

WORKLOAD ANALYSIS FOR HUMAN RESOURCE OPTIMIZATION IN PRIMARY HEALTHCARE CLINIC X

Dina Maria Ulfa^{1,*} Syihabudhin², Sopiah³

^{1,2,3} Universitas Negeri Malang, Malang, Indonesia

¹ dina.maria.2404138@students.um.ac.id^{*}, ² syihabudhin.fe@um.ac.id, ³ sopiah.fe@um.ac.id

*Dina Maria Email: dina.maria.2404138@students.um.ac.id

Received : 01 October 2025

Published : 25 November 2025

Revised : 10 October 2025

DOI : <https://doi.org/10.54443/morfaiv5i6.4537>

Accepted : 15 November 2025

Publish Link : <https://radjapublika.com/index.php/MORFAI/article/view/4537>

Abstract

This study investigates workload distribution and staffing adequacy as the foundation for optimizing human resources in Primary Healthcare Clinic X. Increasing service demands and diverse job characteristics across clinical and administrative units have highlighted potential imbalances in workforce allocation. Using a descriptive qualitative design supported by quantitative workload-analysis techniques, this research integrates the Full-Time Equivalent (FTE) method and the Workload Indicators of Staffing Need (WISN) approach to provide an evidence-based assessment of staffing requirements. Data was obtained through semi-structured interviews, direct observations of work processes, and analysis of organizational documents, followed by thematic analysis and methodological triangulation to ensure validity and reliability. The results reveal that workload imbalances are not uniform across units. Clinical roles—such as registration staff, nurses, general practitioners, and dentists—experience peak-hour surges and external service demand that justify maintaining existing staffing levels despite numerical surpluses. In contrast, several administrative and support positions, including facilities management, personnel administration, and sterilization, show significant underload and prolonged idle time. FTE and WISN calculations indicate that two positions can be reduced without affecting service quality: one from the sterilization unit and one from the resource subdivision through the consolidation of periodic administrative tasks. The study concludes that human-resource optimization requires a unit-specific approach integrating workload analysis with strategic job redesign and structural alignment. The findings offer practical implications for workforce planning, efficiency improvement, and organizational sustainability in healthcare service settings.

Keywords: *Workload analysis; Human resource optimization; FTE; WISN; Healthcare management; Staffing adequacy*

INTRODUCTION

Primary Healthcare Clinic X serves as both a primary healthcare provider and a teaching facility, supporting the institution's academic mandate. As the demand for medical, dental, pharmacy, and diagnostic services continues to rise, the clinic faces increasing challenges in maintaining service quality while ensuring that its human resources are utilized efficiently. Recent internal observations indicate that the distribution of workload across job categories has not been fully aligned with actual service needs. Some positions involve continuous, high-intensity tasks related to patient care, while others entail administrative duties with varying activity levels. These imbalances raise concerns regarding the effectiveness of role allocation, staff performance, and long-term service sustainability. The variability in workload is particularly evident in clinical services, where staff interact directly with patients in fast-paced and unpredictable conditions. At the same time, several administrative and managerial roles exhibit fluctuating loads driven by reporting cycles or occasional service events. Such inconsistencies reflect deeper issues in human-resource allocation and signal the need for a structured, evidence-based approach to assessing staffing adequacy. The complexities inherent in healthcare organizations—where job characteristics differ significantly across units—require a systematic evaluation of how staff time is distributed relative to operational demands. These challenges point to the broader issue of human-resource management (HRM) in healthcare institutions. Effective HRM is not only concerned with staffing levels but also with ensuring that the workforce is deployed proportionally and strategically according to workload demands. According to Mathis and Jackson (2017), human resources must be managed in a way that aligns people, tasks, and organizational objectives. When staff distribution does not match actual workload patterns,

service quality, employee well-being, and operational efficiency can be compromised. This is consistent with Handoko's (2018) argument that ineffective human-resource planning may lead to idle capacity in some units and excessive pressure in others, ultimately disrupting organizational performance. One of the core concepts in aligning staff capacity with service needs is workload management, which examines the relationship between the amount of work required and the available human resources. Imbalanced workloads, whether overload or underload—can lead to adverse outcomes such as burnout, decreased productivity, or inefficiency (World Health Organization [WHO], 2010). For this reason, workload analysis has become a crucial tool for organizations seeking to optimize their workforce. The Workload Indicators of Staffing Need (WISN) and Full-Time Equivalent (FTE) methods are among the most widely applied approaches for quantifying workload and determining the ideal number of staff. WISN measures staffing requirements based on activity standards and service volumes, while FTE assesses how actual working time compares to standard working hours (Kementerian Kesehatan Republik Indonesia, 2017). When used together, these methods allow organizations to identify staffing gaps, efficiency levels, and potential mismatches between job roles and workload demands.

Considering the unique characteristics of healthcare organizations—where job functions vary greatly across medical, administrative, and managerial units—systematic workload analysis provides a reliable basis for developing strategies that enhance human-resource utilization. By understanding which roles carry excessive workloads and which operate below full capacity, organizations can more effectively redesign tasks, redistribute responsibilities, and strengthen managerial structures. Based on these conditions, this study focuses on two primary objectives. The first is to determine the ideal number of employees and identify existing staffing gaps across job categories within the organization, particularly within the Medical Services Division and the General and Quality Assurance Division. The second objective is to develop strategic recommendations for human-resource optimization, ensuring that staff distribution and job roles align with operational needs and contribute to sustained organizational performance. Through these objectives, this study aims to provide evidence-based insights that support workforce planning and structural improvements in service organizations. The findings contribute to the broader discourse on HR optimization in healthcare institutions and offer practical implications for enhancing efficiency, role clarity, and organizational resilience.

THEORETICAL FRAMEWORK

Human resources play a central role in determining the performance, efficiency, and sustainability of service organizations. In contemporary human resource management (HRM), employees are viewed not only as operational contributors but as strategic assets whose effectiveness depends on the alignment between organizational objectives, job structures, and workload demands. Mathis and Jackson (2017) emphasize that HRM must ensure the right number of competent personnel are placed appropriately to support service quality and organizational resilience. When human resources are not optimally allocated or when workloads are imbalanced, organizations face risks such as inefficiency, employee dissatisfaction, and declining productivity (Handoko, 2018). These foundational principles position HRM as a key determinant of how organizations manage complexity and performance challenges. A fundamental component of HRM is workload analysis, which examines the relationship between task demands and the available human-resource capacity. Workload imbalance—whether underload or overload—can disrupt productivity and compromise employee well-being. Robbins and Coulter (2019) explain that excessive workload may lead to burnout, errors, and performance decline, while insufficient workload creates idle capacity and inefficiency. Workload analysis therefore provides organizations with evidence-based insights to determine staffing adequacy relative to actual operational needs (Gibson et al., 2012).

Two methodological approaches widely used in workload assessment are Full-Time Equivalent (FTE) and Workload Indicators of Staffing Need (WISN). FTE measures how much time employees dedicate to work relative to standard working hours, thus providing an overview of workload intensity and efficiency (Kementerian Kesehatan Republik Indonesia, 2017). WISN, developed by the World Health Organization (2010), calculates staffing requirements based on activity standards, service statistics, and allowance factors. By comparing required versus actual staff, WISN identifies workload pressure and staffing gaps. When integrated, FTE and WISN offer a comprehensive evaluation of job demands, providing both micro-level and macro-level insights into workforce allocation and capacity. Beyond quantitative workload assessment, HR optimization also relies on strategic human-resource interventions. One of the most influential approaches is job redesign, which restructures tasks and responsibilities to enhance efficiency, motivation, and job satisfaction. Hackman and Oldham's (1976) Job Characteristics Model describes five core dimensions—skill variety, task identity, task significance, autonomy, and feedback—that shape employee motivation and performance. Adjusting job roles to improve these characteristics can reduce monotony, increase job meaning, and strengthen employee engagement. Recent research highlights that job

redesign supports organizational adaptability, especially in environments where technology, service patterns, or operational demands evolve rapidly (Lovejoy, 2021; Heston, 2023). Another relevant theoretical concept is organizational restructuring, which aims to realign structural components to improve coordination, flexibility, and effectiveness. The McKinsey 7S Framework provides a comprehensive perspective by asserting that organizational performance depends on the alignment of strategy, structure, systems, shared values, style, staff, and skills (Permana, Rustiawan, & Sya'rani, 2024). Restructuring may involve eliminating overlapping roles, redistributing responsibilities, simplifying reporting lines, or consolidating functional units. Empirical evidence shows that restructuring contributes to performance improvement when it reduces inefficiencies and strengthens cross-functional collaboration (Widiyastuti, 2025). A further strategy relevant to HR optimization is downsizing, defined as deliberate workforce reduction or role consolidation to increase organizational efficiency. Mujtaba and Senathip (2020) argue that downsizing must be executed strategically, supported by fair communication, and followed by organizational recovery efforts to minimize negative psychological effects. The survivor syndrome—a decline in morale among remaining employees—is one such risk (Harney, Fu, & Freeney, 2018). The Job Demands–Resources (JD-R) Model provides theoretical grounding for these concerns, stressing that organizations must balance job demands with adequate resources to maintain well-being and prevent burnout (Dlouhy & Casper, 2020). In many public-sector and healthcare institutions, downsizing often takes the form of workload redistribution, role clarification, and optimization of existing personnel rather than termination.

The broader theoretical foundation for HR optimization is supported by the Resource-Based View (RBV), which posits that human resources are valuable, rare, inimitable, and non-substitutable assets capable of creating sustainable competitive advantage when effectively managed (Barney, 1991). Armstrong and Taylor (2020) further highlight that organizations achieve optimal performance when human capital is aligned with strategic goals through effective planning, competency development, and structural refinement. Human Capital Theory also reinforces this perspective by asserting that investments in employee skills, knowledge, and experience yield long-term organizational benefits (Becker, 1993). Taken together, these theories demonstrate that optimizing human resources requires a multidimensional approach that integrates workload analysis, job design, organizational restructuring, and strategic workforce planning. The combined application of FTE and WISN provides a strong empirical basis for identifying workload disparities, while job redesign and restructuring offer practical pathways for correcting role imbalances and improving system efficiency. Meanwhile, RBV, Human Capital Theory, and the JD-R Model provide strategic justification for ensuring that HR interventions are aligned with long-term organizational sustainability. This holistic theoretical framework guides the operational and strategic interpretation of human-resource optimization within complex organizational environments.

RESEARCH METHODOLOGY

This study employed a descriptive qualitative approach supported by quantitative workload-analysis techniques to obtain a comprehensive understanding of staffing adequacy, workload distribution, and human-resource optimization strategies within a service-based organizational context. A descriptive qualitative design was selected because it enables researchers to portray organizational conditions as they naturally occur without introducing experimental manipulation, while still allowing in-depth exploration of workforce dynamics, structural arrangements, and performance patterns. This approach aligns with Creswell's (2018) view that qualitative descriptive research is suitable for studies that seek to document, analyze, and interpret phenomena from the perspectives of individuals involved in day-to-day operations. To strengthen analytical rigor, the qualitative design was complemented with quantitative measurements derived from workload-analysis frameworks, particularly the Full-Time Equivalent (FTE) method and the Workload Indicators of Staffing Need (WISN) approach, both of which were essential for producing objective calculations of staffing sufficiency.

The research design reflected a case-study orientation, allowing the investigation of phenomena in their natural organizational setting. Case studies, as described by Yin (2018), are appropriate when researchers aim to explore contemporary issues in depth and when contextual factors play a significant role in shaping the phenomena under study. This design enabled the integration of multiple data sources, including interviews, observations, and organizational documents, thereby ensuring comprehensive triangulation and contextual relevance. Primary data were collected through semi-structured interviews with individuals occupying managerial, functional, and administrative positions, selected purposively due to their direct involvement in service delivery and workforce management. The interviews provided detailed insights into job responsibilities, perceived workload intensity, task distribution, and operational challenges encountered in daily practices. Observational data were gathered by examining real-time work activities, service flows, task frequencies, and time allocation patterns during standard operational hours. These observations revealed the extent to which documented job descriptions aligned with actual

practices in the field. Secondary data was obtained through the analysis of organizational records, including job descriptions, standard operating procedures, service-volume reports, workload documentation, attendance logs, and staffing profiles. Document analysis, as noted by Bowen (2009), is a valuable method for generating stable, context-rich data that can corroborate findings from interviews and observations. The documents served as essential inputs for workload calculations and facilitated the cross-validation of empirical findings, especially in determining activity standards, annual service volume, and the number of personnel required to meet operational needs.

Data analysis was conducted through an integrative process combining quantitative workload measurement with qualitative thematic interpretation. FTE calculations were performed to determine how efficiently employee working hours were utilized in relation to standard annual working hours. The FTE value provided a marker of workload intensity: values below 1.00 indicated underload, values between 1.00 and 1.28 reflected normal conditions, and values above 1.28 suggested overload that might necessitate task redistribution or additional staffing (Wardanis, 2018). Meanwhile, the WISN method was applied to calculate ideal staffing levels based on activity standards and service statistics. This method, introduced by the World Health Organization (2010), enabled the computation of a WISN ratio, which classifies staffing conditions as understaffed, balanced, or overstaffed. The combination of FTE and WISN analysis provided a robust estimation of workforce sufficiency by offering both micro-level and macro-level perspectives on workload.

Qualitative data derived from interviews and observations were analyzed through thematic analysis following Braun and Clarke's (2019) approach. The analysis began with familiarization with the data, followed by the identification of codes and the development of themes that captured patterns related to job-role clarity, workload perception, task duplication, and structural inefficiencies. The thematic findings offered contextual explanations for the quantitative results and deepened the understanding of organizational conditions that influenced workforce performance. To ensure credibility and reliability, the study applied methodological triangulation by comparing findings across interviews, observations, and documents, consistent with Denzin's (2017) recommendation for enhancing qualitative rigor. Triangulation strengthened the depth and accuracy of interpretations by confirming that conclusions emerged consistently across multiple data sources. Participant validation was also applied to ensure that the interpretations accurately reflected participants' perspectives. Ethical considerations were upheld through informed consent, confidentiality, and anonymization of participant identities throughout the reporting of findings. To ensure the accuracy, validity, and reliability of the data, triangulation was also applied to verify the consistency of information obtained from multiple sources and methods. Triangulation confirmed the alignment between task descriptions, expected outputs, time standards, and actual work practices, thereby strengthening the credibility of the workload analysis.

Tabel 1
Triangulation Data

No.	Aspect	Triangulation	
		Source	Technique
1.	Task description	✓	
2.	Output and measurable unit of the task	✓	
3.	Ideal time required to complete the task	✓	✓
4.	Category of execution time and method of implementation	✓	
5.	Output volume per execution time	✓	✓

Source: Processed by the Researcher, 2025

RESULT AND DISCUSSION

Overview of Workload Analysis at Primary Healthcare Clinic X

The workload assessment conducted on 47 job types within Primary Healthcare Clinic X reveals substantial variation in workload distribution across clinical and non-clinical roles. Although the clinic does not experience an overall shortage of personnel, the FTE calculations show clear discrepancies between actual staffing levels and workload-based staffing requirements. Overall, the Medical Services Division requires 24.47 FTE, while 28 staff are currently assigned, resulting in a surplus of 3.53 FTE. Similarly, the General and Quality Division requires 9.25 FTE but employs 12 staff, indicating a surplus of 2.76 FTE. These findings demonstrate that staffing challenges within the clinic stem not from insufficient staffing but from misaligned workload distribution and functional overlap.

Summary of FTE by Key Job Positions (Hybrid Format)

To ensure clarity and conciseness aligned with journal publication standards, Table 2 presents only the key job positions that show the most significant gaps between workload-based requirements and actual staffing. Although the full analysis covers 47 job types, the table highlights the positions with the greatest managerial relevance.

Table 2
Summary of FTE by Key Job Positions in Primary Healthcare Clinic X

No	Job Title	FTE Required	Existing Staff	Gap (Existing – FTE)
1	General Practitioner	4.38	5	+0.62
2	Dentist	2.41	4	+1.59
3	Nurse	4.87	6	+1.13
4	Midwife	0.39	1	+0.61
5	Pharmacist	1.59	1	-0.59
6	Pharmacy Technician	1.29	2	+0.71
7	Laboratory Analyst	1.82	2	+0.18
8	Registration Officer	2.35	3	+0.65
9	Sterilization Officer	1.20	2	+0.80
10	Customer Care Officer	1.04	1	-0.04
11	Occupational Health & Safety Staff	0.76	1	+0.24
12	Facility & Maintenance Staff	0.33	1	+0.67

Source: Processed by the Researcher, 2025

Workload Category Classification

Workload categorization identifies job roles that fall into underload, normal, and overload conditions. The majority of administrative, support, and some clinical roles fall under the underload category. Meanwhile, only a few roles exhibit overload, but their impact on service quality is critical.

Table 3
Workload Category Classification

Category	Clinical Examples	Non-Clinical Examples
Underload	Nurses (certain units), Midwives, Facilities Staff, HR/Personnel Staff, Sterilization Staff	Multimedia Staff
Normal	General Practitioner, Dentist, Customer Care	Quality Assurance Unit Staff
Overload	Pharmacist	Head of Medical Services Division

Source: Processed by the Researcher, 2025

Summary of Staffing Gaps by Job Groups

To provide a more operational view, Table 4 groups job types into key functional clusters. This helps identify which clusters contribute most to surplus or overload conditions at the divisional level.

Table 4
Summary of FTE Requirements and Gaps by Job Group

Job Group / Unit	FTE Required	Existing Staff	Gap	Interpretation
General & Dental Practitioners	6.79	9	+2.21 Surplus	
Nursing & Midwifery	5.26	7	+1.74 Surplus	
Pharmacist	1.59	1	-0.59 Overload	
Pharmacy Technicians	1.29	2	+0.71 Underload	
Laboratory Analysts	1.82	2	+0.18 Near normal	
Registration & Queue Management	2.99	4	+1.01 Underload	
Resource Subdivision	1.70	3	+1.30 Significant surplus	
Finance & Administration	3.38	5	+1.62 Significant surplus	
Quality Assurance Subdivision	3.86	4	+0.14 Balanced	

Source: Processed by the Researcher, 2025

Division-Level Workload Comparison

At the macro-organizational level, staffing surpluses are evident in both divisions; however, internal distribution problems are more pronounced than total headcount.

Table 5
Division-Level FTE Comparison

Division	FTE Required	Existing Staff	Gap	Interpretation
Medical Services Division	24.47	28	+3.53 Surplus: internal imbalance persists	
General & Quality Division	9.25	12	+2.76 Surplus: major excess in admin-related units	

Source: Processed by the Researcher, 2025

Critical Overload and Underload Job Positions

Only a subset of roles exhibits workload extremes significant enough to impact the clinic's operational stability.

Table 6
Critical Overload and Underload Job Positions

Category	Job Code	Job Title	FTE	Existing	Notes
Overload	S	Head of Medical Services Division	>1.60	1	Workload includes clinical + managerial
Overload	KK	Pharmacist	>1.80	1	High burden in dispensing & reporting
Underload	Q, R	Sterilization Staff	0.80	2	Idle time between sterilization cycles
Underload	H	HR/Personnel Officer	0.31	1	Low volume of daily HR tasks
Underload	J	Facilities Maintenance	0.33	1	Infrequent maintenance tasks
Underload	G	Multimedia/Graphics Designer	0.61	1	Project-based workload
Underload	I	Training & Research Staff	0.17	1	Activities are not continuous daily

Source: Processed by the Researcher, 2025

DISCUSSION

The workload analysis conducted at Primary Healthcare Clinic X reveals that the organization's human resource challenges stem not from a shortage of personnel, but from an imbalance between numerical staffing levels and actual workload distribution across job categories and divisions. This misalignment reflects discrepancies between organizational structure, functional responsibilities, and the dynamic characteristics of primary healthcare services. These findings align with Galbraith's Organizational Design Theory (2014), which states that inefficiency often arises when structural configurations do not match operational demands. Although numerical surplus is evident in both the Medical Services Division (+3.53 FTE) and the General & Quality Division (+2.76 FTE), qualitative findings indicate that surplus does not always imply excess staffing that can be reduced. For example, registration officers appear underloaded numerically, yet observational data reveal significant busy hours between 08:00 and

11:00, during which patient volume increases sharply. During these peak hours, having more than one staff member is crucial to prevent long queues, service delays, and decreased patient satisfaction. This finding supports WHO's (2015) assertion that annualized FTE calculations may not adequately capture peak load phenomena in healthcare settings. Similarly, numerical surplus among nurses is contradicted by qualitative evidence showing frequent deployment for activities outside the clinic, such as university-based health screenings and external institutional requests. These responsibilities do not occur daily and are therefore underrepresented in FTE calculations, yet require sufficient standby capacity to maintain service continuity. This aligns with the Job Demands–Resources (JD–R) Model (Bakker & Demerouti, 2017), which emphasizes that fluctuating and unpredictable job demands require adequate resource buffering.

General practitioners and dentists also demonstrate numerical surplus but hold additional responsibilities, including health education, clinical supervision, university activities, and ad hoc clinical tasks. These activities justify maintaining the current number of providers, as workforce reduction could compromise the clinic's clinical responsiveness. Idle time in the General & Quality Division exhibits a different pattern. Most administrative positions experience periodic workload cycles, where key tasks cluster around particular times—such as reporting periods, procurement cycles, or monthly administrative deadlines. During non-peak periods, extended idle time appears naturally. This pattern aligns with Kettunen's (2021) concept of cyclical administrative load, where workloads fluctuate over time rather than being distributed evenly across workdays.

Although administrative staff remain essential for readiness, coordination, and ad hoc responses, FTE analysis shows significant underload among several positions, including facilities, personnel administration, and multimedia staff. These findings suggest opportunities for role consolidation, job redesign, or redistribution of tasks to enhance efficiency. Unlike administrative units, idle time among sterilization staff follows a daily cycle linked to clinical service routines. Peak load occurs only before and after service hours, while much of the day involves minimal activity. With an FTE of approximately 0.80 per person for two staff members, the sterilization unit demonstrates substantial underload. Field observations confirm that a single sterilization officer can handle the workload effectively without compromising service quality. This aligns with the concept of process-cycle workload (Heinrich et al., 2020), which suggests that highly standardized, short-cycle tasks can be efficiently managed with fewer personnel.

Therefore, unlike clinical units where readiness and responsiveness are essential, the sterilization unit represents a viable area for staffing reduction. The findings underscore that staffing decisions must be unit-specific rather than universally applied. Clinical units experience fluctuating demand, external duties, and time-based workload surges, making numerical surplus insufficient justification for workforce reduction. In contrast, administrative and support units exhibit underload that is both numerically and functionally supported, indicating stronger potential for efficiency improvements through job redesign, task integration, or personnel reallocation. This interpretation aligns with the Resource-Based View (RBV) (Barney, 1991; Andreeva & Ritala, 2021), which emphasizes the strategic deployment of human resources based on their functional contribution to organizational performance. Administrative surplus represents an opportunity for efficiency refinement, whereas clinical staffing must prioritize service continuity and adaptability. By integrating quantitative FTE analysis with qualitative insights from interviews and observations, this study demonstrates that numerical surplus does not always correspond to operational excess. The triangulation process revealed data saturation when multiple informants across divisions consistently reported similar patterns of peak-hour pressure in clinical units and idle time in administrative work. These results confirm that workforce imbalance at Clinic X is both systemic and multidimensional, requiring tailored interventions that consider both numerical FTE data and real-world workflow dynamics.

CONCLUSION AND RECOMMENDATIONS

This study concludes that the human resource challenges at Primary Healthcare Clinic X arise not from a shortage of personnel, but from an imbalance in workload distribution across clinical and non-clinical roles. The FTE and WISN analyses reveal a numerical surplus in both the Medical Services Division and the General & Quality Division. However, qualitative findings show that not all surplus personnel should be reduced. Clinical positions—including registration officers, nurses, general practitioners, and dentists—experience peak-hour service demands and external operational duties that are not fully captured in annualized FTE calculations. Therefore, maintaining current staffing levels in these roles is essential to preserve service continuity and responsiveness. In contrast, several administrative and support roles demonstrate sustained underload, as confirmed by low FTE values and prolonged idle time. These units include facilities management, personnel administration, multimedia, and sterilization. The sterilization unit, in particular, exhibits a daily process-cycle idle pattern, with only two peak workload windows before and after service hours, indicating that tasks can be adequately handled by a single staff member.

Based on the integrated quantitative and qualitative findings, this study identifies two positions among the clinic's total workforce of 40 employees that may be reduced without compromising service quality:

1. one staff member from the sterilization unit, and;
2. one staff member from the Resource Subdivision, through the consolidation of personnel administration and training-research duties, both of which have very low FTE values due to their periodic nature.

These targeted adjustments align with workload-based staffing principles and support improved organizational efficiency. Overall, the findings underscore the importance of unit-specific optimization strategies, job redesign, and selective workforce realignment to enhance resource utilization while maintaining high-quality service delivery at Primary Healthcare Clinic X.

RECOMMENDATIONS

Based on the integrated findings from the FTE/WISN analysis, interviews, observations, and document reviews, several recommendations are proposed for optimizing human resources at Primary Healthcare Clinic X:

1. Implement unit-specific workforce adjustments

Numerical surplus should not be addressed uniformly. Clinical units that experience peak-hour surges or external activity requirements—such as registration officers, nurses, general practitioners, and dentists—should maintain their current staffing levels to ensure service continuity. Workforce reductions should be applied selectively to non-clinical units where both numerical and functional underload are evident.

2. Optimize administrative and support functions through role consolidation

Units such as facilities management, personnel administration, and multimedia exhibit consistent idle time and overlapping tasks. These positions may be consolidated or redesigned to form multi-functional roles, reducing organizational redundancy while improving workflow integration.

3. Reduce staffing in the sterilization unit

Given the low FTE value and high idle time between sterilization cycles, the sterilization unit is suitable for downsizing from two staff to one, without compromising service quality. This aligns with process-cycle workload principles and should be accompanied by clear scheduling procedures.

4. Redistribute non-clinical tasks to balance workload

Some administrative tasks traditionally handled by specific roles could be redistributed to underloaded personnel. Cross-training may be implemented to increase workforce flexibility and promote a more balanced distribution of daily workload.

5. Reassign surplus administrative staff to other units within the university

To reduce the clinic's staffing expenditure while maintaining fairness to employees, surplus personnel—especially from administrative subdivisions—may be reassigned to other university units experiencing workforce shortages. This institutional reallocation approach avoids unnecessary termination while improving overall resource utilization.

6. Strengthen job redesign for underloaded roles

Underloaded positions may benefit from job enrichment strategies, such as expanding task scope, increasing autonomy, or integrating roles with customer service or digital documentation. This aligns with the Job Characteristics Model and may increase both efficiency and employee engagement.

7. Enhance monitoring of peak-hour workload

Regular observation and workload logging should be implemented to ensure that staffing decisions remain responsive to real-time demand fluctuations. Workload-based scheduling may be developed for units like registration and pharmacy.

8. Integrate FTE/WISN analysis into routine HR planning

Primary Healthcare Clinic X should adopt workload analysis as part of its annual HR planning cycle. This ensures that staffing decisions remain evidence-based and aligned with service demand, organizational objectives, and regulatory requirements.

REFERENCES

Armstrong, M., & Taylor, S. (2020). *Armstrong's handbook of human resource management practice* (15th ed.). Kogan Page.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>

Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). The University of Chicago Press.

Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40. <https://doi.org/10.3316/QRJ0902027>

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676X.2019.1628806>

Creswell, J. W. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Denzin, N. K. (2017). *The research act: A theoretical introduction to sociological methods* (4th ed.). Routledge.

Dlouhy, M., & Casper, A. (2020). The job demands–resources model: Its future in occupational health psychology. *Frontiers in Psychology*, 11, 1–7. <https://doi.org/10.3389/fpsyg.2020.00694>

Gibson, J. L., Ivancevich, J. M., Donnelly, J. H., & Konopaske, R. (2012). *Organizations: Behavior, structure, processes* (14th ed.). McGraw-Hill.

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16(2), 250–279. [https://doi.org/10.1016/0030-5073\(76\)90016-7](https://doi.org/10.1016/0030-5073(76)90016-7)

Handoko, T. H. (2018). *Manajemen personalia dan sumber daya manusia*. BPFE.

Harney, B., Fu, N., & Freeney, Y. (2018). Balancing tensions: Buffering the impact of change in the HR function. *Human Resource Management Journal*, 28(1), 1–14. <https://doi.org/10.1111/1748-8583.12158>

Heston, M. (2023). Redesigning work systems for healthcare efficiency: A socio-technical approach. *Health Services Management Research*, 36(2), 112–123. <https://doi.org/10.1177/09514848221104629>

Kementerian Kesehatan Republik Indonesia. (2017). *Pedoman analisis beban kerja tenaga kesehatan*. Kemenkes RI.

Khaw, K., Ali, N., & Rahman, S. (2022). Organizational restructuring and its effects on performance: A systematic review. *Journal of Organizational Change Management*, 35(3), 567–589. <https://doi.org/10.1108/JOCM-05-2020-0143>

Lovejoy, M. (2021). Job redesign for the modern workplace: A review of evidence and future directions. *Human Resource Development Review*, 20(3), 250–268. <https://doi.org/10.1177/15344843211015300>

Mathis, R. L., & Jackson, J. H. (2017). *Human resource management* (15th ed.). Cengage Learning.

Mujtaba, B. G., & Senathip, T. (2020). Downsizing and layoffs: A review of literature. *Journal of Applied Management and Entrepreneurship*, 25(1), 61–82. <https://doi.org/10.9774/GLEAF.3709.2020.ja.00007>

Permana, R., Rustiawan, W., & Sya'rani, A. (2024). Aligning organizational elements using the McKinsey 7S Framework: Implications for developing public organizations. *Jurnal Manajemen Publik*, 12(1), 33–47.

Robbins, S. P., & Coulter, M. (2019). *Management* (14th ed.). Pearson.

Wardanis, S. (2018). Analisis beban kerja tenaga kesehatan menggunakan metode WISN dan FTE. *Jurnal Kesehatan Masyarakat*, 14(2), 123–132.

Widiyastuti, A. (2025). Structural redesign and performance improvement in public-sector organizations. *Journal of Public Administration Studies*, 7(1), 55–67.

World Health Organization. (2010). *Workload Indicators of Staffing Need (WISN): User's manual*. WHO Press.

World Health Organization. (2015). *Staffing needs in health facilities: WISN implementation guide*. WHO Press.

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.