Safety Engineering Initiative for Patient Safety (SEIPS)

RAINETICS

HUMAN FACTORS

Worksheet



SEIPS Explained

Examples of Work System Descriptors

SEIPS is the Safety Engineering Initiative for Patient Safety. It is based on a Human Factors systems approach to understanding care systems, processes and outcomes to inform better design and improvement. SEIPS can be used by anyone as a general systems analysis and problem-solving tool e.g. incident investigation; hazard identification; incident reporting & data collection; simulation design; protocol & checklist development; research design and data analysis.. **Guiding Step**

- 1. As a team, use the worksheet as a prompt to highlight the systemwide factors that contribute to the issue at hand
- 2. Seek to understand how these factors influence processes and interact to produce outcomes (wanted or unwanted)
- 3. Link this new knowledge to making improvement recommendations

Person Factors

e.g. Physical, psychological capabilities, limitations and impacts (frustration, stress, fatigue, burnout, musculoskeletal, satisfaction, enjoyment, experiences, job control); personality or social issues; cognitive ; competence, skills,

knowledge, attitudes; risk perception; training issues; personal

needs and preferences; psychological safety; performance variability; personal goals; adaptation to work conditions. **Care team** e.g. roles, support, communication, collaboration, supervision, management, leadership

Patient/client e.g. complexity of clinical condition, physical, social, psychological, relationship factors Others e.g. families and carers, and other health and social services colleagues

Tools & Technology

e.g. design interaction and device usability issues; familiarity; positioning, accessibility; availability; access; mobility; operational /calibrated /maintained; device usability; various IT design issues.

Task Factors

Specific actions within larger work processes, includes task attributes such as:

- level of task difficulty /complexity;
- time taken;
- hazardous nature;
- variety of tasks;
- sequencing of tasks
- workload, time pressure, cognitive load,

Physical Environment

e.g. Layout; noise; lighting; vibration; temperature; humidity and air quality; design of immediate workspace or physical environment layout; location; size; clutter; cleanliness; standardisation, aesthetics; crowding

External Influences

e.g. Societal, government, cultural, accreditation and regulatory influences e.g. funding, national policies and targets, professional bodies, regulatory demands, legislation and legal influences, other risks and influences

Organisation of Work Factors

e.g. Structures external to a person (but often put in place by people) that organise time, space, resources, and activity.

Within institutions:

- Work schedules/staffing
- Workload assignment
- Management and incentive systems
- Organisational / safety culture (values, commitment, transparency)
- Training
- Policies/procedures
- Resource availability and recruitment
- In other settings:
- Communication
- Infrastructure
- Living arrangements
- Family roles and responsibilities
- Work and life schedules
- Financial and health-related resources

Outcomes – System Performance e.g. Safety; productivity; resilience; efficiency; effectiveness; care quality

Outcomes – Human Wellbeing e.g. Health and safety; patient satisfaction and experience; enjoyment; staff turnover; staff welfare; job satisfaction

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