

ABSTRACT

The Outpatient Unit utilizes information technology to improve operational efficiency and service quality. However, its implementation faces several challenges, such as network disruptions, hardware failures, and software instability. These issues directly affect service continuity and have even led to patient overcrowding. The situation is exacerbated by the lack of proactive measures in identifying and managing IT risks, resulting in recurring incidents such as “internet network offline” and “delays in diagnosis processes” from 2020 to 2024. These disruptions have negatively impacted service quality and hindered hospital operations. This study adopts a risk management approach based on ISO 31000:2018, using interview, observation, and document review methods. The main objective is to conduct a risk assessment and develop a risk register for IT-related risks in the Outpatient Unit. Risks are identified from environmental, human, system and infrastructure, and operational process factors. Each risk is assessed based on its likelihood and impact levels. The risk assessment results show that six risks are at a medium level and ten risks at a low level. The resulting risk register helps the Outpatient Unit prioritize risk handling and design appropriate mitigation strategies to maintain smooth service delivery. The application of ISO 31000:2018 in this study provides academic contributions by strengthening the conceptual framework of IT risk management, as well as practical contributions through the provision of a systematic guide for managing IT risks to support operational continuity and the quality of hospital services.

Keywords: *Information Technology, Risk Management, ISO 31000:2018, Risk Register*