

## Medical Education

# The role of simulation in postgraduate medical education

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## Introduction

The healthcare environment and postgraduate medical education are rapidly changing in global, regional and national contexts. Changes in the healthcare environment are driven by advancing technology, increasing costs, legal and ethical implications, diversity of care providers and settings, changing expectations of patients and the public (including professionalism, patient safety, ethics and communication) and commodification of healthcare [1,2]. This increasingly complex nature of healthcare results in postgraduate teaching requirements that are more challenging and sophisticated [3,4]. Can a paradigm shift in postgraduate medical education be achieved through the systematic incorporation of simulation?

### What is simulation based medical education?

Simulation can be defined as a “technique to replace or amplify real-life experiences with artificially contrived guided experiences.” [5] Simulation based medical education (SBME) involves educational activities that replicate clinical scenarios and mirror real-life circumstances and situations in which healthcare and clinical services are provided [6].

When compared with conventional apprenticeship-based training, simulation provides designated opportunities to learn from trial and error within a safe learning environment, without compromising patient safety. A learning environment that is separate from demanding service commitments that are applicable to both the learner and the educator will provide time, space and opportunity for learning through feedback and reflection. These characteristics make simulation an ideal method to optimise and enhance postgraduate medical education [2,4,6].

### Why simulation for postgraduate medical education?

Simulation has much to offer postgraduate medical education. A range of higher level competencies expected by a postgraduate trainee, including critical thinking, analytical skills, specialized procedures, leadership, decision-making, interpersonal skills and professionalism could be trained and achieved through simulation. Simulation also provides a safe and educationally orientated environment for both teaching and