

The Role of Human Factors in Failure to Recognise Patient Deterioration

Training Teamwork

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GLOBAL AIR TRAINING



Aim

- To demonstrate how an understanding of the impact of human factors on human performance can assist in the early recognition of the deteriorating patient





Background

- Projects commissioned by CGST of the Modernisation Agency
- Transfer of concepts & principles trialled & proven in aviation
- Assists in both a reactive and proactive approach to learning lessons from critical scenarios
- Used in a variety of clinical settings



Contributing Human Factors in Adverse Incidents

- Communication
- Personality Type and Behaviour
- Situational Awareness
- Tiredness & Fatigue
- Management of Stress/Conflict
- Management of Workload
- SOP's, Protocols & Guidelines
- Automation

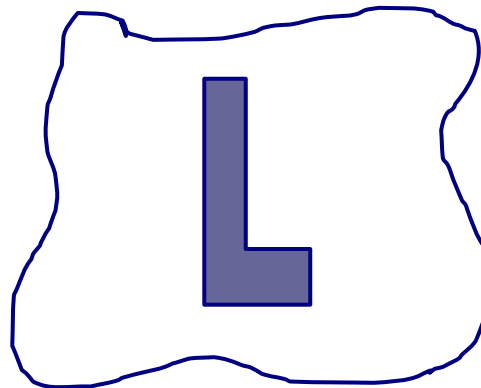




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Variations in Performance & limitations

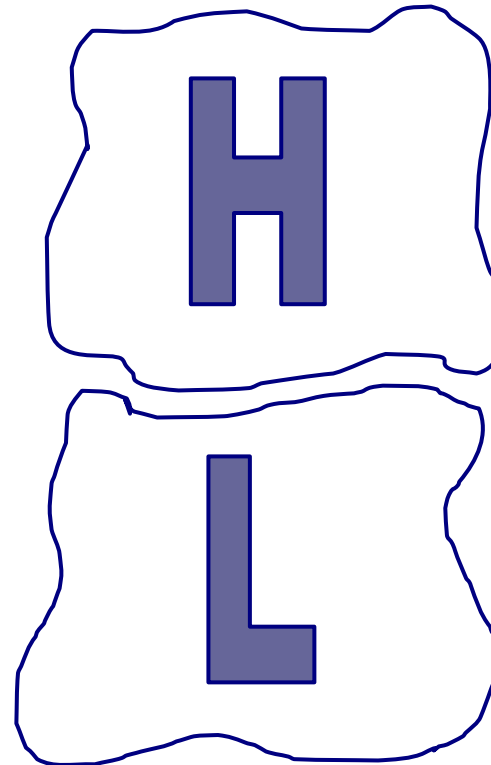


- Physical characteristics
- Emotional stability
- Information processing (inc. input & output characteristics)
- Environmental tolerances



Liveware – Hardware

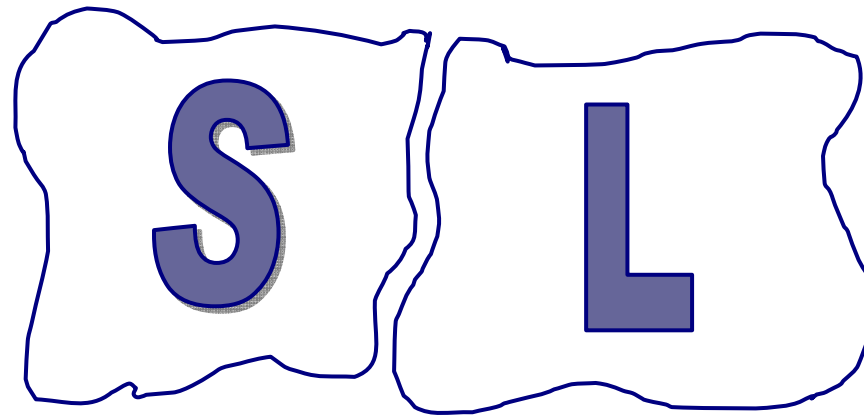
- Ergonomics
- Interface between human & equipment





Liveware – Software

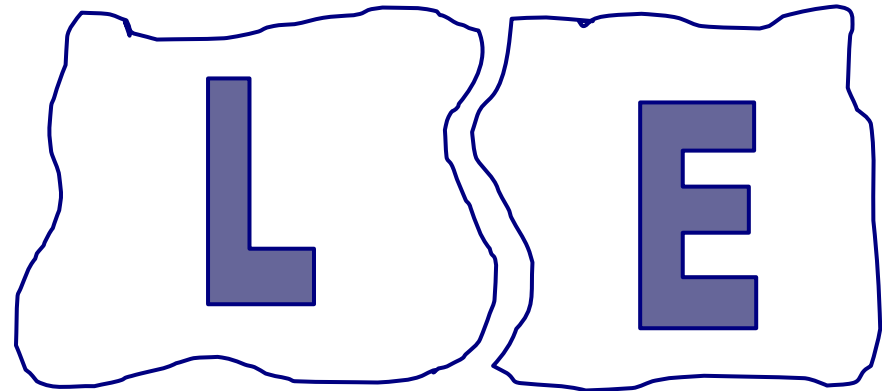
- Non-physical aspects of systems
- Check lists, SOPs, Protocols & Guidelines





Liveware – Environment

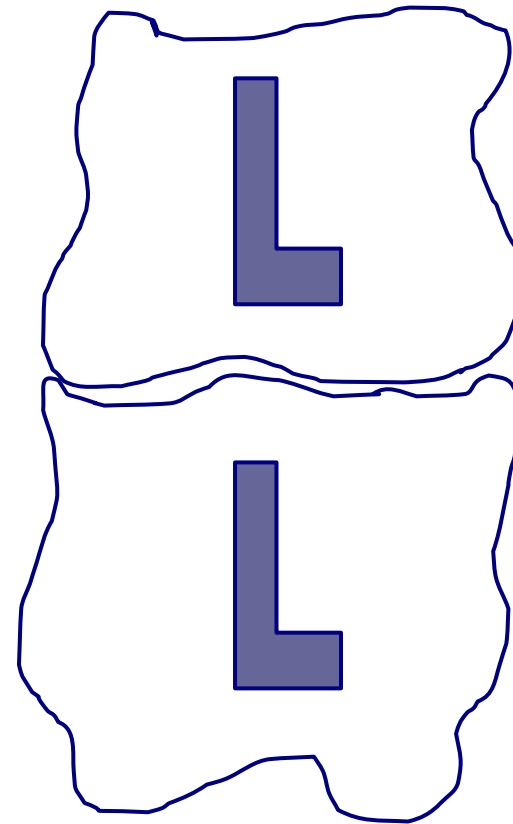
- Disturbed biological rhythms/shift work
- Sleep disturbance and deprivation
- Heat, cold, air conditioning, humid, light & dark





Liveware – Liveware


- Lack of clear leadership, poor co-operation between teams/staff
- Lack of checklists, inadequate communication between staff and teams





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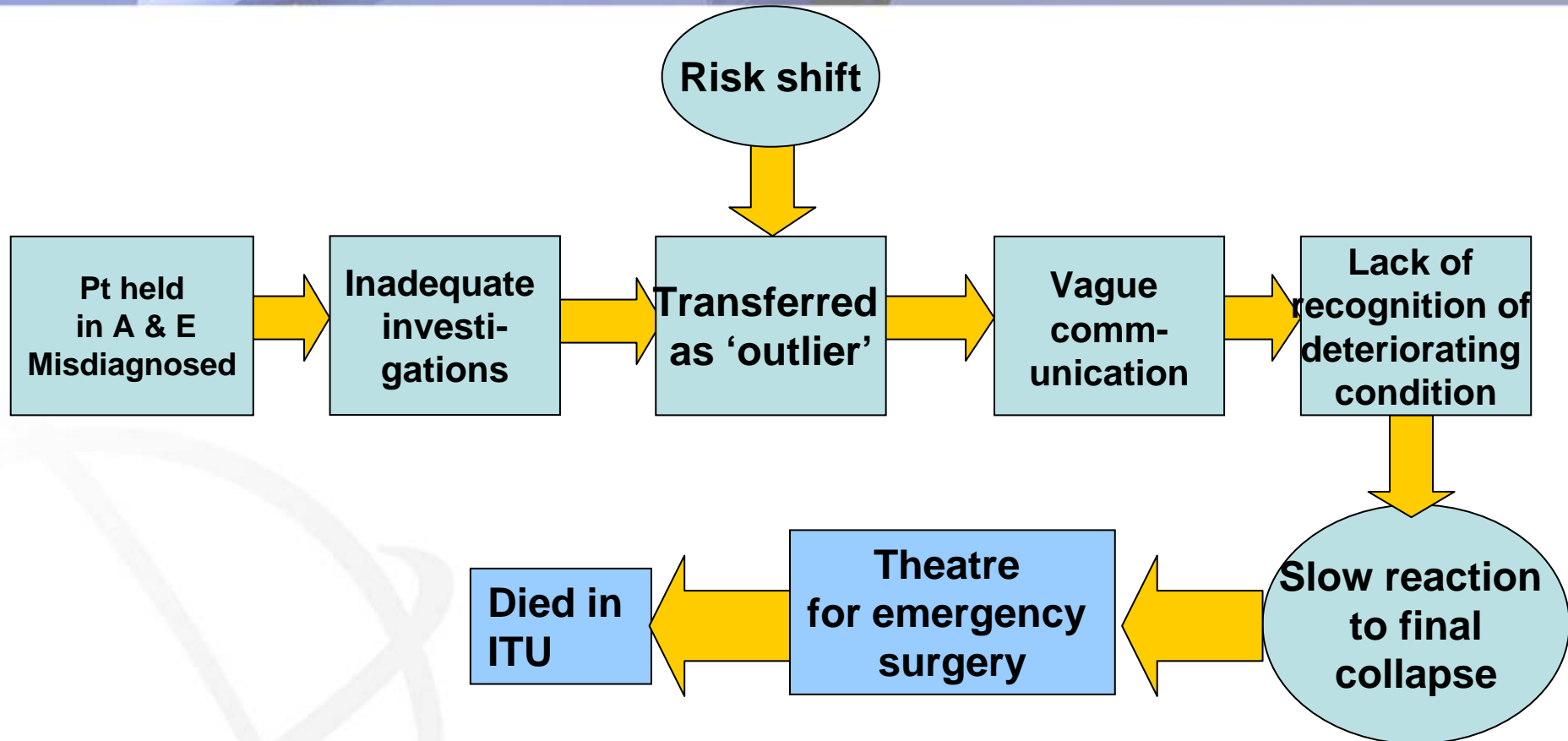


Case-study

- Initial misdiagnosis
- Investigations not completed
- Failure to recognise patient's deteriorating condition
- Inappropriate allocation as an 'outlier'
- Delay in alerting the surgical team & initiating resuscitation



Simple Timeline






Classifying the Causal Factors

- Patient factors
- Individual's impact
- Communication
- Team dynamics
- Equipment resources
- Procedures/protocols/guidelines
- Education & training
- Work environment
- Organisational & strategic factors





Error Chain Approach

- Ambiguity
- Fixation or preoccupation
- Confusion or an empty feeling
- No one “flying the aircraft”
- No one “looking out of the window”
- Use of an undocumented procedure
- Violating limitations and minimum standards
- Unresolved discrepancies
- Failure to meet targets
- Departure from protocols
- Incomplete communications





- To err is human
- To cover up is inexcusable
- To fail to learn is inexcusable





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QUESTIONS



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