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Web Science CDT

Using Personal Informatics to Support Decision-Making in Healthcare: A Survey of the Dangers of Cognitive Bias

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The increasing ubiquity of personal tracking devices is leading to the emerging field of Personal Informatics. Thousands of devices exist to record personal information related to health, including weight, diet and activity. Such data has been demonstrated as providing self-insight and promoting positive health behaviours, such as maintaining a healthy diet. As such, there has been interest in its use by healthcare practitioners to support decision making. However, such data may have insufficient context, leading to biased decisions and poor judgement.

Through surveying the use of personal data within constraints, such as time and context, this dissertation synthesises a series of cognitive biases pertinent to a number of healthcare scenarios. From this, the dangers of their use in healthcare are assessed against their potential benefits. [Results will be discussed here] Drawing from these results, this dissertation forms the design of a study which will examine the prevalence of such biases within nursing when providing care to stroke patients.

Contents