

WHY IS THE NHS STILL HARMING PATIENTS?

Taking a Professional Approach to Patient Safety for COVID-19 and beyond



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PATIENT SAFETY RECOGNISED IN 2000

Patient safety hit the headlines in 2000 with the publication of *'An Organisation with a Memory'* in response to the Bristol heart scandal in which it was estimated that 170 children died between 1986–1995 who would have survived in other NHS hospitals. In 2000, around £400 million was being paid each year for clinical negligence claims; 400 people died or were seriously injured by medical devices; nearly 10,000 people had adverse reactions to drugs and there were around 1,150 suicides after recent contact with mental health services.

HAS THIS CHANGED OVER THE LAST 20 YEARS? NO, IT HASN'T!

In 2020, Shrewsbury and Telford Hospital Trust is being investigated for at least 1,200 alleged cases involving the deaths of babies and mothers. The National Confidential Inquiry into Suicide and Safety in Mental Health reported over 1,500 suicides by people under mental health care with families affected by the lack of safety commenting that *"the NHS is not an organisation with a memory. The same problems in care keep happening"*. Patient Safety has been described as a *'movement becalmed ... [or] ... dead as a reform effort'* (Wears and Sutcliffe, 2020) and that the *'patient safety movement itself has gotten things wrong. Its understandings ... of concepts*

such as safety, harm, risks and hazards are incomplete and simplistic and, as a result, its work has been grounded in assumptions and generalisations that are either wrong or lacking in context.' The recent national response to COVID-19 has resulted in many avoidable patient deaths and harms.

The National Patient Safety Agency (2001-2012; now part of NHS England/Improvement) led many excellent projects but failed to embed safety science expertise at Trust level. There is a new opportunity with the 2019 NHS Patient Safety Strategy stating that *'NHS does not yet know enough about how the interplay of normal human behaviour and systems determines patient safety. The mistaken belief persists that patient safety is about individual effort ... Getting this right could save almost 1,000 extra lives and £100 million in care costs each year from 2023/24. The potential exists to reduce claims provision by around £750 million per year by 2025.'*

This includes:

- creating the first system-wide and consistent patient safety syllabus, training, and education framework for the NHS
- establishing patient safety specialists to lead safety improvement across the system; which is the first step in professionalising this key role.

In this short paper, we propose

taking a much-needed professional approach to patient safety through an accredited learning pathway to integrate safety into clinical systems and develop healthcare safety specialists and experts.

PROFESSIONAL SAFETY SCIENTISTS: CHARTERED HUMAN FACTORS/ ERGONOMICS SPECIALISTS

At the Chartered Institute of Ergonomics & Human Factors (CIEHF) our members have been leading and supporting safety in many other industrial sectors (aviation, defence, oil & gas, nuclear, rail etc.) for decades. We feel that the NHS has not yet taken safety seriously; it has been estimated that there are fewer than 5 professionally qualified Human Factors Specialists across 223 NHS Trusts - one for every 300,000 NHS England staff in contrast to the National Air Traffic Services (NATS), an ultra-safe organisation which has one Human Factors specialist for every 100 staff. Policy recognition of the need to close this gap would illustrate a strong commitment professionalising patient safety.

Our profession focuses on integrating humans and systems and brings knowledge and experience of a range of concepts, principles, standards, and methods to understand and resolve problems and issues routinely experienced in highly complex, dynamic systems. It



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was established in the 1950s and received royal chartership in 2015. It is 'one of the first truly multi-, inter-, and cross-disciplinary subjects' (Wilson, 2000), drawing knowledge from design, engineering, psychology, organisational management and human sciences (anatomy, physiology, biomechanics, kinesiology and anthropometry) and applying this to the safe and efficient design of systems, products and services.

We propose that a **Professional Approach** (Figure 1) should be taken to healthcare safety and this starts with targeted education and training for patient safety specialists, investigators (local and national) and other key personnel.

knowledge relevant to their professional and role by taking one-day courses. This will provide an understanding of all the topics in the patient safety syllabus and develop professional competencies which can be taken forward in Level 3.

Achieving **Level 3** will create professional patient safety (technical) specialists (local advisors) who have undertaken 600 hours of learning (taught, experiential and self-study), with mentorship from a Chartered Human Factors Specialist (C.Erg.HF). They will have a recognised accredited title: Technical Specialists (HFE in Healthcare) and postnominal of TechCIEHF.

Experience Person (SQEP) in **'JSP 912 Human Factors Integration for Defence Systems'** from the Ministry of Defence (2014); *'equipment and systems have to be operated in a demanding and diverse military context in circumstances of fatigue, hunger, stress and even fear. Ultimately their usability in these demanding environments will determine our operational success.'* This informs all procurement, whereas in contrast the NHS has poorly designed systems, devices and products as procurement has been based on purchase cost alone. This has resulted in usability problems as well as problems of maintenance, both

the first opportunity to support the NHS. Our members volunteered from many sectors (e.g. rail, oil and gas, nuclear sectors) to work with the Medicines and Healthcare products Regulatory Agency (MHRA), Faculty of Intensive Care Medicine (FCIM), Intensive Care Society (ICS), Academic Health science Network (AHSN) and Nightingale Hospital London, Healthcare Safety Investigation Branch (HSIB), Clinical Human Factors Group (CHFG), Royal College of Speech & Language Therapy (RCSLT). We rapidly produced guides on:

- COVID Ventilators - the methods and approaches needed to capture the full range of user requirements: <https://bit.ly/HFandVentilators>
- Usability Testing for Rapidly Manufactured Ventilator Systems: <https://bit.ly/VentilatorUsabilityV2>
- Bedside Action Cards for the care of ventilated patients: <https://bit.ly/3axoNpd>
- Routine Care for Tracheostomy Guide <https://bit.ly/HFBedsideTracheostomyGuidance>
- Design of Work Procedures <https://bit.ly/WorkProceduresDesignGuidance>
- Covid-19 Risk Assessment for General Practice Remobilisation: <https://bit.ly/31XdI6l>
- Capturing Organisational Learning and Achieving Sustainable Change: <https://bit.ly/312JSEx>

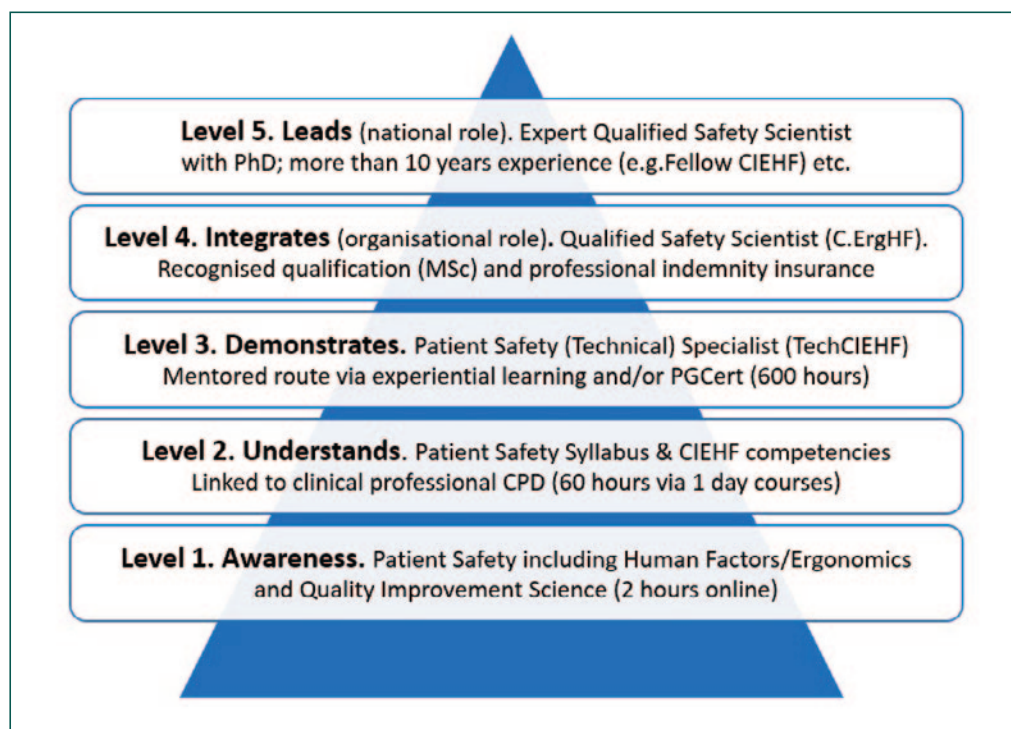


Figure 1. Taking a Professional Approach to Patient Safety

At **Level 1**, we are offering an online course, based on our 2015-2020 workshops with Health Education England and NHS Education for Scotland, to provide an awareness of safety science and Human Factors for all staff.

At **Level 2**, healthcare staff (clinician and non-clinical) will build their patient safety

Levels 4 (organisational lead) and **5** (national lead) offer opportunities to change career and become a professionally qualified safety scientist (Chartered Human Factors Specialist; C.Erg.HF).

Level 3 is equivalent to the minimum Human Factors knowledge required for a Suitably Qualified and

of which, directly or indirectly, can compromise patient safety.

COVID-19

The rapid response by the CIEHF to COVID-19 was to set up a Gold-Silver-Bronze command structure to respond to the multitude of requests for patient safety support.

The lack of ventilators offered

THE NEXT STEPS IN PATIENT SAFETY

Most Human Factors healthcare input has been funded through research, with

much of it based at universities rather than hospitals. There are examples for acute care, primary care, emergency care, home care, medical device design, health IT, health systems design, architecture, simulation, education, and reliability. Studies have analysed systems of work, teamwork, decision making, displays, device interactions, risks, threats, performance shaping factors, environmental and organizational approaches, and regulatory influences.

One consequence of the lack of a professional approach to patient safety is that few opportunities exist in clinical

settings for embedding qualified Human Factors professionals. Given that return-on-investment can be difficult to calculate, and effect on outcomes is difficult to measure in a non-linear system, a direct business case is still hard to make although the fact that Human Factors Specialists are integrated in the safety operations of all high-risk industries except healthcare should arguably be reason enough.

This has created a chicken-and-egg problem, where Human Factors professionals have not been employed in healthcare organizations, because there has

been a limited understanding of what they can do, no clear and immediate application, no business case, and no clear evidence base. However, without embedded experience within healthcare organisations the application, evidence and business case will not be developed. Healthcare organizations need to know how they can employ Human Factors specialists and upskill key parts of the workforce who lack safety science knowledge and skills (e.g. patient safety advisors and quality improvement specialists) through accredited safety routes at comparative low cost.

The CIEHF have been working with Health Education England (HEE), Healthcare Safety Investigation Branch (HSIB), NHS England/Improvement, NHS Education for Scotland (NES), Academic Health Science Network (AHSN), Academy of Royal Medical Colleges, Royal College of Nursing (RCN) and others to create this innovative Learning Pathway. As we enter our first COVID winter, taking a professional approach to patient safety should be one of the highest priorities in the NHS to send strong reassurance to patients, families, staff and the public of the continuing importance of this issue. □

MYELOMA, PRECISION MEDICINE AND GENOMIC MAPPING



Sarah McDonald - Director of Research, Myeloma UK

Myeloma UK is a patient focused charity, the only UK charity that deals exclusively with, the blood cancer, myeloma. We were established in 1997 and we have four central aims:

- Patients get a timely diagnosis
- They have the right treatment the right time
- They are supported, informed and empowered
- We fund research towards a cure.

On average 16 people in the UK are diagnosed with myeloma every day and we estimate that 24 thousand people are currently living with myeloma.

In the cancer world, myeloma is 18% of blood cancers and 2% of all cancers. This means

myeloma is considered a less common cancer.

THE CHALLENGES OF MYELOMA

Myeloma is a blood cancer arising from plasma cells, a type of cell found in the bone marrow. It's a remitting and relapsing cancer and at the moment, it's incurable.

From a patient point of view, the biggest challenge about myeloma and usually the first thing patients experience is around diagnosis, and specifically late diagnosis. As a blood cancer myeloma isn't easy to detect, there isn't "a lump" and patients experience non-specific and vague symptoms like fatigue, a stiff back, or bone pain. At diagnosis, half of myeloma patients will have visited their GP three or more

times. Around a third of patients are diagnosed via an emergency route presenting with serious complications caused by their myeloma such as kidney failure, bone fractures, spinal cord compression or severe infection. There is currently no screening programme for blood cancer and as a healthcare culture, the UK doesn't habitually take the blood tests which would pick up blood cancers earlier.

Myeloma is treatable but, sadly incurable. For patients finishing a course of chemotherapy, they don't worry if it will come back, they worry when it's coming back. Over the course of the disease, the time between remissions reduces and treatment side effects increase until the myeloma eventually becomes resistant to treatment.

