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Development of a PDA-based Minimum Data Set for the Screening and Management of Type 2 Diabetes Mellitus in Primary Care

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Abstract

The ultimate goal of this project is to develop an informatics practice model in primary care to enhance evidence-based practice (EBP) by increase advanced practice nurse (APN) students' informatics competencies. This abstract describes a process of development of a PDA-based minimum data set (MDS) for the Screening and Management of Type 2 Diabetes Mellitus (DM) in primary care.

Keywords:
primary care, diabetes, minimum data set, PDA

Introduction

Past projects had been successfully developed in which informatics students had worked with APN students to develop their capstone projects that reflect the combined expertise of the informatics students and the APN students.[1] In the U.S., about 20.8 million people have diabetes, and surprisingly 30% of those are not aware that they have diabetes until they have developed this chronic condition that requires long-term management.[2] Based on the success of the collaborative projects, faculty from informatics and adult primary care, diabetes educators, and 3 APN students were involved with the development of the MDS for the screening and management of Type 2 DM to promote the delivery of EBP in primary care.

Methods

Literature on primary care database was extensively searched and retrieved in the U.S., the U.K. and Canada. The team basically considered the clinical practice guideline (CPG) recommended by the American Diabetes Association (ADA),[2] the Diabetes Continuing Care Reference Dataset (DCCRD)[3] published by the Primary Care Information Service (PRIMIS),[4] nursing minimum data sets (NMDS) published,[5] and additional indicators that meet the federal health indicators for this project.

Results

The following 4 modifiers- Assess, Care, Teach, and Manage- of the Clinical Care Classification (CCC) System[6] were used as a framework for nursing interventions of Type 2 DM (Figure 1)

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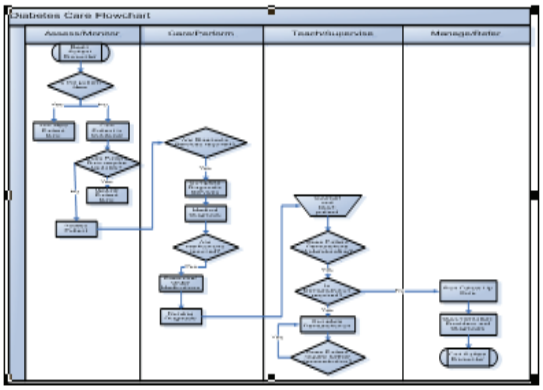

. *Figure 1 Flowchart of Type II diabetes care*

Figure 2 shows part of the PDA screen shots based on the MDS developed.

Figure 2 - PDA Screen shots of the PDA-based Minimum Data Set developed

Conclusions

Ultimately, this data set will be served as a research repository for future EBP planning in primary care. In

addition, this collaborative approach has resulted in the increase of informatics competencies for both APN students as well as faculty in various specialties.[1]

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