

1. Executive Summary

The purpose of this paper is to update the CEO on the state of this VR project, inform of it's feature at an upcoming VR/AR conference as well as the starting date of our blind study on 1st June 2017.

2. Background

The current system used to train TI/PGY1s in ward based medical emergencies is limited to didactic lectures, small group sessions and low-fidelity simulation. These training methods are limited due to difficulties booking rooms, securing facilitators and time constraints. This group often work antisocial hours, have diverse experience and differing career aspirations. Additionally, the rotational nature of their roles means it is incredibly difficult to provide standardised training over the course of the year.

Tailoring education to these training needs has long been a challenge.

In response to these constraints Waitemata DHB invested seed funding into a pilot VR training programme.

The purpose of this pilot was to develop;

- State of the art, cutting edge training solution
- Enhance the reputation of the DHB as a centre of training excellence and innovation
- Scalable and cost-effective solution
- Ensure a quality control standard
- Potential to commercialise regionally, nationally, internationally
- Potential for shared IP/JV with technology provider

3. Key Learnings

Leadership - Clinical leadership critical to the success of the VR project. The importance of this vision and leadership has been seen throughout the whole project from script writing to VR production and post production.

Professional crews - There are several areas of the project that are best handled by non medics. Namely this is around onscreen performance. We found that having experienced actors

and film crew allowed us to humanise scripts, create emotion and urgency in the dialogue while still delivering on the learning objectives.

Technology partnerships - Our relationship with the technology partner is also critical when developing new ideas and innovations. A close relationship was forged over the many alterations and developments with our goal of creating the best product possible being totally aligned. Several new concepts and advances in technology were conceived due to this collaborative approach.

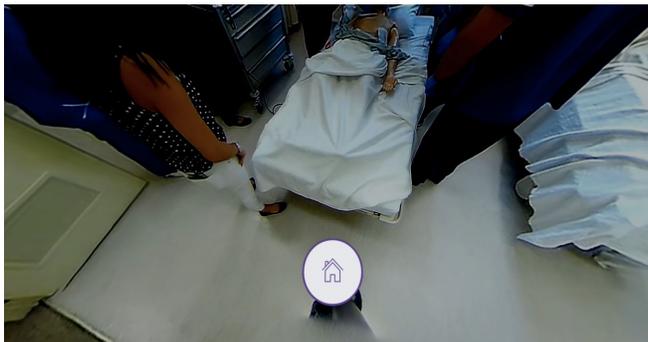
How we work - An agile and iterative process is required in order to adapt and flex with the evolving nature of the work. Post production work is the bulk of the project time. The best outcomes in post production are achieved by having the team together on site to work through changes and decisions.

Research - we believe that researching the results of this work is imperative in understanding its benefits as well as areas of improvement. This research programme has been designed by clinical staff in consultation with our technical partner. This research programme is set to start on the 1st June 2017 and will run for 12 weeks.

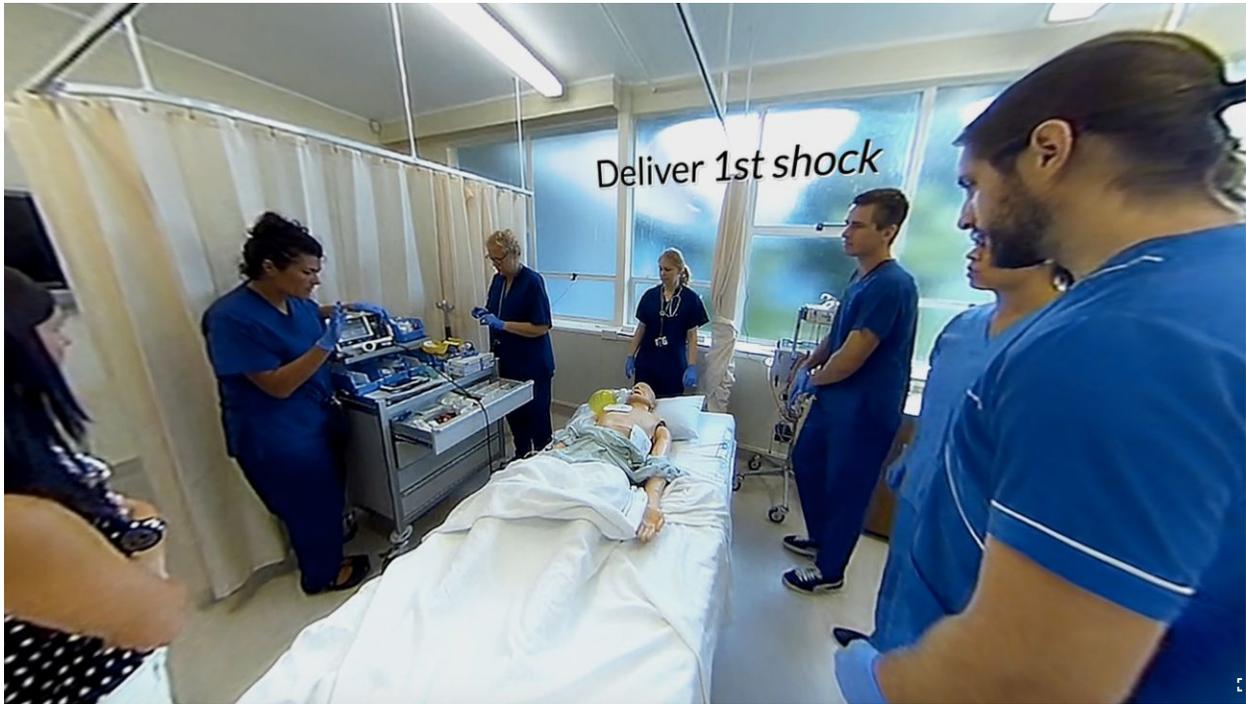
Various Screenshots from the VR training programme in 2D (Screen mode)

CPR Scenario

(In viewer you are able to view 360)



Home button when you look down.





Atrial Fibrillation Scenario







ECG showing AF enlarged for better viewing.



Debriefs are shown at the end of each scenario



These debriefs allow the viewer to see the scenario play at the same time. These are superimposed over the left clinic wall.

Anaphylaxis Scenario







Hypoglycemia scenario



