PIOTR KSIĄŻEK

Rola Dyrektora ds. Informatyki w Szpitalnym Systemie Zarządzania

The role of the Chief Information Officer (CIO) in Hospital Management Structure

Streszczenie

Celem pracy jest przedstawienie roli Dyrektora ds. Informatyki w obecnej strukturze zarządzania szpitalem. W związku z rosnącą rolą informatyzacji, autorzy przedstawili opis funkcji pełnionych przez dyrektora ds. informatyzacji, a także analizę przyszłych oczekiwań wynikających z rosnącego znaczenia informatyzacji w zarządzaniu instytucjami ochrony zdrowia.

Summary

The main objective of the article is to describe the role of the CIO in the current management structure of hospital. Due to the growing role of information, authors discuss approach to functions of CIO and future expectations.

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INTRODUCTION

What is a product of hospital treatment? This simple question in not easy to answer. According to the current Polish health care structure, the National Health Fund (NHF) is responsible for securing health services. The billing system is based on the national version of Diagnosis Related Groups (DRG) - all hospitals must report the performed services and procedures to the NHF. Regarding this fact, information is the product of hospital [1,2].

If we assume information to be a product, the management of the production process should be one of the most important parts of daily hospital management. The management of each production process must be described and controlled as a system. The system designed for managing the information about hospital billing is called Hospital Information System (HIS). HIS is a business covering the application of people, documents, technologies, and procedures by management accountants to solve business problems such as costing a product, service or a business-wide strategy. Management information systems are distinct from regular information systems in that they are used to analyze other information systems applied in operational activities in the organization. Definite HIS/MIS must constitute part of strategic hospital management. The member of the board responsible for HIS/MIS is called the Chief Information Officer (CIO). The CIO must be placed in a higher management structure equal to the Chief Financial Officer and Medical Director [1-4].

CURRENT ROLE OF A CIO

The CIO is responsible for the clinical data flow and billing system in hospital. Regarding this the hospital IT and statistic department should lie in the CIO responsibilities. Typically, the CIO delegates technical decisions to employees who are more familiar with details. Usually, a CIO proposes the information technology needed by hospital to achieve its goals and then works within a budget to implement the plan. The CIO's role is sometimes used interchangeably with the chief technology officer's role, although they may be slightly different. When both positions are present in an organization, the CIO is generally responsible for processes and practices supporting the flow of information, whereas the CTO is generally responsible for technology infrastructure [4,5].

CIO characteristics: role confidence, flexibility, initiative, technical knowledge, ability to work with MDs, understanding financial goals regarding medical treatment [1,2,4,6]

Current CIO's work environment is characterized by deep technological changes and growing users' demands. Typically, HIS users (doctors and nurses) expect friendly and ergonomic software application while hospital top management expects suitable information dedicated to decision making. Bringing consensus to these two opposite goals is a major role of a CIO [2,3,7,8].

The efficient realization of the CIO's role is based on the following functions;

1. The data administration - This function relies on the database management as a hospital strategic resource
   a. The preparation of the data security policy
   b. The definition of the data input and output standards
   c. Support for hospital financial goals
   d. Business intelligence analyses

2. Users' service - This function relies on recognizing users' needs and expectations
   a. HIS implantation
   b. Implementation of ERP (Enterprise Resource Planning)
   c. Users' training
   d. Help desk
3. Clinical data management - This function relies on the management of information needed/required for treatment
   a. The integration of all specialist software (LIS,RIS,PACS)
   b. The hospital pharmacy
   c. The treatment documentation
   d. Scientific analyses
4. Financial data management
   a. The NHF billing
   b. The patient billing
   c. The budget preparation
   d. Trends

THE FUTURE ROLE OF A CIO

Due to a growing role of information technologies in hospital, the management role of a CIO will evolve from a technician to a decision maker [9]. In the next few years every hospital will need an efficient HIS to be on the market. The oncoming private insurance will abuse a new billing system where IT solution becomes the key resource and value of hospital. Majority of hospitals will have to confront and change the management structure regarding payer's needs and a CIO will become a necessary part of the hospital (executive) board.

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