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**Evaluasi Penggunaan Modul Hemodialisis Pada Sistem Rekam Medis Elektronik Di RSUD Prambanan
Berdasarkan ISO 9241-11**
Aida Musumi Mahendratta, Dian Budi Santoso, S.K.M., M.P.H.
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ABSTRAK

Latar belakang: Implementasi Rekam Medis Elektronik (RME) pada unit hemodialisis masih ditemukan permasalahan penggunaan sistem yang berpotensi menghambat pelayanan. Penelitian ini bertujuan untuk mengukur tingkat *usability* modul hemodialisis pada Sistem Rekam Medis Elektronik di RSUD Prambanan berdasarkan komponen efektivitas, efisiensi, dan kepuasan pengguna berdasarkan ISO 9241-11, mengidentifikasi permasalahan penggunaan berdasarkan pengalaman pengguna, serta menyusun rekomendasi perbaikan sistem.

Metode: Penelitian ini menggunakan pendekatan *mixed method* dengan desain *concurrent triangulation. Usability testing* dilakukan terhadap pengguna 1 dokter dan 9 perawat. Aspek efektivitas diukur menggunakan *completion rate*, efisiensi menggunakan *Time-Based Efficiency* (TBE) dan *Overall Relative Efficiency* (ORE), sedangkan kepuasan pengguna diukur menggunakan *System Usability Scale* (SUS) berdasarkan ISO 9241-11. Data kualitatif diperoleh melalui wawancara dan dianalisis menggunakan OpenCode.

Hasil penelitian: Pengguna dokter memperoleh *completion rate* 100%, nilai TBE 0,0401 *goal/second*, ORE 100%, dan skor SUS 78. Pada pengguna perawat diperoleh *completion rate* 76,5%, nilai TBE 0,0171 *goal/second*, ORE 87,1%, dan skor SUS 72. Kemudian, ditemukan 18 permasalahan yang dikelompokkan ke dalam aspek efektivitas, efisiensi, dan kepuasan pengguna, sehingga disusun 18 rekomendasi perbaikan sesuai kebutuhan pengguna.

Kesimpulan: Modul hemodialisis pada RME RSUD Prambanan menunjukkan tingkat *usability* yang berbeda antara pengguna dokter dan perawat. Dokter dapat menyelesaikan seluruh tugas secara efektif dan efisien dengan kepuasan kategori baik dan dapat diterima, sedangkan perawat menghadapi hambatan pada efektivitas dan efisiensi akibat keterbatasan fitur dan interaksi sistem dengan kepuasan kategori baik dan dapat diterima namun masih membutuhkan adaptasi. Ditemukan 18 permasalahan dan disusun 18 rekomendasi perbaikan yang bersifat operasional.

Kata kunci: Evaluasi *Usability*, *Usability Testing*, ISO 9241-11, Rekam Medis Elektronik, Hemodialisis

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ABSTRACT

***Background**: The implementation of Electronic Health Records (EHR) in hemodialysis units has revealed usability issues that potentially hinder healthcare services. This study aims to measure the usability level of the hemodialysis module in the EHR system at RSUD Prambanan based on effectiveness, efficiency, and user satisfaction components according to ISO 9241-11, identify usage problems based on user experience, and develop system improvement recommendations.*
***Methods**: This study employed a mixed method approach with a concurrent triangulation design. Usability testing was conducted with 1 physician and 9 nurses as active users of the hemodialysis module. Effectiveness was measured using completion rate, efficiency using Time-Based Efficiency (TBE) and Overall Relative Efficiency (ORE), and user satisfaction using the System Usability Scale (SUS) based on ISO 9241-11. Qualitative data were obtained through interviews and analyzed using OpenCode.*
***Results**: The physician user obtained a completion rate of 100%, TBE of 0.0401 goal/second, ORE of 100%, and SUS score of 78. Nurse users obtained a completion rate of 76.5%, TBE of 0.0171 goal/second, ORE of 87.1%, and SUS score of 72. A total of 18 problems were identified and categorized into effectiveness, efficiency, and user satisfaction aspects, resulting in 18 improvement recommendations.*
***Conclusion**: The hemodialysis module in the EHR system at RSUD Prambanan demonstrated different usability levels between physician and nurse users. The physician completed all tasks effectively and efficiently with satisfaction rated as good and acceptable, whereas nurses encountered barriers in effectiveness and efficiency due to feature limitations and system interaction issues, with satisfaction rated as good and acceptable but requiring further adaptation. Eighteen usability problems were identified and 18 operational improvement recommendations were developed.*
Keywords: Usability Evaluation, Usability Testing, ISO 9241-11, Electronic Health Record, Hemodialysis