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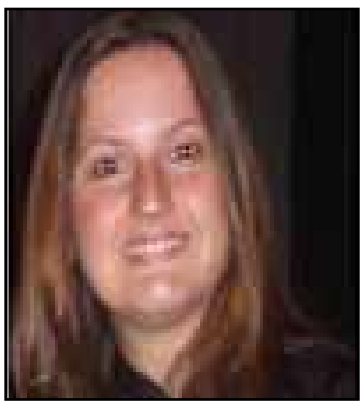
Introductory Note



Technological production of a prototype of the electronic record system CICATRIZAR: an applied study

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ABSTRACT

Introduction: The clinical evaluation of the development of a wound is done through a clear and objective organization of all registries of the findings and of the actions performed by the health professional.

Aim: to test a prototype of the digitalized system CICATRIZAR destined to keep nursing records of wounded patients.

Method: This is an applied study, which forecasts a final technical product, under development at Fluminense Federal University, from a partnership between the Wound Restoration Ward of Antonio Pedro College Hospital and the Computers Institute, both from the same University. To evaluate the feasibility of this system, a test with the prototype will be conducted with a group of evaluators, divided in two categories: C1 – computer analysts and E1 – nurses with experience in the evaluation of wounds.

Descriptors: Nursing Informatics; Medical Informatics; Wound Healing.

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PROBLEM SITUATION AND ITS SIGNIFICANCE

The healthcare dedicated to the patient with wounds requires extremely cautious attention. The nurse involved in the caring has many different roles: to evaluate the evolution of the lesion, to apply dressing techniques, to measure the wound, to perform the photographic registry, to check the evolution of the characteristics and the therapy adopted to treat the wound. Thus, the availability of technologies that are facilitating assistance tends to contribute to the quality of assistance and the detailed information of the patient that is registered in medical records.

Today, the majority of ambulance services in Brazil still register the patients manually, and record data in paper files. This type of documentation presents limitations, such as the lack of legibility and availability in one single place, so it can only be accessed by one person at a time. Furthermore, this data can be lost or not found in the precise and rapid manner that the demands of the health service normally require.

In this sense, information technology comes as a supporting tool in caring, which enables the nurse to access a patient's records in a legible form.

Based on what was demonstrated here, this study aims to test the digitalized system prototype **CICATRIZAR** destined to keep nursing records of wounded patients.

METHOD

This study is characterized as an applied study, with a final product being an electronic medical registry system to be used in nursing consultation and evaluation of wounded patients.

Applied researches aim to create new products from the rise of effectiveness of already existing products[1]. They are based on the conjunction of the understandings of simple and basic research to develop products or processes according to a pre-established demand.

The setting of the study will be the Wound Restoration Ward, located in the Antônio Pedro College Hospital, in the city of Niterói, Brazil. The ward was opened in 1993, through the efforts of a professor from the Nursing School of Fluminense Federal University (UFF, in Portuguese). Since then, it has been a regional reference unit to treat patients with chronic lesions, as well as being a theoretical and practical field for the subject "Fundamentals of Nursing I": it is also where the study group "Clinical Research, Wounds and Biomaterials" works[2].

For the technical construction and development, the prototype has been developed based on a partnership with the Computers Institute of UFF. The scientific content of the prototype was based on the valid and specific protocol used to evaluate clients with tissue lesions in the Wound Restoration Ward.

As a technique to build the system, the cyclical methodology of prototyping will be used. Both the target audience/clients and the software engineers like to face the paradigm of prototyping, once these users have had an idea of the final system[3].

In prototyping, the process is performed more than once, with an objective to create different versions until the final version is achieved. Therefore, the prototype can work as the "first system"[3].

In software engineering, the process of prototyping is composed of four stages. These are: communication; quick planning (modeling or quick project); construction of the prototype and implementation (employment, delivery and retro-feeding)[3].

After the construction of the prototype, a questionnaire will be used, in November 2013, to validate the viability of the system. The viability of the system will be tested regarding its use and technical quality, following the standards described in the NBR ISO/IEC 14598-6, which determines that a system must be evaluated by at least eight professionals.

The group of evaluators will be composed of two categories, based on the following criteria of inclusion: system analysts, in category C1, with at least one year of experience in the field and nurses, with at least one year of experience in the field of wound evaluation, in category E1.

The analysis of data will be done through descriptive statistics.

This project is registered under CAAE 07572812.4.0000.5243, under opinion #241,279, both submitted to the Ethics in Research Committee (CEP, in Portuguese) but because it is also dealing with the development of a system as an evaluation instrument to be used by professionals, CEP considered that the questionnaire does not place at risk any of the subjects interviewed, which then makes unnecessary any further evaluation by the committee.

EXPECTED RESULT

This project aims to build an Electronic Record System in Health to be used with wounded patients. This is a technological innovation whose main goal is to improve the quality of information in health care.

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PROJECT DATA

Project Data

Dissertation Project of the Professional Master Program in Assisting Nursing at Fluminense Federal University.

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