ABSTRACT

XYZ Hospital has implemented the Hospital Management Information System (SIMRS) since 2014 to support the management of Electronic Medical Records (EMR). However, the medical records unit still faces various information technology constraints, including problems with software, hardware, and human resources. These constraints have a significant impact on operations, such as double registers, patient data that does not appear, increased patient waiting times, and obstacles in data administration and management. This condition is contrary to the Minister of Health's regulation on EMR, which guarantees complete, accurate, and integrated patient health information. To overcome these problems, a risk analysis using the Failure Mode Effect Analysis (FMEA) method is needed. FMEA is an analysis technique that aims to provide weighting for potential failures based on the Risk Priority Number (RPN) value, which is calculated from the level of occurrence, severity, and risk detection capability. Through this approach, IT risks in the medical records unit can be identified, assessed, and prioritized according to their level of urgency. From this study, 28 potential risks were found with the highest RPN value of 284 with a very high level, and a value of 8 with a very low level. These risks involve software, hardware, and human resources. The next step after risk weighting is the implementation of risk management based on the international standard ISO 31000:2018. ISO 31000:2018 provides a comprehensive framework for managing risk systematically and measurably. This standard emphasizes the importance of comprehensive risk identification, assessment, control, and monitoring. The results of the study produced a document of IT improvement recommendations that can improve operational efficiency and support the sustainability of health services. The main objective of this study is to protect organizational values so that they remain safe in supporting the operations of XYZ Hospital.

Keywords: *FMEA, ISO 31000:2018, Rekam medis elektronik, manajemen risiko IT, SIMRS*