Patients and Physicians have different opinions about the use of a Computer Patient Record System in ambulatory setting

Daniel Luna, Alejandro Lopez Osornio, Sebastian Garcia Martín, Gastón López, Germán Cifarelli, Fernán Gonzalez Bernaldo de Quirós, Paula Otero, Enrique Soriano, Eduardo Durante

*Department of Medical Informatics - Hospital Italiano de Buenos Aires, Buenos Aires, Argentina

Abstract

User’s acceptance of a Computer-based Patient Record (CPR) System is one of the most important steps of its implementation. We designed this study to describe physicians and patient’s attitudes towards different aspects about the utilization of a CPR system, and to analyze the coincidence between these two groups. We administered tailored questionnaires to physicians and their patients, exploring the same topics. In this study most doctors expressed that Computer use during clinical encounter was a disrupting element in patient-physician relationship. Patients being consulted about the same subjects do not see this as a problem; moreover, they think it could improve their health care quality.

Introduction

When a Computer-based Patient Record (CPR) System is implemented, barriers that can difficult its success may arise. User’s acceptance of the CPR is one of the crucial steps in this process, and without it the best technical efforts are useless (1). During a qualitative study in our centre, exploring barriers in physician acceptance of the CPR system, we found as a constant among doctors the idea of detrimental effects of the CPR system in patient-physician relationship. This was the main reason why physicians with the lowest use rate of the CPR system justified them. Although there is published evidence that documents this concern (2, 3), there is no conclusive data about the detrimental effect of the use of a CPR system during clinical encounter or patient dissatisfaction (1,3).

Objectives

To describe physicians and patients attitudes towards different aspects of CPR system utilization, and analyze the coincidence between these two groups. These aspects included patient-physician relationship, privacy and security of information, and quality of health care.

Methods

The study setting was the Plan de Salud del Hospital Italiano de Buenos Aires in Argentina. Since June 1998 a CPR system was set up in the Hospital Italiano de Buenos Aires’ HMO, being now used by the entire Hospital in the ambulatory and internship level. This is a high technology University Hospital. Its HMO takes care of around 80000 patients, with 200 primary care physicians. Medical encounters with patients are recorded in the CPR. Patient care is distributed among several buildings around the metropolitan area being the most 30 km away. They are interconnected by a WAN. Tailored questionnaires exploring the same topics were developed for physicians and patients. These questionnaires were based on the Spanish translation of validated instruments from Gadd (4) and Cork (5). They included 11 questions, 4 of which were about demographic data. Every question in patient’s questionnaire was related to other one in the physician’s questionnaire. The survey was administrated to 16 primary care physicians and to 77 of their patients.

Results

Physicians had significantly more computer knowledge than patients (p<0,01). Patients perceived quality of care with the use of computers was significantly higher than physicians. Patients also rated significantly higher patients-physicians communication. Patients believed that their physicians spent significantly less time with the computer than their Doctors thought. Patient’s score for disruption of personal contact with the computers was also significantly lower than physician’s one. There were no significant differences between patients and their physicians on questions about privacy and security of the information.

Conclusion

Patients thought that a CPR system neither interfered with their communication with doctors nor disrupted the personal contact. More than that they felt the CPR system as an improvement in their quality of care and strongly agreed with its use in the doctor’s office. The conclusions of this study have great practical importance during the implementation of a CPR system, as a tool for helping users to overcome one of the most important barriers for its success.

References