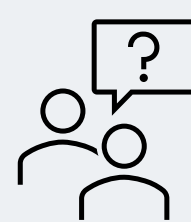


Developing ‘Trachy Team’: a virtual, gamified, Critical Care tracheostomy MDT ward round: Innovative and future-proof MDT education for an under-taught and important team skill

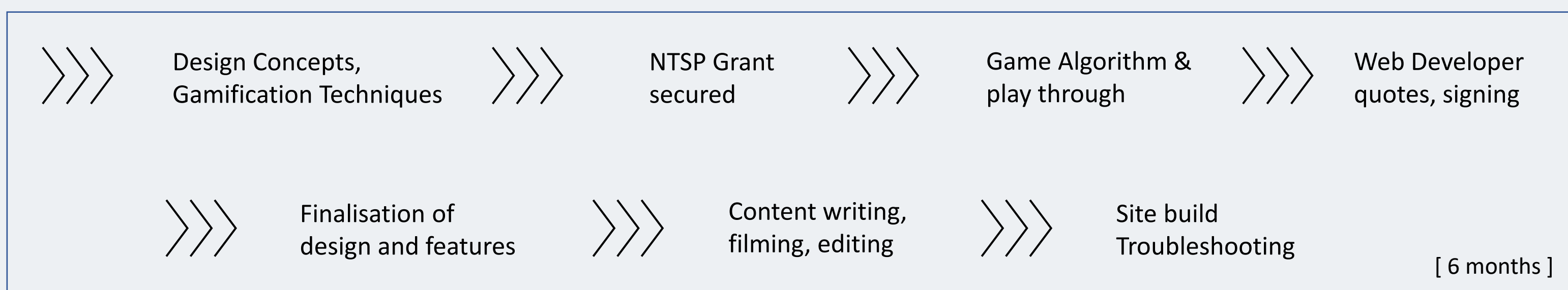
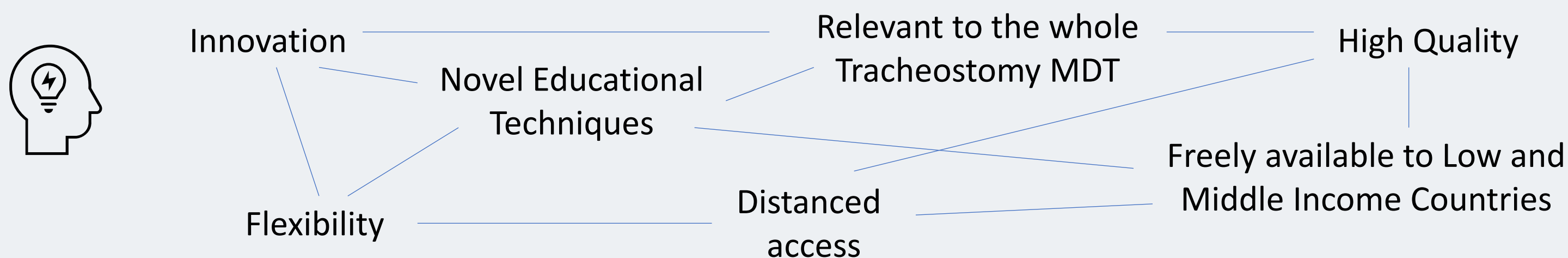
B.A. McGrath; R. Dooley



Critically ill patients requiring a tracheostomy are exposed to the risks of prolonged invasive support and altered airways. Liberation is a multi-specialty process requiring adept collaboration and consistency to optimise rehabilitation, prevent and identify complications. Multidisciplinary team (MDT) tracheostomy ward rounds have been shown to improve quality and safety of care¹⁻⁴. The number of UK Intensive Care Units (ICUs) with such teams has not been surveyed. We believe they are uncommon, despite evidence of benefit.

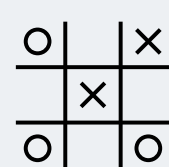


Education is a key contributor to improving standards of care. Yet training in collaborative, complex decision-making around tracheostomy care is often left to ad hoc workplace exposure of unreliable educational quality. Lack of tracheostomy MDT ward rounds is not only disadvantageous for patient care but is a missed opportunity to deepen healthcare professionals’ understanding of good tracheostomy care and rehabilitation, especially for those who care for patients with tracheostomies day-to-day.



Educational Techniques

- Set in ICU environment for maximum virtual fidelity
- Interactivity
- Case-based scenarios laid out in realistic ward round sequence
- Active information gathering and prioritisation
- In-game knowledge assimilation
- Specialty opinions given by renowned specialists to increase buy in and validity
- Varied type of interactivity (interactive case vs quick MCQ)
- Micro-feedback to learn during the game
- Safe practice of holistic decision-making in the virtual environment
- Video feedback and explanations from experts at the end
- Positive role modelling of the value of the whole Tracheostomy MDT
- Resource provision
- Use of questionnaires to prompt knowledge recall immediately after



Gamification Techniques

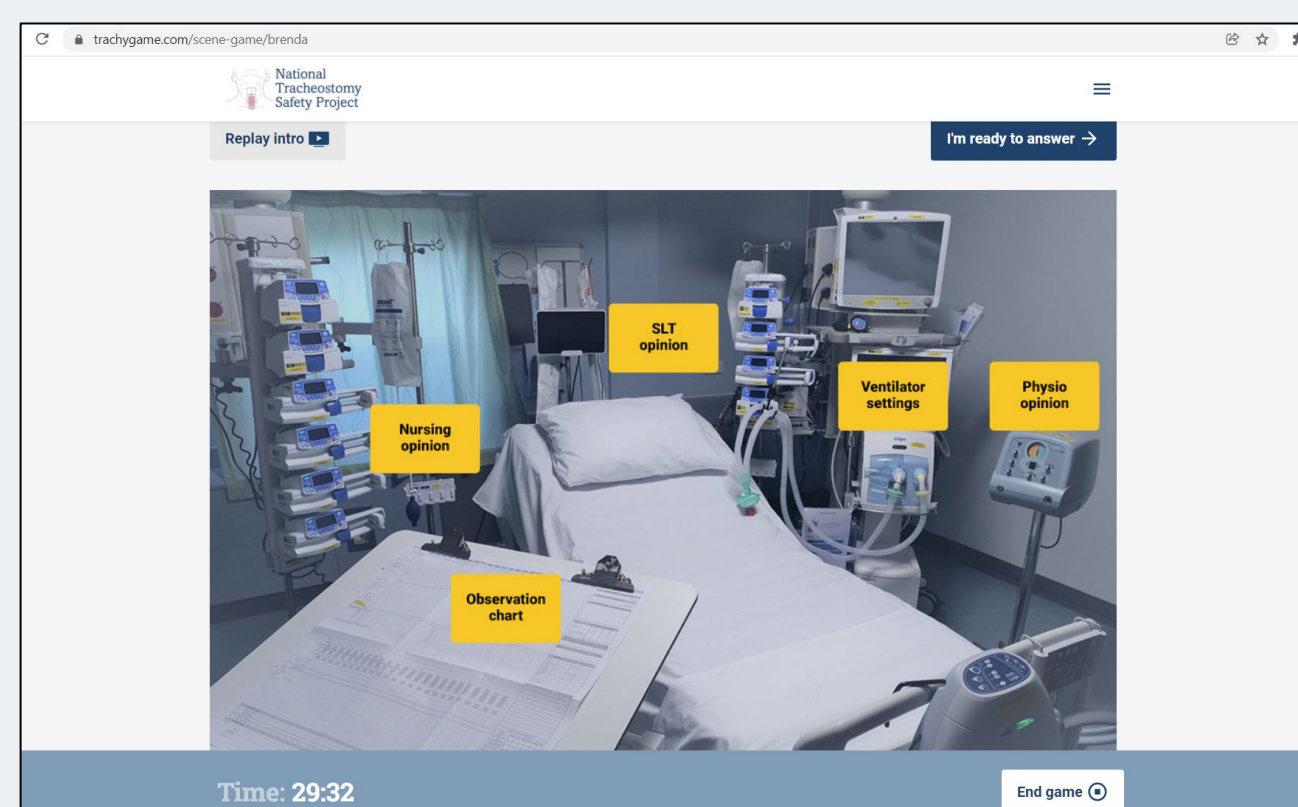
- Team play option
- Race against time: lock out at 30mins
- Points for answers and time to completion
- Leader board
- Winner’s Prize
- Variance in immediate micro-feedback provided: strategy to scenario approach



Content, impact

- Scenarios based on common challenges for the ICU MDT
- Complex scenarios requiring a knowledgeable, holistic approach
- Patient-focused scenarios
- Content applicable to the whole ICU Tracheostomy MDT

www.trachygame.com



Progress to Date: Game complete and launched! Check us out →

1) Claffey ; Heslin, Chloe; Donnelly, Grace; Charles, Ron; Gorman, Sharon **Creating an integrated tracheostomy care pathway for patients in an Irish regional hospital setting - the feasibility and effectiveness of a dedicated tracheostomy team.** International Journal of Integrated Care Oct 2017; vol. 17 ; p. 1-2
 2) Hopkins B.S.; Brenner M.J.; Raynor T.P.; Pandian V **How data-driven multidisciplinary tracheostomy teams transform care, prevent harm, and save lives** Otolaryngology - Head and Neck Surgery; Sep 2020; vol. 163 (no. 1)
 3) Iqbal S; Fong N; Leblanc J; Fata P; Razek T; Khwaja K **Impact of a specialized multidisciplinary tracheostomy team on tracheostomy care in critically ill patients.** Canadian Journal of Surgery; Jun 2011; vol. 54 (no. 3); p. 167-172
 4) Doherty C.; Higson M.; English C.; Marks J.; Howarth R.; Consterdine K.; Bateman N.; Beggs R.; McGrath B **Improving the quality and safety of paediatric tracheostomy care: Implementation of a weekly multidisciplinary ward round** Anaesthesia and Intensive Care; Nov 2020; vol. 48 (no. 2); p. 45