**Resilience Challenge: Using an evidence-based video game as a tool to support patient safety**

**Background:** Resilience Engineering (RE) is a framework for supporting safety in complex adaptive systems, including healthcare. RE is theoretically well developed but has limited implementation in clinical settings. In order to translate the concepts from RE to clinicians, a video game was created as a reflective tool. Video games impact upon behaviours and attitudes, which suited the engagement needs for this population.

**Aims/Objectives** The aim of this study was to create a clinical engagement tool to raise awareness of the value of RE in clinical work, and support clinicians to reflect on their practice, and evaluate a video game to a rigorous standard.  **Methods:** The game was created by using a focus group of clinicians, academics, and digital media experts. “Resilience Challenge” (<http://game.resiliencecentre.org.uk/>) presents a series of scenarios where a player guides a patient’s journey through a hospital. Resilience Challenge was shared online through websites, social media, and blog posts. The game was evaluated by the analytic data from gameplay, a cross-sectional survey at the end (with branches for healthcare providers and the public), and through play testing using the ‘think aloud’ method.  **Main findings:** Resilience Challenge has been played over 1,700 times. Survey participants (n=137) almost universally agreed that the game was engaging and they would recommend it to others. 82% of clinician participants agreed or somewhat agreed that the game helped them to reflect and 63% agreed that the game introduced them to RE concepts. Qualitative analysis included the themes: system pressures, connecting safety with patients, adaptations, and the ‘right’ answer in each scenario.

**Conclusions/Recommendations:** Resilience Challenge has demonstrated effectiveness as a reflective tool. Video games are an important medium to engage with clinicians, start conversations about pressures and adaptations in clinical work, and transfer research findings to clinical practice.