, haemostatic techniques for peptic ulcer bleeding, snare polypectomy, feeding tube insertion and percutaneous endoscopic gastrostomy.

Understand the indications, contraindications, and complications of these procedures.

III) Non-endoscopic techniques

Ability to perform abdominal paracentesis, liver biopsy and abdominal ultrasonography.

Possession of 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, CT/MR enteroclysis, nuclear medicine procedures, percutaneous cholangiogram, biliary drainage procedures is also required.

2 PROCEDURE REQUIREMENT

Upper gastrointestinal endoscopy and related procedures

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 and related procedures

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 gastroenterologist 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 acquiring professional and procedural competence required of a specialist in Genetics and Genomics (Medicine).

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 acquire professional competence in training future trainees in Genetics and Genomics (Medicine).

II) STRUCTURE

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

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 and Professional Competency

Upon completion of the specialist training, trainees are expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians, and able to demonstrate a satisfactory knowledge and professional competency in the various aspects of Genetics and Genomics as described below:

1 Knowledge in Genetic and Genomics, including 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.

2. Subject to the specialty(ies) one had already attained, the trainee should be familiar with:

2.1 Major genetic practice in adult medicine, including but not limited to genetics and genomics of common and rare diseases;

2.2 Managing patients and families suffering from known or suspected genetic diseases

2.3 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.

2.4 Genetics of pathogens and infectious diseases and how the information can be applied at clinical, hospital management and community levels;

2.5 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.

2.6 The principles, guidance and laws regarding medical ethics and confidentiality in the delivery of genetic care.

3 Recognizing 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.

4 Leading or collaborating in a multidisciplinary team in the delivery of genetic care if necessary.

(B) Procedural Competency

1 Ability to perform a pedigree analysis.

2 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.

3 Ability in the application 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.

4 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.

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 enhance knowledge and clinical skill in the prevention, diagnosis and management of a broad range of presentations and conditions in hospitalized and ambulatory older people as well as those with frailty and complex comorbidities.

3 To develop competence in leading interdisciplinary teams and fostering collaborations with social care, primary care providers and other medical and surgical specialties.

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. (Appendix II) 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 of training in either Geriatric Medicine or another specialty* followed by 24 months of core training in the 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

(1) Knowledge and Professional Competency

Upon completion of the specialist training, geriatric medicine trainees are expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians, as well as being able to demonstrate satisfactory standard of knowledge in geriatric medicine as described below:

1.1 Epidemiology of ageing – worldwide and local and its implication.

1.2 Normal ageing (biological, physical, psychosocial) and its distinction from disease states and impact on common medical conditions

1.3 Preventive aspects including healthy ageing, compression of morbidity and apply strategies for personal and population illness prevention and screening.

1.4 Atypical presentation and multi-factorial nature of clinical presentations in older people.

1.5 Diagnosis and management of common medical conditions in older people.

1.6 Diagnosis and management of geriatric syndromes and related conditions, including but not exclusive to the followings:

a. Elder abuse
b. End-of-life care including symptom control and related medico-legal issues.
c. Falls and syncope
d. Frailty
e. Iatrogenesis from under or over investigations or drug treatment

f. Immobility and mobility decline
g. Immunosenescence and vaccination
h. Impaired feeding, dysphagia and malnutrition
i. Impaired vision and hearing
j. Neuropsychiatric conditions- Dementia, behavioral and psychological symptoms, delirium, depression and other psychiatric presentations
k. Osteoporosis and fragility fracture
l. Pain
m. Peri-operative management
n. Pressure injury
o. Sarcopenia
p. Urinary and fecal incontinence

1.7 Principles, components and application of comprehensive geriatric assessment.

1.8 Appropriate use of investigations and treatment (pharmacological and non-pharmacological), balancing risk against benefit for individual older patients.

1.9 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. Appropriate prescription and deprescription according to health status and goal of care. Medication reconciliation to avoid medication error.

1.10 Rehabilitation principles as applied to management of acute and chronic illness in older people; understand 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 Quality indicators of hospital-based infirmary and residential care home, including but not exclusive to: infection control, pressure injury 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 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, dying in place and assessment of mental capacity.

1.13 Understand the interface between clinical and caring issues including elder abuse, surrogate decision-making including application of guardianship, caregiver stress, social isolation and support networks.

1.14 Knowledge on objectives and up-to-date spectrum of care provided by residential care homes and community supporting services.

1.15 Determinants of successful transfer of care outside hospital which meet the perspectives and needs of older people and their caregivers, and suitability for different care levels within the community

1.16 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 people.

(2) Competencies and Skills in managing Geriatric patients

2.1 Ability to prioritize issues to be addressed in an older patient encounter.

2.2 Ability to perform a comprehensive geriatric assessment in the evaluation of physical health, mental health, functional status, socioeconomic status and environmental factors related to old age, as applied to various settings including acute, post-acute and rehabilitation, outpatient, geriatric day hospital and home visits.

2.3 Ability to perform assessment using standardized instruments including but not exclusive to the following domains and conditions

a. Cognition, delirium, behavioral and neuropsychiatric symptpoms in dementia
b. Geriatric depression
c. Use of medication
d. Basic and instrumental activities of daily living
e. Mobility, gait, and balance
f. Risks of falls and fracture
g. Swallowing and nutrition
h. Urinary incontinence
i. Frailty and sarcopenia
j. Vision and hearing

2.4 Ability to manage complex clincal problems and presentations in older people and formulat patient-centred care plan.

2.5 Skills in safe prescription and medication management aiming to prevent, detect and address medication-related problems and achieve optimum use of medicine.

2.6 Ability to assess the mental capacity of older persons for clinical decision making.

2.7 Ability to identify patients with limited reversibility of their medical conditions and to discuss end of life, advance care planning and palliative care needs.

2.8 Ability to manage and lead rehabilitation services for older people.

2.9 Ability to organize and lead geriatric services in collaboration with social care providers and other specialties, like orthopedics, psychogeriatrics and emergency medicine etc.

2.10 Ability to coordinate the management of older patients across the whole continuum of care settings including inpatient, outpatient, day hospital, community-based setting programs and long-term care facilities.

2.11 Procedural skills of assessment tools which are essential to the diagnosis and management of common medical conditions in older patients.

(3) Attitude

3.1 To recognize the 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 To be alert to socioeconomic changes that would affect the health care of older people 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 purposes 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 purposes are: interdisciplinary case conferences and management.

7 Close working relationships with psycho-geriatrics, orthopaedics, emergency medicine 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 acquiring professional and procedural competence required of a specialist in Haematology and Haematological Oncology (Haem & Haem Onc).

2 To encourage and provide opportunities in the pursuance of scientific enquiry and basic research in Haem & Haem Onc.

3 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.

4 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 of training in either Haem & Haem Onc or the broad-based specialty followed by 24 months of core training in the remaining specialty.

III) CONTENTS

1 Knowledge and Professional Competency

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 delivers expert specialised care to such patients.

1.1 Upon completion of the specialist training, Haem & Haem Onc trainees are expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians, as well as being able to demonstrate a satisfactory standard of knowledge in haematology and haematological oncology as described below.

1.2 In-hospital management of patients with various blood disorders, including anaemias, abnormalities in white cells and platelets, marrow failures, acute leukaemia, myelodysplastic syndrome, myeloproliferative neoplasms, lymphoid and histiocytic neoplasms, plasma cell neoplasms, and bleeding and thromboembolic disorders.

1.3 Ambulatory and outpatient care of patients with various blood disorders.

1.4 Different modalities of systemic therapies and supportive management of patients with haematological malignancies.

1.5 Interpretation of morphological haematology and routine and specialised haematological tests required for the management of patients with various blood disorders.

1.6 Interpretation of results on genetic and genomic investigation of various blood disorders and their clinical utility including but not limited to diagnosis, prognostication, disease monitoring and counselling.

1.7 Consultation by other specialties on general haematology, bleeding and blood transfusion problems.

1.8 Management of acquired and inherited thrombotic disorders.

1.9 Management of inherited and acquired bleeding disorders.

1.10 Management of patients requiring the following therapies and procedures.

a. Haematopoietic stem cell transplantation and other cellular therapies.

b. Plasmapheresis and other apheresis procedures.

c. Blood component collection, processing and blood banking.

2 Procedural Competency

Upon completion of the specialist training, trainees should attain or acquire the following procedural competency

2.1 Bone marrow aspiration and trephine biopsy.

2.2 Management of venous access catheters, including tunneled central venous catheters, implantable ports, and percutaneously inserted central venous catheters.

2.3 Peripheral blood stem cell and marrow harvest.

2.4 Lumbar puncture and intrathecal administration of drugs.

2.5 Intraventricular administration of drugs through an intraventricular catheter system or reservoir to the central nervous system.

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 immunosuppression 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 Medical audit and postgraduate education programmes.

IMMUNOLOGY AND ALLERGY

I) OBJECTIVES

1 To provide broad-based training and in-depth experience at a level sufficient to acquire professional and procedural competency and professionalism that required for a specialist in Immunology and Allergy.

2 To acquire professional competency 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 of training in either Immunology and Allergy or AIM followed by 24 months of core training in the remaining specialty.

4 The trainee should be directly involved in the clinical management to acquire clinical experience and competence 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 Inborn & Acquired Errors of Immunity is required. Supervised training in Autoimmune & Autoinflammatory Diseases of minimum 3 months and maximum 6 months duration is required.

5 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) A for core laboratory components.

6 Fellows in related subspecialty may choose to be exempted from training in relevant areas in (III) A.

III) CONTENTS

(A) Knowledge and Professional Competency

Upon completion of the specialist training, trainees under Immunology and Allergy are expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians, as well as being able to demonstrate a satisfactory standard of knowledge in Immunology and Allergy as described below:

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:

- Allergy & Hypersensitivity
- Inborn & Acquired Errors of Immunity
- Autoimmune & Autoinflammatory Diseases

Trainees are expected to have a comprehensive understanding of various immunological tests and demonstrate the ability to accurately interpret their results, which include the following:

1 Immune serology; including autoimmune/allergy-related investigations and vaccination responses

2 Flow cytometry-based tests; including lymphocyte subsets, B/T-cell immunophenotyping and functional-based cytometry tests

3 Cell function assays; including basophil activation tests, lymphocyte transformation tests, neutrophil function tests

4 Immunology-related genetic testing and knowledge; including gene panels and next generation sequencing

(B) Clinical and Procedural Competencies

The trainee must acquire sufficient background knowledge in basic and applied immunology through guided learning and clinical/laboratory exposure. He/she should become familiar with diagnostic techniques in Immunology and Allergy, their interpretation, quality assurance and their relevance in the major immunological practice areas. Such areas include:

Clinical Competency:

1 The ability to manage patients with allergy & hypersensitivity diseases, especially evaluations and investigations of anaphylaxis and severe cutaneous adverse reactions

2 The ability to manage patients with inborn & acquired errors of immunity, including diagnostic investigations, treatments and various modalities of immunoglobulin replacement

3 The ability to manage patients with autoimmune & autoinflammatory diseases, especially in excluding underlying inborn or acquired errors of immunity

Procedural Competency:

1 Allergy skin testing; including skin prick tests, intradermal tests and patch tests

2 Provocation testing and desensitization for both food and drug allergies

IV) INSTITUTIONAL REQUIREMENTS

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) A 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 acquiring professional, clinical and procedural competence required of a specialist in Infectious Disease

2 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.

3 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' (at any approved clinical 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 the 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 and Professional Competency

Upon completion of the specialist training, Infectious Diseases trainees are expected to have acquired the "Generic Professional Competencies as universal requirements in Physician Training" under the Hong Kong College of Physicians, as well as being able to demonstrate a satisfactory standard of

knowledge in Infectious Diseases as described below:

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 immunocompromised 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) Clinical and procedural competency

2.1 Ability to manage adult patients with acute, subacute, and chronic infections, and their complications and sequelae

2.2 Ability to manage patients with communicable and tropical infections (e.g. malaria, cholera, typhoid; vector-borne diseases; airborne infections)

2.3 Ability to manage infections in immunocompromised patients (e.g. neutropenic fever, transplant-related infections, immunosuppressant and biologics recipients, HIV/AIDS)

2.4 Able to treat severe infections in critical care settings

2.5 Ability to treat healthcare-associated infections and antimicrobial resistant pathogens; application of appropriate infection control measures, and liaison with laboratory services

2.6 Demonstrate understanding of the procedures and the ability to interpret essential diagnostic procedural 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

2 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 of training in either Medical Oncology or the broad-based specialty followed by 24 months of core training in the 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 months 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 should acquire and develop the following knowledge and skills.

(1) Professional and knowledge competency

Upon completion of specialist training, medical oncology trainees are expected to have acquired the generic professional competencies as stated in the physician training under Hong Kong College of Physicians, as well as being able to demonstrate a satisfactory standard of knowledge in Medical Oncology as described below:

1.1 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 malignancies

Cancer of unknown primary site

1.2 Elements of cancer biology, including the mechanisms of oncogene activation, tumour suppressor genes, signaling pathways, stepwise evolution of invasive neoplasia, etc.

1.3 Principles of cytotoxic chemotherapy (systemic and regional), endocrine (hormonal) and immunotherapy (including interferon/other cytokines, immune checkpoint inhibitors, bispecific T-cell engager, engineered cell therapy), 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.

1.4 Principles of cancer molecular tests, including biomarker assays, genetic

and genomic tests, their application and interpretation.

1.5 Elements of radiation physics; principles and practice of radiotherapy including late effects and complications of radiotherapy and their management; normal tissue tolerance.

1.6 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.

1.7 Staging procedures and classifications of the various tumours. Assessment of performance status/quality of life assessment.

1.8 Methods of assessing tumour response and treatment-related toxicities: clinical, radiological and biochemical.

1.9 Management of oncological emergencies, paraneoplastic syndromes and the neutropenic patient.

1.10 Supportive, rehabilitation and palliative care, including psychosocial aspects and symptomatic control of pain and emesis.

1.11 Principles of nutritional support for cancer patients.

1.12 Methods of vascular access and indwelling vascular catheter care

1.13 General principles of transplantation as applied to cancer treatment. Apheresis and harvesting of haematopoietic stem cell.

1.14 Preventive medicine in relation to oncology, mass screening and early detection.

1.15 Pathology of malignant disease.

1.16 Bereavement counselling, talking to dying patients and their families.

1.17 Access to, and use of, Cancer Databases.

1.18 Audit and quality assurance in oncological practice.

(2) Procedural competency

Upon completion of the specialist training, medical oncology trainees should be competent in performing:

Biopsy – Skin, bone-marrow aspiration and biopsy.

Pleural tap and drainage.

Abdominal paracentesis

Lumbar puncture and intrathecal chemotherapy

(3) Capabilities as a specialist in Medical Oncology

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 systemic therapy for 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.

(4) Attitudes

4.1 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.

4.2 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.

4.3 Ability to recognise the cost-effectiveness, indications, contraindications, and potential complications of various procedures in the course of patient care.

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

4.5 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.

4.6 A mature and reasoned attitude to the interaction of a Medical Oncologist with the pharmaceutical industry and its representatives.

IV) INSTITUTIONAL REQUIREMENTS

There should be sufficient opportunities for the trainee to observe and directly

manage, and take on continuing responsibility for both outpatients and inpatients with a wide variety of tumour types.

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 and online 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 acquiring professional and procedural competence required of a specialist in Nephrology.

2 To enhance understanding of healthcare issues related to the practice of Nephrology for holistic patient care, including healthcare administration, policy making and implementation.

3 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 one of the Nephrology related specialties (hypertension, cardiovascular medicine, metabolic medicine, endocrinology, immunology, infectious disease, or genetics), 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 kidney transplantation in an accredited kidney 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 obstetrics service and actively take part in managing pregnant patients with kidney problems (e.g. attending external consultation in obstetrics wards) for at least 3 months, either during the period of general nephrology training or concurrently during the period of kidney 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:

A 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.

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

(A) Knowledge and Professional Competency

Upon completion of the specialist training, nephrology trainees are expected to have acquired the Generic Professional Competencies as stated in the Phyician Training under the Hong Kong College of Physicians, as well as being able to demonstrate a satisfactory standard of knowledge in nephrology as described below:

1 Diagnosis of kidney diseases, including the assessment of kidney function, interpretation of hematology and biochemistry data, kidney histology, radiology, ultrasound, angiography, CT, MRI, radionuclide imaging, and other relevant imaging results.

2 Identification and management of different clinical renal syndromes, including nephrotic syndrome, all common types of glomerulonephritis and tubulointerstitial diseases.

3 Management of hypertension including hypertensive disorders in pregnancy. Familiarity with pre-conception counselling and drug safety in chronic kidney disease, management of kidney transplant recipients before and during pregnancy.

4 Identification and management of fluid, electrolyte, and acid-base disorders.

5 Management of acute kidney injury, including acute kidney replacement therapies and continuous renal replacement therapy (CRRT) in the context of critical care nephrology.

6 Management of chronic kidney disease, including its complications and prevention of kidney disease progression, and the ability to support primary care in the management of chronic kidney disease.

7 Management of kidney failure 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 Awareness of advance care planning, and familiarity with shared decision making, and palliative / conservative kidney management. Awareness of team approach in withdrawal of dialysis.

9 Kidney transplantation – preparation, peri-operative and long-term management of recipients, living donors and deceased donors.

9 Other kidney diseases, examples include those arising from systemic illnesses, genetic diseases, urinary tract disorders, and urolithiasis.

10 Ability to work with multidisciplinary teams, clinicians of other specialiaties, and primary care physicians to manage kidney involvement in systemic disease, and managing kidney problems in surgical, obstetrics, gynecological, and oncology patients. Understanding the transition of care from pediatric to adult care in nephrology.

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 Kidney physiology, pathology, immunology, microbiology, pharmacology and therapeutics.

13 Alterations in drug metabolism in kidney disease and nephrotoxicity. Understanding of the role of therapeutic plasma exchange in extracorpoeal management of intoxication and disesaes.

14 Cardiovascular risk factors, complications and their prevention in chronic kidney disease.

15 Nutrition: general, enteral and hyperalimentation in kidney failure. Understanding and management of CKD-MBD (mineral bone disease).

16 Quality assurance in renal services.

(B) Procedural Competency and Capability

Upon completion of the specialist training, nephrology trainees should attain or acquire

1 Kidney biopsy

Ability to prepare patients for, perform, and offer post-procedural care of native and transplant kidney biopsies.

Understand the indications and contraindications of native and transplant kidney biopsies, including the management of complications.

Understand the diagnostic and prognostic implications of the light microscopic, immunofluorescent and electron microscopic findings in kidney histopathology, including those of transplant kidneys.

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

Ability to prescribe peritoneal dialysis treatment, including manual fluid exchange and cycler-assisted dialysis regimens.

Understand the principles and practice of insertion of peritoneal dialysis catheter.

3 Extra-corporeal kidney replacement therapy

Ability to create and take 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.

Understand the principles and practice of insertion of permanent cuffed tunneled hemodialysis catheter.

4 Interventional nephrology, e.g. angioplasty for renal artery stenosis or arteriovenous fistula, insertion of tunneled hemodialysis catheters and peritoneal dialysis catheters.

Understand the principles and practice of these procedures.

IV) INSTITUTIONAL REQUIREMENTS

A hospital will be accredited to provide full or partial training in Nephrology if it contains all or some 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 Obstetrics service

If a Hospital does not provide obstetrics service, arrangement must be made for the trainees to be seconded to a Hospital with obstetrics service for at least three months, either during the period of general nephrology training or concurrently during the period of kidney 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 40 or more active chronic hemodialysis patients may be accredited for a maximum of 6 months in HD training. Centers with 20-39 active chronic hemodialysis patients 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 kidney 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 Kidney Transplantation

3.1 This includes living 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 subsequent complications after kidney transplantation.

3.4 If a center does not offer kidney transplantation, arrangements must be made for a trainee to be seconded to a kidney transplant center for at least 6 months.

3.5 For a center to be accredited for training in kidney transplantation, it must perform no fewer than 8 kidney transplantations annually.

4 The training hospital should also provide the following expertise.

4.1 A sufficient number of fully trained staff with an 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 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 kidney 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, fluoroscopy, radionuclide scan, ultrasound, CT scan, MRI, renal angiogram)

4.3.2 histopathology service including kidney biopsy interpretation

4.3.3 microbiology service

4.3.4 clinical chemistry service

4.3.5 hematology service

4.3.6 accessibility to tissue typing and immunogenetics 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 grand round, 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 educational materials.

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 professional and procedural competence required of a specialist in Neurology.

2 To enhance scientific knowledge as a necessary groundwork for research in Neurology.

3 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.

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 of training in either Neurology or the broad-based specialty followed by 24 months of core training in the remaining specialty

III) CONTENTS

(A) Knowledge and Professional Competency

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.

Apart from knowledge related to Neurology, Neurology trainees are also expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians.

Neurological diseases:

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 central nervous system (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) Procedural competency:

Ability to perform or interpret the following procedures

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 (Interpretation)

10 Neurosonology (Interpretation)

11 Brain death test

(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

12 Neuropalliative care

(D) Additional procedural skills in the following are desirable, subject to availability of training facilities:

1 Sleep studies (interpretation)

2 Transcranial magnetic stimulation

3 Mechanical thrombectomy

4 Neuromuscular Ultrasound for movement disorders

5 MRI guided focused ultrasound of the brain for movement disorders

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 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.

3 In training hospitals, the following features should be available. The facilities may be either on-site or with access in networking hospitals.

3.1 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

3.2 Regular outpatient subspecialty clinics in Neurology

3.3 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

3.4 Laboratory and diagnostic facilities

3.4.1 Clinical neurophysiology: EEG, EMG, NCS, EP

3.4.2 Radiology: Computed tomography (CT) on site, access to Magnetic resonance imaging (MRI), cerebral angiography, interventional radiology, ultrasonography, radionuclide scans

3.4.3 Neuropathology

3.4.4 Microbiology

3.4.5 Clinical chemistry

3.5 Regular quality control procedures including medical audit and autopsy

3.6 Maintenance of high quality medical records with easy accessibility

3.7 Affiliation with extended care facilities which provide neurological rehabilitation and hospice care

3.8 Structured educational programme including teach-in, journal club and grand rounds in Neurology

3.9 Adequate educational facilities which include:

3.9.1 Access to medical library facilities and computerised literature search systems

3.9.2 Conference facilities including audio-visual aids

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 in the management of patients with advanced, progressive life-limiting disease, for whom the focus of care is to optimize their quality of life through expert symptom management and psychological, social and spiritual support as part of a multi-professional team across different health care settings.

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, 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 when applying 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 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 of 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

(A) Professional and Knowledge Competency

By the completion of specialist training, palliative medicine trainees are expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians, and able to demonstrate satisfactory knowledge and professional competencies in the various aspects of palliative medicine as described below:

1 Understanding symptoms in terms of:

1.1 Prevalence, complexity and progression along the trajectory of disease, including those in the last days of life.

1.2 Symptom as multidimensional in nature and symptom distress as unique experience of patients.

1.3 Elucidation of underlying causes and mechanisms of various symptoms.

1.4 Methods of assessment, diagnosis and management of various symptom complexes.

1.5 Pharmacological and non-pharmacological management in symptoms control. Development of appropriate management strategies taking into consideration the personal priorities of the patient.

1.6 Identification of potential refractory symptoms.

2 Management of common emergencies encountered in palliative care.

3 Prognostication for patients with progressive life-limiting conditions.

4 The role of disease-specific treatments and their related side effects in the practice of Palliative Medicine for cancer (such as palliative surgery, radiotherapy, chemotherapy, hormonal therapy, targeted therapy, immunotherapy, anaesthetic techniques) and for other progressive life-limiting non-cancer conditions (such as dialysis, non-invasive ventilation, mechanical ventilation, artificial nutrition and hydration).

5 Psychological response of the patients and their families to progressive life-limiting conditions, including coping strategies, psychological

morbidities and grief reactions.

6 Understanding of impact of the disease on the social well-being and be sensitive to cultural influences.

7 Understanding of spiritual care as an integral part of palliative care, including the impact of perceived meaning of life and religious beliefs.

8 Knowledge of family dynamics, caregiver burden and distress in the context of progressive life-limiting conditions.

9 Ethical principles including beneficence, non-maleficence, respect for autonomy, equity, the principle of double effect, the principle of patients' best interest, respect for life, and their application in various clinical decisions as the disease progress, and in handling requests from patients and/or families for hastening death, physician assisted suicide and euthanasia.

10 Knowledge of Drug Ordinances related to the use of controlled or dangerous drugs.

11 Knowledge of the prevailing legal requirement in making, operation and revocation of Advance Medical Directive and Do-not-attempt Cardiopulmonary Resuscitation (DNACPR).

12 Knowledge of various modes of palliative care provision, including inpatient care, outpatient care, home care, day care and consultative services.

13 Functions of the inter-disciplinary team, including the role of rehabilitation in palliative care.

14 Characteristics of a palliative care team, team dynamics and conflict resolution.

15 Knowledge concerning staff stress and burnout arising from the provision of palliative care.

16 Acquisition of the following professional competencies specific to Palliative Medicine:

(a) Ability to recognize that all days of human life are deserving of dignity, meaning and concern and to regard death as a normal part of life.

(b) Ability to recognize that when cure is not possible, active total care of the patients and their families is central to patient management and promoting their quality of life even when remaining life is limited.

(c) Ability to recognize that hastening death and artificial termination of life should not be the intention of care or as the means for symptom control.

(d) Ability to recognize the limits of medicine, including symptom control measures.

(e) Awareness of the importance in promoting the understanding of palliative care in the health care system and community.

(B) Skills Competency

By completion of specialist training, the palliative medicine trainees are expected to attain the following skills:

1 Ability to elucidate and empathize with patients and their families in sufferings when facing progressive life-limiting conditions.

2 Ability to manage complex pain and other symptoms in people with progressive life-limiting conditions in all care settings including use of strong opioids through different routes of administration, in a safe and effective manner; to anticipate difficult symptoms and to formulate a care plan for potentially refractory symptoms.

3 Ability to identify, assess and manage complex psychosocial issues in the context of progressive life-limiting conditions.

4 Ability to recognize (and support other clinicians to recognize) and manage patients that are dying and their families.

5 Ability to make appropriate clinical decisions that is based on patients' and families' needs, appropriate to the patients' prognosis with the aim of maximizing quality of life and relieving suffering of patients and supporting families.

6 Ability to demonstrate effective advanced communication skills in exploring patients' concerns across physical, psychological, social, cultural and spiritual domains; in breaking bad news and prognosis telling; in handling requests of euthanasia, wish to hasten death and assisted suicide; in holding family conferences for consensus building and resolution of conflicts.

7 Ability to facilitate the advance care planning process to formulate the future medical and personal care plan as disease progresses; support the patient in making an Advance Medical Directive; assess the fulfilment of specified precondition before signing the DNACPR form.

8 Ability to identify and support family members who are at risk of complicated grief and to refer for appropriate professional service.

9 Ability to lead an inter-disciplinary team in all care settings and conduct case conference to formulate care plan for patients with palliative needs and their family members with engagement of team members.

(C) Capabilities of a Palliative Medicine Specialist

By completion of specialist training, the palliative medicine specialist should acquire the following capabilities:

1 To provide consultative and advisory service to other specialties regarding the palliative care of patients and their significance, the modalities of palliative care service available and the appropriateness of referral.

2 To provide specialist palliative care service in palliative care and non-palliative care wards, clinics, day settings and community.

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 not less than 1:2 at any one time.

2 Sufficient numbers of regular referrals of patients with incurable cancers and other progressive life-limiting conditions.

3 Presence of an inter-disciplinary team comprising medical, nursing and allied health professionals, in particular clinical psychologists, social workers, counsellors and spiritual care workers 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 access to literatures 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 professional and procedural competencies required of a specialist in Rehabilitation.

2 To develop clinical competencies 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 using interdisciplinary team approach.

4 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 of training

in either Rehabilitation or the broad-based specialty followed by 24 months of core training in the 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 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.	(3 months)

III) CONTENTS

(A) Knowledge, Professional Competency and Capability

Upon completion of the specialist training, rehabilitation trainees are expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians, as well as being able to demonstrate a satisfactory standard of knowledge in Rehabilitation as

described below:

(1) General Knowledge in Rehabilitation

1.1 Assessment of impairment, activity limitation and participation restriction using the World Health Organization – International Classification of Functioning, Disability, and Health (WHO-ICF) model or equivalent.

1.2 Application of appropriate measures in assessing functions and outcomes for a broad range of impairment groups.

1.3 Capability in planning and leading a multidisciplinary/ interdisciplinary/transdisciplinary rehabilitation programme, and mediating constructive exchange of multidisciplinary clinical perspectives for rehabilitation goal setting, management and discharge planning of patients.

1.4 Understanding of the allied health disciplines to effectively integrate their contributions into the process of rehabilitation.

1.5 Capability 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 Indications, contraindications and prescription of therapeutic exercises in various types of disabilities and in single or combination of visceral organs or metabolic and vascular conditions like chronic heart, lung, kidney diseases, diabetes mellitus, obesity and peripheral vascular disease …etc.

1.9 Indications, contraindications and prescription of adaptive devices.

1.10 Indications, contraindications and prescription of prosthetic and orthotic devices, together with their biomechanical principles, methods of assessment, follow-up and check out procedures.

1.11 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.

1.12 Management and prevention of specific rehabilitation problems and complications such as spasticity, swallowing disorder, chronic pain, deconditioning, pressure injury, bladder and bowel problems.

1.13 Knowledge of impairment, activity limitation and participation restrictions in conducting an Independent Medical Examination (IME) is encouraged.

1.14 Making recommendations in rehabilitation areas including return-to-work, driving and sexuality.

1.15 Pathophysiology of conditions related to lifestyle, exercise, recreation and stress.

1.16 Other related areas of knowledge

1.16.1 Knowledge and design of architecture which affects persons with disabilities.

1.16.2 Rehabilitation engineering principles, which are relevant to clinical rehabilitation, especially mechanical, electrical and hydrodynamic principles.

1.16.3 Various updated and novel strategies in Rehabilitation e.g. tele-rehabilitation.

1.16.4 Ability to discuss advance care planning for indicated patients.

(2) Knowledge in Specialised Rehabilitation Programmes

2.1 Cardiac Rehabilitation

2.1.1 Capability 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 Understanding the clinical components of cardiac rehabilitation programmes.

2.1.3 Concepts of exercise especially aerobic exercise, activities counselling and behavioral modification as applied to cardiac patients.

2.1.4 Assessment of suitability for entry into cardiac rehabilitation programmes, exercise risk stratification, exercise prescription and its modification to suit patients with different rehabilitation and medical considerations.

2.1.5 Making recommendations including return-to-work, driving, and sexuality after appropriate rehabilitation assessment and

intervention.

2.1.6 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 Normal lung physiology and pathophysiological basis of various pulmonary diseases including alteration of lung gaseous exchange, respiratory muscle dysfunction and control of ventilation etc.

2.2.2 Understanding the clinical components of pulmonary rehabilitation programmes and the roles and strategies of nurses and allied health disciplines in the interdisciplinary team.

2.2.3 Ability to prescribe exercise for pulmonary patients.

2.2.4 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.

2.2.5 Understanding of various symptom and outcome evaluations of pulmonary rehabilitation programmes.

2.2.6 Other general rehabilitation knowledge and skills relevant to the rehabilitation of the pulmonary patient.

2.3 Neurological Rehabilitation

2.3.1 Natural history, complications, prognosis and treatment of neurological disorders including vascular, traumatic, degenerative, infective, and immunologic diseases which result in chronic disability.

2.3.2 Application of appropriate measures in assessing the impairments, functions and outcomes of patient with neurological disorders.

2.3.3 Selection and interpretation of the results of investigations related to diagnosis of neurological disorders including neuro-imaging studies, electrodiagnostic studies (NCS, EMG), EEG, CSF analysis, muscle and nerve biopsies.

2.3.4 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.

2.3.5 Appropriate selection of various surgical and pharmacological interventions for neurological disorders and understanding of their

limitations and complications.

2.3.6 Advanced technologies in neuro-rehabilitation including the clinical use and application of transcranial magnetic stimulation and robotics.

2.3.7 Neuropsychology with respect to the management of major neuropsychological syndromes, and the interpretation of cognitive assessments.

2.4 Musculoskeletal Rehabilitation

2.4.1. Practicing rehabilitation in the following musculoskeletal disorders:

Osteoporosis and osteoporotic fractures

Spinal cord and peripheral nerve injuries

Acute and chronic pain syndrome

Rheumatological diseases rehabilitation

Amputations and joint replacement

Common musculoskeletal injuries, fractures and related complications

Pressure injury prevention and management

2.4.2. Obtain relevant physical and functional history, examination of the musculoskeletal system and to select appropriate investigations and accurately interpret the results.

2.4.3 Osteoporosis assessment, investigation interpretation, anti-osteoporosis therapy prescription and related sarcopenia and fall assessment and management.

2.4.4 Assessing spinal cord injury patient with appropriate tool such as the American Spinal Injury Association (ASIA) impairment scale and managing related complicated such as autonomic dysreflexia.

2.4.5 Prescription of appropriate medical, physical, occupational and psychosocial treatments, and adaptive devices for the management of disability, including orthotics and prosthetics.

2.4.6 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.

(B) Procedural Competency

1 Performance and interpretation of treadmill exercise test.

2 Exposure and interpretation of cardiopulmonary exercise testing is encouraged.

3 Interpretation of static and dynamic pulmonary function test.

4 Interpretation of radiological findings of common pulmonary diseases.

5 Interpretation of electrodiagnostic studies (NCS, EMG) for common neurological conditions. Performance of these electrodiagnostic studies is encouraged.

6 Performance and interpretation of urodynamic studies.

7 Interpretation of video fluoroscopy swallowing study and fibreoptic-endoscopic examination of swallowing.

8 Performing chemo-denervation with Botulinum toxin or other neurolytic drugs with or without ultrasonogram or EMG guidance.

9 Interpretation of Dual Energy X-ray Absorptiometry (DXA) scan and Fracture Risk Assessment Tool (FRAX) score.

10 Performance and interpretation of musculoskeletal ultrasonogram of major joints and soft tissue for diagnostic and guided therapeutic intervention are encouraged. Preferably skills in musculoskeletal ultrasonogram of shoulder & knee joint and injection therapy of the knee joint are encouraged.

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 Electronic devices installed with literature search engines and online resources including e-journal & e-books in Rehabilitation for clinical management and research.

2.5 Case conferences, in-service training programs and continuous quality improvement.

RESPIRATORY MEDICINE

I) OBJECTIVES

1 To provide a broad training and in-depth experience at a level sufficient for trainees to acquire professional, clinical and procedural competence required of a specialist in Respiratory Medicine.

2 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.

3 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 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:

A 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.

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

III) CONTENTS

(1) Knowledge and Professional Competency

Upon completion of the specialist training, trainees in respiratory medicine are expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians, as well as being able to demonstrate a satisfactory standard of knowledge in respiratory medicine as described below:

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

Additional knowledge in the following in relation to Respiratory Medicine is desirable, subject to availability of training facilities

- Palliative medicine
- Microbiology
- Pathology
- Immunology
- Cellular biology
- Molecular medicine
- Anaesthesia
- Lung volume reduction surgery
- Video assisted thoracic surgery
- Lung transplantation
- Infection control
- Pulmonary oncology

(2) Clinical and Procedural Competencies:

2.1 The following clinical skills should have been acquired at training completion:

(a) Ability to manage common respiratory symptoms, including cough, dyspnoea, haemoptysis and chest pain

(b) Ability to manage respiratory emergencies

(c) Ability to provide pre-operative respiratory assessment and post-operative respiratory care for pulmonary and general surgery

(d) Application of Pulmonary rehabilitation (PR) in the management of chronic respiratory diseases

- Indications, assessment of the suitability and referral of patients for PR
- Ability to work with in a PR multidisciplinary team
- Ability to understand and describe physiological changes related to PR

(e) Ability to administer procedural sedation with the following knowledge and skill requirements:

- 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.

2.2 The following procedural skills should be acquired unless otherwise specified.

(a) 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 and Fractional Exhaled Nitric Oxide (FeNO)

(b) Exercise lung function tests (supervision and interpretation)

(c) 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 the HKCP.

(d) Thoracic ultrasonography, percutaneous needle lung aspiration and other USG- guided interventions

(e) Pleural tap and biopsy

(f) Chemical/autologous blood pleurodesis

(g) Intrapleural therapy for pleural infection

(h) Endotracheal intubation

(i) Mechanical ventilation including set-up, monitoring and weaning from commonly used modes

(j) Non-invasive ventilation and High Flow Nasal Cannula Therapy

(k) Central venous line insertion

(l) Arterial punctures and interpretation of arterial blood gas

(m) Chest imaging - interpretation of CXRs; interpretation of CT imaging for important respiratory diseases; and interpretation of other imaging results e.g. PET scan

(n) Bronchial challenge tests -- procedure and interpretation.

(o) Sleep studies and CPAP titration – indications, techniques of performing the tests and interpretation of results.

(p) Skin tests – tuberculin tests and atopy skin tests (indications, understanding and interpretation of the procedures)

(q) Rigid bronchoscopy -- indications and understanding of the procedure.

(r) Pleuroscopy --indications and understanding of the procedure.

Remark: The necessary training and experience for the performance of medical pleuroscopy can be acquired in the post-specialist status subject to the prevailing credentialing criteria under the HKCP.

(s) 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 the HKCP.

IV) INSTITUTIONAL REQUIREMENTS

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.

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, airway resistance and lung compliance.

b Sleep study

c. Bronchoscopy facilities, including fluoroscopy

d Radiology, including X-rays and ultrasound. Access to CT Scan, radionuclide scans and pulmonary angiograms should be available.

e Pathology, including exfoliative cytology

f Microbiology

g Clinical chemistry

h Haematology.

2.5 Regular medical audit procedures and 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 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 facilities that allows access to the scientific literature and computerized literature search systems.

b Space and education equipment including audiovisual aids, for clinical presentation.

RHEUMATOLOGY

I) OBJECTIVES

1 To provide a broad-based training and in-depth experience at a level sufficient to acquire professional and procedural competency that required for a specialist in Rheumatology

2 To acquire professional competency 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 12 months, with prior approval by the specialty board,

1.4 During the two-year training period, exposure to the following areas can be accredited up to a maximum of 3 months with prior approval by the specialty board

i. Laboratory medicine particularly Immunology

ii. One of the Rheumatology related specialties (Immunology & Allergy, Infectious disease, Genetics and genomics, Orthopaedic surgery)

iii. Radiology

iv. Nuclear medicine

v. Epidemiological surveys

vii. Clinical or basic research relevant to Rheumatology

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 of training in either Rheumatology or the broad-based specialty followed by 24 months of core training in the 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 an 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.

III) CONTENTS

(1) Knowledge and Professional Competency

Upon completion of the specialist training, rheumatology trainees are expected to have acquired the Generic Professional Competencies as stated in the Physician Training under the Hong Kong College of Physicians, as well as being able to demonstrate a satisfactory standard of knowledge in rheumatology as described below:

1 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, primary and secondary antiphospholipid syndrome, systemic sclerosis and related syndromes, Sjogren's syndrome, idiopathic inflammatory myopathies (IIM), systemic vasculitides 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 and medical conditions complicating rheumatic diseases

1.9 Autoinflammatory diseases (Adult onset Still's disease, IgG4 related disease, VEXAS syndrome etc)

1.10 Pharmacological and non-pharmacological therapies for rheumatological diseases.

1.11 Perioperative management in relation to surgical and orthopaedic intervention for rheumatological diseases and for patients using immunosuppressive agents including biologics.

1.12 Management of rheumatological diseases complicating pregnancy.

1.13 Osteoporosis including glucocorticoid induced osteoporosis

2. Ability to interpret immunological tests and have the knowledge of the clinico-histo-pathological correlations relevant to rheumatological disorders.

3. Familiarity with the interpretation and/or use of electrophysiological diagnostic tests.

4. Able to prescribe the appropriate physical methods used in the treatment of patients with musculoskeletal disorders.

5. Awareness of public funding for expensive drugs (e.g biologics) and how the resource is allocated

6. Be able to coordinate and collaborate with specialty nurses and allied health professionals in order to provide comprehensive care to patients with rheumatological diseases.

7. Ability to interpret skeletal and soft tissue radiographs and other imaging modalities, including CT, PET-CT, Dual Energy CT (DECT), MRI and Dual Energy X-ray Absorptiometry (DEXA) scan.

(2) Procedural Competency

2.1 Ability to perform bone marrow and muscle biopsy and offer post-procedural care and their pathological interpretations.

2.2 Ability to perform joint aspiration and injection techniques with or without ultrasound guidance.

2.2.1 Understand the indications and contraindications

2.2.2 Ability to perform and offer post-procedural care

2.2.3 Interpretation of the synovial fluid analysis

2.3 Ability to perform 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. Interpretation of

other ultrasound features in the following diseases:

2.3.1 Gout

2.3.2 Interstitial lung disease

2.3.3 Temporal arteritis (Giant cell arteritis)

2.4 Ability to perform and interpret nailfold video capillaroscopy images. Trainees should be able to differentiate normal from abnormal features.

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.

1.3 Obstetrics service

If a hospital does not provide obstetrics service, arrangement must be made for the trainees to be seconded to a hospital with obstetrics service for at least three months.

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 Affiliation with extended care facilities for physical rehabilitation.

2.7 Structured educational programme including teach-ins, journal clubs and grand rounds in rheumatology.

VI. 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 scores of the dissertation should be returned by the Assessors on or before 4 weeks prior to the examination date, so that in case one Assessor gives the Dissertation a FAIL score and the other Assessor gives it a PASS score, a third Assessor would have to be arranged. 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.

6 The following points should be considered by Specialty Boards on the required remedial training in candidates with failure marks of <90% of the section pass mark in BOTH sections of the Exit Assessment, with respect to the need of trainers or remedial training programs from another institution:
(a) whether the poor examination result was likely the result of suboptimal supervision and training, or the lack of training exposure in a certain area in that "parent" institution.
(b) whether a change to another trainer in that "parent" institution could be feasible and already considered helpful during the 12-month remedial training.
(c) whether that would be the second or more failures of the same candidate
(d) the examination track record of the parent institution in that specialty
(e) the feasibility of identifying another training centre to arrange the remedial training, which would necessitate staff exchanges
(f) A special remedial programme in another institution can be designed without the need of staff exchanges between institutions. Instead of being asked to do general ward rounds, medical outpatient clinics or overnight on-call duties, one can be asked to join specified activities with educational or training values, as specified by the Specialty Board. Mock viva examinations, tutorials or case discussions can also be arranged.
(g) Trainer from another centre might help to jointly supervise the "remedial dissertation" with a supervisor in the parent institution.

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 ONE electronic copy in word format 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/TRAINER (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 skills:

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 skills
Overall assessment ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10

Specific diagnostic/procedural skill

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 Progression of Professional Competencies - Trainer Assessment and Feedback to Trainee

1. Professional expertise
   a. Knowledge and its application in devising appropriate patient management plans

      _____

      _____

   b. Procedural skills _____

      _____

   c. Quality and safety (such as documentation quality, timeliness and appropriate involvements with seniors and specialists, informed consent, ability to recognize urgencies and set priorities etc.)

      _____

      _____

      _____

      _____

2. Communication skill _____

   _____

3. Team work _____
4. Professionalism, attitude, and ethics _____
5. Academic (participation in CME activities, teaching, research etc.)

   Conferences/Research/Publications (append details if necessary)

6. Miscellaneous (e.g service development and other administrative/managerial involvements, others _____
7. Additional comments

5 Overall assessment

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10

Additional Comments (if any) _____

Date of meeting with Trainee ___/___/___
(DD/MM/YY)

Trainee	**Supervisor/Trainer**	**Specialty Programme Director**
Name _____	Name _____	Name_____
Title _____	Title _____	Title _____
Signature _____	Signature_____	Signature _____
Date _____	Date _____	Date _____

Notes to Supervisors/Trainers:

1. The assessment / evaluation should be carried out at least once every 6 months.
2. The trainees' logbooks should be reviewed during the evaluation. The completed logbooks should be regularly assessed by the Programme Directors, as well as during Interim and Exit Assessment by the Panels.
3. Trainer must meet with Trainee to discuss and provide feedback on the Trainee's performance and progress. The assessment and feedback by Trainer to Trainee serve a formative objective, aiming to help the Trainee progress effectively in the Physician Training Programme by identifying the strengths and weaknesses on the part of the Trainee, and highlighting gaps in the training curriculum that the Trainee needs to work on. A copy of the evaluation report can be provided to the Trainee.
4. Details of the requirements in Generic Professional Competencies in Physician Training can be found in the College Guidelines on Postgraduate Training in Internal Medicine ((7th edition). Website address: http://www.hkcp.org

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						
$\frac{(CR1+CR2+S)}{3}$ =								

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 (mm/yy)	MRCP/ HKCPIE (mm/yy)	Basic Physician Training			Date of Starting Higher Physician Training (mm/yy)	Concurrent Training		Overall Score	Assessment Result		
				From (mm/yy)	To (mm/yy)	Duration		Yes (specify Specialty)	No (Specify Fellowship of other Specialty)		Pass	Bare Fail	Fail

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 _____

Result (pass/fail) _____

Comment _____

_____

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 _____