

ABSTRAK

Latar Belakang: Penyakit Ginjal Kronis (PGK) merupakan salah satu Penyakit Tidak Menular (PTM) dengan prevalensi yang meningkat, hal ini berdampak langsung pada meningkatnya kebutuhan layanan hemodialisis. Meningkatnya jumlah fasilitas layanan HD ini menuntut adanya sistem pelaporan yang terstruktur dan mudah dalam monitoring oleh Dinas Kesehatan DIY. Namun dalam proses pelaporan layanan hemodialisis yang bersifat manual dengan mengunggah dokumen laporan menyebabkan beban administratif, keterbatasan rekapitulasi laporan, serta proses monitoring yang belum optimal.

Tujuan: Mengembangkan *prototype* sistem pelaporan dan monitoring layanan hemodialisis di Dinas Kesehatan DIY yang sesuai dengan kebutuhan pengguna.

Metode: Jenis penelitian ini adalah *Research and Development* (RnD) dan menggunakan metode *prototyping*. Penelitian ini dilakukan pada bulan Mei – Oktober 2025 di Dinas Kesehatan DIY. Pengumpulan data dilakukan dengan wawancara, observasi, dan studi dokumentasi. Tahapan penelitian meliputi analisis kebutuhan pengguna, desain proses, pengembangan *prototype*, serta uji coba dan evaluasi terhadap *prototype*

Hasil: Penelitian ini menghasilkan *prototype* sistem pelaporan dan monitoring layanan hemodialisis yang dibuat berdasarkan analisis kebutuhan pengguna yang divisualisasikan dengan *use case diagram*, *user flow diagram*, dan *activity diagram* serta mampu memfasilitasi proses input data laporan, rekapitulasi laporan, dan monitoring laporan layanan hemodialisis.

Kesimpulan: *Prototype* sistem pelaporan dan monitoring layanan hemodialisis yang dikembangkan dapat menjadi solusi awal dalam mendukung proses digitalisasi pelaporan layanan hemodialisis di Dinas Kesehatan DIY serta dapat meningkatkan efektivitas dan efisiensi proses monitoring layanan hemodialisis.

Kata Kunci: Hemodialisis, Sistem Pelaporan, Monitoring, *Research and Development*, *Prototyping*.

ABSTRACT

Background: *Chronic kidney disease (CKD) is a Non-Communicable Diseases (NCD) with increasing prevalence, which has a direct impact on the increasing need for hemodialysis services. The increasing number of hemodialysis service facilities requires a structured and easy reporting system for monitoring by the Yogyakarta Health Office. However, the manual hemodialysis service reporting process, which involves uploading report documents, causes administrative burdens, limitations in report recapitulation, and a monitoring process that is not yet optimal.*

Objective: *To develop a prototype reporting and monitoring system for hemodialysis services at the Yogyakarta Health Office that meets user needs.*

Method: *This research is a Research and Development (RnD) study using the prototyping method. This research was conducted from May to October 2025 at the Yogyakarta Health Office. Data collection was carried out through interviews, observations, and documentation studies. The research stages included user needs analysis, process design, prototype development, and prototype testing and evaluation.*

Results: *This research produced a prototype reporting and monitoring system for hemodialysis services based on user needs analysis, visualized with use case diagrams, user flow diagrams, and activity diagrams, and capable of facilitating the process of report data input, report recapitulation, and monitoring of hemodialysis service reports.*

Conclusion: *The prototype hemodialysis service reporting and monitoring system developed can be an initial solution in supporting the digitization of hemodialysis service reporting at the Yogyakarta Health Office and can improve the effectiveness and efficiency of the hemodialysis service monitoring process.*

Keywords: *Hemodialysis, Reporting System, Monitoring, Research and Development, Prototyping.*