



Summer Institute in Nursing Informatics 2019
Poster Presentation

Development and application of chronic wound assessment system

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Purpose: A chronic wound can be defined as one that has failed to proceed through an orderly and timely reparative process to produce anatomic and functional integrity within a period of 3 months or that has proceeded through the repair process without establishing a sustained and anatomic and functional result. Due to the long and varied treatment cycle, the homogenization of the treatment process and the difficulty in the preservation of the whole wound progression data are great. This procedure is designed to simplify the work process, establish the database of chronic wound assessment, treatment guidelines and wound evolution information, and achieve the homogenization of assessment and treatment. **Methods:** We selected Bates-Jensen Wound Assessment Tool (BWAT) to evaluate the chronic wound. The system was developed independently by the nursing information group of our hospital. Professor Polun Chang from National Yangming University of Taiwan was invited to teach the "User Self-Building Model", and was developed using Microsoft Excel 2016 and its internal Excel VBA tools. **Results:** The system includes a login interface and a user interface. The user interface is divided into two user interfaces: information entry and assessment therapy. (1) Information input: When the patient comes for the first time, an electronic file is established, and when the patient comes back, the information retrieves automatically. The input of the ID number ensures the accuracy of the patient identification. (2) Evaluation and treatment: the patient's previous medical information (previous evaluation and wound pictures) was collected to evaluate the wound evolution process. According to the evaluation results, the best evidence-based treatment scheme was pushed by the database to ensure the homogenization of treatment, especially to provide work guidance for novice nurses. **Discussion and Conclusion:** The operation interface of the chronic wound assessment system conforms to the work flow of wound treatment. The rapid retrieval and treatment guidelines of the graphic and text data ensure the accuracy of the assessment, the continuity, safety and standardization of the treatment, improves the work efficiency and medical record management level. This provides data support for further scientific research. The next step will continue to improve this process in terms of data analysis, automation, and convenience.