



## The Birth of Prehospital Emergency Services (PHEMS) Programme

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### Need for the programme

The germ of the idea for training Emergency Medical Technician (EMT) for the non-emergency services in the Prehospital Emergency Services (PHEMS) started in 2012. The ability of a first responder in an out-of-hospital rescue can determine the success and even, the survival of the casualty. The EMT plays the supportive role to competently support the paramedic in prehospital emergency care.

In 2012, MOH recognized the need to standardize the care across the PHEMS sector. Incidents involving Emergency Medical Services (EMS) personnel, predominantly in the non-emergency services sector were on the rise and reported in the media. The lack of training for the EMTs was calculated to be one of the factors. SingHealth Alice Institute of Advanced Nursing (IAN) was invited to collaborate with MOH and Unit for Prehospital Emergency Care (UPEC) in developing a course to standard the practice of EMTs in Singapore within the PHEMs sector.

By 2013, with the collaboration of UPEC(MOH) and SkillsFuture Singapore(previously WDA), IAN commenced training to certify EMTs under the following programmes, WSQ Higher certificate in Healthcare Support (PHEMS)- Assessment Only Pathway (AOP) and WSQ Higher Certificate in Healthcare Support (PHEMS)- Full Programme (FP). The aim of the two similar programmes was dual fold as it were intended to certify those currently working in the prehospital emergency sector and individuals whom are keen to start working in the prehospital emergency sector.

### Description of programme

By 2014, IAN was conducting PHEMS (AOP) programme targeting at current practitioners. The 4-day programme was designed to test the entry abilities of the individuals in handling the situations any EMT may encounter.

Programmes	Days	Hours
WSQ Higher Certificate in Healthcare Support (PHEMS) AOP	4	32
WSQ Higher Certificate in Healthcare Support (PHEMS) FP	47	304

Figure 1: Programme duration

PHEMS- FP includes 9 modules that reinforce the knowledge and skills of the EMT in critical decision making and managing any possible life threatening situations. The reinforcement of learning is emphasized in the trainees' attachment to the emergency medical services provided by Singapore Civil Defense Force (SCDF) and the private ambulance sector for the non-emergency services.

Varied teaching methodologies like case scenario simulations and hands on practices prepares and strengthened the abilities of the EMTs to demonstrate understanding of the responsibilities of an emergency medical technician, assist in care of patient's airway, perform life saving techniques and ensuring patient safety throughout the whole journey in the medical transport.



### Outcomes

Programmes	Intakes	EMT Trained
WSQ Higher Certificate in Healthcare Support (PHEMS) AOP	24	200
WSQ Higher Certificate in Healthcare Support (PHEMS) FPP	10	60

Figure 2: Total EMT Trained from 2013 to 2018

IAN uses Kirkpatrick Model of Evaluation to evaluate the outcomes of the programmes

At Level 1 evaluation, about 65% of participants rated as exceeded expectations and 35% of participants rated had met expectation. Participants mentioned that all topics were related to their job scopes and they had benefited from this programme. Level 3 and 4 outcomes were not measured for AOP as it was considered solely as a certification of competencies

### Challenges

There were challenges as the learners were from different training backgrounds and cognitive abilities. As the AOP programme was designed to assess the current practitioners, many were of different level of experience and academic abilities. Frequently, the trainers encounter situations that the trainees had difficulties understanding the medical terminology used.

In addition, there was language barrier. Additional coaching, revision of salient topics and even, the use of other languages were employed to help the learners.

### Sustainability Plans

With the enforcement of the Healthcare Services Bill in 2018, under the Private Ambulance Regulatory Framework, EMTs whom are in service will need to recertify themselves as competent every 2 years. Plans were underway to continue with the recertification of the trained EMT. Additional intakes of the programmes (WSQ Higher Certificate in Healthcare Support (PHEMS) AOP) were included in 2019 to meet the deadline for the enforcement of ambulance regulations by 2020.

