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Nursing Clinical Documentation System Structured on NANDA-I, NOC, and NIC Classification Systems[1]

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Abstract

Information is a key feature that health professionals need to exercise their profession with efficiency and quality. This study aims to present the experience of the usage of an electronic system for clinical documentation in nursing in a university hospital. It is a methodological research of technology production. The system was developed in four phases: Conception, Elaboration, Construction, and Transition, and was named Electronic Documentation System of the University of São Paulo Nursing Process (PROCEnf-USP™). The knowledge base of PROCEnf-USP™ was organized in hierarchy of domains and classes, according to NNN linkages.

Keywords:

Nursing Information Systems; Information Systems; Nursing Diagnoses; Classification System; Nursing Process.

Introduction

Health records are the primary information tool to improve clinical communication and evidence based practice. Structured documentation produces data that generate more meaningful and reliable information than free documentation [1]. Classification systems are instruments to improve the reliability, validity and usability of the nursing documentation [2]. The implementation of the NNN linkages (classifications of nursing diagnoses, outcomes and interventions) [2] in electronic nursing documentation system encourages nurses to adopt the nursing process, proves the diagnostic accuracy and the scope of the results obtained from the patients**.** The objective of this study is to present the experience of the usage of an electronic system for clinical documentation in nursing in a university hospital.

Methods

In this methodological research four cyclical phases of creation and assessment of technological product were used to develop the system, based on project management model in the Project Management Institute (PMI) [3]. Phases: Conceptualization - project scope was approved and defined. Estimated resources, problems and expected benefits were identified. Elaboration: problem domain was analyzed in order to complement the survey documentation of the use cases and modeling of system data. Construction: system development (prototype), aiming to refine the requirements, build and test their components. Transition: dissemination of the new system for the whole nursing team, user training, and evaluation of user satisfaction [3].

Results

The system developed is Electronic Documentation System of the University of São Paulo Nursing Process (PROCEnf-USP™). It allows clinical documentation, generates reports of the nursing process and provides decision support about diagnoses, expected results and nursing interventions [3]. This support system for clinical decision has both professional and academic environments, and it has been used since 2009 [1].

Conclusion

This project was funded by Brazilian government agencies for research support. PROCEnf-USP™ generates data for scientific research regarding the evaluation, accuracy and usability of the system.

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