QPS TALKTIME

A community of quality and patient safety improvers

30 November , 2021

Human Factors in Healthcare - Launching a new guide designed to inspire and support healthcare staff along their human factors journey

Welcome

- ## Sound: Computer or dial in:
  - Telephone no:
    - Irish: 01-5260058
    - UK: +44-20-7660-8149
  - Event number: 2731 399 5068#

- ## Chat box function
  - Comments/Ideas
  - Keep the questions coming!

- ## Recording

- ## Engage with the team
  - Twitter: @QPSTalktime / #QIreland/ @poc_doctor
  - @AngelaLODea @johnfitzsimons9

- ## Feedback
  - Short feedback form after the session, please help us to improve our QPS Talktime Webinars
  - A window will pop up before logging out

- ## Confirmation of attendance
  - You will receive an email from QPS Talktime
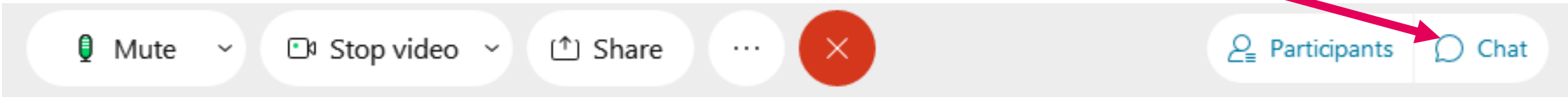
To get started … we invite you to

Share using the chat box

- Your name, work and where you are joining us from …

- What does the term Human Factors mean to you?

Speakers today

Launching the Guide

Lorraine Schwanberg, our new colleague, Assistant National Director for Incident Management, National Quality and Patient Safety Directorate will be launching the guide.

Dr Angela O'Dea, PhD is a Senior Lecturer in Surgical Education at RCSI. Specialist in Human Factors in high risk industries, researcher and educator. Passionate about sharing human factors knowledge and approaches with healthcare staff for the betterment of patient safety, quality and service efficiency.

Dr Paul O'Connor, Human Factors Psychologist and Senior Lecturer in Primary Care at NUI Galway. His research, and teaching, are concerned with improving human performance and safety in high risk work environments. In addition to healthcare, he has worked across a range of high risk industries and the military.
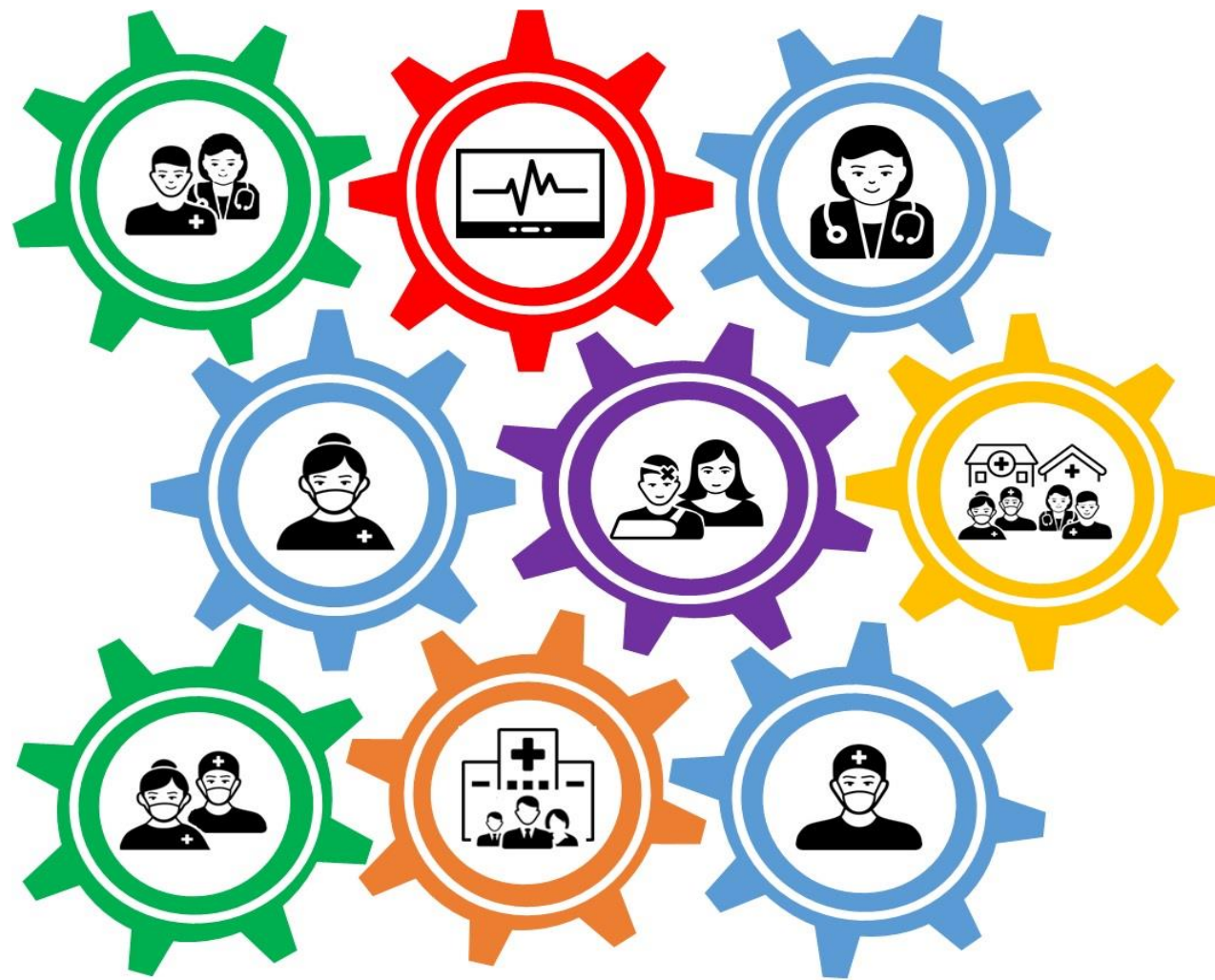
In conversation with

Dr John Fitzsimons, Clinical Director, HSE Quality and Patient Safety Directorate and Consultant Paediatrician, Children's Health Ireland at Temple Street.
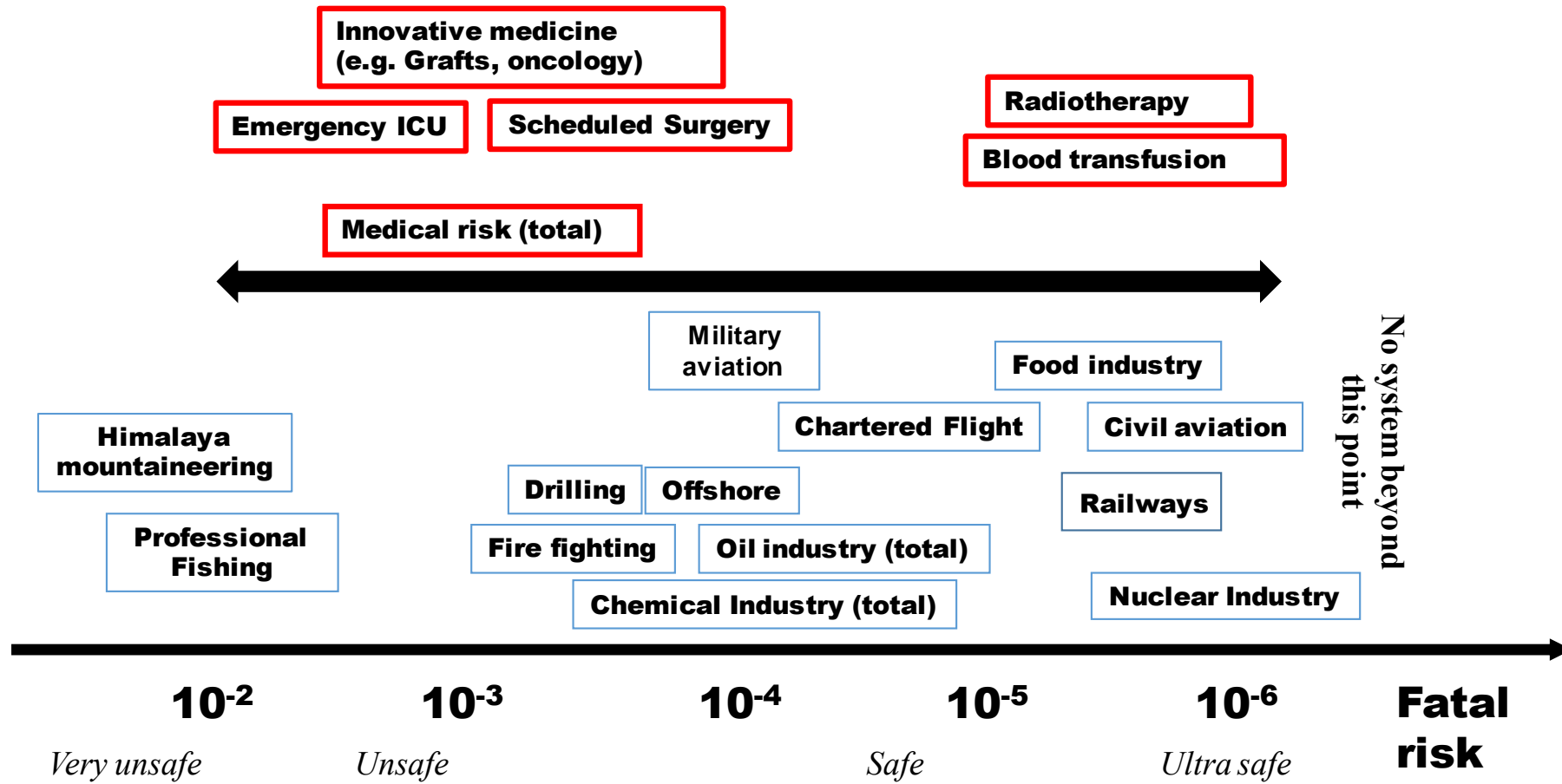
Launch…

An Introduction to Human Factors for Healthcare Workers

National Quality and Patient Safety Directorate

Patient Safety Strategy 2019-2024
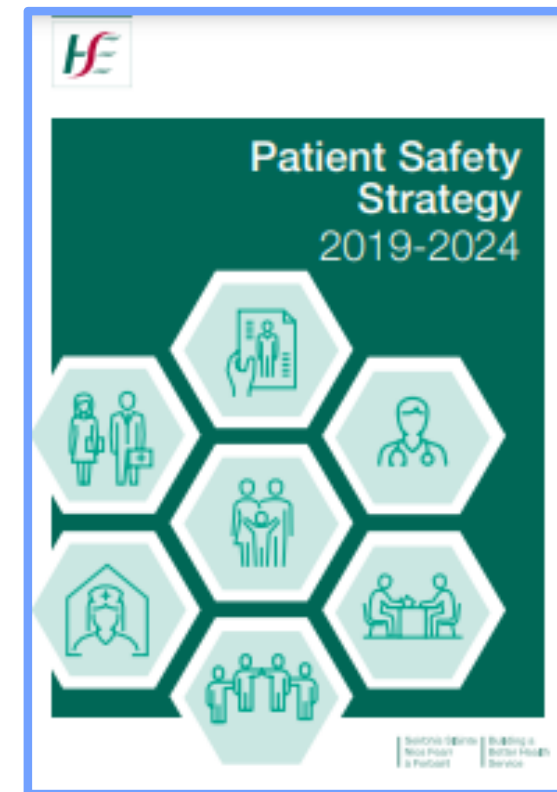
An Introduction to Human Factors

Paul O'Connor and Angela O'Dea

Risks in Human Activities (adapted from Amalberti, 2013)

Catchpole's Epochs of Patient Safety

Epoch 1: It's a systems problem

- Incident reporting systems, rules, procedures.

Epoch 2: Let's do what other industries do

- Low hanging fruit, attempt at standardisation, top-down implementation.

Epoch 3: This is more difficult than we thought

- Easy wins not so easy, broad implementation of solutions (e.g. safety training, checklists).

Epoch 4: Lets rethink what we are doing

- Rules, technology and training are not going to solve all problems- <u>people are at the centre of what we do.</u>

What is Human Factors?

"The environmental, organisational and job factors, and human and individual characteristics which influence behaviour at work in a way which can affect health and safety".

UK Health and Safety Executive (1999)

Human Factors

- Human factors is a multidisciplinary field incorporating contributions from discipline including:

  – Psychology

  – Engineering

  – Biomechanics

  – Industrial design

  – Occupational health

  – Statistics

 – Operations research

  – Anthropometry

Human Factors: History

- Generally considered to have originated in the U.S. during World War II largely in response to poor cockpit design, and the recognition of the need to design for people's capabilities.
- Other industries
  - Civil aviation (1950s)
  - Nuclear power (1980s)
  - Oil industry (1990s)
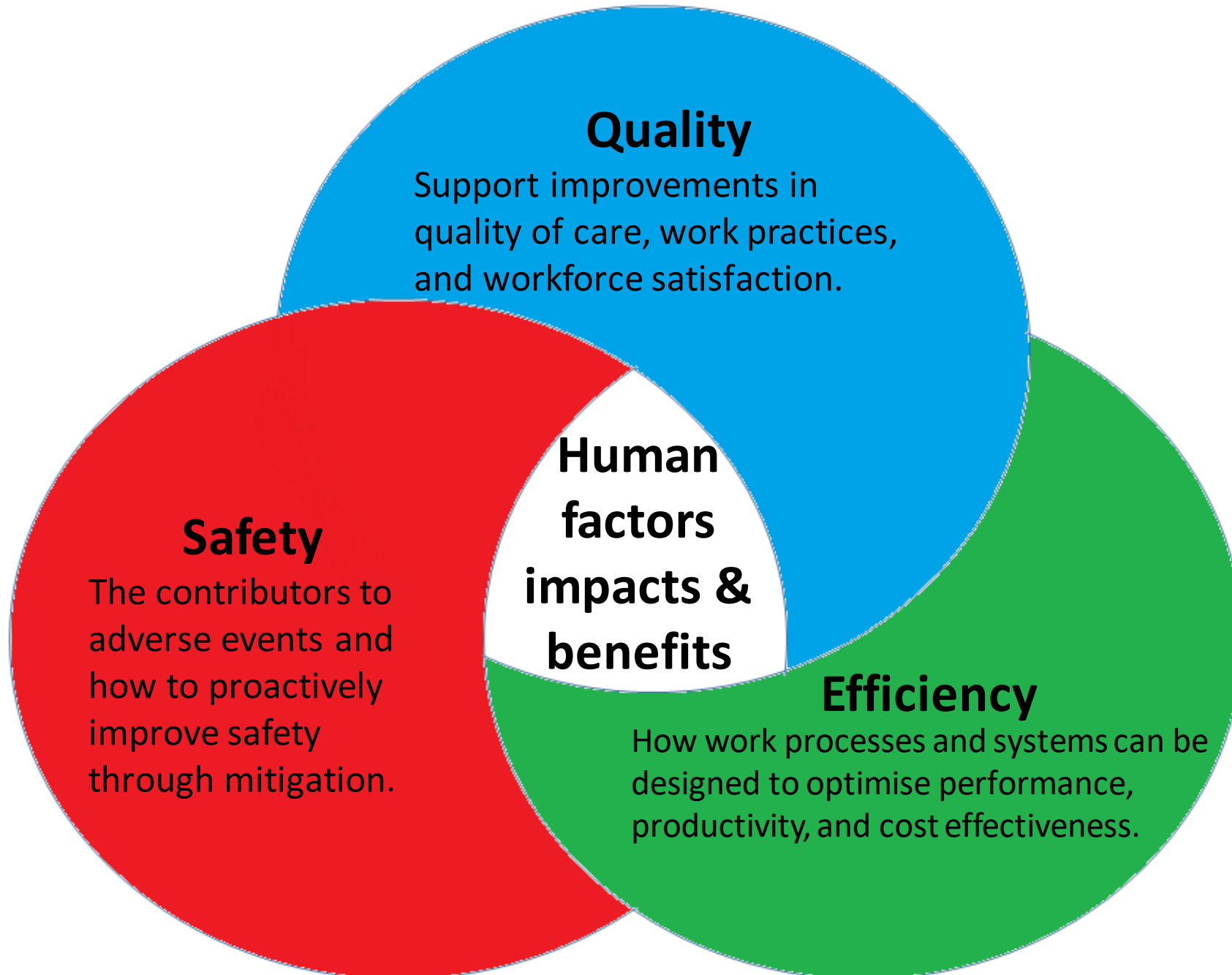 - Design of automation (1990s)

Human factors in Healthcare: History

- Small number of references in 1980s and early 1990s.

- Increase interest following Reason (1995; understanding adverse events).

- To Err is human (2000- U.S. Institute of Medicine).

- Crisis resource management (Gaba, 2000s).

- Medical device regulations- late 2000s.
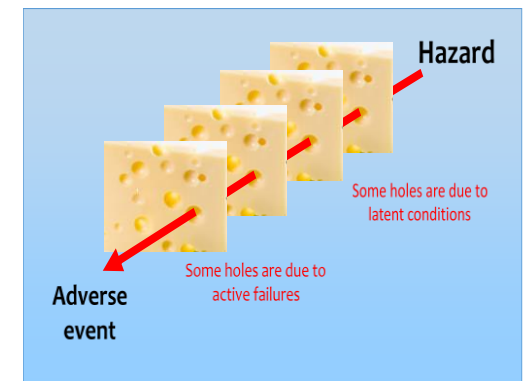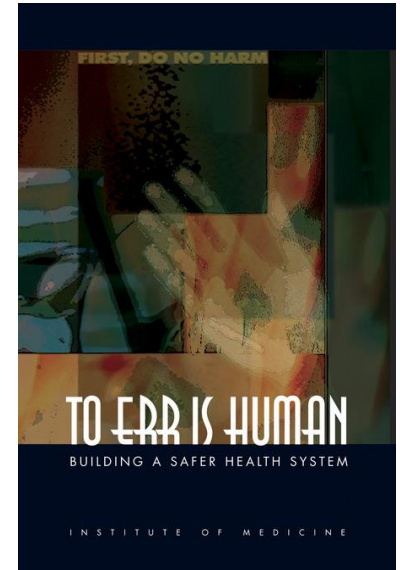
Myths About Human Factors

- Human factors is communicating with patients.
- Human factors is improving teamwork and communication
- Human factors is about reducing errors.
- Human factors is something that 'can be done'.

Quality
Support improvements in quality of care, work practices, and workforce satisfaction.

Safety
The contributors to adverse events and how to proactively improve safety through mitigation.

Human factors impacts & benefits

Efficiency
How work processes and systems can be designed to optimise performance, productivity, and cost effectiveness.
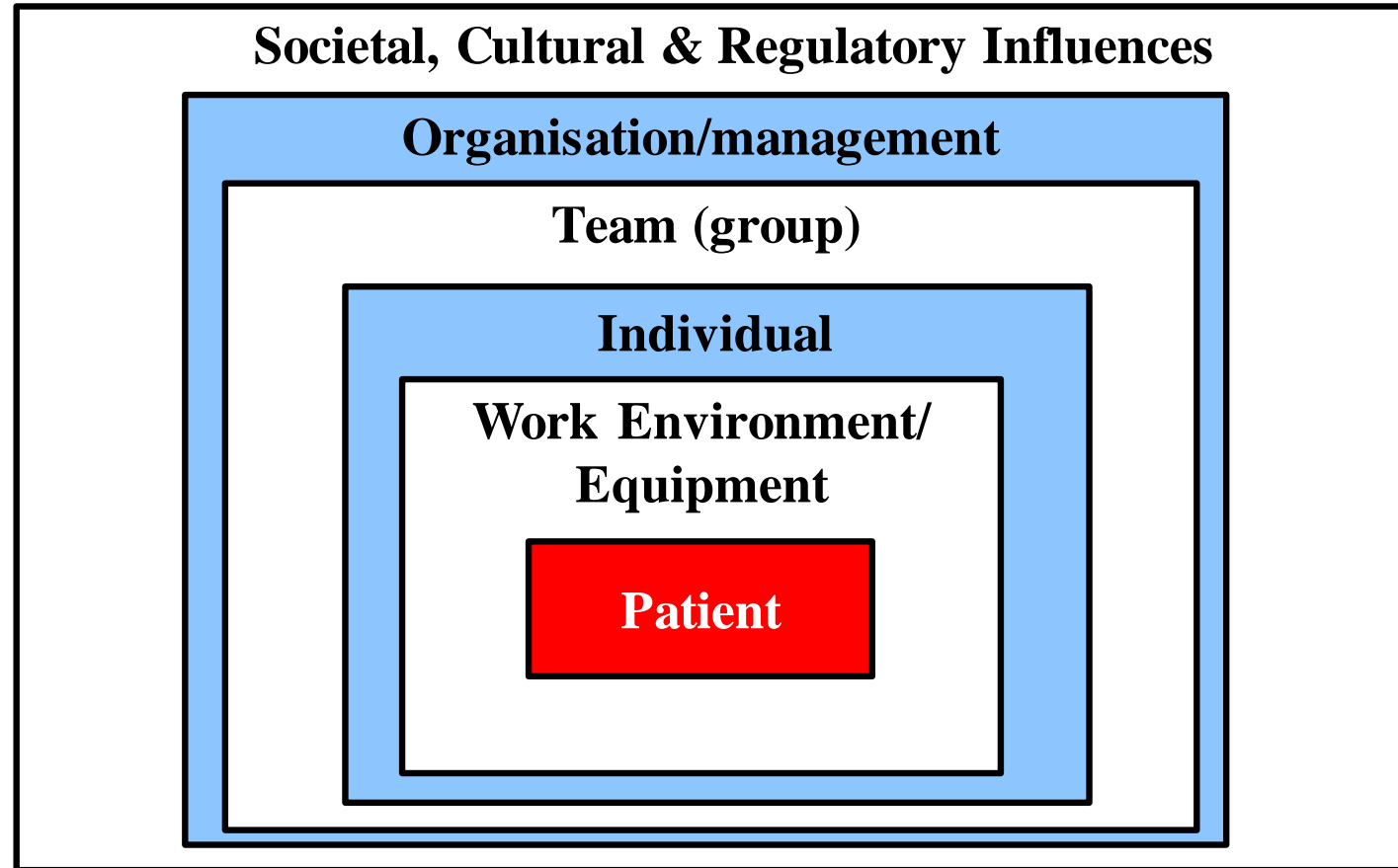
This guide will….

- provide an overview of human factors.

- support healthcare workers to identify human factors issues in their workplace.

- support the identification of the human factors contributors to incidents.

- provide examples of human factors interventions.
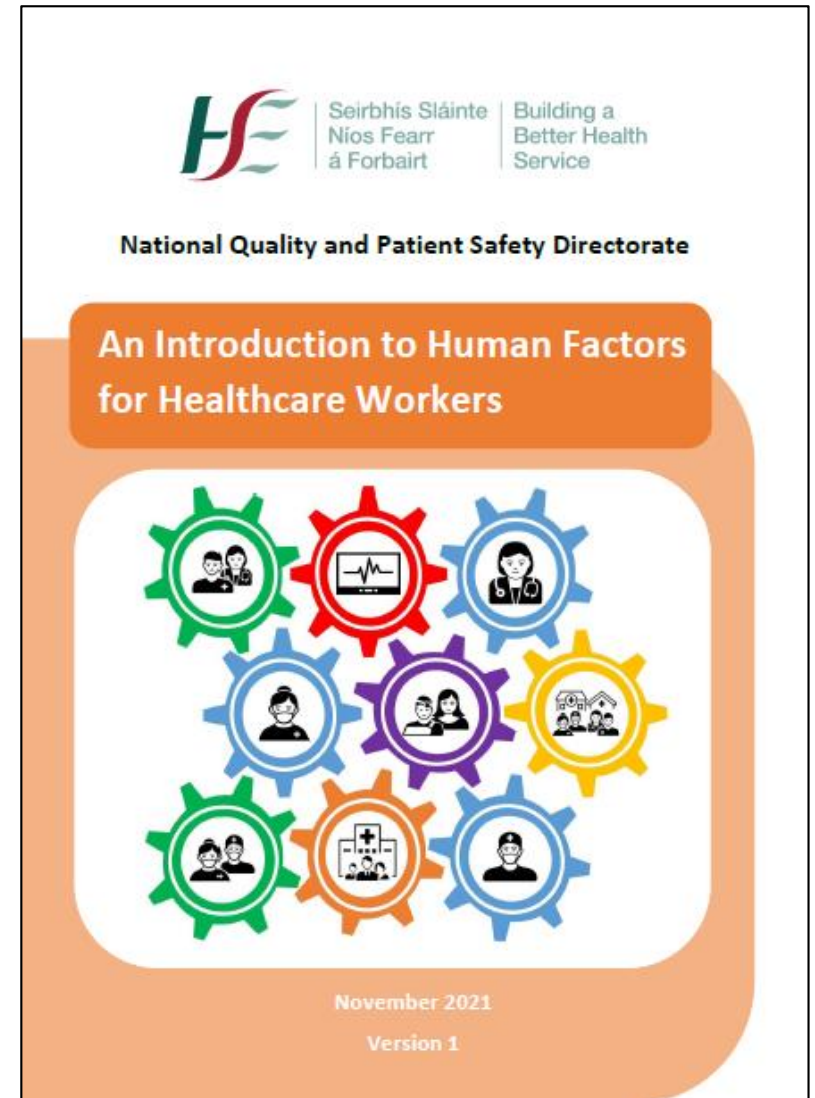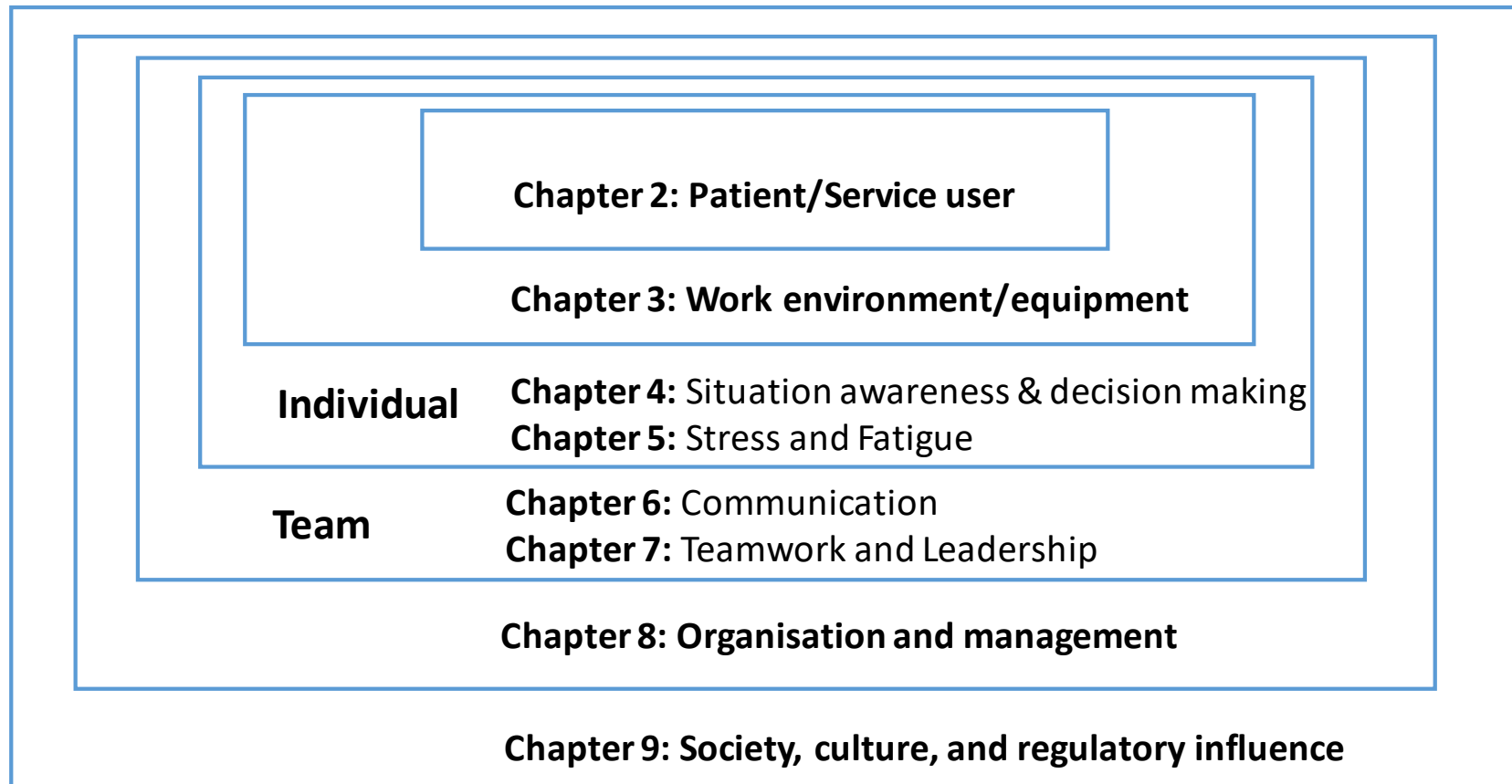
Format of the Guide

- The guide draws upon seminal human factors research and practices, but presented in a accessible format.

- Utilises real-world examples.

- Outlines practical implications.

- Provides links to online resources and additional reading.

Underlying model for the guide: Sociotechnical model of Healthcare

Morey (2000)

Part 1: Foundations of HF in Healthcare

Chapter 1: What is human factors?

Chapter 2: Patient/Service user

Chapter 3: Work environment/equipment

Individual   **Chapter 4:** Situation awareness & decision making
Chapter 5: Stress and Fatigue

Team   **Chapter 6:** Communication
Chapter 7: Teamwork and Leadership

Chapter 8: Organisation and management

Chapter 9: Society, culture, and regulatory influence

Part 2: Application of HF in Healthcare

Chapter 10: The Application of human factors to incident review
- Swiss cheese model – active and latent failures
- Yorkshire Contributory Factors Framework
- Safety I and Safety II approaches

Chapter 11: Examples of human factors interventions
- Looking at a problem from a human factors perspective
- Introduce the IHI Model for Improvement
- Provide examples of interventions at each level of the model

Conclusions

- A human factors approach involves developing a thorough understanding of the problem space.

- Human factors practitioners use a wide range of theories, measures, approaches and techniques in order to understand the problem space.

- The appropriate strategy and approach will depend on the problem and the context.

- Solutions are tailored to meet the needs of the situation and the context.

- Solutions often have safety, quality and efficiency goals as these are often interconnected.

- It is crucial to ensure that the healthcare workers are invested in the process.
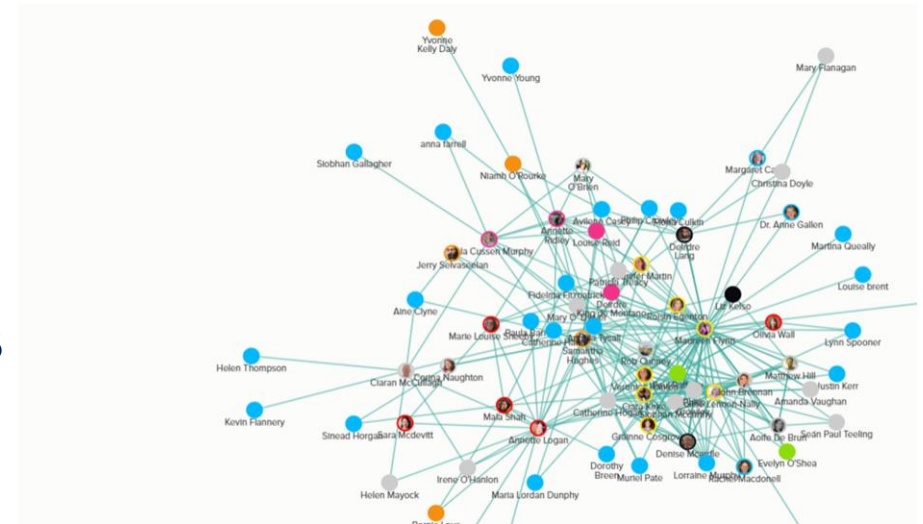
Acknowledgements

HEARING YOUR THOUGHTS AND COMMENTS

The Q Ireland Network Map

To help build connections between those involved in healthcare quality improvement across Ireland

- How to join the map?
  - Visit the HSE website (see link in the chat)
  - Get sent your unique link to the map
  - Enter information about you, your professional characteristics and your interests
  - Log your connections

- How to use the map?
  - Filter the map by role, organisation, interests
  - View individual profiles
  - Connect and collaborate with others

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Delivered by
The Health Foundation

- All you need to know about applying can be found on the Q website
- You will be invited to complete an online application using the Q online portal
- If you have queries or require support, please contact our colleague via email

Caroline.Lennonnally@hse.ie

Upcoming Webinars: Dates for your diary ....

Dates	Topics	Speakers
14 December	Understanding COVID using measurement for improvement	Emma Hogan and Dr Jennifer Martin National Quality and Patient Safety Directorate with guests

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https://www.hse.ie/eng/about/who/qid/resourcespublications/qitalktime.html

Let us know how we did today ….

Reminder: Short questions (pop up) as you sign off, please help us to improve our QPS Talktime Webinars by sharing your feedback

We really appreciate your time, thank you