

Introduction

Simulation based education (SBE) is a recognised effective method of preparing the workforce without compromising the service¹.

The Challenge

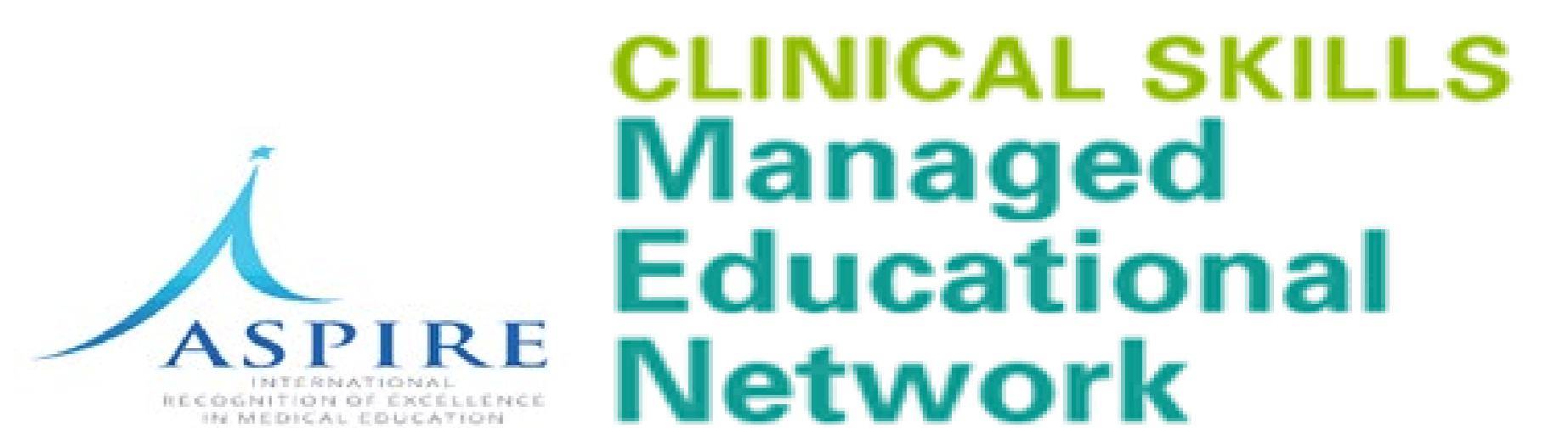
In remote and rural NHS Scotland the availability of specialist faculty to deliver a sustainable system of quality SBE at the front line is limited.



The CSMEN [Mobile Skills Unit](#) above (MSU) provides simulation facilities and specialist equipment

Methods

The national Clinical Skills Managed Educational Network (CSMEN) is responsible for the provision of simulation based education.

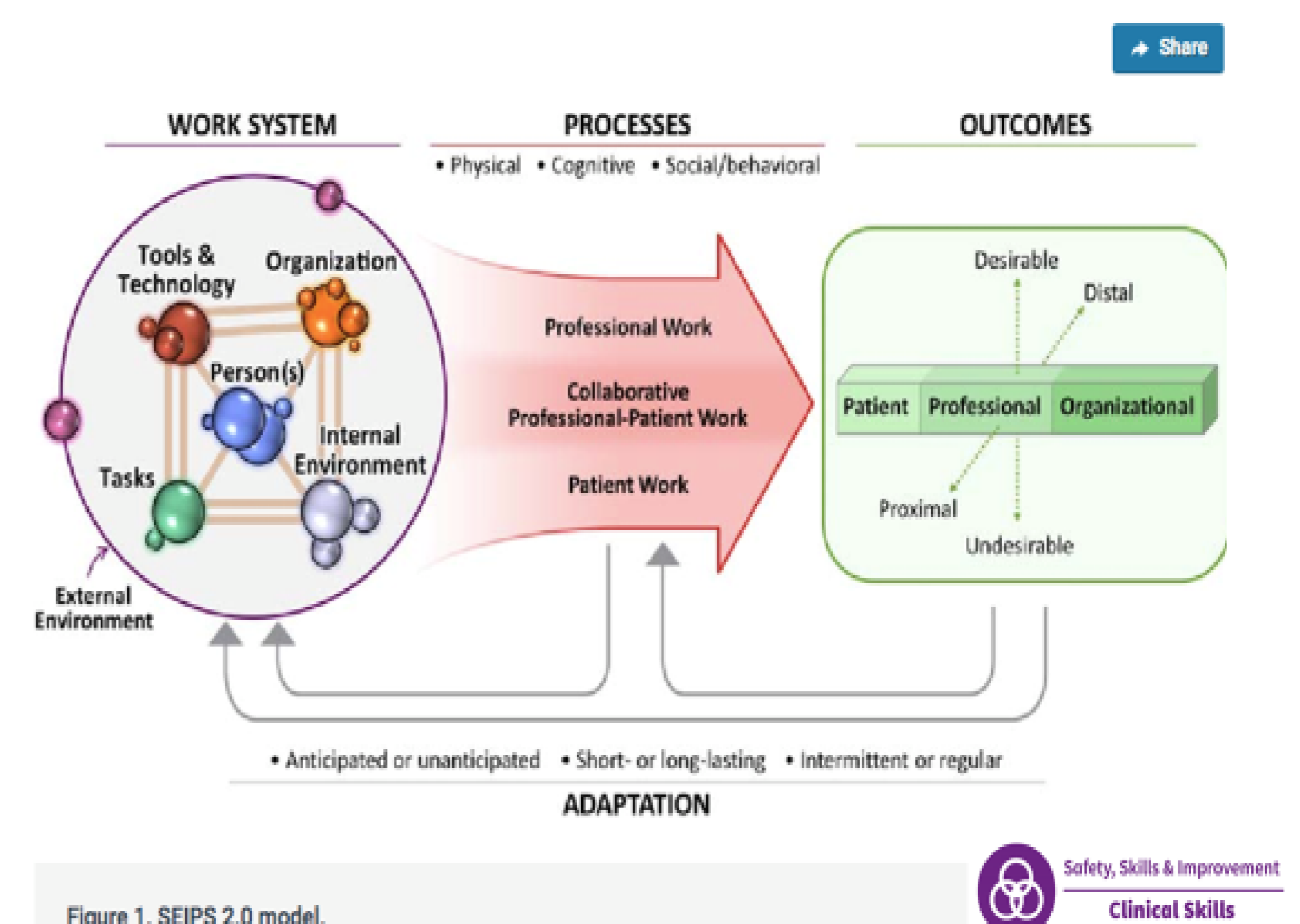


A Human Factors Science approach- Systems Engineering Initiative for Patient Safety(SEIPS) 2.0 was implemented to enhance sustainability in faculty development for SBE.²

SEIPS 2.0 Human Factors Framework for enhanced Reliability in the System

In relation to the ‘work system’ in **Figure 1** CSMEN organised (O):

- A [high level outcomes framework for SBE faculty](#) (T) developed by stakeholders
- The national faculty [SBE development course for the MSU](#)(IE)
- Faculty recruitment from remote and rural Scotland (P)
- The development of an online faculty learning resource using the national outcomes SBE framework (TT)
- MSU collaborative events bringing together users including other organisations (EE)



Outcomes:

1. [National Tier 1 and 2 online faculty course](#)
2. National bank of over 250 SBE faculty
3. Average number MSU visits annually: 27
4. Train approximately 1000 HCPs per year
5. MSU Cost-effective
6. ‘Flying faculty’ to help sustainability

Key Lessons Learned:

- Human factors science useful to analyse influencers of sustainability
- Achieving a balance between national standards and local ownership requires stakeholder involvement
- Protected time for faculty hosting the MSU is crucial for sustainability

1. Motola I, Devine LA, Chung SC, Sullivan JE, Issenberg BS Simulation in Healthcare education – a best evidence practical guide- AMEE No 82 Medical Teacher (2013) 35: e1511-e1530

2. Holden R, Carayon P, Gurses AP, Hoonakker P, HUNDT AS, Ozok AA Rivera-Rodriguez AJ, SEIPS 2.0 A human factors framework for studying and improving the work of health care professionals and patients Ergonomics (2013) 56(11) 1669-1686