### Research Theme
Health Systems and Population Health

### Research Project Title
Cost-Effectiveness of eLearning for Health Professionals

### Principal Investigator
Asst Prof Lorainne Tudor Car, LKCMedicine

### Project Description

**Background**
The global shortage of healthcare workers, perpetuated in part by poor education, is expected to reach 18 billion by 2030. The use of information technology for learning, i.e. eLearning holds promise of a flexible, affordable and scalable approach to healthcare professionals' education. Yet, a lack of evidence on cost-effectiveness of eLearning for health professionals seems to be one of the major barriers to eLearning adoption in health science education as show by a recent survey of the WHO Member States. Research in the field of medical education has traditionally focused on the effectiveness and only a few studies have examined the cost and value of different learning strategies. This gap in evidence has been confirmed by literature as well as our project consisting of a series of Cochrane reviews on the effectiveness of different eLearning modalities in health professionals’ education. The question of the price and the effectiveness of eLearning in comparison to traditional education is highly pertinent for a range of settings and stakeholders, including educators, students, policy-makers, researchers etc. With the perpetual progress, adoption and expansion of the use of digital technology, it will be increasingly important to determine the cost-effectiveness of blended educational approach merging diverse eLearning modalities and traditional teaching.

**Proposed work**
The aim of this project is to advance the field of eLearning for health professionals’ education. This project will set-out to synthesize available evidence and to develop a framework to guide evaluation of cost-effectiveness of eLearning for health professionals’ education. This will include defining what constitutes costs and outcomes in eLearning as well as how these can be measured. It will focus on several eLearning modalities and will aim to model a cost-effectiveness assessment using the existing data.
Research skills to be developed through this project
This is a multi-disciplinary project that will expose the student to a variety of research fields including healthcare, medical education, andragogy, information and communication technology and economics. The student will also become familiar with a range of different research methodologies: evidence-based medicine, health technology assessments, evidence synthesis, health economics etc. This doctoral project will foster development of competences that are imperative for an academic career in medical education and evidence-based healthcare including formulation of research question, critical appraisal of the literature, development of a study design, economic analysis, data analysis and interpretation. It will also aid in development of a range of generic skills such as academic writing, communication, team working, oral presentation, time management and project planning.

Contact Us
If you have questions regarding this project, please email the Principal Investigator.
Assist Prof Lorainne Tudor Car
Evidence Based Medicine, LKCMedicine
Lorainne.tudor.car@ntu.edu.sg