

## Emergency Medicine Residency Programme in Singapore—Where Are We at Since Inception?

Li Lee Peng,<sup>1</sup> MBBS (S'pore), FRCSEd (A&E), FAMS (Emerg Med), Shirley BS Ooi,<sup>2</sup> MBBS (S'pore), FRCSEd (A&E), FAMS (Emerg Med)

It has been 4.5 years since the Accreditation Council for Graduate Medical Education (ACGME-I) accredited competency-based emergency medicine residency programmes were started in July 2010 in Singapore.<sup>1</sup>

The transit from a time-based curriculum to a competency-based curriculum, which centres on the 6 ACGME-I core competencies of 'medical knowledge', 'patient care', 'professionalism', 'interpersonal and communication skills', 'systems-based practice', and 'practice-based learning and improvement', has led to a significant change in the curriculum and evaluation. In addition to passing high stake summative professional exams (medical knowledge) and being competent in patient care, residents are taught the principles of patient safety and cost-effectiveness in the context of the entire healthcare delivery (systems-based practice) and they are involved in quality improvement projects (practice-based learning and improvement) with emphasis on evidence-based practice. Not only does the resident demonstrate his engagement in self-improvement through reflective logs, he is also taught how to facilitate the learning of others as teachers to junior learners (practice-based learning and improvement).

Concurrent with this change, the faculty have also seen and benefitted from a series of faculty development programmes since the introduction of ACGME-I accreditation.

The emergency medicine residency programme is a 5-year programme consisting of 3 years of junior residency followed by an intermediate exam before progression to another 2 years of senior residency. The intermediate exam for emergency medicine has historically been a conjoint exam with the British colleges. However, since 2014, the conjoint exam has been discontinued and the local MMed (A&E) will be the only recognised exam for progression to senior residency with effect from 2016.

The 3 sponsoring institutions are currently accredited by ACGME-I to take a combined total of 24 emergency medicine residents a year. From the launch of residency programme in 2010 to 2014, a total of 102 emergency

medicine residents have been matched to the 3 emergency medicine programmes, averaging about 20 residents per year over the last 5 years. Half of these matched positions were offered to fresh graduates from medical schools. This is a significant increase compared to the old training system where on average 10 trainees per year were selected to start emergency medicine training for the 5-year period prior to residency (2005 to 2009), and all of these positions were only offered to medical officers after their second postgraduate year onwards. For our country, the 2 times increase in the number of emergency medicine training positions offered augments well to meet the shortage of trained emergency physicians required to adequately manage the increasing workload and improve patient care. It was estimated in 2011 that the staffing in emergency departments by trained emergency physicians in Singapore needed to be increased by 3.3 times.<sup>2</sup>

Does the increase in number of emergency medicine training positions taken up reflect an increase in the popularity of emergency medicine as a career option for young doctors nowadays? Perhaps. Or perhaps, now that students can enter directly into emergency medicine residency upon graduation, their interest in emergency medicine as a student is allowed to be developed further and not lost as they rotate to various postings. Whether this interest is real or based on a naiveté of a medical student looking at the excitement of the emergency department through tinted glasses is always a concern and challenge for the selection panel in selecting students for entry into emergency medicine residency. The evaluation of the aptitude of the student for the emergency medicine specialty is also limited compared to a medical officer who has had the opportunity to work in the specialty for a full 6 months. The difference in the perspective towards the career choice of a student and that of a medical officer, who has transited to the working adult life, is often underestimated.

On the other hand, the early intake of students into residency offers the potential to shape their values in their

<sup>1</sup>Emergency Medicine Department, National University Hospital, National University Health System Emergency Medicine Residency Program, Singapore

<sup>2</sup>Emergency Medicine Department, National University Hospital, National University Health System Residency Program, Singapore

Address for Correspondence: A/Prof Shirley Ooi, Emergency Medicine Department, National University Hospital, 5 Lower Kent Ridge Road, Singapore 119074. Email: shirley\_ooi@nuhs.edu.sg

first formative years. Unlike their counterparts in the old training system who did not belong to any hospital in the first 3 years of their Basic Specialist Training (BST), every emergency medicine resident is “owned” by a sponsoring institution and their respective emergency medicine programme from day 1. The opportunity to inculcate the values and ethos of the specialty as well as of the institution in which they will ultimately work in has significant positive implications in the training of a specialist.

The emergency medicine resident today is eligible for entry into training 2 years earlier than his counterpart under the old training system, and the training duration has also been shortened from 6 to 5 years compared to a decade ago. What this translates into is that a newly promoted associate consultant in emergency medicine today could be as young as in his 6<sup>th</sup> postgraduate year, compared to the old system where he would be at least in his 8<sup>th</sup> postgraduate year because of a later start, or in his 9<sup>th</sup> postgraduate year before the training was shortened to 5 years.

A difference of 3 years of clinical experience seems significantly huge and for a specialty like emergency medicine where knowledge in the breadth of medicine is required in your daily work and where clinical experience is a valued commodity, there is no doubt that it will have some bearing on the confidence in clinical judgment.

On the other hand, it is not to be assumed that the old system of putting the trainee through longer duration of training is necessarily superior because it was an opportunistic learning journey with a “hit and miss” outcome.

While there was a similar structure of log books and supervisory framework of named supervisors in the past, the weakness lies in its execution – the log books were reviewed without longitudinal accountability, deficiencies were not picked up in a timely manner and hence the trainee struggled to pass exams, remediation were often too little too late with no single department or person being accountable for the trainee. The Specialist Training Committee (STC) provided a distant oversight. Those who struggled to pass summative exams continued to “float” from posting to posting.

The emergency medicine resident today finds himself under the care of supervisors dedicated to help plan and navigate their learning journey. In return, the resident is held accountable to a tighter rein on their milestone progression, and it comes with timely feedback and early remediation of deficiencies, sometimes pre-emptively because of the benefits of a mentoring relationship. This rapid transformation in the postgraduate learning environment is in no small part attributable to a revamp of postgraduate training leadership in the hospitals as a result of the ACGME-I accreditation, as well as the funding support by

Ministry of Health which allow trainers to have protected time for the educational activities.<sup>1</sup> All the programme directors come under the leadership of the designated institutional official in each sponsoring institution, and this has created a community of educators who not only collaborate to support the teaching across programmes, but also of themselves as educators.

Our strive is to ensure that the selection of residents (substrate) is robust, the training programme (intervention) is structured in a way to ensure consistent quality of specialists produced, and that the safety nets are tight in picking up and remediating the weak residents (rescue) so as to decrease casualties in training (wastage). We, as a fraternity, must take the lead in evaluating the impact of these changes on the quality of training and the emergency medicine specialists we produce.

#### REFERENCES

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