

**Analysis of Electronic Medical Record Information Security Aspects in
Outpatient Facilities Using CIA Triad at RSD Dr. Soebandi Jember**

Sabran, S.KM., M.P.H (Supervisor I)

Magfira Nur Azizah

Health Information Management Study Program

Department of Health

ABSTRACT

The information security of the Electronic Medical Records (EMR) at RSD dr. Soebandi Jember is considered not fully secure. This is due to certain staff members storing usernames and passwords within the EMR system. Furthermore, errors occur in patient data entry into the electronic medical records because some patients have duplicate names. In practice, manual medical records are still being used. This is caused by some electronic forms not yet being available, and the medical history data of previous patients has not been fully entered into the electronic medical records. The aim of this study is to analyze the aspects of information security in the EMR of the outpatient installation at RSD dr. Soebandi Jember. The research method used is descriptive qualitative. The method employed is the CIA triad, which includes Confidentiality, Integrity, and Availability. The results of this study indicate that the EMR information at RSD dr. Soebandi Jember is not secure. From the confidentiality aspect, issues were found in user authentication, such as usernames and passwords stored in the system, staff members knowing each other's accounts, and the lack of an automatic logout feature. Regarding integrity, staff can delete data without supervisor confirmation, and there are errors in diagnosis entry due to duplicate names. Concerning availability, patient medical histories are not fully available in the EMR, the diagnosis entry uses a restrictive list box, and forms are not yet fully integrated into the EMR. Therefore, a corrective measures needs to be prepared to meet the EMR information security standards.

Keywords: *Security Aspects, Confidentiality, Integrity, Availability, Outpatient Care*