

# Title: Advancing Human Factors in Transformative Simulation: A Collaborative Research Approach

**Background:** Healthcare simulation methodology continues to mature, frontiers of its application expanding beyond education alone into broader areas of transformation. Transformative simulation is rapidly reshaping health and care practice, informed by a growing body of frameworks, models, and theories. Within this evolving landscape, human factors science plays a critical role in taking a systems and design-based approach to appreciating how the complexities and variability associated with human and wider system performance influences outcomes, both wanted and unwanted. While many ASPIH Special Interest Groups engage with transformative simulation and acknowledge the importance of human factors, there is a need for a more integrated and collaborative approach. Therefore, we are bringing together three ASPIH specialist interest groups to engage in a collaborative, innovative strategic approach addressing this intersection and shaping a shared research plan.

**Target audience:** Intermediate to advanced practitioners, educators, researchers, and members of ASPIH SIGs with an interest in human factors and transformative simulation.

**Aims:** To collectively explore how human factors intersect with the transformative forms of simulation in health care, and to identify the research needed to develop this connection.

## Objectives:

- Identify which SBI's<sup>i</sup> are most influenced by human factors principles
- Explore how human factors contributes to achieving the goals of each SBI
- Develop a research plan to advance the understanding and integration of human factors theory and practice in transformative simulation

**Session description:** This will be a collaborative, interactive workshop involving facilitated discussions and co-creation activities. Participants will contribute to shaping a research plan and will be encouraged to remain involved in ongoing initiatives and outputs that emerge from the workshop.

## Facilitators:

### Transformative Special Interest Group

- Sharon Weldon. Greenwich University
- Andy Buttery Canterbury Christ Church University

### Human Factors Special Interest Group

- Kevin Stirling University of Dundee
- Paul Bowie University of Staffordshire, NHS Education for Scotland
- Martin Duffy, NIMDTA
- Catie Paton, NHS Education for Scotland

### Research Special Interest Group

- Paul O'Connor University of Galway
- Carla Sa-Couto, Faculty of Medicine of University of Porto

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<sup>i 1</sup>Weldon SM, Buttery A., Spearpoint K., Kneebone R. (2023) Transformative forms of simulation in health care – the seven simulation-based ‘I’s: a concept taxonomy review of the literature IJOHS, DOI:10.54531/tzfd6375