INTEGRATIVE REVIEW ARTICLE

ELECTRONIC MEDICAL RECORD AS A FACILITATOR TOOL IN CONTROL OF INFECTIONS RELATED TO ASSISTANCE: INTEGRATIVE REVIEW

PRONTUARIO ELETRÔNICO COMO FERRAMENTA FACILITADORA NO CONTROLE DAS INFECÇÕES RELACIONADAS À ASSISTÊNCIA: REVISÃO INTEGRATIVA

ARCHIVO ELECTRÓNICO COMO HERRAMIENTA FACILITADORA EN EL CONTROL DE INFECCIONES RELACIONADAS A LA ASISTENCIA: REVISIÓN INTEGRADORA

Gleiciana Sant' Anna Vargas1, Jorge Luiz Lima da Silva2, Miriam Marinho Chrizostimo3, Diego Pereira Rodrigues4

ABSTRACT

Objective: to identify the importance of the implementation of electronic medical records as a tool for the control of infections related to health care units in hospitals. Method: an integrative review, with search in databases Lilacs, IBecs, MEDLINE from issues << How can electronic medical records help to control the IRAS?>>, << What are the difficulties encountered in their implementation?>>. 14 studies were eligible for the last 10 years in Portuguese and Spanish. The presentation of the review and discussion of the data were performed descriptively in order to allow the reader to critical evaluation of the results and their applicability. Results: the study showed the importance of electronic medical records as a tool for the control of infections related to health care. Conclusion: the use of electronic medical record provides the quality of completion and subsequent improvement in the actual calculation of infections related to health care.

Descriptors: Epidemiological Surveillance; Hospital Infection; Systems of Computerized Medical Records.

RESUMO

Objetivo: identificar a importância da implementação do prontuário eletrônico como ferramenta no controle das infecções relacionadas à assistência em unidades hospitalares. Método: revisão integrativa, com busca nas bases de dados Lilacs, IBecs, MEDLINE a partir das questões << Como o prontuário eletrônico pode auxiliar para o controle das IRAS?>>, << Quais as dificuldades encontradas para sua implementação?>>. Foram elegíveis 14 estudos dos últimos 10 anos, nos idiomas português e espanhol. A apresentação da revisão e a discussão dos dados foram realizadas de forma descritiva a fim de permitir ao leitor a avaliação crítica dos resultados e a sua aplicabilidade. Resultados: os estudos mostraram a importância do prontuário eletrônico como ferramenta no controle das infecções relacionadas à assistência em saúde. Conclusão: a utilização do prontuário eletrônico propicia a qualidade de seu preenchimento e posterior melhora no cálculo real das infecções relacionadas à assistência em saúde.

Descritores: Vigilância Epidemiológica; Infecção Hospitalar; Sistemas de Registros Médicos Computadorizados.

RESUMEN

Objetivo: identificar la importancia de la implantación del archivo electrónico como una herramienta en el control de las infecciones relacionadas con la asistencia en las unidades hospitalares. Método: revisión integradora, con la búsqueda en bases de datos Lilacs, IBecs, MEDLINE desde cuestiones << ¿Cómo los archivos médicos electrónicos pueden ayudar a controlar las IRAS?>>, << ¿Cuáles son las dificultades encontradas en su aplicación?>>. 14 estudios fueron elegibles para los últimos 10 años, en portugués y español. La presentación de la revisión y discusión de los datos se realizaron de forma descriptiva con el fin de permitir al lector la evaluación crítica de los resultados y su aplicabilidad. Resultados: el estudio demostró la importancia del archivo clínico electrónico como herramienta en el control de las infecciones relacionadas a la asistencia en la salud. Conclusión: el uso del archivo clínico electrónico proporciona la calidad de su terminación y la consecuente mejora en el cálculo real de las infecciones relacionadas con la asistencia en la salud.

Descritores: Vigilancia Epidemiológica; Infección Hospitalaria; Sistemas de Archivos Médicos Informatizados.

1Nurse Specialist Infection Control in Healthcare, Nursing School Aurora Afonso Costa/EEAAC, Fluminense Federal University/UFF, Niterói (RJ), Brazil. Email: gleicanavanargas@yahoo.com.br; 2Nurse, Master of Nursing/Unirio, Assistant Professor of the Department of Maternal and Child Psychiatry, UFF/UFF, Niterói (RJ), Brazil. E-mail: jorge.luizlima@vm.uff.br; 3Nurse, Associate Professor, Department of Nursing Fundamentals and Administration, Course Coordinator Infection Control in Healthcare, Nursing School Aurora Afonso Costa/EEAAC, Fluminense Federal University/UFF, Niterói (RJ), Brazil. E-mail: miriammarinhochristismo@gmail.com; 4Nurse, Master of Science in Health Care School of Nursing Aurora Afonso Costa/EEAAC, Fluminense Federal University/UFF, Niterói (RJ), Brazil. E-mail: diego.pereira.rodrigues@gmail.com
INTRODUCTION

Health care is all that involves the care of human health, including the promotion, protection, rehabilitation and treatment of diseases. It permeates a variety of industries and complexities that require specific care, additional, insightful and essential. Having priorities, control of infections related to health care (IRAS), as are the major causes of morbidity and mortality in hospital.¹

The IRAS is a public health problem, and can cause complications, sometimes irreversible to patients who are hospitalized in hospitals, besides increasing the length of stay, increasing treatment costs. Thus, the hospital infection is understood as that acquired during hospitalization and was not present or in incubation period during the patient’s admission. It is diagnosed in general, from the 48 hours after admission.²

And for the control of infections related to health care emerged laws, decrees and ordinances, which strengthened and strengthen the need and obligation to implement measures and care about better health care. As a striker had the decree 77,052 1976 which established that no hospital could work if it did not have the means of protection in order to prevent harmful effects to users.²

In this understanding, in 1983, here comes the ordinance mandating that all 196 health institutions should maintain an infection control committee, which is of paramount importance for the establishment of committees of hospital infection control (HICC) in Brazil. Among other credits include Law No. 9,431 of 1997 requiring the establishment of a program of CIH; Ordinance No. 930 of 1992 expanded rules for CIH; Ordinance No. 2616, 1998 which deals with the organization and powers of CCIH and program of hospital infection control (HICP), Law No. 9782 was created the national Agency of sanitary Surveillance (ANVISA), which is currently connected to manage research and prevention of infections and adverse events (GIPEA).²

The ordinance 2616 emphasizes that one of the members executors should preferably be a nurse. And as integral and essential, the nurse works with a multidisciplinary team, working on commission hospital infection control (CCIH), in order to carry out actions that minimize and/or extinguish the occurrence of infections related to health care.³

Accordingly, the commission of hospital infection control has primary responsibility for the implementation of biosecurity actions that correspond to the adoption of standards and guidelines for safe and proper maintenance of the health of patients, professionals and visitors.³

As a strategy of action and continuous assessment of infections related to health care, the commission of hospital infection control uses hospital epidemiology, defined as activities related to the study of the frequency, distribution, risk factors and etiologic agents of care-associated infections and other adverse events, and the development of quality standards in health care.²

Epidemiological surveillance is intended for beds for critically ill patients in accordance with Ordinance 2616, are considered critically ill patients in intensive care (adult, pediatric and neonatal), patients with high-risk nursery, burn patients, patients undergone organ transplants, hematologic-oncology patients and patients with acquired immunodeficiency syndrome. Epidemiological surveillance of nosocomial infections is done by observing active, systematic and continuous occurrence, and also its distribution among patients, in order to timely implementation of prevention and control of infections.³

The active search, although more laborious, provides that the professional is more present on the day the unit and can improve on infection control focusing on individual difficulties, and passive search, a method less reliable because the information is given by others, increasing the tendency of underreporting. Besides extracting the data, which can be given in a primary, which originate by direct observation of the population, and secondarily, where the data originate records for other purposes, information already established or analysis issued. As these data representative of the indicators already observed.⁴

The tool used in the active search is the record that is constituted by a set of standardized documents, containing information generated from facts, events and situations on the health of the patient and the assistance of a legal nature, secretive and scientific and enables communication between members of the multidisciplinary team and continuity of care to the individual.⁵

The reality of Brazilian hospitals is to use the patient’s records manuscript. The notes in the medical record or clinical record should be made legibly, allowing to identify health professionals involved in patient care. Being that this is not the reality of the records found in most hospitals that sometimes do not provide concrete information of particular...
assistance, to be filled in errors, incomplete and / or illegibly. Another problem is the continuous manipulation and lack of specific place for the accommodation of the charts, causing losses and deterioration of the contents.6

Faced with the issue of using the chart as a tool for infection surveillance, it revealed itself as a problematic underreporting of infections related to health care due to disorder, missing and/or inconsistent data records. Thus, the electronic medical record system is understood as a standardized, digital, and consists of an electronic record prepared with specificity to support the user, offering convenient access to numerous information database, resource decision support, alerts and various other resources. Thus, we see the need for the implementation of electronic medical record which is a method which aims to maintain and able to create databases containing clinical and administrative information of the patient, recognized as of great benefit in improving the impact and effectiveness, efficiency, safety, and quality of health care practice.6

**OBJECTIVE**

- To identify the importance of the implementation of electronic health record as a tool for the control of health care related to health assistance in hospital units.

**METHOD**

Study integrative literature review, and is considered a strategy to identify existing evidence in order to substantiate a health practice in various specialties.7 For the preparation of the study were followed six stages: identification of the subject and selection of research question; establishing criteria for inclusion and exclusion of studies and searching the literature, defining the information to be extracted from the selected studies, critical appraisal of included studies the integrative review, interpretation of results, presentation of review/synthesis knowledge.8

To guide the integrative review was formulated the following questions << As electronic medical records can help to control the IRAS? >>; << What are the difficulties encountered in their implementation? >>

For the selection of the articles were used as databases, namely the Latin American and Caribbean Health Sciences (LILACS), Spanish Bibliographic Index of Health Sciences (IBECS), Medical Literature Analysis and Retrieval System Online (MEDLINE). We attempted to also original references in the articles identified in the survey conducted from January to February 2012.

The inclusion criteria of the selected publications for this integrative review were articles published in Portuguese or Spanish, available in full on the databases in the period 2012-2012. We excluded studies not available in full, dissertations, theses, and newspaper articles that had no scientific, publications in English language and who did not fit the cutout of the last ten years.

We used the descriptors standardized and available in MeSH: Epidemiological Surveillance, Infection control, computerized medical records system. The search was conducted by online access, and initially 3,179 articles were obtained. Of these, we excluded those who were not related to the theme (2878) by careful reading of the title and the abstract online. Subsequently, a full reading of the remaining publications of the first selection (189) allowed also exclude those that were repeated in the databases (98). Using the inclusion criteria, the final sample consisted of the review of 14 articles.

To collect the data from the articles that were included in this review, we designed a form including the following items: item identification, publication type, study design, objectives, sample, main results and conclusions. For analysis and subsequent synthesis of the papers used a synoptic built for this purpose, which included the following: title, materials and methods, results and conclusions.

The presentation of the review and discussion of the data were performed descriptively in order to allow the reader to critical evaluation of the results obtained and its applicability.

**RESULTS**

In this integrative review, we analyzed 14 articles that met the inclusion criteria previously established.

It was found that the literature of the subject's electronic medical record to facilitate the control of the care-associated infections is scarce, however, the electronic medical record is a subject addressed by different studies, promoting the technology for the sake of analysis and interpretation to constrain attention full and effective patient care.

The publications of studies relevant to the topic were the last ten years, according to the inclusion criteria described earlier. Thus, the
study was more posts of 2011 (4/14) followed by 2008 and 2007 (3/14) for each year, followed by 2010 (1/14), 2009 (1/14) and 2004 (1/14).

In relations to the periodic publication, studies achieved dominance in the state of São Paulo (4/14), being an important hub of scientific knowledge; followed by Brasília (3/14), Rio de Janeiro (3/14), Rio Grande do Sul (2/14) and Pernambuco (1/14). Regarding relations publications, it should be noted that 13/14 articles were published in Brazil, and only one article (1/14) was published in Spain.

In published studies, the electronic medical record is an important tool available albeit initial improvements of the data generated and thus promote the improvement of patient care. Thus, health professionals should be harnessed technological changes to implement an effective cross data and foster a more specialized and joint care for the patient.

In this sense, the professional should be able to handle these new technologies in order to equip a care favorable to the patient. Figures 1, 2 and 3 shows the synthesis of items included in the process of this integrative review.

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<th>Title</th>
<th>Methods</th>
<th>Main Results</th>
<th>Conclusions</th>
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<tr>
<td>Indicators of use of the electronic patient record.</td>
<td>System generates log of all transactions carried out by all users.</td>
<td>The history of hospitalizations was consulted by 70% of doctors, of the examinations carried out and medicines of patients and saw by which specialties the patient was assisted. -All doctors opened their previous queries before including the new query.</td>
<td>You can see that with the PEP there was improvement in quality of care due to the readability of the medical card, quick patient history, and examination online application, elimination of paper and consequently reduction of bureaucracy.</td>
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<td>Evaluation of the national epidemiological surveillance subsystem in the hospital in the State of Pernambuco, Brazil.</td>
<td>Cross-sectional study, with normative evaluation approach, which consists in making a value judgment about a speech comparing the structure, process and results with criteria and standards.</td>
<td>The degree of implementation was satisfactory in three cores, acceptable in an unsatisfactory in two and critical one; as for levels I, II and III, only two cores were classified correctly.</td>
<td>The study indicates that, despite the difficulties still persist, advances in the collection, analysis and dissemination of information; It is necessary to reevaluate the way of classification of hospitals, to the transfer of resources; and invest in strategies for greater integration between the NHE.</td>
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<td>Hospital epidemiology cores of high complexity public health network located in Recife, Pernambuco: evaluation of implementation.</td>
<td>Qualitative approach consisted of a regulatory review to verify the degree of deployment in their structure and process components.</td>
<td>The CORS Constitution and its regulation was a breakthrough, but the institutional operation is finding many difficulties.</td>
<td>The political context represented by the decision of managers effectively influenced the degree of deployment and depending on the performance of the actors or not, represented an antagonistic or synergistic force investment.</td>
</tr>
<tr>
<td>Hospital infection: prevalence study in a public hospital.</td>
<td>Descriptive, retrospective study, quantitative approach, carried out in a public and teaching hospital, located in the city of Teresina, in the State of Piauí in the Northeast region.</td>
<td>Urinary tract infection (UTI) is one of the most asked questions in the adult population.</td>
<td>The prevalence of IH in two UTIs was 60.8% 45.3%, surpassing the General Index registered in Brazilian hospitals which is 15.5%, contributing to increase the morbidity and mortality caused by infections.</td>
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<tr>
<td>Modificaciones en las perspectivas de los médicos sobre el registro médico electrónico: investigación cualitativa longitudinal.</td>
<td>Longitudinal qualitative research, conducted from interview in Italian Hospital in Buenos Aires, Argentina.</td>
<td>The doctors realized that the system gave them a broader perspective on their patients, which in turn improved their professional performance.</td>
<td>The implementation of computerized medical records system modified the opinions of doctors about, how to consider them as an auxiliary tool for the clinical activity. The value assigned to the system depends on its relevance within the institutional framework.</td>
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Figure 1. Synthesis of publications included in the integrative review, according to the title of the article, methods, main results and conclusions.
The electronic patient record in the Brazilian health system: a reality for the doctors?

**Methods**

It is a theoretical and reflective work drawn from literature review.

**Main Results**

The medical record, that everyone knows (paper) […] has pages difficult to read, with hand-written. […] When you step into the electronic health record, have a number of advantages. The first is that I can retrieve the information that, on paper, is absolutely impossible. […] in one system, using a computer, can have a more appropriate form of communication through the voice, natural language.

**Conclusions**

It is the creation of information systems including the electronic patient record under the Brazilian health system, in order to identify users, to facilitate the management of services, communication, information sharing and, most importantly, improve the quality of care provided to the population.

Adoption of the electronic patient record in university hospitals of Brazil and Spain: the perception of health professionals.

**Methods**

The survey was conducted during the period from April 2009 to May 2010, considering, initially, three hospitals, and enjoyed a period of interviews and a questionnaire application.

**Main Results**

As to the respondents’ participation in the development and deployment of electronic patient record (EPR) in two hospitals, it was found that 61% of respondents have not participated in this process, 26% took part in the deployment, although they have not participated in the discussions of technology development, and 13% participated in both the development and the implementation of the PEP.

**Conclusions**

It is necessary that health professionals have some sympathy with the hospital Manager in the way both realize the meaning and importance of the PEP.

Evaluation of medical records in Brazilian teaching hospitals.

**Methods**

This approach is descriptive study, case series, covering medical models of Brazilian hospitals that serve as practice for undergraduate courses in Medicine of Brazil.

**Main Results**

The study is based on a comparison of the information generated by the Department of Neonatology of the IFF/FIOCRUZ, by the Department of information and documentation of the IFF/FIOCRUZ (Medical File) and those available in SH-SUS.

**Conclusions**

In addition to the reduced quality of most medical records studied, almost all have not yet incorporated the modern technologies available from information science.

Hospital information system of the unified health system (SIH-SUS): a preliminary assessment of their performance in perinatal hemolytic disease monitoring Rh (D).

**Methods**

The study is based on a comparison of the information generated by the Department of Neonatology of the IFF/FIOCRUZ, by the Department of information and documentation of the IFF/FIOCRUZ (Medical File) and those available in SH-SUS.

**Main Results**

From 1998 to 2003, 194 live births received the diagnosis of perinatal hemolytic disease in Newborn Service of IFF/FIOCRUZ. Of these, only 148 cases (76.3%) were recorded in the Medical File for issuing an AIH own newborn. However, only 147 AIHs were actually issued by the Medical File. In the SIH-SUS, 145 cases were recovered, and two AIHs were not identified.

**Conclusions**

The codification of administrative professionals untrained AIHs seems to be responsible for many of the problems related to the low reliability of the diagnostic fields, lack of completion of Secondary Diagnosis and large differences in the quality of the data of the IAI. The administrative databases are potentially useful in some aspects of Public health research.

Computerized system of surgical infection notification after discharge in the hospital of Porto Alegre - Rio Grande do Sul.

**Methods**

There were compared infection rates related to surgical site in two periods, before and after the implementation of the computerised system, from January 1999 to February 2002 (period I, 38 months) and January 2005 to March 2006 (period II, 14 months).

**Main Results**

After the implementation of the computerised system, it was possible to almost double the number of infections detected, 2.5% (period I) to 4.4% (period II).

**Conclusions**

Computerization allowed the detection of a large number of cases of infection which had not previously access and favored the use of a system of internationally accepted infection indicators allowing comparisons of rates of infection, allowing a more critical assessment of work processes.
Vargas GS A, Silva JLL da, Chritostimo MM et al. Electronic medical record as a facilitator...

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<td>Electronic medical files for patients: some steps towards the future.</td>
<td>Editorial of scientific journal.</td>
<td>According to CFM, the paper records must be retained for a period of 20 years after the last record or the death of the patient. In addition, there are very specific rules and inhospitable for disposing of patient records, which makes this task unattractive. Although still persist doubts as to electronic signature, digital certification and other issues of ‘credibility’, everything indicates that the good experiences will promote one of the biggest revolutions for the care of the patient, as well as enable the use of information for educational and scientific use. The placement of research subjects against nosocomial infection was evidenced with evocations, such as: surgical scrub, and hands. The result reinforces the emphasis given by health professionals to prepping for their own protection and that of the patient during invasive procedures, emphasizing the importance of caution with your hands. The factors of success of this project of technological production included the articulation of different areas of knowledge, as well as the continuous appreciation of the theoretical-practical improvement of the nursing process.</td>
<td>Social representations of hospital-acquired infections elaborated by health professionals.</td>
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<td>Social representations of hospital-acquired infections elaborated by health professionals.</td>
<td>It is a descriptive research with qualitative approach, because it is better suited to investigate the problems presented, to study the socio-cultural phenomena of social representations related to nosocomial infection, based on the theory of social representations.</td>
<td>The phenomenon of nosocomial infection by eyes of the social representations allows construction of concepts, explanations and statements that originate in everyday life through interindividual communications and socially prepared and shared knowledge.</td>
<td>Development Electronic Systems of Nursing Clinical Documentation structured by diagnosis, outcomes, and interventions.</td>
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<td>Development Electronic Systems of Nursing Clinical Documentation structured by diagnosis, outcomes, and interventions.</td>
<td>The study was a methodological research of technological production in case study.</td>
<td>The result was the development of the electronic PROCEnf system-USP (Electronic Documentation system of the process of nursing of the University of São Paulo) which allows the clinical documentation and reporting of the nursing process, in addition to providing support for decisions about diagnosis, expected results and nursing interventions.</td>
<td>The use of an electronic medical system in a pediatric emergency department with a clinical score triage system.</td>
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<td>The use of an electronic medical system in a pediatric emergency department with a clinical score triage system.</td>
<td>Retrospective descriptive study conducted in the emergency room of the Instituto da Criança do Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo reporting the strategy of implementation of the electronic system.</td>
<td>In the period prior to the implementation of the electronic health record, mean residence time was four hours and seven minutes, there were 5.1% of lost and were admitted to 4.8% of patients seen. In the period after the deployment, the mean residence time was two hours and three minutes, there was no loss of chips and 6% of patients were admitted. The use of the electronic health record has streamlined the flow of patients, improvement in the medical record and team satisfaction.</td>
<td>DISCUSSION</td>
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Technological advances are constantly evolving, and the management of information, communications and data a challenge in the care of health. The health informatics has emerged as a new strategy for the provision of care, can be defined as a fast developing field of science. Besides dealing with storage, retrieval and use of information, the data and biomedical knowledge are to solve problems and make decisions. These technological advances are leading health care institutions to adopt information technology such as electronic medical records in order to manage and process information, resulting in improving the delivery of care.

Accordingly, the electronic medical record is information used by health professionals, aiming to standardize and organize the data in a concise manner for each patient, optimizing offered assistance. Then, the electronic medical record can be developed from guidelines as the certification manual for electronic registration system health of the Brazilian society of health informatics (IBIS), resolutions No. 1821 \ 2007 to 1638 \ 2002 federal board of medicine (CFM) and Brazilian law (constitution, penal code and civilian). From the perspective of evaluating the programs, it is important to consider your ability to answer questions relating to an intervention, its activity, its effects and the network of actors involved in the context of its institutionalization. In this network we epidemiology hospital that has an important role within the hospital units that need effectively and investment in its structure with the implementation of the operation of information systems in healthcare innovators such as electronic medical records. In one study the authors cite in their study that even with legislation in the country, hospital infection rates remain high.

Figure 3. Synthesis of publications included in the integrative review, according to the title of the article, methods, main results and conclusions.
intensifying the need to implement effective measures for the control of infections related to health care.\textsuperscript{13}

It is noteworthy for the implementation of electronic medical record system demands that institutional support. However, these strategies do not guarantee a good application when considering the beliefs of physicians in each context.\textsuperscript{14}

Thus, it is noteworthy that the first experiments with electronic systems in the 1960s. And only in 1972, after a conference sponsored by the United States, that began to emerge the first EHRs. Since then began the search continues for a real definition and adaptation, so that the quality of care being provided not would not die, but be improved with the electronic tool.\textsuperscript{15}

In Brazil, the electronic records emerged in the 90s, resulting in the development of models of electronic medical records in the major centers. And, with the passage of time, which has gained traction was the computerization of administrative routines, while the electronic medical record grew gradually and difficult.\textsuperscript{16} hospitals have adopted electronic medical records and information technology in order to achieve efficiencies and effectiveness in the management of organizations.\textsuperscript{17} Thus, the appearance of clinical technologies that can greatly facilitate the task of building the electronic medical record. These technologies, combined with the Internet, enable the meeting of a cascade of information of an individual, even if they are distributed in complex heterogeneous systems.\textsuperscript{18}

Unfortunately in Brazil, technological development, especially in hospitals, is very heterogeneous, sometimes pointing to problems for implementation problem cultural, economic, financial and sometimes legal and ethical constraints, besides the poor and precariously services records.\textsuperscript{19} The issue of delaying the implementation of electronic medical records, the lack of a concrete definition and unique than it is, and how it should be used, do not have a data standard and common scenarios. Another important factor to the difficulty of the implementation of electronic medical records is digital illiteracy, which is a factor that causes resistance to the use of electronic medical records.\textsuperscript{20} Even before the difficulties and fears that any novelty, whether technological or not, carries the primary is to think of the quality and benefits that such a tool can facilitate the provision of patient care.

The purpose of development of electronic medical records is to promote health, prevent risks and diseases, providing a complete patient history, thus ensuring continuity and security of treatment.\textsuperscript{18} Thus, the implementation of a computerized system provided for the detection of a large number of infection, the incidence of passing 2.5 to 4.4%, and in still possible favoring the use of these indicators and comparison with other hospitals.\textsuperscript{19} Accessing data and information of patients in healthcare facilities, it is sometimes a challenge, especially when the information is recorded manually on charts printed.

The difficulties of data collection and the uncertain quality of the records, it is sometimes motivated by a lack of control of the generation of such information.\textsuperscript{18} Given these problems, the electronic medical record has some advantages such as the fact of being a common database, increased satisfaction of the professionals involved, reducing costs, errors, omissions and better access to information.\textsuperscript{9}

The nursing information are organized and documented in a systematic manner by means of electronic, communication is operationalized, facilitating the resolution of the problems of the individual patient, expanding the nursing knowledge towards the patient and the multidisciplinary team. So there is no risk of losses and as incomplete or fills occur in paper charts.\textsuperscript{20}

The electronic medical record allows the construction of a process of care because patient data will be systematically organized in one place, the quality of charts and filling facility in data collection, thus enabling a reliable data collection, resulting in a real situation of the patient. Can then diagnose whether or not the presence of infections related to health care, on the assumption that all information related to patient care will be contained and stored in one place, written in an understandable and complete form.\textsuperscript{20,21}

Thus, the nurse committee of the hospital for infection control must be able to recognize where, who and how the patient was affected by this germ, following the strategy for development and implementation of training and improvements according to actual need. In this, as negative the fact if you need a high initial investment to implement electronic medical records, but the return is right, as soon have an economy in printed, correct administration of drugs, among others.\textsuperscript{21}

The disadvantage of the implementation of electronic medical records the difficulty of
meeting all the information of an individual in a single system, since each institution has a health information system is different, programming languages, operating systems and hardware platforms. Combining with also complex and poorly structured information, which is how the language also appears in health. However as the benefits of electronic medical records are quickly locate the patient’s history, online solicitation of examinations, eliminating paper and consequently reduction of bureaucracy operating. And as difficulties: The high costs for computerization, being a very big challenge. Another problem is the need for continuing education due to high turnover of professionals. 10

As positive factor was that from the beginning of the 1873 filing patient charts, and these should be stored for 20 years. Because of this, the electronic medical record appears as a good alternative for storage of records and data manipulation. 21 It is worth emphasizing that the difficulty to change this paradigm manuscript for computerized sometimes permeates the lack of government support, requiring the adoption of new standards and methodologies to levels much higher. And still, there is insufficient number of formal studies and well defined to show the impact of the system of computerized records.

CONCLUSION

Given this entire context could be seen how important the electronic medical record as innovative and effective tool when it concerns the holistic care of the patient, the integrated control of infections related to health care. It is known that, still has many obstacles to be overcome, and many paths to be followed. Since the uncertainty of the new, the different, has made the implementation of this tool is postponed.

It is noteworthy that the idea of including the electronic medical record is not just because we live in a virtual world, what we want is to get into the hospital, a tool that can provide a reliability index of infections related to health care in order to that strategies are formulated and implemented as reality. Given all the difficulties listed, noted the importance of electronic medical records for the control of infections related to health care, scoring as positive factors of its features, such as legibility, storage and richness of content. Enables visualization of these positive factors, an attempt to break the negative factors, which are the high initial cost for implementation and lack government support for the negative paradigm is broken.

REFERENCES


