GOVERNMENT HEALTH AND SANITATION SERVICE MANAGEMENT WITH AI ASSISTANCE FOR OPTIMIZED PUBLIC SERVICES

ABSTRACT

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DISCIPLINE
Information Systems

KEYWORDS
health-center services, sanitation permits and inspections, health surveillance, ai chatbot, local government services, goserveph

ARTICLE ID
AASGBCPJMRA-AB54823

Local government health and sanitation services in the Philippines may be constrained by slow manual workflows. Paper-based systems for permits and health records can contribute to data errors and delayed responses. This study presented GoServePH, a digital platform with AI assistance designed to automate service requests and provide 24/7 user support. The system was intended to offer a more transparent, efficient, and citizen-centered approach to public-service delivery. The study used a mixed-method design to evaluate the system. GoServePH was developed through an Agile Development Life Cycle using PHP, MySQL, and Tailwind CSS. Data were collected from health officials and residents through System Usability Scale surveys and performance tests of modules such as permit processing and AI interaction. The evaluation focused on administrative efficiency and user accessibility in urban barangays. GoServePH reportedly reduced permit-processing time by 40%. The AI chat assistant handled 80% of routine inquiries without manual intervention, and the system achieved 98% data accuracy. Users also reported high satisfaction with interface usability and platform responsiveness compared with traditional procedures. The findings suggest that automated and AI-assisted functions may help address administrative delays and staffing constraints in local government services. A digital audit trail may support transparency and accountability. However, compliance with the Data Privacy Act and scalability across public-health settings require formal security, privacy, governance, and implementation assessment beyond the reported prototype results.

RECOMMENDED CITATION

Alix, E., Bustalinio, G. K., Desolo, J., Lanos, H. J., & Santos, P. J. (2026). Government Health and Sanitation Service Management with AI Assistance for Optimized Public Services. *Ascendens Asia Singapore – Bestlink College of the Philippines Journal of Multidisciplinary Research Abstracts, 8*(6), 91.