IMPROVING HEALTH AND SAFETY IN AGED CARE USING GAME BASED SIMULATION

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Australia faces the challenge of supporting a growing ageing population (AIHW, 2012). Health and safety is paramount in ensuring care is economically sustainable. Nurses involved in healthcare have a responsibility to protect themselves and those being cared for against health and safety risk. Training of the workforce is paramount to reducing the chance of injury (Robson et al. 2012).

Developed by the University of the Sunshine Coast in conjunction with developers Bondi Labs and industry community care partner Suncare, “Safe Environments” is a competency-based serious game that has been created to address The Australian National Safety Standards. Using specific client profiles, the app provides opportunities to improve knowledge and skills in managing environments for people with health concerns related to perception, coordination and movement in facility and in-home care. Immersing players in a virtual 3D environment, the application exposes them to over 100 randomly generated hazards representing 11 hazard categories in a variety of environments. These test ability to identify and categorise hazards, determine risk and make recommendations for risk elimination/containment and minimisation. Detailed analytics and feedback provide players with information about the percent of hazards found, correctly categorised hazards, level of risk, likelihood of incident, consequence and correct management.

Used to vitalise content and engage learner’s critical thinking, the application is designed for tertiary education and community and facility care sectors to educate nurses, health workers, volunteers, family and friends. The application was a finalist in the Australasian Simulation Congress Showcase in October 2016, and will soon be available via Apple’s App Store. It is hoped that this form of interactive media will provide new and engaging ways for learning and have a positive impact on the health and welfare of the community. Research about the success of the application and how learning from simulation based games can translate to health outcomes will commence in early 2017. For further information about the application and trial contact Associate Professor Patrea Andersen at the University of the Sunshine Coast.

References