First responder paramedics called to the scene of a mass casualty need to be ready to respond rapidly and make informed
decisions. The prognosis of a patient can be significantly improved when emergency medical decisions and life-saving treatment
are administered to patients quickly at the site of the incident. Training and preparation are essential to ensure that first response
teams will take the appropriate action in a coordinated effort at the right time. With traditional exercise-based training methods, it is
impossible for all paramedics to receive training. The CAE Virtual Paramedic is an innovative, award-winning simulation-based training
solution, which can be integrated with a learning management system, to cost-effectively and efficiently help prepare paramedics
for complex and critical situations.

Immersive self-led training solution

The CAE Virtual Paramedic is an immersive, self-led paramedic training solution which makes training accessible to geographically
distributed personnel. The focus of the emergency management simulation is to allow paramedics to execute roles associated with
mass casualty events, including management of resources, triage of patients and provision of life-saving treatment.

Traditional forms of training for major incidents require the trainees, and a large number of support personnel, to be available
simultaneously at one central location. The CAE Virtual Paramedic is web-enabled, allowing paramedics to train anywhere and at
any time, thus greatly reducing training costs and increasing efficiency.

CAE Virtual Paramedic Features:

- Dynamic simulated patients, which are inspired by real world patients,
  and respond to treatment or lack of treatment;
- Facility to triage and treat patients;
- Ability to task resources, including other ambulance and agency
  personnel, as they arrive on the scene;
- Scenario briefing and feedback on key performance indicators, including
  triage effectiveness;
- Execution of all the primary roles for a coordinated paramedic emergency
  response plan.

The CAE Virtual Paramedic is available as either an individual student
license, or an organisation wide license, to allow access to training for all
paramedic staff. The licenses are sold as a package which includes the
options for:

- Tailoring of content, scenarios and dialogue to represent agency specific
  visualisation and responses, and delivery of the training through CAE’s
delivery system.
- Development of additional scenarios and tailoring to provide support
  for different response protocols and integration with an agency specific
  learning management system.
- Development of additional scenarios and tailoring to provide support for
different response protocols and integration
Program Example

Ambulance Victoria, Australia, has launched the CAE Virtual Paramedic training solution to train all ambulance paramedic’s personnel so they are ready to respond in a timely and cost-effective manner. The simulation scenarios are developed and validated using data of actual incidents and patients. The CAE Virtual Paramedic allows the trainees to interact with intelligent, virtual characters representing other response agencies and bystanders to make decisions that achieve the desired operational outcome. CAE also implemented a learning management system to record results and provide trainees feedback on their performance. Plans for future development include implementing the roles of transport officers and health commanders, which will enable Ambulance Victoria paramedics to execute all the primary roles in their emergency response plan.

The Council Ambulance Authorities (CAA) of Australia, New Zealand and Papua New Guinea has awarded the 2013 CAA Educational Performance Award to CAE Australia and Ambulance Victoria for the Virtual Paramedic program, recognising its contribution to innovative professional development, skills maintenance and practice standards.