What data should be captured during IV treatment in community to answer questions which

various stakeholders might have?

Student: Sarfaraz Ahmad

Year: 2015

Course: Health Informatics

Supervisor: Dr. Lucy Hederman

A dissertation submitted to the University of Dublin in partial fulfilment of the requirements for the degree of Master of Science in Health Informatics

2015

Abstract

The objective of this research is to explore the potential for secondary use of community nursing intervention data. There is potential to capture ancillary data that can be leveraged to inform all stakeholders where the community nursing interventions are managed electronically (e.g. OPAT). This research had explored this potential in the context of community IV treatment. It looked at the questions which the various stakeholders wished to answer (the ones they identify explicitly and ones which emerge from literature or questions identified by the author), and what data that can be collected or is required to answer them.

A qualitative research method is chosen. Two different types of questionnaire sets were prepared for the eight identified stakeholder groups for the semi structured telephonic interviews. The participants were given an opportunity to discuss their needs for information irrespective of the data that is or is not currently captured electronically during the delivery of IV treatment at home. The captured interview data was systematically analysed to elicit requirements and themes were obtained. Each theme was further analysed to identify potential analysis questions. The second part of analysis was related to stakeholder interviews. In that regard, two different types of questionnaire sets were prepared for the eight identified stake holders groups for the semi structured telephonic interviews. The captured interview data was systematically analysed to elicit requirements in the form of potential analysis questions. After that, a deduplication process was performed on all identified analysis questions to obtain a unique list of analysis questions. At the end, a comprehensive data model was produced (based on the findings from interview and literature review) to answer uniquely identified analysis questions which answered the research question.

The outcome of the research can help improve patient care from the perspective different stakeholders identified in this dissertation, inform the development of new community nursing software solutions and inform improvements to existing software solutions' data capturing and reporting functions.