

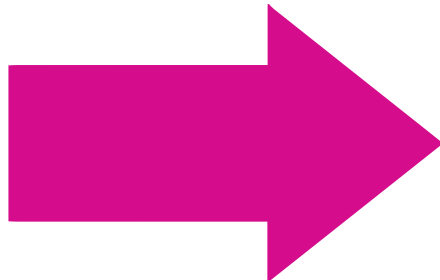
Setting Up Human Factors-Based Simulation at the Hospice – A Pragmatic Approach



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What is Human Factors-Based Simulation?

Scenarios are designed that create real-world situations which ‘feel real’ on **physical, physiological, emotional and social levels**¹.
Learning through **experiential learning**² and **reflective debriefing** following a realistic scenario³.



Why deliver Human Factors-Based Simulation?

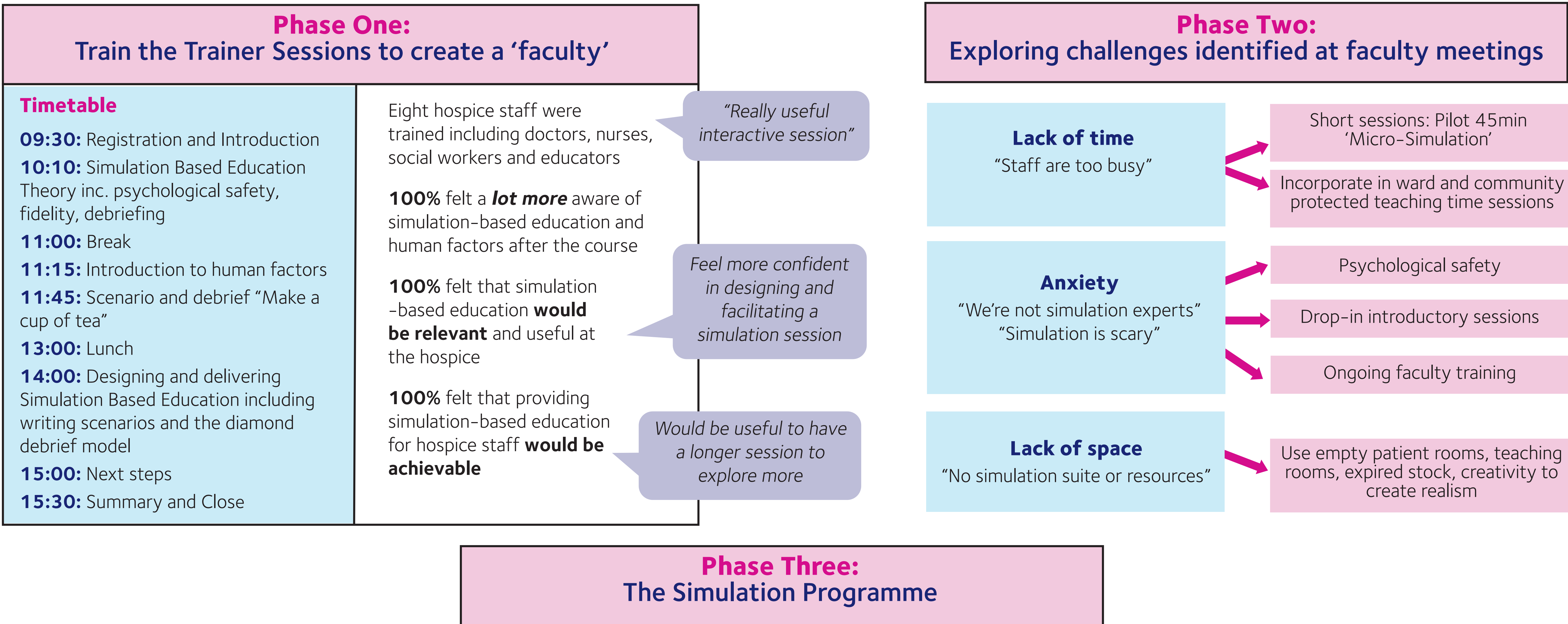
To deepen **patient safety understanding**, by exploring how we can **work well as individuals, teams and organisations**^{4,5}.



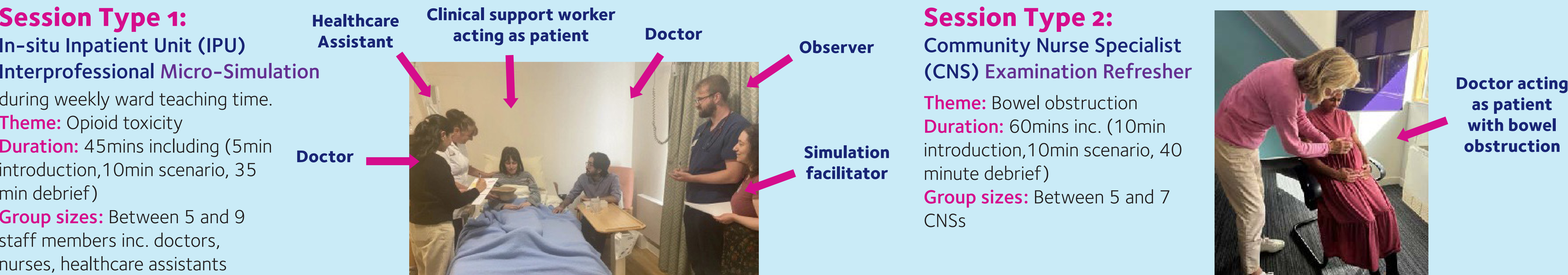
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Aim: To design, deliver and evaluate human factors-based simulation sessions for hospice staff

What did we do?



August 2023 to September 2024: Two main types of simulation sessions were designed and delivered



- **94% felt more confident** looking after patients and loved ones.
- **97%** had increased awareness of **human factors** after the sessions
- **100%** felt scenarios were **realistic, relevant and useful**
- **97%** would attend another and would recommend the simulation day

“No need to do all the elements of assessment – do what is relevant” – Take Home Message: CNS Simulation Day

“Sharing the mental load to review with all MDT member” Take Home Message: IPU Micro-Simulation

“Realistic during a busy shift” – Open comment, IPU Micro-Simulation

Conclusion

We designed, delivered and evaluated human factors-based simulation sessions. Establishing the unique challenges for delivering simulation-based education for our hospice allowed for a bespoke programme to be designed. The programme demonstrated learning at a human factors level for individuals, the team and the organisation. We recommend this can be achievable for other hospices.

Our recommendations

1. You need **enthusiasm, enthusiasm, enthusiasm**
2. Think of **everyday** clinical situations
3. **Be creative** to make scenarios ‘feel real’
4. Find an expert with simulation expertise for advice
5. **Reassure yourselves** that you have advanced communication skills to apply to debriefing
6. **Psychological safety** is key!
7. Consider what available space you already have to use e.g. **empty patient room** or teaching room
8. Consider simulation scenarios during protected pre-planned teaching sessions i.e. **incorporate into already planned sessions**
9. Use **out-of-date** stock equipment for realism and sustainability
10. You can run some scenarios without a specialist simulation suite or manikin



References:
¹Paige, J.B. and Morin, K.H., 2013. Simulation fidelity and cueing: A systematic review of the literature. Clinical Simulation in Nursing, 9(11), pp.e481–e489.
²Khan, K., Pattison, T. and Sherwood, M., 2011. Simulation in medical education. Medical teacher, 33(1), pp.1–3.
³Abildgren, L., Lebahn-Hadidi, M., Mogensen, C.B., Toft, P., Nielsen, A.B., Frandsen, T.F., Steffensen, S.V. and Hounsgaard, L., 2022. The effectiveness of improving healthcare teams’ human factor skills using simulation-based training: a systematic review. Advances in simulation, 7(1), p.12.
⁴Bailey, C.R., Shorrock, S. and Fong, K., 2023. Human factors and ergonomics. British Journal of Hospital Medicine, 84(6), pp.1–4.
⁵Carayon, P., Wetterneck, T.B., Rivera-Rodriguez, A.J., Hundt, A.S., Hoonakker, P., Holden, R. and Gurses, A.P., 2014. Human factors systems approach to healthcare quality and patient safety. Applied ergonomics, 45(1), pp.14–25.

