Hong Kong Academy of Medicine position paper on postgraduate medical education 2023

HY So[1], FHKAM (Anaesthesiology), **Philip KT Li**[2], FHKAM (Medicine), **Paul BS Lai**[3], FHKAM (Surgery),
Alexander CL Chan[4], FHKAM (Pathology), **Karen KL Chan**[5], FHKAM (Obstetrics and Gynaecology), **TM Chan**[6], FHKAM (Medicine),
David VK Chao[7], FHKAM (Family Medicine), **SN Chiu**[8], FHKAM (Psychiatry), **KM Chu**[9], FHKAM (Surgery),
KY Ho[10], FHKAM (Dental Surgery), **Hugh Simon HS Lam**[11], FHKAM (Paediatrics), **CK Law**[12], FHKAM (Radiology),
SW Law[13], FHKAM (Orthopaedic Surgery), **CM Ngai**[14], FHKAM (Otorhinolaryngology), **FC Pang**[15], FHKAM (Community Medicine),
Clement CY Tham[16], FCOphthHK, FHKAM (Ophthalmology), **Clara WY Wu**[17], FHKAM (Emergency Medicine),
Gilberto KK Leung[18] *, FHKAM (Surgery)

[1] Educationist, Hong Kong Academy of Medicine / President, The Hong Kong College of Anaesthesiologists, Hong Kong SAR, China
[2] Vice-President (Education and Examinations), Hong Kong Academy of Medicine, Hong Kong SAR, China
[3] Immediate Past Vice-President (Education and Examinations), Hong Kong Academy of Medicine, Hong Kong SAR, China
[4] President, The Hong Kong College of Pathologists, Hong Kong SAR, China
[5] President, The Hong Kong College of Obstetricians and Gynaecologists, Hong Kong SAR, China
[6] President, Hong Kong College of Physicians, Hong Kong SAR, China
[7] President, The Hong Kong College of Family Physicians, Hong Kong SAR, China
[8] President, The Hong Kong College of Psychiatrists, Hong Kong SAR, China
[9] President, The College of Surgeons of Hong Kong, Hong Kong SAR, China
[10] President, The College of Dental Surgeons of Hong Kong, Hong Kong SAR, China
[11] President, Hong Kong College of Paediatricians, Hong Kong SAR, China
[12] President, Hong Kong College of Radiologists, Hong Kong SAR, China
[13] President, The Hong Kong College of Orthopaedic Surgeons, Hong Kong SAR, China
[14] President, The Hong Kong College of Otorhinolaryngologists, Hong Kong SAR, China
[15] President, Hong Kong College of Community Medicine, Hong Kong SAR, China
[16] Immediate Past President, The College of Ophthalmologists of Hong Kong, Hong Kong SAR, China
[17] President, Hong Kong College of Emergency Medicine, Hong Kong SAR, China
[18] President, Hong Kong Academy of Medicine, Hong Kong SAR, China

* Corresponding author: gilberto@hku.hk

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Introduction

The Hong Kong Academy of Medicine (HKAM) is committed to promoting the development of postgraduate medical education (PGME) and continuing medical education (CME). In 2010, HKAM published a position paper outlining the necessary reforms to modernise PGME.[1] Progress has been made in areas such as defining core competencies, incorporating communication skills into specialist training, standardising training programmes, and implementing comprehensive assessments. An Education Office, operated by The Hong Kong Jockey Club Innovative Learning Centre for Medicine, has been established under the HKAM Education Committee to support the development of PGME.

As HKAM celebrates its 30th Anniversary, we aim to build upon the foundation established in the 2010 Position Statement by embracing new opportunities and adapting to the evolving professional landscapes of medical education and healthcare delivery.[2] In light of this, HKAM organised the Tripartite Medical Education Conference (MEC) 2023 and the Strategic Planning Retreat on Education and Training 2023 to evaluate existing frameworks and formulate actions for the future.

The Tripartite MEC 2023, themed 'Actualising the Curriculum Continuum', brought together local and international medical experts to share experiences and insights on optimal alignment of postgraduate and undergraduate education. In the roundtable discussion on 14 January 2023, titled 'Ten Years Down the Line', four distinguished speakers discussed critical topics including the challenges faced by young doctors; the importance of quality assurance, role modelling, and demographic shifts; the need for trust in the healthcare system; the impacts of technology and data sciences on healthcare delivery; the concept of mandatory teaching skills instruction for trainees; and the importance of resilience and well-being among young doctors.[3]

The Strategic Planning Retreat on Education and Training, held on 4 March 2023, aimed to establish directions for HKAM in terms of fulfilling its fundamental responsibilities and functions within PGME and CME.

This position paper represents an update and extension of the 2010 Position Statement based on discussions arising from the Tripartite MEC 2023, the results of a survey conducted before and discussed during the Retreat, and relevant literature.[4] The Figure illustrates the framework of the recommendations made in this position paper.

Postgraduate medical education

Postgraduate medical education traditionally focused on clinical competency alone. However, there is increasing recognition that modern professional training must prepare doctors to adapt to rapid advancements in medicine, understand patient perspectives, appreciate other professionals' skills, and work effectively in teams.[2,5] Therefore, training for 'Hong Kong's Specialist' must encompass the seven domains of competencies defined by HKAM.[1]

Postgraduate medical education has traditionally been time-based, but there are compelling reasons to move towards competency-based medical education (CBME),[6] which focuses on specialists' abilities and organises competencies based on societal and patient needs.[2] While the 2010 Position Statement recommended a combination of competency-based and time-based training, the current view is that time should be regarded as a resource for learning, rather than the basis for competency progression.[2,5] Therefore, instead of a combination of time-based and CBME approaches, the focus should be on advancing towards CBME as the primary approach.

Recommendation 1: Colleges should continue to advance specialist training towards CBME.

Advancement towards CBME presents challenges that can be addressed through four key strategies.[5,7] First, CBME is a complicated concept that significantly differs from current practice. Effective communication with stakeholders is essential to engage them in this resource-intensive change. Second, CBME requires trainers to master teaching skills that may not be well-known. Faculty development programmes (FDPs) are crucial. Third, the alignment of learning and assessment methods with CBME approaches requires educational standards and procedures to be redesigned. Finally, PGME is a relatively new discipline with limited academic presence. Knowledge specific to our context should be generated to guide implementation.[2]

Recommendation 2: HKAM and the Colleges should undertake the following actions to implement CBME.

(1) develop and implement a comprehensive communication plan through appropriate channels to effectively engage with each stakeholder segment; (2) design and deliver FDPs that empower Fellows to master the teaching and facilitation skills required for CBME; (3) redesign training and assessment
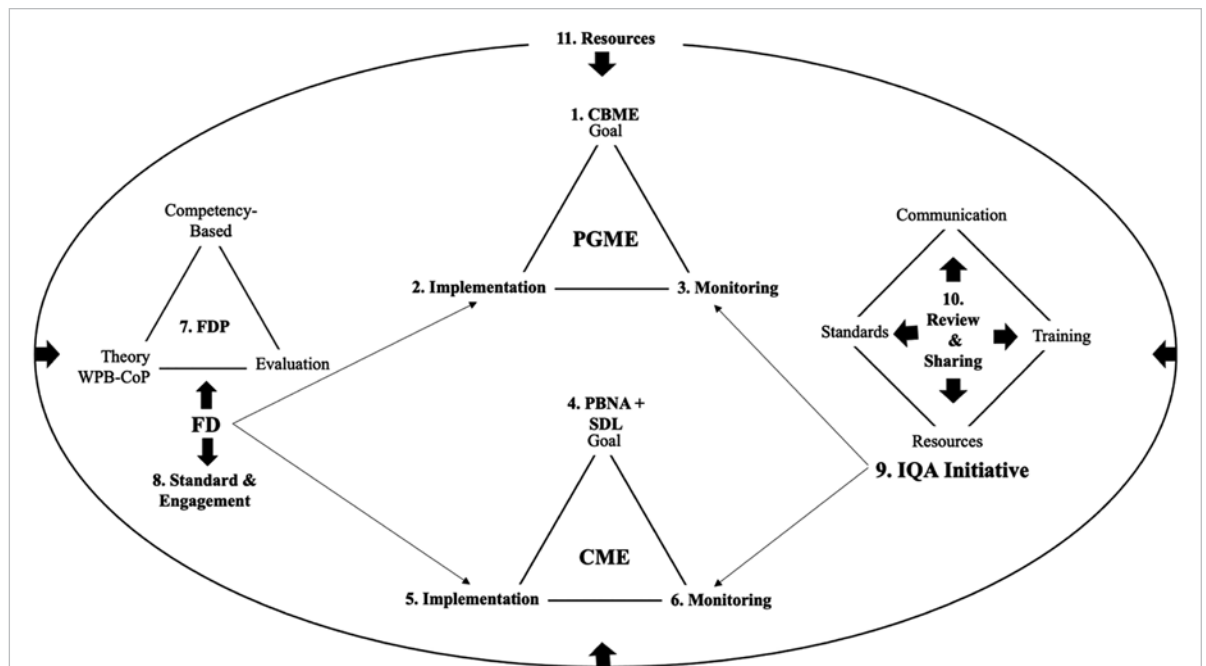

FIG. Framework of recommendations

Abbreviations: CBME = competency-based medical education; CME = continuous medical education; CoP = community of practice; FD = faculty development; FDP = faculty development programme; IQA = internal quality assurance; PBNA = practice-based needs assessment; PGME = postgraduate medical education; SDL = self-directed learning; WPB = workplace-based

standards and procedures to align with the principles and approaches of CBME; and (4) support and participate in research activities that advance the field of PGME and generate evidence concerning CBME benefits that can be used to engage stakeholders.

Competency-based medical education is a constantly evolving approach that focuses on achieving better healthcare through effective medical education.[6] Regular evaluations are necessary to ensure progress and continuous improvement.

Recommendation 3: HKAM and the Colleges should establish a mechanism to regularly evaluate CBME implementation and impact. A timeline for this process should be implemented and external reviewer involvement should be considered.

Continuing medical education/ continuous professional development

Because our profession is constantly advancing, specialists must engage in lifelong learning, known as continuing medical education/continuous professional development (CME/CPD).[8] The Institute of Medicine states that effective CME/CPD should prepare healthcare professionals to provide patient-centred care, work in teams, use evidence-based practice, apply quality improvement, and utilise health informatics.[9] However, current CME practices, which mainly involve didactic activities that are not always related to patient outcomes, have demonstrated limited impacts on physician practice.[8] Thus, there is a need for transformation. Continuing medical education/continuous professional development can improve performance and patient outcomes if it is driven by practice-based needs assessment, is ongoing, uses interactive learning methods, and is contextually relevant.[10]

Recommendation 4: HKAM and the Colleges should promote lifelong learning driven by practice-based needs assessment and self-directed learning.

The transformation of CME/CPD faces several challenges. First, stakeholders are unfamiliar with the new paradigm; effective communication is essential to engage them. Second, many learners currently view CME/CPD as a mere requirement for specialist registration rather than an opportunity for lifelong learning. This motivational problem requires both engagement efforts and changes in the CME system. Third, there is a need to empower Fellows and CME/CPD providers to use methods that support adult learning, and online learning is a particularly promising method for this learning.[11] Finally, many learners lack the skills and personal attributes needed for self-directed learning; they require support to acquire these abilities.[12]

Recommendation 5: HKAM and the Colleges should undertake actions to transform CME/CPD, including:

(1) devise and deliver a comprehensive communication plan to effectively engage all stakeholders; (2) reform the structure and redesign the standards and procedures of CME requirements and accreditation to align with the new CME paradigm; (3) design and implement FDPs to empower Fellows and possibly other CME providers to use learning methods which support adult learning; (4) nurture the capacities of learners to practise self-directed learning; (5) support the development of online learning through the provision of technology and relevant training in educational practices; and (6) establish partnerships with overseas CME/CPD accreditation bodies.

The process of transforming CME/CPD will be a long journey that requires regular evaluation to ensure forward movement in the correct direction.

Recommendation 6: HKAM and the Colleges should establish a mechanism and regularly evaluate the progress of CME transformation.

Faculty development

The development of PGME and CME relies on clinical educators who are equipped with modern medical education knowledge and skills. This reliance highlights the critical need for faculty development.[13]

A generic FDP that can be adapted to meet specific needs of each College would be beneficial. The objectives of the generic FDP should not be limited to teaching skills; they should also focus on motivating Fellows to participate in education, emphasise professional identity, and build leadership skills for Fellows with leading roles.[14,15] The generic FDP should be competency-based, be driven by sound education theories, promote workplace learning, foster the development of communities of practice, and be evaluated for continuous improvement.[13-15]

Recommendation 7: HKAM and the Colleges should enhance teaching skills, motivate participation in educational activities, and strengthen leadership in medical education through the introduction of FDPs.

The Academy should create competency-based curricula for FDPs that can be implemented for clinical teachers at various levels, according to their respective roles and responsibilities. Faculty development programmes should comprise induction courses or workshops based on theories of situated learning, experiential learning, and adult learning. Additionally, opportunities for workplace

learning and mutual learning should be provided through communities of practice involving clinical educators. Moreover, HKAM and the Colleges should establish mechanisms to evaluate FDPs using both quantitative and qualitative methods.

The statuses of trainers should be enhanced to engage Fellows in teaching activities. The Academy should establish a benchmark, which can be customised by each College, for trainer accreditation and define trainers' expected teaching responsibilities. Additionally, HKAM and the Colleges should explore ways to acknowledge Fellows' contributions to education. For example, training activities should be eligible for credit towards CME/CPD.

Recommendation 8: HKAM and the Colleges should develop a set of guidelines for trainers, a system for certifying trainers, and strategies to cultivate a distinguished image of clinical educators.

Quality assurance

As providers of PGME and CME, HKAM and the Colleges are responsible for ensuring quality and must be accountable for the training they provide.[16] However, quality assurance is not widely regarded as a priority; greater communication and encouragement are needed.

We focus on internal quality assurance (IQA), which involves implementing activities and processes that control, monitor, improve, and enhance educational quality.[17] The IQA cycle consists of three steps: defining measurement parameters, judging quality based on collected data, and taking actions for improvement.[17]

The World Federation for Medical Education has defined standards in eight areas for PGME,[18] two of which were highlighted during the Retreat: trainer quality and assessments. Evaluation of the psychometric properties of assessments can be supported by psychometricians and appropriate software; training is necessary to interpret findings. Qualitative methods are often used to collect valuable data for improvement purposes. However, Fellows may require training to become familiar with these methods.

Next, criteria and standards can be established to interpret the collected data and assess the quality of education.[17] Finally, actions taken for improvement require the assignment of responsibility as well as the development of a culture of continuous improvement and a sense of ownership and commitment among learners and staff.[17,19]

Recommendation 9: HKAM and Colleges should implement a structured quality assurance initiative by taking the following steps:

(1) develop and execute a comprehensive communication strategy that reaches each stakeholder segment through appropriate channels; (2) establish quality assurance standards; (3) provide training to Fellows responsible for quality assurance on quality assurance fundamentals, standard establishment, quality metric interpretation, and qualitative evaluation methods; and (4) allocate resources to facilitate quality assurance initiatives.

Recommendation 10: HKAM and Colleges should create a mechanism for Colleges to regularly review and share their experiences in quality assurance and improvement activities.

For IQA to yield helpful results, the assessment tasks must be integrated into the Colleges' daily operations and executed in an organised and structured manner.[20] The Academy and the Colleges should scrutinise their quality assurance procedures to ensure compliance with these conditions.

Recommendation 11: HKAM should liaise with the Government, the Hospital Authority, and other funding sources to secure resources that support advancement towards CBME, transformation of CME/CPD, faculty development, and quality assurance. HKAM should work in partnership with the Hospital Authority to identify training needs for the whole territory, rather than the Hospital Authority alone.

Successful implementation of the above 11 recommendations will require significant resource investment. Both Fellows and doctors in training will need to devote considerable time and effort towards these aspirations. However, because of staffing limitations and heavy clinical workload, it may be challenging to assign the necessary personnel and accomplish the recommended actions. The Academy must liaise with the Government and the Hospital Authority to obtain their support.

There are also needs for other resources such as medical education expertise, information technology, and secretarial assistance. Considering the staffing limitations, it is essential to explore the possibility of utilising technology. E-learning can be developed that allows trainers to focus on workplace-based learning activities rather than information transmission. In addition, the Academy should seek potential funding resources to support these initiatives.

Conclusion

The recommendations expressed in this position paper are the products of intense deliberations involving all Colleges and the Education Office of HKAM, as well as leaders from the two medical schools and the Hospital Authority. The progressive

implementation of these recommendations is expected to provide an evidence-based and effective framework of postgraduate training in the context of new opportunities and challenges arising from changes in professional landscapes, healthcare delivery models, and societal needs.

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