

Health Information Technology and Quality of Care

Sima Ajami* and Tayyebe Bagheri-Tadi

Department of Health Information Technology, Health Management and Economics Research Center, School of Medical Management and Information Sciences, Isfahan University of Medical Sciences, Isfahan, Iran

Introduction

How can we assure and manage quality in the health care agenda?

One of the proposed ways is applying new technologies to improve quality of care in the health industry.

Davis et al. in their article stated that as the practice of medicine has become more complex, it is increasingly difficult for physicians to provide the right care for patients every time without modern health information technology support. c including prescription drugs, devices, and procedures make it possible to improve patient health outcomes and quality of life. Physicians are expected to be knowledgeable about new research, follow state-of-the-art clinical guidelines, assist patients with complex health problems in navigating the health care system, fortunately, advances in health information technology make it easier for physicians to do all these tasks [1].

Health Information Technology (HIT) is defined as a broad array of technologies involved in managing and sharing patient information electronically rather than through paper records. These information technologies include the application of health information systems (HIS) designed primarily to support the management of patient's records such as Electronic Health Record (EHR) system, and to assist medical and health care delivery such as clinical decision support system (CDSS) and computerized provider order entry (CPOE) system [2].

Health care experts, policymakers, payers, and consumers consider health information technologies, such as electronic health records and computerized provider order entry, to be critical to transforming the health care industry [3].

Ash et al. mentioned that with fully accessible and integrated electronic patient records, and with instant access to up-to-date medical knowledge, faulty decision making resulting from a lack of information can be significantly reduced [4].

Linder et al. In their article stated that patient in the United States receives about half of recommended medical care, and there have been widespread calls to improve health care quality. Health information technology (HIT) and, in particular, electronic health records (EHRs) have been touted as cost-effective, sustainable solutions for improving quality of medical care [5].

The major effect of health information technology on quality of care was its role in increasing adherence to guideline or protocol-based care [3].

Studies from 4 benchmark leaders demonstrate that implementing a multifunctional system can yield real benefits in terms of increased delivery of care based on guidelines (particularly in the domain of preventive health), enhanced monitoring and surveillance activities, reduction of medication errors, and decreased rates of utilization for potentially redundant or inappropriate care [3].

Over the past few decades, the aim of many health care systems to improve consistency and safety in patient care has prompted considerable investment in the development of evidence-based clinical guidelines. However, the effective dissemination of these guidelines has

remained a challenging task, and HIT has been proposed as an effective means to implement the guidelines in practice [2].

Computerized provider order-entry systems that provided decision support at the point of care were the primary interventions leading to decreased utilization. Types of decision support included automated calculation of pretest probability for diagnostic tests, display of previous test results, display of laboratory test costs, and computerized reminders [3].

As the community demand for quality health care services is increasing, along with the cost of providing these services, burgeoning attention is being directed towards the potential of health information technology (HIT) to lower health care spending and to improve the efficiency, quality and safety of medical care [2].

Conclusion

So we can say that new technology such as EHR can promote quality of care. On the other hand, there are many obstacles in its implementation, so it should be more research to establish the infrastructure that is necessary for the implementation of new technologies.

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*Corresponding author: Sima Ajami, Associate Professor, Department of Health Information Technology, Health Management & Economics Research Center, School of Medical Management and Information Sciences, Isfahan University of Medical Sciences, Hezarjereb Avenue, Isfahan, Iran (p.o. box: 81745-346), Tel: +98-913-101-5226; Fax: +98-311-6684799; E-mail: ajami@mng.mui.ac.ir

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