

Revolutionizing the way people work with medical technology

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Abstract: A multidisciplinary human-centred design approach is presented to tackle complex interacting problems with ICT in healthcare. Especially when Human Factors problems are related to multiple levels, i.e., physical, psychological, team, organizational and political, a systems approach is required. By the case of neonatal equipment alarms it is explained how a framework of 'Human Factors and Design Thinking' can be used to identify research questions, methods, research domains and research activities. Cognitive systems engineering could play a major role in solving many problems with ICT in healthcare, a domain where cognitive ergonomics and systems ergonomics has been neglected.

Keywords: user interfaces, human factors, human centered design, alarm systems, medical applications
