Integrating Human-Centred AI in Clinical Practice: Systems considerations

Chartered Institute of Ergonomics & Human Factors

Human-centred AI is about taking a systems perspective to the design and use of AI technologies. This type of systems analysis can help clinicians and those wishing to integrate AI into their systems to look beyond just the technical characteristics of the technology. This supports better design, which will contribute to better use, better experience and acceptability, and improved patient safety. This list of prompts is not exhaustive, but it illustrates the kind of considerations that should be taken into account.

PEOPLE

Who are the people involved?

What are their needs and their specific characteristics?

What are the relationships between people (both pre- and post-AI implementation)?

ENVIRONMENTS

What do the physical spaces where work is carried out look like? How do they support or hinder the work?

What organisational processes are relevant and how do they impact on the work?

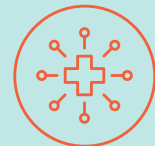What external influences and pressures should be considered?

TASKS

What tasks are being carried out?

What characterises the tasks?

TECHNOLOGY

What tools are being used as part of the process?

What characteristics do the tools have?

KEY INTERACTIONS

Which sets of interactions among the elements of the work system are particularly critical or important?