











SAFE PPE: User Needs for an Interactive PPE Training Tool

Gerard Lacey^{1,8}, Joan Cahill², Alison Kay², Vivienne Howard², Richard Harte³, Frank O'Reilly³, Eva Ziampra^{4, 5}, Fidelma Fitzpatrick^{4, 5}, Ber Mulcahy⁶, Siji George⁶, Rachel Nolan⁷

¹Computer Science and Statistics, ²Psychology, ³Learnovate, Trinity College Dublin, ⁴Royal College of Surgeons in Ireland, ⁵ Beaumont Hospital, Dublin, ⁶Bon Secours Hospital, Cork, ⁷Tallaght University Hospital, Dublin, ⁸SureWash, Dublin

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Introduction:

Staff competency and access to PPE training became critical early in the COVID-19 pandemic. This placed demands on infection prevention & control staff when already busy with COVID-19-related tasks.

Objectives:

To be prepared for the next pandemic, we investigated the role of mindfulness and technology in PPE training.

Methods:

Human factors research involving three clinical sites (N= 174) consisting of interviews, workshops and participatory co-design sessions. This was extended by interviews with 14 IPC experts from 7 sites in UK and USA.

Results:

Existing PPE & Hand Hygiene Training:

- Addressed the lived experience of using PPE
- Variety of training formats e.g. classroom (15%) and in-unit training (85%)
- One (1/10) site assessed PPE competency
- Four (4/10) sites used a Virtual Learning Environment to track the learner journey
- One (1/10) site used a mobile phone based training

Performance Shaping Factors:

- Training, Fatigue, Distraction, Rushing, Stress, etc.
- Changing types of PPE with different quality and fit
- Changing PPE guidelines as IPC knowledge evolved

Emerging Mobile Learning App Concept & Requirements:

- All trainers expressed concerns of low engagement with phone-based training
- Online and in-person training must be consistent
- Assessment should be carried out on-site, with special-purpose equipment
- PPE and Hand Hygiene training should incorporate self-care & mindfulness
- Scenario-based training needed to support different clinical roles and needs
- Customise training to local guidelines

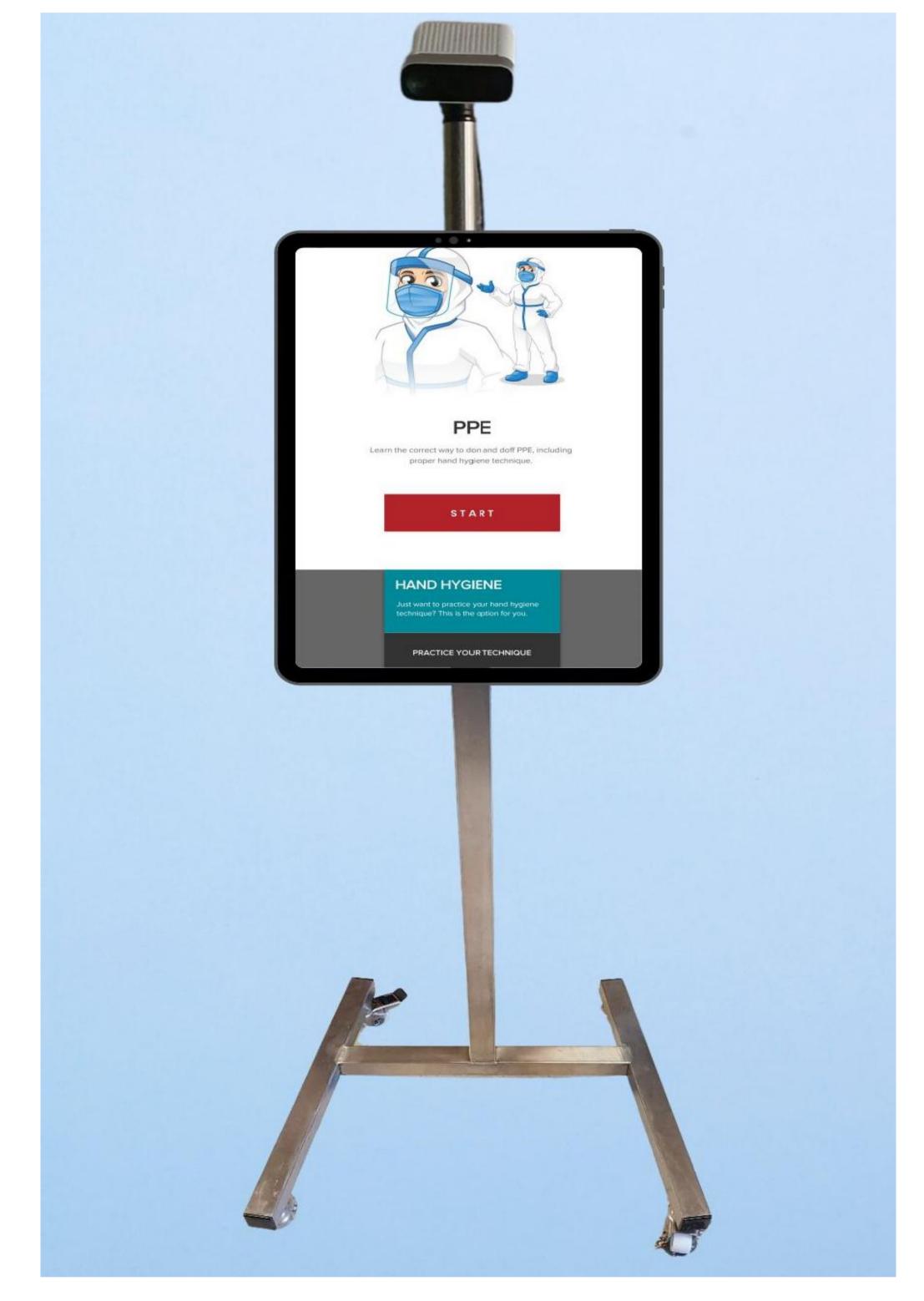


Figure 1: Prototype of Interactive PPE trainer incorporating Surewash Hand Hygiene Training

Conclusions:

Mindfulness is a protective factor for effective and safe performance. Organisations should consider integrating wellness into IPC training. An interactive PPE training tool can support in-person training, but it is not a replacement and must be available 24-7. A variety of training access pathways are good, but the Learner Journey should be tracked to ensure everyone is trained and skills are maintained over time.

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