

# Improved Documentation and Record Management: A Necessity to Prevent Medical Errors in Health Care System

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## Abstract

*In modern health care system medical error is very important problem to consider. In United States preventable medical errors are considered to be third leading causes of death. Medical errors like injuries, wrong site surgeries, medication mishaps, misidentification of patients, reporting errors, poor diagnosis of disease and so on happen in health care system in different situation in different environment. Some of the questions to address in order to find solution are what medical errors are, what occur most often and what could be the way to prevent the errors from happening. Usually, the errors could result from human health care provider or health care system. Some errors could result from both the reasons. The study argues that, practicing appropriate documentation and record management in health care system is a must to identify the causes of the medical errors and to find ways to prevent them from happening.*

**Keywords—** Administration, Documentations, Health care, Human Resources, Medical Error, Record Management.

## I. INTRODUCTION

*“With tens of thousands of patients dying every year from preventable medical errors, it is imperative that we embrace available technologies and drastically improve the way medical records are handled and processed.”*

*-Jon Porter, Former member of U.S. House of Representative*

Patient safety measure plays a very significant role in health care delivery system. Evidence of high incidences of frequent medical errors in health system put the issue of patient safety in threat and a matter of concern (Grober, Bohnen 2005). According to latest statistics, in United States, every year 210,000 people are killed by preventable hospital errors. The number exceeds to 440,000 if diagnostic errors, errors of omission and failure to follow guidelines are included (James, John 2013). Statistically, the number is 4.5 times higher than the previous statistics of 1999 done by institute of medicine (Rodak 2013). According to Allen, Propublic (2013), it has been concluded that one sixth of the deaths in United States each year results in medical errors because of undocumented information of the patients aside to the other causes

of heart disease and cancer. (Mercola2013). According to the European Commission, almost 4 in 5 person (78%) think medical error is a very important problem in their country (EC 2006). In developing countries medical mistakes put the hospitalized patient at major risk and can lead to more than one death per day in hospital (Edmonson, 2012).

The evidence of high incidences of medical error cases have raised public concern about the safety of modern health care delivery as presented by Cook et al (1998) in both developing and developed countries (James 2013, Edmonson 2012). As a result, health care institutions consider errors in health care a research priority (Grober & Bohnen, 2005) and some estimate shows that eliminating medical errors should become a national priority as per patient safety is concern (Mercola 2013). Henceforth, some of the key issues to be addressed are identifying causes of the errors, devise solutions and measure the success of improvement efforts. Moreover, accurate statistics and records of the incidence of error are essential requirements for effective action (Grober & Bohnen 2005).

## II. ANALYSIS

In health care system errors can involve medicines, surgery, diagnosis, home treatment, equipment, or lab reports et.al.Kohn (1999) resulting either by fallibility of health care provider or by health care system or combination of both in all areas of care (Marie 2004). During health care delivery patient could be harmed by the use of technology or treatment they receive and by poor communication between the health care providers or delay in receiving treatment (WHO, 2013).

Study shows that, irrespective of the specific cause of error an estimated 80 percent of serious medical errors involve some form of miscommunication particularly while transferring the patient or treatment from one provider to next. Thus, lack of good communication becomes leading root causes of medical error (AHRQ, 2003), which could be substantially reduced through effective documentation, record and verbal communication (Underwood 2013). Therefore, improving communication between health care providers or with

patient should be priority consideration to reduce medical error in health care delivery system.

Communication is defined as the transfer of information, ideas or feelings (WHO, 2009). In health care system for present and continuing care of the patient the health care providers uses verbal and written orders for treatment purpose when they depends mostly on written form of information or medical record about the patient's health status (WHO) as it communicates information about the progress of patient to the physicians and other health care professionals who are providing care to the patient. It acts as a bridge of communication between patients and care givers. In addition, medical records also provide critical information such as the history of illness and treatment provided for subsequent treatment (Wijesekera 2013). Thus, medical records become the integral mean of communication in health care delivery system.

In health care system, a medical record is used as a tool which contains "sufficient data to identify the patient, support the diagnosis or reason for attendance at the health care facility, justify the treatment and accurately document the results of that treatment"(Huffman, 1990). According to World Health Organization, the main purpose of the medical record is to record the facts about a patient's health, and treatment which is used for present and continuation of care. In addition, it is used in planning the services, facilities, to create health statistics, medical research, and retrospective study. Documentations of patients are used as finding aid for the patient case notes (Ropper 1999).

Health care professionals like Doctors, Nurses and others write up medical records so that health history of patients is available when the patient returns to the health care facility. Unavailability of the records might cause patient to suffer due to wrong treatment because of missing vital information for continuity of care (WHO). Therefore, proper management of the record is important to protect information from being lost. It is evident that, any type of error or weakness in charting in the record or missing of information increases the margin of error which could result in patient injury or harm, wrong diagnosis (Karp 2008) and could create some of the key problems like, difficulties in shift or patient handover, error in recorded information in patients files, inappropriate case notes and incident reports, difficulties of transmitting information within and between organizations (WHO 2009) which put serious risk to the treatment plan of patient.

Healthcare providers use the medical records after handover to continue treatment of the patient. A study in US shows that, miscommunication during handover is a leading cause of error which contributes

two of every three "sentinel events". In addition, the omission of critical information and transfer of erroneous information from the record during handover are common which lead to patient harm (Starmer 2014). Another study in Malaysia demonstrates that, of all the medical errors 98% comprises documentation errors, where nearly half of the records missed the documentation of history, physical examination, presenting problems and diagnosis (Koo 2012).

A recent study conducted in a private hospital of Bangladesh reports 3.46 medication related error per prescription due to poor handwriting and recording. It also states poor documentation in prescription to be a major cause of patient morbidity and mortality in Bangladesh (Paul 2014). These high numbers of preventable medical errors raised the concern to think of incidences happening in poor or developing countries.

A recent case study analyzed by WHO shows, inadequacy of recording details and losing records could lead to serious medical errors like wrong diagnosis, wrong treatment that causes the patient die. It also emphasize on practicing appropriate record management to follow evidence based practice (WHO). Medical errors are a major reason as to why current medical system is in desperate need of transformation (Mercola, 2013).

Researchers found that, proper transfer of information between health providers can reduce patient injuries from medical errors by 30 percent (Noguchi,2014) some study also suggest to avoid verbal orders or should send standing order (Aaos, 2003) which demonstrates the necessity of maintaining medical records and transfer properly to ensure continuity of care.

### **III. DISCUSSION**

It is very important for a health care professional to properly document and manage records. Medical records are the only evidence and means of communication to ensure that the treatment is carried out properly. Any simple mistake in record or lose of information could lead to serious error in the treatment of a patient which could lead to even death. Moreover, medical records could be a great assistance in reviewing cases of the patients, evaluating profile and plan for treatment.

Medical records include a variety of documentation of patient's history, clinical findings, diagnostic test results, daily notes of a patient's progress, medications and so on. Over a period of time, the documentation build up a form a complete medical history of the patient (Roper 1999) which might also contain many records that are indirectly related to patient management such as accounts

records, service records of the staff, and administrative records which are necessary for both the patients and healthcare providers for accountability.

As the medical records are kept for a number of reasons to meet different purposes such as, for communication purposes while caring for the patient, for continuity of patient care over the course of the patient's life, for evaluating patient care, for medico-legal purposes, for using as a source of health statistics, for research, education and planning purposes (Wijesekera,2013) proper medical recording needs involvement, efforts and communication from a number of health care providers. Such as, the doctors and nurses are responsible for recording history, case notes, assessment, and plan of treatment, consent forms, prescriptions, referral documents, discharge papers and other necessary documentations; health care professionals also need to be involved in recording tasks like, care record, laboratory findings and analysis, billing process, consent forms. Which all are important to be recorded accurately to ensure the proper receiving of treatment by patient as the records are transferred and studied by different members of health care team to decide about the treatment?

Proper archiving and management of the records is also equally important for continuity of care. For example, information about previous history of illness and treatment is essential for future treatment plan as medical records contain information required to inform physicians of past and present treatment decisions, and to provide evidence that such care was appropriate in all respects and weaknesses in the charting increase the margin of errors (Karp 2008). Archived records are also used to study medical errors, to find statistics, prevalence and frequency of an error (Charls 2001). Moreover, many other issues, including clinical audit and research needs, could influence the retention of medical records (Roper 1999). Therefore, accuracy, proper handling and management of the records are crucial for both the patient and health care team. Above all, the most important reason for health care professional to maintain accurate, credible medical records is that good documentation and record protect patients (Karp 2008). This means that to ensure proper maintenance and transfer of patient records is a must to ensure proper communication, appropriate treatment and safety of the patient.

Now a day, researches are being conducted to improve health care situation and to reduce medical errors. Some organizations are bringing latest technology and system of care. But still high incidence of medical errors keeps the question of proper documentation system, implementation, proper practice, and health archive management a

concern. So, to reduce medical error by a great margin it is crucial to improve documentation system of health record and their management.

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