

SCHOLARSHIP OF TECHNOLOGY ENHANCED LEARNING

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"Responding to emergencies: There's an app for that."

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Introduction

Our cellphones have become more than just a communication tool. This presentation will explore the use of cellphone applications in the emergency response and prehospital care within New Zealand. Three distinct groups of applications are identified. The first are apps used by community first responders, the second group, are apps used by paramedics in the prehospital environment, and finally apps which we can all use in disaster preparation and response. These apps also support the education of paramedicine students when they are undertaking simulations and planning exercises.

The context/motivation for the topic

It is appreciated that members of the public undertake first aid and emergency response training. Following this training, the perception is that this will be enacted to respond and improve patient outcomes. But is this the case? Evidence highlights that citizens who undertake first aid training may lack the motivation to become involved. Applications such as Good Sam can directly facilitate the public's participation in emergency responses.

Paramedics now utilise numerous apps to support their delivery of healthcare. Two examples of how apps can be used include the introduction of high-performance CPR, which requires the use of a metronome to ensure chest compressions are delivered at 110 beats-per-minute. Research into the inclusion of physiological characteristics in triage sieves to support their sensitivity has paramedics seeking applications which can quickly calculate parameters such as a "shock index".

What will be shown or discussed?

Having identified the three domains where apps can support the delivery of prehospital care, a review of the apps and the circumstances of their use will be explored.

What are the implications for future practice?

As the use of specific apps increases the ability to adjust the contents and increase the functionality is greatly desired by the end-user. For community responders, the Good Sam app likely to positively affect the outcome of cardiac arrest in the community by providing timely CPR and early defibrillation. For clinicians, the St John Clinical Practice Guild lines app guilds the clinical practice of paramedics and provides the ability to connect to various communication the centre activities, as well as providing links to safety alerts and training activities.

Determine how the debate will be continued

The increasing level of sophistication of our communication devices and improvements of the cell networks can only enhance the functionality of phones and apps. As we become more comfortable using these tools are likely to seek additional features and applications to support the prehospital delivery of care.