

## ABSTRAK

Peralatan medis merupakan bagian penting dalam mendukung mutu pelayanan kesehatan di rumah sakit. Penggunaan teknologi berbasis *Computerized Maintenance Management System* (CMMS) menjadi salah satu upaya untuk meningkatkan efektivitas pengelolaan pemeliharaan alat medis. RSUD Arifin Achmad Provinsi Riau telah menggunakan aplikasi Trilux CMMS+ dalam pelaksanaan pemeliharaan peralatan medis. Penelitian ini bertujuan untuk mengevaluasi kinerja pemeliharaan dan perbaikan peralatan medis berbasis aplikasi Trilux CMMS+ di RSUD Arifin Achmad Provinsi Riau.

Penelitian ini menggunakan metode kualitatif dengan pendekatan studi kasus. Pengumpulan data dilakukan melalui wawancara mendalam, observasi, dan dokumentasi. Informan penelitian terdiri dari Kepala Instalasi Pemeliharaan Sarana dan Prasarana Rumah Sakit (IP3MRS), Kepala Ruangan IP3MRS, dan dua teknisi elektromedis. Analisis data dilakukan melalui reduksi data, penyajian data, dan penarikan kesimpulan berdasarkan aspek input, proses, dan output.

Hasil penelitian menunjukkan bahwa pada aspek input implementasi aplikasi Trilux CMMS+ didukung oleh sumber daya manusia, teknologi, kebijakan, anggaran, serta data dan informasi, meskipun masih terdapat kendala berupa keterbatasan SDM, jaringan internet yang tidak stabil, dan keterbatasan perangkat pendukung. Pada aspek proses, aplikasi membantu perencanaan, pelaksanaan, pengawasan, dan pelaporan pemeliharaan alat medis menjadi lebih terstruktur dan terdokumentasi. Pada aspek output, penggunaan aplikasi membantu meningkatkan kinerja dan efisiensi kerja teknisi, meningkatkan kualitas data pemeliharaan, serta memberikan kepuasan kepada pengguna karena sistem dinilai mudah digunakan dan membantu pekerjaan maintenance menjadi lebih efektif.

Kesimpulan penelitian ini adalah aplikasi Trilux CMMS+ membantu meningkatkan pengelolaan pemeliharaan dan perbaikan peralatan medis melalui sistem pemeliharaan yang lebih efektif, terstruktur, dan terdokumentasi secara digital.

**Kata Kunci:** CMMS, Trilux CMMS+, pemeliharaan alat medis, rumah sakit, peralatan medis.

## **ABSTRACT**

*Medical equipment plays an important role in supporting the quality of healthcare services in hospitals. The use of Computerized Maintenance Management System (CMMS)-based technology is one of the efforts to improve the effectiveness of medical equipment maintenance management. Arifin Achmad Regional General Hospital of Riau Province has implemented the Trilux CMMS+ application in medical equipment maintenance activities. This study aims to evaluate the performance of medical equipment maintenance and repair based on the Trilux CMMS+ application at Arifin Achmad Regional General Hospital of Riau Province.*

*This study used a qualitative method with a case study approach. Data were collected through in-depth interviews, observations, and documentation. The research informants consisted of the Head of Hospital Facilities and Infrastructure Maintenance Installation (IP3MRS), the Head of IP3MRS Unit, and two electromedical technicians. Data analysis was conducted through data reduction, data presentation, and conclusion drawing based on input, process, and output aspects.*

*The results showed that the input aspect of the Trilux CMMS+ application implementation was supported by human resources, technology, policies, budget, as well as data and information, although several obstacles were still found, including limited human resources, unstable internet networks, and limited supporting devices. In the process aspect, the application supported planning, implementation, supervision, and reporting of medical equipment maintenance in a more structured and documented manner. In the output aspect, the application improved technician performance and work efficiency, enhanced maintenance data quality, and increased user satisfaction because the system was considered easy to use and effective in supporting maintenance activities.*

*The study concluded that the Trilux CMMS+ application helped improve the management of medical equipment maintenance and repair through a more effective, structured, and digitally documented maintenance system.*

**Keywords:** *CMMS, Trilux CMMS+, medical equipment maintenance, hospital, medical equipment.*