Eliciting and Confirming Data, Information, Knowledge and Wisdom in a Specialist Health Care Setting - The Wicked Method

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Abstract : Healthcare is a knowledge-rich environment. This knowledge, while valuable, is not always accessible outside the borders of individual clinics. This research aims to address part of this problem (at a study site) by constructing a maximal data set (knowledge artefact) for motor neurone disease (MND). This data set is proposed as an initial knowledge base for a concurrent project to develop an MND patient data platform. It represents the domain knowledge at the study site for the duration of the research (12 months). A knowledge elicitation method was also developed from the lessons learned during this process - the WICKED method. WICKED is an anagram of the words: eliciting and confirming data, information, knowledge, wisdom. But it is also a reference to the concept of wicked problems, which are complex and challenging, as is eliciting expert knowledge. The method was evaluated at a second site, and benefits and limitations were noted. Benefits include that the method provided a systematic way to manage data, information, knowledge and wisdom (DIKW) from various sources, including healthcare specialists and existing data sets. Limitations surrounded the time required and how the data set produced only represents DIKW known during the research period. Future work is underway to address these limitations.

Keywords: healthcare, knowledge acquisition, maximal data sets, action design science

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