

HKJC ILCM Simulation Trainers Certification Programme

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Prepared by HKJC ILCM Simulation Instructor Credentialing Working Group	Approved by HKJC ILCM Advisory Committee
Updated by HKJC ILCM Simulation Trainers Certification Subcommittee	

1. Background

The Hong Kong Jockey Club Innovative Learning Centre for Medicine (HKJC ILCM)'s Simulation Faculty Development and Simulation Trainers Certification Programme is part of HKJC ILCM mission to ensure the quality of innovative simulation learning and research to enable our healthcare professionals to deliver safe and quality patient care.

This Simulation Trainers Certification Programme is a continuous quality improvement programme developed under HKJC ILCM for HKJC ILCM courses. In future, the programme may be open to other trainers to join on a voluntary basis.

2. Objective

- 2.1. To recognise the simulation trainer's specialised knowledge, skills and excellence in practice.
- 2.2. To enhance the best practices for simulation trainer.
- 2.3. To provide peer review and censorship for personnel practicing simulation-based education.
- 2.4. To ensure quality assurance of the provision of healthcare simulation-based training.

3. Scope

3.1. This Simulation Trainers Certification Programme provides recognition of the applicant as a qualified simulation trainer in healthcare under the HKAM's HKJC ILCM.

4. Definitions

4.1. Simulation-based Medical Learning

4.1.1. Simulation-Based Medical Learning is an educational activity that utilises simulation to replicate clinical context to achieve educational goals through experiential learning. Unlike direct clinical instruction, simulation education requires a specialised skillset. Healthcare simulations are expected to serve the purposes of education, assessment, research and health system integration for patient safety.

4.2. Simulation-based Education Trainer

4.2.1. Simulation Trainers are those who possess the required training and qualification approved by HKJC ILCM, and therefore credentialed with the required capabilities to facilitate immersive simulation courses and debrief the learners to provide an effective learning experience. As part of the maintenance of certification process, they must also fulfil the Continuing Medical Education and Continuous Professional Development (CME/CPD) requirements over a 3-year cycle.

4.2.2. Simulation trainers must satisfy the minimum requirements including (1) understand the principles of simulation-based education, (2) understand the principles of adult learning and experiential learning theories, (3) able to create a safe learning environment to engage participants in the simulation experience, (4) has knowledge of non-technical skills in patient management, (5) ability to facilitate small group learning and provide feedback, (6) have the skills to facilitate immersive simulation and apply knowledge of different debriefing strategies.

4.2.3. A qualified immersive simulation trainer may be categorised as Category B or C. (Refer to Appendix I)

4.3. Certification

4.3.1. Certification is a time-limited, renewable and voluntary process of confirming the knowledge, skills and abilities essential to qualified simulation trainers. It indicates a level of competence and educational expertise in the area of healthcare simulation education.

4.4. Category of Trainers

- 4.4.1. Under the Simulation Trainers Certification Programme of HKJC ILCM, there are three categories of trainers depending on the formal training obtained by the trainer and approved by the HKJC ILCM. (Refer to Appendix I)
- 4.5. Best Practices for Simulation Trainer
 - 4.5.1. Subject Qualification
 - 4.5.1.1. Trainer must be recognised by healthcare or educational organisation as a proficient practitioner of the subject to teach.
 - 4.5.1.2. Trainer must be competent to apply the methodology of skills-based teaching or simulation-based learning and teaching e.g. to run and teach a simulation scenario.
 - 4.5.1.3. In addition, higher level trainer (Category C) will be able develop curriculum, design scenario and lead a simulation based medical learning programme.
 - 4.5.2. Continuous Quality Improvement
 - 4.5.2.1. Trainer must maintain an ongoing commitment to simulation-based medical learning and develop the competency in simulation trainer role by peer review and continuous medical education activities.
 - 4.5.3. Curriculum Integration
 - 4.5.3.1. Trainer must be able to facilitate the complement of simulation based medical learning into clinical education.
 - 4.5.3.2. Trainer must plan, schedule and focus on helping learner to achieve both general and specific learning objectives from the curriculum.
 - 4.5.4. Simulation Fidelity
 - 4.5.4.1. Trainer must be able to utilise medical simulation with a close match of education goals with simulation tools. (Low fidelity, high fidelity and multi-mode)
 - 4.5.5. Deliberate Practice and Mastery Learning
 - 4.5.5.1. Trainer must be able to use deliberate practice model to shape, refine and maintain learner knowledge, skills and attitudes.
 - 4.5.5.2. Trainer must accomplish all educational objectives in a consistent manner.
 - 4.5.6. Skill Acquisition and Maintenance
 - 4.5.6.1. Trainer must promote the procedural, professional, cognitive and team related skills acquisition and maintenance
 - 4.5.7. Feedback and Outcome Measurement
 - 4.5.7.1. Trainer must be competent in feedback and be able to shape learning by isolating 3 of its core elements: varieties (formative and summative), sources (trained trainer, simulation device and video or digital recordings) and impact.
 - 4.5.7.2. Trainer must be able to use the evaluation measurement (observational ratings, learner responses and haptics) to make accurate assessments about learner.
 - 4.5.8. Transfer to Practice
 - 4.5.8.1. Trainer must enhance learner skills acquired in simulation-based medical education to settings generalise to real clinical settings and

improve patient outcomes.

5. Credit Point System

- 5.1. The Simulation Trainers Certification Programme is based on a "Credit Point System" which allocates points for the approved training time according to the Simulation Programme Registry under HKJC ILCM Quality Management Subcommittee.
- 5.2. For the purpose of continuous education and quality assurance, the Credit Points are classified into:
 - 5.2.1. Active teaching activity relevant to simulation-based education
 - 5.2.2. Accredited CME/CPD activity
- 5.3. Cycle length of each period of review is three years.
- 5.4. Each cycle will start on 1st January on a three-year basis. Each trainer can enter the review cycle through the enrolments on either 1st January or 1st July on each calendar year and the Credit Points will be calculated on a pro rata basis.
- 5.5. The minimum CME/CPD requirement is 90 Credit Points in a 3-year cycle. Credit Points accumulated in excess of the requirement for one cycle cannot be carried forward to the next cycle.
- 5.6. Active teaching activity
 - 5.6.1. FIVE (5) Credit Points of active teaching activity relevant to simulation-based education is awarded to ONE (1) session of approved training time under the Simulation Programme Registry. ONE (1) session of approved training time is equivalent to a half-day training session. The maximum approved training time for individual course should not be more than TWO (2) sessions / days.
 - 5.6.2. **Minimum of FIFTY (50) Credit Points of active teaching activity under the intended trainer category** in each cycle is mandatory.
- 5.7. Accredited CME/CPD Activity
 - 5.7.1. Peer Review Exercise
 - 5.7.1.1. It is the activity to examine and evaluate the best practice of a simulation trainer.
 - 5.7.1.2. **Minimum of TWO (2) Peer Review Exercises** in each cycle is mandatory.
 - 5.7.1.3. The exercise can be in the form of:
 - Peer review by fellow trainers who observe in the teaching activity / debriefing exercise **OR**
 - Video Debriefing Exercise
 - 5.7.1.4. Peer Review Exercise is subject to the approval and assessment by HKJC ILCM Simulation Trainers Certification Subcommittee.
 - 5.7.1.5. TEN (10) Credit Points are awarded to each Peer Review Exercise on a course basis, i.e. only one exercise can be granted Credit Point every time under the same course.
 - 5.7.2. Conference on Simulation and/or Healthcare Education

- 5.7.2.1. ONE (1) Credit Point is awarded to ONE (1) hour of approved conference participation as an attendee. The maximum Credit Points for individual conference should not be more than FIVE (5) Credit Points per day.
- 5.7.3. Workshop on Simulation and/or Healthcare Education
 - 5.7.3.1. ONE (1) Credit Point is awarded to ONE (1) hour of approved workshop participation as an attendee. The maximum Credit Points for individual workshop should not be more than TEN (10) Credit Points per day.
- 5.7.4. Chairing/Presenting at Simulation, Medical and Healthcare Education Conference
 - 5.7.4.1. Five (5) Credit Points are awarded to each session.
- 5.7.5. Developing Simulation-based Education Course
 - 5.7.5.1. Development of Simulation-based Education Course is accepted as a form of CME/CPD activity.
 - 5.7.5.2. Ten (10) Credit Points are awarded to each course curriculum.
- 5.7.6. Research and Publication
 - 5.7.6.1. Ten (10) Credit Points are awarded to each relevant publication with prior approval by HKJC ILCM Simulation Trainers Certification Subcommittee.
- 5.7.7. Self-study
 - 5.7.7.1. Self-study is only accredited with prior approval by HKJC ILCM Simulation Trainers Certification Subcommittee.
 - 5.7.7.2. One-hour (1) of approved self-study is awarded half (0.5) Credit Point.
 - 5.7.7.3. The maximum Credit Points for self-study should not be more than five (5) Credit Points per cycle.
- 5.7.8. Other related Simulation-based Education Activities
 - 5.7.8.1. Participation in other professional development activities that can facilitate the practice of simulation trainer is accepted as a form of CME/CPD.
 - 5.7.8.2. Credit Point awarded is going to be approved by HKJC ILCM Simulation Trainers Certification Subcommittee.

6. Procedure

- 6.1. Application should be submitted through HKJC ILCM Simulation Trainers Certification Subcommittee website.
- 6.2. Application will be processed at once, and it normally takes 14 working days to complete.
- 6.3. Entry Requirements
 - 6.3.1. Provisional Trainership
 - 6.3.2. Any trainer new to the intended trainer category who has:
 - 6.3.2.1. Completed formal training course(s) to demonstrate his / her competence in the respective skillsets stated for the intended trainer category.
 - 6.3.2.2. More than 3-year experience in simulation training (for Category C applicants ONLY).

6.4. Full Trainership

6.4.1. Route 1: (for transition from provisional to full trainership)

- Any trainer who has completed and achieved the certification criteria of the provisional trainership for the corresponding trainer category

6.4.2. Route 2: (for revalidation)

- Any trainer who has fulfilled the certification criteria for the corresponding trainer category in the previous 3-year review cycle or remedial programme for the non-compliance

6.4.3. Route 3: (for 'Grandfathering' Provisions)

- Any trainer who has fulfilled the requirement to apply for 'Grandfathering' Provisions within the initial grace period. This route will only be opened for applications within the first year after introduction of the programme.

6.5. First-time enrolment in any trainer category

6.5.1. Trainers should apply for provisional trainership and fulfil the following requirements within **TWELVE** (12) months:

6.5.1.1. A minimum of **TWENTY** (20) Credit Points of active teaching activity, under the intended trainer category, **AND**

6.5.1.2. **TWENTY** (20) Credit Points of Peer Review Exercise.

6.5.2. During the provisional trainership, simulation training activity should be conducted under the supervision of at least **ONE** credential trainer of the intended trainer category.

6.5.3. On completion of the requirements stated for provisional trainership, trainer should enter the review cycle for the intended full trainership through the enrolments on either 1st January or 1st July on each calendar year (whichever is earlier) and the Credit Points will be calculated on a pro rata basis. Trainer can opt to enter the Simulation Trainers Certification Programme for full trainership in next review cycle, only if the earliest enrolment date falls on the last **SIX** (6) months of the same review cycle.

6.6. Revalidation under the same trainer category

6.6.1. Trainers should fulfil the following requirements within the 3-year cycle:

6.6.1.1. A minimum of **NINETY** (90) Credit Points, **AND**

6.6.1.2. **FIFTY** (50) Credit Points of approved active teaching activities under the intended trainer category, **AND**

6.6.1.3. **TWO** (2) approved Peer Review Exercises.

6.7. 'Grandfathering' Provisions

6.7.1. A Practice Track Pathway for certification will be open for application within the initial grace period of the Simulation Trainers Certification Programme. The 'Grandfathering' Provisions are subjected to the final decision by HKJC ILCM Simulation Trainers Certification Subcommittee.

6.7.2. Current faculties bearing the qualifications stated for the corresponding trainer category are encouraged to apply for 'Grandfathering' Provisions under the Practice Track Pathway by submitting:

6.7.2.1. A current CV.

6.7.2.2. Documentation of **FIVE** active simulation training activities within the past 3 years.

- 6.7.2.3. Supporting document(s) for the formal training courses to demonstrate their competence in the respective skillsets stated for the intended trainer category.
- 6.7.2.4. Supporting document(s) to certify the years of experience in simulation training (for Category C applicants ONLY).
- 6.7.2.5. Any additional information of importance to support their request for certification.

7. Documentation

- 7.1. Trainers should register under the HKJC ILCM Simulation Trainers Certification Programme.
- 7.2. Trainers should fulfil the respective simulation trainer category skillsets
- 7.3. Trainers should submit the Credit Point Application to HKJC ILCM within twelve months on completion of each active training activity or quality assurance activity.
- 7.4. The Credit Points accumulated by trainers will be reviewed annually.

8. Certification

- 8.1. Trainers who accumulate more than the required minimum Credit Points will be eligible for the issue of a Certificate by HKJC ILCM to certify that they have achieved a satisfactory level of active simulation training and quality assurance activities over the period of review.

“The Hong Kong Jockey Club Innovative Learning Centre for Medicine certifies that _____ is credentialed with the capabilities to facilitate clinical skills-based courses and debrief the learners to provide an effective learning experience as a Category A trainer.”

OR

“The Hong Kong Jockey Club Innovative Learning Centre for Medicine certifies that _____ is credentialed with the capabilities to facilitate immersive simulation courses and debrief the learners to provide an effective learning experience as a Category X trainer.”

Non-compliance

- 8.2. Non-remediable non-compliance means failed the CME/CPD activity under the Credit Point System **AND** failure to achieve the minimum requirement for active teaching activities and Peer Review Exercises. Full trainership will be suspended and trainers need to apply for the provisional trainership in the next review cycle.
- 8.3. Remediable non-compliance refers to being able to achieve the minimum active teaching activities and Peer Review Exercises but failure to achieve to the minimum Credit Points in the review cycle.

- 8.4. If a trainer does not fulfil the certification criteria in a cycle, the trainer must engage in a remedial programme.
- 8.5. The trainer must achieve the remaining Credit Points within **ONE** year.
- 8.6. The next cycle should follow immediately after the previous cycle without any break, i.e. the trainer will have to undergo normal and remedial active training activity at the same time.
- 8.7. For remediable non-compliance, if the trainer cannot complete his / her remedial by the deadline, credential trainership will be suspended.
- 8.8. Reinstatement of credentialed trainership shall be subject to the review of the HKJC ILCM Simulation Trainers Certification Subcommittee.

9. Reference Document

- 9.1. Simulated Video Debriefing Programme (HKJCILCM/QM-2017001-G-V1)
- 9.2. Peer Review Exercise for Simulation Trainer (new guideline by Quality Management Subcommittee)
- 9.3. Position Statement of Simulation Based Education
- 9.4. Assessment of Simulation Course Framework (amendment by Quality Management Subcommittee)

10. Appendix

- 10.1. Appendix I Category of Trainers
- 10.2. Appendix II References
- 10.3. Appendix III Frequently Asked Question (FAQ)

Appendix I Category of Trainers

Trainer Category	Description	Skillsets to be demonstrated:
A	Credentialed to facilitate clinical skill teaching	<p><u>Education Principles</u> Understand the principles of small group teaching. Understand the principles of adult learning.</p> <p><u>Debriefing Strategies</u> Conduct demonstration of clinical skills. Facilitation of small group learning. Competency in providing positive feedback.</p>
B	Credentialed to facilitate simulation course with fully immersive simulation scenario and non-technical skill teaching	<p><u>Education Principles</u> Understand the principles of small group teaching. Understand the principles of simulation-based education. Understand the range of simulation modalities. Understand the principles of adult learning and experiential learning theories. Create a safe learning environment to engage participants in the simulation experience. Master the non-technical skills in patient management.</p> <p><u>Debriefing Strategies</u> Conduct demonstration of clinical skills. Facilitation of small group learning. Competency in providing positive feedback. Understand different debriefing strategies including its applications, merits and limitations.</p>

Trainer Category	Description	Skillsets to be demonstrated:
C	<p>Credentialed to facilitate simulation course with fully immersive simulation scenario and non-technical skill teaching. And Credentialed to perform course and scenario planning, developing and execution.</p>	<p><u>Minimum of 3 years Simulation Experience</u></p> <p><u>Education Principles</u> Understand the principles of small group teaching. Understand the principles of simulation-based education. Understand the principles of adult learning and experiential learning theories. Understand the range of simulation modalities. Create a safe learning environment to engage participants in the simulation experience. Master the non-technical skills in patient management.</p> <p><u>Debriefing Strategies</u> Conduct demonstration of clinical skills Facilitation of small group learning Competency in providing positive feedback. Understand different debriefing strategies including its applications, merits and limitations. Master the strategies for managing challenging behaviours during a debriefing.</p> <p><u>Course / Scenario Design and Implementation</u> Master of fully immersive simulation course and scenario planning, developing and execution. Understand education curriculum design. Perform basic technical operation of the console operation and simulator.</p> <p><u>Simulation Applications</u> Integrate simulation design and teaching principles into different curriculum. Understand the different applications of simulation.</p>

Appendix II References

1. Healthcare Simulation Credentialing – HPSN
https://www.hpsn.com/documents/1348/healthcare_simulation_credentialing.pdf
2. Simulation for Quality Assurance in Training, Credentialing and Maintenance of Certification. Steadman RH1, Huang YM.Best Pract Res Clin Anaesthesiol. 2012 Mar;26(1):3-15. doi: 10.1016/j.bpa.2012.01.002.
3. A Critical Review of Simulation-based Medical Education Research: 2003- 2009. William C. McGaghie, S Barry Issenberg. Medical Education 2010: 44: 50-63
4. Principles and Guidelines on Continuing Medical Education and Continuous Professional Development (CME/CPD), For Cycle 2017-19. Hong Kong Academy of Medicine.

Appendix III Frequently Asked Question (FAQ)

1. What is the HKJC ILCM Simulation Trainers Certification Programme?

This programme is developed to provide a structured process for the certification of a qualified Simulation-based Trainer in Hong Kong. The project is led by the Hong Kong Academy of Medicine's Hong Kong Jockey Club Innovative Learning Centre for Medicine, and supported by member Simulation Alliance Organisations including Hospital Authority, Department of Health, The Chinese University of Hong Kong, The University Hong Kong, Hong Kong Society for Simulation in Healthcare and Hong Kong Private Hospital Association.

2. What is the purpose of this exercise?

This exercise enhances healthcare simulation-based education through the identification of best practices and appropriate recognition of the training of Simulation Trainers within the healthcare community. It encourages continuous quality improvement of trainers, and provides a benchmark for teaching standard and quality among different simulation courses.

3. Why should I apply to join this Simulation Trainers Certification Programme?

As a qualified Simulation Trainer, your specialised knowledge, skills and excellence in practice will be acknowledged and recognised by joining this Simulation Trainers Certification Programme. The programme will set a minimum standard for trainers of simulation-based teaching within the healthcare community. Through the process of continuing practice and peer review, you will be able to continue to develop, maintain and strengthen your skills and best practices in medical simulation instruction.

4. Who should join this programme?

You should join the Simulation Trainers Certification Programme if you want to be recognised as a qualified Simulation Trainer in healthcare under the Hong Kong Jockey Club Innovative Learning Centre for Medicine (HKJC ILCM). By participating in this programme and having your name in the Simulation Programme Registry, you will be recognised a qualified trainer for medical simulation. You will be admitted to the register if you have completed an accredited trainer course and satisfied the CME/CPD requirements.

5. Which organisation will govern and be responsible for this Simulation Trainers Certification Programme?

The Simulation Trainers Certification Programme for simulation trainers in healthcare will be managed by HKJC ILCM. All the process, logistics and operational issues will be handled by the Simulation Trainers Certification Subcommittee of HKJC ILCM. Members from different disciplines and relevant participating organisations will be invited to join this Simulation Trainers Certification Subcommittee. The Simulation Trainers Certification Programme will be open to all healthcare simulation trainers from member organisations.

6. Is the certification recognised by other Organisation?

The certification is recognised by HKJC ILCM at present. All member Colleges of HKAM and member organisations of the Simulation Alliance are welcome to recognise this programme.

7. What do I have to do to apply?

You should submit your application through HKJC ILCM Simulation Trainers Certification Subcommittee website.

In order to qualify as a trainer, you should apply for provisional trainership and fulfil the following requirements within TWELVE (12) months:

- a. A minimum of TWENTY (20) Credit Points of active teaching activity, under the intended trainer category, AND
- b. TWENTY (20) Credit Points of Peer Review Exercise.

8. How can I maintain my name in the registry of qualified Simulation Trainers?

A Credit Point System allows trainers to achieve 90 credits over a three-year cycle in order to qualify and maintain in the Simulation Programme Registry. Credit Points may be accumulated through various teaching, training, and Continuing Medical Education and Continuous Professional Development (CME/CPD) activities. Each trainer can start his / her own 3-year cycle through the enrolments on either 1st January or 1st July on each calendar year.

9. Which Category of trainer do I belong?

There are three categories, namely A, B and C, under the Simulation Trainers Certification Programme, each of which has its specific skillset requirement. You should decide which category is most suitable for your teaching needs before you join the certification cycle. Category A is credential to facilitate clinical skill teaching. Category B is credential to facilitate simulation course with fully immersive simulation scenario and non-technical skill teaching. Category C is credential to facilitate simulation course with fully immersive simulation scenario and non-technical skill teaching, as well as to perform course and scenario planning, developing and execution.

10. What documents do I need to submit?

You need to submit supporting document(s):

- a. For the formal training courses to demonstrate your competence in the respective skillsets stated for the intended trainer category.
- b. To certify the years of experience in simulation training (for Category C applicants only).

11. How long do I need to wait before I receive a reply regarding my application?

Your application will be processed at once, and it normally takes 14 working days to complete.

12. Can the same CME/CPD Credits be counted for Medical Simulation as well as for my Specialty requirement?

Credit Point System is adopted for the purpose of continuous education. In general, same CME/CPD credits can be counted for Simulation CME/CPD as well as for your Specialty requirement. It is advised to contact individual medical specialty and healthcare discipline for clarification.

13. What is video-debriefing?

This is a Peer Review Exercise to facilitate continued improvement in debriefing skill of Simulation Trainers and to facilitate certified trainers to fulfil their credentialing need. The recommended procedure for the exercise can be referred to the document on

Simulated Video Debriefing Programme that is available at the HKJC ILCM website.

14. Should I join this programme if I am already a certified ACLS instructor or skill-based course trainer?

The HKJC ILCM Simulation Trainers Certification Programme offers a generic universal certification of the qualification of all simulation and skilled-based trainers. As a simulation course trainer, your specialised knowledge, skills and excellence in practice will be recognised. Through the process of peer review, best practices of simulation trainers will be strengthened. Your certification will assure a high quality and standard in the provision of simulation-based teaching within the healthcare community.

15. What are the CME/CPD activities I need to complete in order to qualify for Category C as compared to B and A?

For the purpose of continuous education and quality assurance, the Credit Points are classified into Active teaching activity relevant to simulation-based education and Accredited CME/CPD activity. Please refer to the lists of accredited CME/CPD activity at the Simulation Trainers Certification Programme link.