ABSTRACT

Digitizing medical records in hospitals is inevitable in the era of healthcare transformation, but its implementation often faces technical and non-technical challenges that impact service efficiency. This study aims to deeply analyze the meaning and challenges of Electronic Medical Records (ER) implementation and its impact on service efficiency at Royal Prima General Hospital, Medan City.

This qualitative research, using a case study design, was conducted in April 2026. Data was collected through in-depth interviews with 11 informants (management, IT, medical records, doctors, nurses, pharmacists, admissions, and patients), observations, and document reviews. Data analysis used the Miles & Huberman interactive model with triangulation of sources, techniques, and time.

The results show that EMR is interpreted multidimensionally: for management, it serves as a foundation for digital transformation, and for clinical staff, it serves as both a tool and a source of new administrative burden. Patient data access time has increased dramatically (from 10-15 minutes to 1-2 minutes), yet 65% of healthcare workers still duplicate records. The main challenges include infrastructure (12 system outages in 3 months, server overload, unstable network), human resources (senior staff resistance, only one day of training), and system integration (data out of sync, interoperability with SATUSEHAT only 40%). Positive impacts: reduction in outpatient waiting time from 87 to 75-80 minutes and improvement in document completeness (30-40% to 15-20%). Negative impacts: increased data input workload for doctors/nurses (5-10 minutes per patient).

The success of EMR requires synergy between infrastructure improvements, ongoing training, and system integration. Future researchers are advised to conduct comparative studies between hospitals (public vs. private) and develop adaptive EMR implementation models.

Keywords: ***Electronic Medical Records, Service Efficiency, Implementation Challenges, Healthcare Workers, Hospitals***