Chapter 59

Definition of a Retrospective Health Information Policy Based on (Re)Use Study

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ABSTRACT

Medical information produced in hospitals is, simultaneously, used (1) to support health care provided to patients, (2) in research work performed by internal and external health professionals, and (3) as legal proof with various objectives. The co-existence of electronic and paper health information, the integration constraints of the various computer applications, and the storage of massive volumes of retrospective paper-based patient records are dominant concerns for São João Hospital Center (SJHC). These problems must be considered in the adoption of an Electronic Patient Record (EPR) in order to ensure that hospitals and patients fully benefit from the technological investments. The contribution of this chapter is the design and conduction of a (re)use study, which consisted of an analysis of the paper-based records management activities and of the patients’ records content. A survey on the (re)use of the paper-based patient records has been conducted in order to characterize the (re)use in terms of objective and type of hospital encounter, and documents accessed were identified and organized in an access frequency table. The results support the paper-based patient records strategy to implement in SJHC integrated in the Hospital EPR adoption project.

INTRODUCTION

Medical information management in hospitals involves issues related with patient records organization, as well as medical, ethical, technological and economic aspects, engaging different professionals directly implicated in the way medical records are produced, stored, retrieved, and made accessible. Medical records management determines the way health care professionals register their medical actions and how these records are retrieved. Nowadays, Portuguese hospitals face
serious problems caused by the lack of an integrated information management strategy. In the public health sector, just like in other areas, the recognition of technology as a determinant factor to achieve major transformations in society, strengthened the government role as promoter of the technological potential in public hospitals. Currently, the interoperability constraints on the various computer applications that have been adopted and the amount of retrospective paper-based patient records stored are challenges that hospitals must overcome to answer to the current demands on the access to medical information.

São João (SJHC) is characterized by an hybrid informational context, in which medical records are dispersed in paper format and over various computer applications. To overcome these difficulties SJHC has developed a strategic information management plan, which will promote the implementation of an Electronic Patient Record (EPR) application and, simultaneously, the integration of the retrospective medical records in the EPR application, substituting the access to paper-based patient records of current SJHC patients. The gradual adoption of the EPR, in progress at HSJ, will ensure the necessary safety and reliability requirements in the access to health information. However, it is important to use the change from paper to electronic medical records in order to change work routines. The combination of the EPR development and adoption and the availability of retrospective paper-based patient records on digital format will promote the reduction of time and effort consuming tasks in the daily routine of medical professionals, and reduce paper storage and management costs, maximizing the benefits of the EPR implementation.

The project focuses on studying the (re)use of health information for health care, research or legal purposes, in order to design an information strategy which improves the access to current and retrospective medical records. Concerning the retrospective medical records, the objective of SJHC information strategy, focused in this chapter, is (1) to support the definition of rules to guide the transfer policy of paper-based medical records into digital and microfilm format, (2) to identify document types with higher access frequency, promoting the scanning of these documents, (3) to define an information policy for the document types that will continue to be produced on paper, promoting its integration in the EPR through the scanning strategy defined and (4) to list the basic features of the technological solution to support the scanning, classification, storage and retrieval of the digital images produced. The integrity and proof value of the information contained in the paper-based medical records will be ensured by microfilming the complete file of the patient record.

An analysis of a sample of patient records of SJHC allowed us (1) to list the document typologies produced in different types of hospital encounters and (2) to identify a general pattern in the patient record organization. Additionally, the results of this analysis were used to build and conduct a survey concerning the usage of document typologies by the health professionals. The results of the survey include (1) the identification of other typologies not initially considered and (2) the inference of an information access frequency table. Moreover, this work has been complemented by a statistical analysis of the medical records access requests addressed to the Clinical Archive in the last 5 years. This statistical analysis was essential to enlighten us about the number of years of the retrospective medical records of each medical specialty to be considered for future usage.

In this chapter, we characterize the SJHC information structure used to manage the medical records, focusing on the organizational, technological and human constraints, which are common to most Portuguese hospitals. We present the retrospective medical records management strategy and the results of the health information re(use) study conducted in SJHC. This chapter will contribute to highlight the role of Clinical Archives in the Hospitals’ information manage-
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