ABSTRACT

Digital transformation in Indonesia's healthcare sector has become an urgent necessity to enhance efficiency, effectiveness, and service quality, as mandated by Law No. 17/2023 on Health. The law requires Health Information System (HIS) operators to integrate their systems with the National Health Information System (Article 345, Paragraph 3). Additionally, Ministry of Health Regulation No. 24/2022 mandates healthcare facilities to connect Electronic Medical Records (EMR) with SATUSEHAT (Article 21) and provide access to medical record contents for the Ministry of Health (Article 28).

This study aims to develop a framework for evaluating hospital Health Information Systems (HIS) based on compliance and readiness to improve accountability and healthcare service effectiveness. The implementation of HIS is an obligation for healthcare facilities, as mandated by Law No. 17/2023 on Health, emphasizing the integration of hospital HIS with the National Health Information System. This research evaluates the effectiveness of compliance-based governance, identifies gaps in implementation, and measures the digital readiness of hospitals in West Java Province.

The evaluation results show that hospital HIS maturity is at Level 3 (Established and Authoritative), with the highest scores in governance (3.42) and data utilization (3.29). However, challenges persist in interoperability (2.22), information and communication technology (ICT) infrastructure (2.94), and data security (2.63). The study also highlights the importance of improving human resource capacity and aligning competencies with ICT requirements. Positive perceptions of HIS administrators regarding the benefits of technology, system readiness, and data security significantly influence technology adoption.

The proposed framework integrates elements of compliance, readiness, and technology to assess the success of HIS implementation in hospitals. Strategic recommendations include strengthening interoperability, investing in ICT infrastructure, enhancing human resource capacity, and advancing data analytics to support the digital transformation of the healthcare sector. This study is expected to serve as a guide for hospitals in refining HIS implementation to support more integrated, effective, and data-driven healthcare services.

Keywords: Health Information System, Framework, Hospital, Digital Transformation.