2-D Hand Hygiene Game for Healthcare Professionals

Technology #2018-150

Studies have shown that healthcare workers wash their hands half the time they should. The CDC points out the importance of washing hands, not only often, but also properly with the right techniques helps insure a safe environment for patient care. With the rise of hospital acquired infections, following proper hand hygiene techniques can significantly reduce the diseases transmitted from person to person.

**Description:**

Researchers at Rutgers University have created a 2D role-playing computer game (RPG) for use in training healthcare managers and employees about the importance and effectiveness of hand hygiene. The game educates users by simulating the thought processes that lead to proper hand washing practices and hand hygiene. The benefits of hand hygiene education are improved patient care and disease reduction by healthcare workers who will recognize the importance of hand hygiene program.

The researcher’s principal goal in creating this game was to enhance the education of individuals involved in healthcare. By providing the education in the form of a 2D role-playing game users are more engaged and attentive and therefore likely to learn, resulting in better future hand hygiene.

A focus group comprised of undergraduate healthcare administration majors played the game and provided feedback.

Responses from the group confirmed that that the interactions and thought processes involved in playing the game kept them more engaged that it was likely they (and other people playing the game) would learn more.

This technology allows workers to realize the importance of hand hygiene and prepares them for the challenges they may face in real life situations.

**Benefits:**

- Applicable for teaching proper hand hygiene from middle school level and higher
- The use of a 2-D game as the learning medium engages users resulting in improved hand hygiene
- Proper hand-washing relates to a major CDC area of concern in healthcare
- Well suited for all levels of healthcare employees
Uses:

Health care educational curriculum for medical, nursing and continuing medical education; hospital compliance programs.

_This technology was created with the Unity Game Software._

Inventors

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Dr. Michael J. McDonough is an associate teaching professor at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University. He has worked as an executive in the health care field since 1975. He is an expert in health policy, public health, and US health care services. His research interests include health services administration, patient quality of care, and healthcare outcomes.

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