Indonesian Journal of Global Health Research
Volume 7 Number 2, April 2025
e-ISSN 2715-1972; p-ISSN 2714-9749
http://jurnal.globalhealthsciencegroup.com/index.php/IJGHR

OPERATIONAL RISK ASSESSMENT TOWARDS THE INTEGRATION OF PRIMARY HEALTH CARE SERVICES AT SUNGAI RANGIT COMMUNITY HEALTH CENTER USING THE ISO 31000 (2018) PERSPECTIVE

Iwan Setyo Lesmana*, Agusta Dian Ellina, Indasah
Health Service Policy and Management, Master's Program in Public Health, Universitas Strada Indonesia,
Jl. Manila No.37, Tosaren, Kediri, East Java 64123, Indonesia
*iwansera16@gmail.com

ABSTRACT
Primary Healthcare Service Integration (PHSI) at Community Health Centers aims to integrate primary healthcare services at Community Health Centers, Sub-Centers, and Integrated service posts for a more comprehensive and integrated approach. Sungai Rangit Community Health Center in West Kotawaringin Regency is planned to implement PHSI in 2024. However, a preliminary study has shown several issues that need to be anticipated, especially in terms of planning and budgeting, organizational governance, and staff assignment. This study aims to explore the operational risks faced by Sungai Rangit Community Health Center so that the implementation of PHSI can run smoothly. This research uses a qualitative descriptive approach. Data was collected through Focus Group Discussions (FGD) involving 59 employees of Sungai Rangit Community Health Center and triangulated interviews with health department employees and qualified risk management experts. The study collected qualitative data through FGDs and document analysis, involving health center employees and policy documents. Triangulation with district officials and risk management experts ensured validity. Data were refined, categorized, and analyzed iteratively, leading to a prioritized risk assessment for healthcare integration while maintaining ethical considerations. The study identified 5 main operational risks that need to be anticipated, namely: 1) risk of unavailable budget; 2) risk of invalid health data; 3) risk of sub-standard work plan preparation; 4) risk of internet connection down; and 5) risk of employee demotivation. Village governments need to allocate budgets for the needs of cadres to conduct household data collection. Cluster Heads need to assist cadres in conducting data collection and filling out the LOCAL AREA MONITORING dashboard. WiFi access in the Community Health Center environment needs to be improved to support internet-based community health center operations.

Keywords: ISO 31000 (2018); operational risk; PHSI

How to cite (in APA style)
Lesmana, I. S., Ellina, A. D., & Indasah, I. (2025). Operational Risk Assessment Towards the Integration of Primary Health Care Services at Sungai Rangit Community Health Center using the ISO 31000 (2018) Perspective. Indonesian Journal of Global Health Research, 7(2), 945-952. https://doi.org/10.37287/ijghr.v7i2.5713.

INTRODUCTION

The Indonesian Ministry of Health (Kemenkes) has established a health development vision: "A Healthy, Productive, Independent, and Equitable Society for an Advanced, Sovereign, Independent, and Strong Indonesia, Based on Mutual Cooperation." To achieve this vision, the general policy focuses on "Improving healthcare services towards universal health coverage, especially by strengthening primary health care, promoting preventive measures, and utilizing technology and innovation" (Kementerian Kesehatan Republik Indonesia, 2020). An evaluation of the 2021 minimum service standards (SPM) for healthcare services by the Directorate of Public Health Governance revealed that none of the 12 SPM indicators reached 100%. Some indicators even declined compared to 2020, including: 1) maternal health services (82.54% to 75.83%); 2) childbirth services (83.65% to 76.29%); 3) neonatal health services (83.63% to 78.03%); 4) toddler health services (79.07% to 71.98%); and 5) mental health services for severe mental disorders (76.55% to 72.94%). These low achievements prompted a transformation of Indonesia's healthcare system, particularly in primary

healthcare services (Direktorat Tata Kelola Kesehatan Masyarakat Kemenkes RI, 2023).
The issuance of Ministerial Decree No. HK.01.07/Menkes/2015/2023 on Technical Guidelines for Integrating Primary Healthcare Services underscores the need for strengthening primary healthcare due to the persistent high health burden and preventable deaths. This reflects the insufficient capacity of primary healthcare services to address health issues effectively (Direktorat Tata Kelola Kesehatan Masyarakat Kemenkes RI, 2023).In Indonesia, primary healthcare is provided by 10,374 Public Health Center, supported by 27,768 auxiliary Public Health Center and other first-level healthcare facilities. Community-based health efforts, including 42,051 village health posts, 301,068 integrated service posts (Integrated service posts), 109,415 elderly Integrated service posts , 18,300 adolescent Integrated service posts , and 79,099 integrated disease control posts, demonstrate the lack of integration in community empowerment at the village/urban ward level. Moreover, 18,193 villages/urban wards lack healthcare facilities such as Pustu, Poskesdes, or Integrated service posts to meet healthcare needs (Yuliandari, 2023).

The Ministry of Health has initiated a healthcare system transformation with six key pillars: 1) Primary healthcare transformation, 2) Referral healthcare transformation, 3) Health resilience system transformation, 4) Health financing system transformation, 5) Health workforce transformation, and 6) Health technology transformation. Primary healthcare transformation involves public education, primary and secondary prevention, and capacity building for primary healthcare services. This aims to reorganize existing primary healthcare services to provide comprehensive, high-quality healthcare for all Indonesians. A new approach, "Integrated Primary Healthcare Services," involves Public Health Center, village-level healthcare units (auxiliary Public Health Center), and Integrated service posts , integrating all primary healthcare facilities (Direktorat Tata Kelola Kesehatan Masyarakat Kemenkes RI, 2023).

The Integrated Primary Healthcare Services approach in Public Health Center shifts from program-based coordination to a life-cycle approach. Public Health Center heads assign staff into clusters and establish an organizational structure based on these clusters: 1) Management, 2) Maternal and Child Health, 3) Adult and Elderly Health, 4) Infectious Disease Control, and 5) Cross-Cluster Working Groups. A pilot implementation in nine Public Health Center representing urban, rural, remote, and very remote areas yielded positive results, confirming its feasibility (Biro Komunikasi dan Pelayanan Publik Kementerian Kesehatan RI, 2023). In West Kotawaringin Regency, 18 Public Health Center operate across several districts. Sungai Rangit Public Health Center is among those implementing integrated primary healthcare services in 2024. This facility employs 56 staff, including doctors, dentists, nurses, midwives, pharmacists, nutritionists, dental therapists, environmental sanitation officers, laboratory personnel, medical record officers, health promotion specialists, IT managers, administrative staff, cleaners, and security personnel.

The challenge was the inappropriate assignment of staff based solely on formal education rather than work experience. During Public Health Center accreditation, most accreditation standard officers were nurses, as they formed the majority of staff. However, many lacked experiences in Public Health Center settings. The preliminary study indicated that risk management was not systematically implemented; instead, problem management was more common. This raise concerns as Sungai Rangit Public Health Center undertakes integrated primary healthcare services. Staff composition and qualifications may change, and service approach adjustments create apprehension about adaptation readiness. A simulation is needed to identify and mitigate risks affecting planning, budgeting, governance, and human

resources, assessing their impact on the Public Health Center.Risk management is crucial for individuals, organizations, and governments in achieving objectives, as unexpected deviations may occur. Healthcare organizations face high and complex risks across professional, technological, and managerial dimensions. Effective risk management is essential, as even low-risk incidents can have severe consequences for patients, staff, costs, and institutional reputation (Pascarella et al., 2021). Risk management involves proactive measures to protect value and minimize gaps between expectations and reality, helping healthcare institutions anticipate and address issues before they arise (Kavalenko, 2023).

Risk refers to factors that may positively or negatively impact organizational goals. Negative impacts are threats, while positive impacts are opportunities. Thus, risk management is the science and art of managing both threats and opportunities (IRMAPA, 2022). Two widely used Enterprise Risk Management (ERM) frameworks are ISO-ERM (International Organization for Standardization) and COSO-ERM (Committee of Sponsoring Organizations of the Treadway Commission) (Wiener, 2022).The COSO-ERM framework is widely used in financial businesses and accounting practices. Its main goal is to enhance goal achievement and identify potential failures in business strategies. This approach is similar to Failure Mode and Effect Analysis (FMEA). However, organizations using COSO-ERM must first define their objectives and strategies before conducting risk analysis, which can be complex for some (Ahmad et al., 2021).The ISO-ERM framework, commonly applied in Indonesia, emphasizes value creation and protection within organizations. Unlike COSO-ERM, ISO-ERM identifies uncertainties first, viewing some as potential opportunities, before developing strategies (Wiener, 2022). The latest standard for risk management is ISO 31000 (2018), operationalized in Indonesia as SNI 8848 (2019) for public sector risk management (BSN, 2019).The ISO 31000 (2018) risk management process includes: 1) Context, scope, and criteria definition – In this study, these were established through research proposal development and evaluation; 2) Risk assessment – Comprising risk identification, analysis, and evaluation, this is the core phase where risks are examined based on existing theories; 3) Risk treatment – Beyond the study's scope, this involves implementing mitigation strategies upon returning to professional duties.

Given the high complexity and interdependence of risks in healthcare services—including professional, technological, and managerial domains—risk management is crucial. Even minor risks can significantly impact patients, staff, costs, and institutional reputation (Pascarella et al., 2021). Effective risk management minimizes the gap between expectations and reality, helping institutions anticipate and address issues proactively (Kavalenko, 2023).The American Society for Health-Care Risk Management identifies eight key risk domains: operational, clinical, strategic, financial, asset-related, legal/compliance, technological, and hazard-related risks (NEJM Catalyst, 2018). Operational risks receive particular focus to ensure smooth business processes.A preliminary study at Sungai Rangit Public Health Center identified challenges related to planning, budgeting, governance, and staff assignments during accreditation and Public Service Agency implementation. However, risks associated with primary healthcare integration remain unclear.A pilot project in Telaga Bauntung Health Center (South Kalimantan) demonstrated improved service coverage and community health monitoring, supported by strong institutional frameworks, government guidance, team performance, and cross-sectoral collaboration (Indriyati et al., 2023). Despite deviations from technical guidelines due to local constraints, innovative solutions emerged, highlighting the role of mentorship, governance understanding, and effective staff deployment in enhancing performance and innovation.Unlike the pilot project, Sungai Rangit Health Center may face unique planning and budgeting risks. Given these considerations, this study aims to conduct an Operational Risk Assessment for Primary Healthcare Integration at Sungai

Rangit Health Center Using the ISO 31000 (2018) Framework.

METHOD

This study employs a descriptive qualitative approach. Qualitative research is a process aimed at understanding human or social phenomena by creating a comprehensive and complex description. This approach emphasizes words, detailed perspectives from informants, and a natural setting. Qualitative research tends to be descriptive and adopts an inductive analysis approach, focusing on the subjects' perspectives. This study describes and analyzes the results of an operational risk assessment for the integration of primary healthcare services at Sungai Rangit Public Health Center using the ISO 31000 (2018) framework.The researcher acts as both the primary data collector and research instrument. The study was conducted at Sungai Rangit Public Health Center, Kotawaringin Barat Regency, between May and June 2024. The study involved 15 employees from Sungai Rangit Public Health Center. Informants for planning and budgeting discussions were administrative staff. Governance-related informants included program leaders and those responsible for governance standards, while assignment-related informants were those overseeing each cluster in the Primary Healthcare Integration Program.

Data in qualitative research includes verbal, written, and visual information relevant to addressing research questions. Primary data were collected from health center employees involved in planning, governance accreditation, and staff assignments. Secondary data included relevant documents such as the Public Service Agency Strategic Plan (Renstra Public Service Agency), Public Service Agency Budget Plan (RBA Public Service Agency), Health Center Work Plan (Renja Public Health Center), operational guidelines, and standard operating procedures (SOPs).FGDs were conducted to gather in-depth insights on the research theme. The researcher engaged with informants, facilitating discussions based on pre-prepared guidelines while encouraging comprehensive responses through probing techniques. FGDs continued until data saturation was reached, meaning no new information emerged. The key output was the Operational Risk Register of Sungai Rangit Public Health Center. Documentation was used to collect written data, such as governance documents and regional policy guidelines. A multi-method approach was employed to validate FGD data. Triangulation involved consultations with the Head of Health Services at the District Health Office and risk management experts certified as Qualified Risk Management Analysts (QRMA) and Certified Risk Professionals from BNSP.

Data reduction involved refining, categorizing, and organizing data to facilitate conclusions. This process was carried out after each FGD session.Following data reduction, information was systematically presented in narrative descriptions and tables to identify meaningful patterns and facilitate conclusions. Conclusions were drawn iteratively and verified throughout the analysis process. Findings provided a prioritized risk assessment for integrating primary healthcare services at the public health center.After conducting FGDs and triangulation interviews with district health officials, expert validation was sought by reviewing key documents such as the Revised and Original Public Service Agency Budget Plans for 2024 and 2025. Experts identified risks and contextual factors, which were then compared with FGD and interview findings.Participants provided informed consent before data collection, ensuring they understood the study's objectives and potential implications. Respondent confidentiality was maintained by coding responses instead of recording personal identifiers. The researcher ensured that collected data remained confidential and was not shared with unauthorized parties. The study prioritized benefits to research subjects and the broader population while minimizing potential risks and adverse impacts.

The study collected qualitative data from health center employees through FGDs and document analysis. Primary data were obtained from employees involved in governance, accreditation, and staff assignments, while secondary data included policy documents, budget plans, and operational guidelines. FGDs provided in-depth insights, with discussions continuing until data saturation was reached. Triangulation was conducted by consulting district health officials and risk management experts to validate findings. Data were refined, categorized, and analyzed iteratively, ensuring accuracy. Conclusions were drawn systematically, leading to a prioritized risk assessment for healthcare integration while maintaining participant confidentiality and ethical considerations.

RESULT

The study involved 59 participants with diverse characteristics. Gender distribution showed a higher proportion of female participants (66.1%) compared to males (33.9%). Regarding age, the majority were aged 35-39 years (42.4%), followed by 30-34 years (28.8%), while only a few were in the youngest (26-29 years, 5.1%) and oldest (50-55 years, 6.8%) age groups.Participants were distributed across five work units, with Cluster 2 and Cluster 5 having the highest representation (15 participants each), while Cluster 4 had the least (6 participants). Education levels varied, with most participants having 19 years of education (44.1%), while a small proportion (1.7%) had 35 years of education. This demographic diversity suggests variations in experience, educational background, and job distribution, which may influence perspectives and responses in the study.

Table 1.
Participant Characteristics

Characteristic	Category	N
Gender	Male	20
	Female	39
Age	26-29 years	3
	30-34 years	17
	35-39 years	25
	40-49 years	10
	50-55 years	4
Work Unit	Cluster 1	9
	Cluster 2	15
	Cluster 3	14
	Cluster 4	6
	Cluster 5	15
Education	19 years	26
	20 years	11
	21 years	6
	22 years	2
	35 years	1
Total Participants		59

Operational Risk Profile for Primary Healthcare Integration at Public Health Center Sungai Rangit (2025)

Based on thematic analysis, several key risks have been identified in the operational integration of primary healthcare services at Public Health Center Sungai Rangit in 2025. These risks shape the facility's operational risk profile as it transitions toward an integrated healthcare system:

Unallocated Budget

This risk stems from external factors, particularly the village government's budgeting mechanism. If the village government fails to allocate funds for gadgets (Android devices) and internet access for community health workers (kader), essential activities such as home

visits, health monitoring, and data input into the **Pemantauan Wilayah Setempat** (Local Area Monitoring) dashboard may be disrupted.

Invalid Health Data

Another external risk arises when community health workers fail to input basic health examination data into the monitoring dashboard. Without accurate data, the overall health landscape of the area cannot be properly analyzed, leading to ineffective planning. Consequently, the inability to address actual health issues may harm the reputation of both Public Health Center Sungai Rangit as a healthcare unit and the image of Kotawaringin Barat Regency at the national level.

Substandard Work Plan Development

This risk originates from both internal and external factors. Internally, limited staff competence in strategic planning for Public Service Agency and time constraints in budgeting pose challenges. Externally, the lack of comprehensive field data from community health workers further exacerbates the issue. This risk could negatively impact the credibility of the Public Health Center and the overall reputation of Kotawaringin Barat Regency.

Internet Connectivity Issues

This risk is tied to the internet service provider and the limited network infrastructure available within the Public Health Center. Poor connectivity could disrupt administrative tasks and hinder staff performance, ultimately affecting service efficiency.

Employee Demotivation

A decline in staff morale is linked to performance issues and resource limitations, particularly the lack of electronic devices such as computers and laptops, as well as inadequate internet access. These constraints slow down task completion, negatively impacting employees' quality of work life. Addressing these operational risks will be crucial for ensuring the successful integration of primary healthcare services at Public Health Center Sungai Rangit in 2025.

DISCUSSION

Budgeting serves as the foundation for integrating primary healthcare services at Public Health Center. The first risk identified in the FGD relates to operational risks in planning and budgeting, specifically regarding village fund allocation for home visits and equipment procurement for reporting data via mobile devices.According to Indriyati et al. (2023), the third priority pillar in primary healthcare service integration is strengthening local health monitoring through a dashboard to ensure 100% of health conditions are regularly monitored. Without adequate funding, activities cannot be executed properly. Proper planning and budgeting ensure structured and successful implementation (Muhyiddin & Nugroho, 2020).The Ministry of Health's Bureau of Communication and Public Services (2023) states that primary healthcare service integration is coordinated based on the life cycle rather than program-based. Indriyati et al. (2023) emphasize that local area monitoring is a key pillar of integration, though initial trials were partially conducted manually. Sound decision-making relies on valid and reliable data; otherwise, weak decisions may result in legal issues (Elragal & Elgendy, 2024).

Work planning follows established guidelines and must be strictly adhered to, as it also determines performance evaluation (Vanlangen et al., 2023). A substandard work plan indicates poor planning, which affects accountability in healthcare development (Muhyiddin & Nugroho, 2020).Internet usage is now a fundamental necessity as government bureaucracy has transitioned from manual to digital processes (Xu & Lu, 2022). Many organizations use information systems and their outputs as performance indicators (Maenpaa et al., 2009). Digital systems have become integral to healthcare governance, management and decision-making (Tawar et al., 2022), referral systems (Arif, 2023), and health research (Zhou et al.,

2021).Demotivation is a combination of multiple risks and serves as a key risk indicator (IRMAPA, 2022). It reflects poor work-life quality (Gumilang et al., 2018) and poses a major challenge in risk adaptation and mitigation. If employees lose motivation, the organization will stagnate, preventing goal achievement. However, motivation can be improved through incentives, such as remuneration (Ahmad et al., 2021).

Various strategies can enhance employee motivation, including fostering a harmonious work environment, providing periodic competency development, and offering compensation (Gumilang et al., 2018). Studies show that implementing PPK-Public Service Agency significantly boosts employee motivation and job satisfaction (Mawarni & Wuryani, 2020). However, financial independence and management maturity of Public Service Agency must also be considered (Sulistyowati & Sunaningsih, 2023). While well-managed Public Health Center benefit from financial autonomy, those still in the development stage may face additional burdens (Syofyan & Hernando, 2021).This study faced several limitations that influenced its implementation and findings. First, the short research timeframe restricted the ability to conduct extensive triangulation interviews, limiting the depth of data validation. Additionally, there were challenges in understanding risk management, particularly the ISO 31000 (2018) framework. As a result, the risk identification process remained somewhat superficial, as it did not begin with a thorough context-setting phase. However, to ensure the accuracy of findings, all collected data and identified risks were verified by certified risk management experts. Any irrelevant data were promptly removed through a rigorous cleaning process.

CONCLUSION

The integration of primary healthcare services at Public Health Center Sungai Rangit faces significant operational risks, including budget constraints, unreliable health data, inadequate work planning, internet connectivity issues, and employee demotivation. These challenges could hinder service efficiency, strategic planning, and overall healthcare quality.To mitigate these risks, it is crucial to secure budget allocations for digital infrastructure, enhance staff capacity in strategic planning, and ensure reliable internet access. Strengthening data management systems and improving employee motivation through better resources and support will also be essential. Proactive risk management will be key to achieving successful healthcare integration.

REFERENCES

Ahmad, S., Akbar, S., Halari, A., & Shah, S. Z. (2021). Organizational non-compliance with principles-based governance provisions and corporate risk-taking. International Review of Financial Analysis, 78, 101884. https://doi.org/10.1016/J.IRFA.2021.101884

Benites-Zapata, V. A., Saravia-Chong, H. A., Mezones-Holguin, E., Aquije-Díaz, A. J., Villegas-Ortega, J., Rossel-de-Almeida, G., Acosta-Saal, C., & Philipps-Cuba, F. (2016). A risk-based monitoring model for health care service institutions as a tool to protect health rights in Peru. Revista Peruana de Medicina Experimental y Salud Publica, 33(3), 401–410. https://doi.org/10.17843/RPMESP.2016.333.2373

Biro Komunikasi dan Pelayanan Publik Kementerian Kesehatan RI. (2023, June 23). Integrasi Pelayanan Kesehatan Primer Memperkuat Peran Kader Kesehatan. Sehat Negeriku. https://sehatnegeriku.kemkes.go.id/baca/umum/20230623/0943369/integrasi-pelayanan-kesehatan-primer-memperkuat-peran-kader-kesehatan/

BSN. (2018). Manajemen Risiko Berbasis SNI ISO 31000 (C. R. Vorst, D. S. Priyarsono, & A. Budiman, Eds.). Badan Standarisasi Nasional.

BSN. (2019). SNI 8848 (2019) Manajemen Risiko: Panduan implementasi SNI ISO 31000 (2018) di sektor publik. Badan Standarisasi Nasional.

Direktorat Tata Kelola Kesehatan Masyarakat Kemenkes RI. (2023). Kebijakan Integrasi Pelayanan Kesehatan Primer.

Donsu, J. T. (2017). Metodologi penelitian keperawatan. Pustaka Batu.

Indriyati, L., Wahyudin, A., & Sulistyowati, E. (2023). Evaluasi program pilot project transformasi layanan primer di Puskesmas Telaga Bauntung Kabupaten Banjar tahun 2022. Jurnal Kebijakan Pembangunan, 18(1), 65–80. https://doi.org/10.47441/jkp.v18i1.311

IRMAPA. (2022). Pengarahan Kepala BPKP kepada profesi manajemen risiko sektor publik mengenai pengawasan berbasis risiko: tantangan dan peluang. IRMAPA Webinar 2022.

Kavalenko, P. (2023). How to implement a healthcare Enterprise Risk Management platform. Langate. https://langate.com/healthcare-enterprise-risk-management/

Kementerian Kesehatan Republik Indonesia. (2020). Pokok-Pokok Renstra Kemenkes Periode 2020-2024.

Keputusan Menteri Kesehatan Republik Indonesia Nomor HK.01.07/Menkes/2015/2023 Tentang Petunjuk Teknis Integrasi Pelayanan Primer (2023).

NEJM Catalyst. (2018). What Is Risk Management in Healthcare? NEJM Catalyst. https://catalyst.nejm.org/doi/full/10.1056/CAT.18.0197

Nursalam. (2017). Metodologi Penelitian Ilmu Keperawatan : Pendekatan Praktis (4th ed.). Salemba Medika.

Pascarella, G., Rossi, M., Montella, E., Capasso, A., De Feo, G., Botti Snr, G., Nardone, A., Montuori, P., Triassi, M., D'auria, S., & Morabito, A. (2021). Risk analysis in healthcare organizations: Methodological framework and critical variables. Risk Management and Healthcare Policy, 14, 2897–2911. https://doi.org/10.2147/RMHP.S309098

Wiener, H. M. (2022). Agile Enterprise Risk Management: Risk-Based Thinking, Multi-Disciplinary Management and Digital Transformation (1st ed.). CRC Press.

Yuliandari, I. (2023). Integrasi Layanan Primer Melalui Posyandu. Ayo Sehat Kementerian Kesehatan. https://ayosehat.kemkes.go.id/integrasi-layanan-primer-melalui-posyandu