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Research Article

Health Management Practices in Community Health Centers in Makassar, Indonesia

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Abstract

Strengthening primary health care (PHC) requires robust health management practices that integrate quality improvement, service coordination, and evidence-informed decision-making. PHC oriented systems have been shown to deliver better health outcomes and greater efficiency when managerial and clinical functions are well aligned. This qualitative study explores health management practices in a Community Health Center in Makassar, Indonesia, with a focus on quality governance, service integration, human resource management, health information systems, and the clinical managerial interface. Data were collected through in depth interviews with five key informants representing managerial, administrative, clinical, and information system roles and analyzed using reflexive thematic analysis, a method widely applied in health services research. The analysis identified four main themes: quality governance anchored in accreditation and leadership commitment, primary care integration as a coordination-dependent managerial process, human resource constraints influencing clinical service quality, and health information systems as both enablers and constraints for decision-making. The findings highlight the pivotal role of physicians in bridging clinical practice and managerial decision-making. Strengthening the clinical managerial link, alongside sustained quality improvement mechanisms and integrated digital systems, is essential to enhance the effectiveness and sustainability of primary health care services.

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Introduction

Primary health care is widely recognized as the cornerstone of effective, equitable, and sustainable health systems worldwide (WHO, 2022). Countries pursuing universal health coverage increasingly emphasize PHC strengthening through governance reform, service integration, and improved managerial capacity, as these elements are strongly associated with better population health outcomes and system efficiency (WHO, 2023).

In Indonesia, recent health system reforms have positioned PHC as the backbone of PHC delivery, responsible for providing comprehensive, integrated, and people-centered services at the community level (WHO, 2023). Despite high accreditation coverage among PHC, variations in service quality and management performance persist, indicating that formal

standards alone may be insufficient to ensure effective implementation (Wulandari & Darma, 2025).

Health management at the facility level plays a critical role in translating national policies into operational practice. Effective management involves the coordination of quality governance, human resources, information systems, and clinical services to ensure patient safety and continuity of care (Amir et al., 2024). However, empirical evidence on how these managerial functions are enacted in daily practice at the PHC level remains limited, particularly in urban contexts with high service demand.

Makassar, one of the largest cities in eastern Indonesia, provides a relevant setting for examining these dynamics. With 35 PHC, most of which are accredited, Makassar illustrates both progress in formal governance and ongoing challenges related to workforce capacity and service integration (Setiaasih et al., 2025). Understanding health management practices in this context is essential to inform policy and practice.

This study aims to explore health management practices in a PHC in Makassar by addressing how quality governance, service integration, human resource management, health information systems, and the clinical managerial link are implemented in practice, contributing to the growing literature on PHC management in low- and middle-income settings (Dai et al., 2025).

Materials and Methods

A qualitative exploratory case study design was employed to gain an in-depth understanding of health management practices within a PHC. Qualitative designs are particularly appropriate for examining complex organizational processes and interactions that cannot be captured through quantitative indicators alone (Braun & Clarke, 2023).

The study was conducted in a PHC located in Makassar City, Indonesia. Makassar is an urban center with high population density and diverse health service needs, making it a strategic context for studying PHC management and integration (Setiaasih et al., 2025).

Five informants were selected using purposive sampling to represent key functional roles in PHC management: Head of PHC, Head of Administration, Quality Improvement Officer, Health Information System (SIMPUS) Officer, and a Physician serving as clinical coordinator. All informants had held their positions for at least two years, ensuring adequate experiential knowledge of organizational processes (Amir et al., 2024).

Data were collected through semi-structured, in-depth interviews focusing on quality management, service integration, workforce management, health information systems, and clinical–managerial interactions. In-depth interviews are commonly used in PHC management studies to capture actors' perspectives and decision-making rationales (Setiaasih et al., 2025).

Interview transcripts were analyzed using reflexive thematic analysis following Braun and Clarke's six-phase approach. This method enables systematic identification of patterns across data while allowing analytical flexibility and researcher reflexivity (Braun & Clarke, 2023).

Credibility was enhanced through triangulation across managerial and clinical roles and the use of verbatim quotations. Ethical approval was obtained from the relevant institutional ethics committee, and all participants provided informed consent, consistent with qualitative research standards in health services research (WHO, 2022).

Results

Analysis of the interview data yielded four interrelated themes: (1) quality governance

anchored in accreditation and leadership commitment, (2) primary care integration as a coordination-intensive managerial process, (3) human resource constraints shaping clinical service quality, and (4) health information systems as enablers and limitations for decision-making. These themes reflect core managerial challenges commonly reported in PHC settings in Indonesia and comparable contexts (Amir et al., 2024; Setiaasih et al., 2025).

Across all themes, physicians emerged as key actors linking clinical realities with managerial decisions, highlighting the importance of the clinical–managerial interface in sustaining service quality and integration (Dai et al., 2025).

This study involved five informants (n = 5) who represented the management function and clinical services at PHC Makassar City, namely the Head of PHC, Head of Administration, Quality Officer, SIMPUS Officer, and Doctor as clinical informants. All informants have a minimum term of office of two years, so they have adequate experience in management practices and health services at the primary service level.

Data analysis using reflexive thematic analysis resulted in four main themes. The update to this section emphasizes the role of physicians in bridging clinical practice and managerial decision-making.

Table 1. Characteristics of Research Informants

Informant Code	Departments	Gender	Length of Tenure (years)	Final Education	Main Role in Management and Service
KP-01	Head of Health Center	—	≥ 2	—	Strategic leadership, planning and quality control, integration of primary services, managerial decision-making
TU-01	Head of Administration	—	≥ 2	—	Administrative and financial management, operational planning, logistics support, performance reporting
MT-01	Quality Person	—	≥ 2	—	Quality and patient safety coordination, internal audit, monitoring of quality indicators, follow-up of accreditation results
SI-01	SIMPUS Officer	—	≥ 2	—	Management of the PHC information system, validation of service data, preparation of reports and support of data-based decisions
DR-01	Physician (Clinical Coordinator)	—	≥ 2	—	Clinical services, coordination of UKP services, implementation of clinical SOPs, contribution to quality and patient safety

Description:

1. All informants have served for at least 2 years, so they have adequate experience in management and service practices at the Health Center.
2. The identity of the informant is disguised using a code to maintain confidentiality.
3. The sign (—) indicates information is not published for the sake of anonymity.

1. Leadership and Quality Governance: Managerial and Clinical Synergy

PHC leadership plays an important role in directing the planning and quality control of services through regular management meetings, preparation of annual work plans, and monitoring of quality indicators. The Head of PHC emphasized that the quality indicators were compiled referring to the accreditation standards and policies of the Health Office.

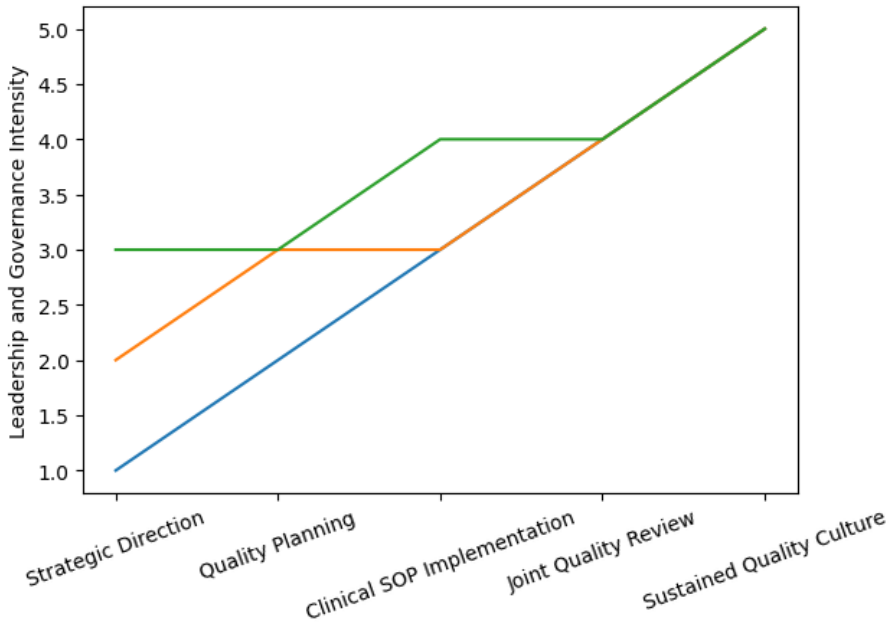

Figure 1. Leadership and quality governance

"Quality indicators refer to accreditation standards and performance targets from the Health Office." (KP-01). From a clinical perspective, doctors act as a link between quality policies and daily service practices. Doctors ensure that standard operating procedures (SOPs) are consistently applied in patient services, as well as provide clinical input in management forums.

"We in clinical services adjust the SOP to the patient's condition, but still report the obstacles to the management so that they can be corrected systematically." (DR-01). These findings suggest that quality governance is not only administrative, but also depends on the active involvement of clinical personnel in the management process.

2. Primary Service Integration: Clinical Coordination as a Managerial Practice

The integration of primary services in PHC is practiced through cross-program coordination and a family approach. The head of PHC explained that the integration aims to reduce service fragmentation and improve the patient experience.

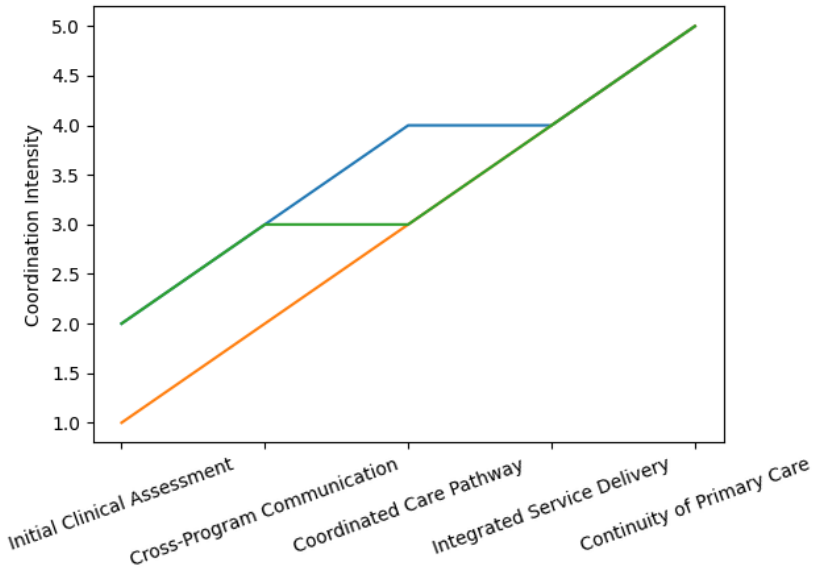

Figure 2. Primary service integration

"Services are directed so that patients do not have to move from counter to counter too much." (KP-01). Doctors as clinical coordinators contribute to the integration of services through the regulation of medical service flows, internal referrals, and coordination with KIA, nutrition, and NCD programs.

"If patients have some problems, we try to coordinate services so that they do not go back and forth. But it does need strong cross-program communication." (DR-01). However, service integration still faces obstacles in the form of limited human resources and high administrative burden, which has an impact on smooth clinical-managerial coordination.

3. HR Management: The Impact of Workload on Clinical Quality

Limited human resources are a central issue in PHC management. The Head of PHC and the Head of Administration revealed that some health workers must concurrently perform service and administrative duties.

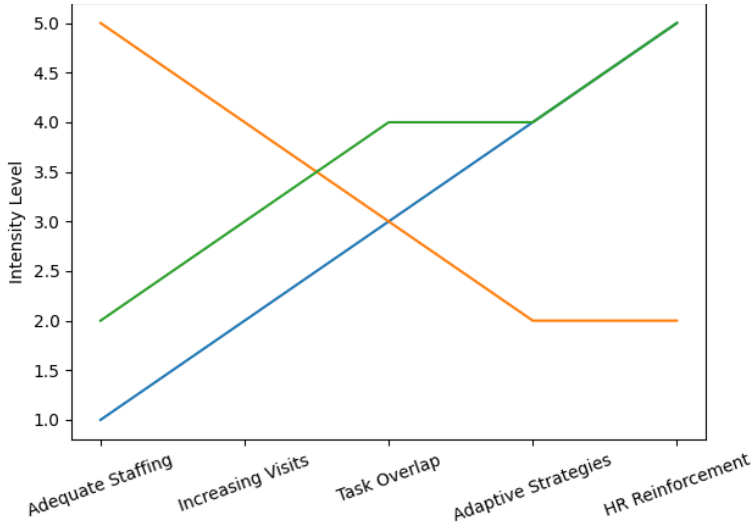

Figure 3. HR management

"Some of the staff concurrently have duties, both service and administration, so the workload is quite high." (KP-01). From the clinical side, doctors feel the impact of workload on service time and clinical focus, especially during busy visiting hours.

"If visits are high and human resources are limited, the time for patient education will be reduced. This affects the quality of service." (DR-01). In response, management implemented adaptive strategies such as task-shifting, service rescheduling, and cross-functional training. Although effective in the short term, doctors consider that this strategy needs to be balanced with additional human resources so that clinical quality is maintained.

4. Information Systems as a Link to Clinical Data and Managerial Decisions

The PHC information system plays an important role in supporting reporting and performance evaluation. Patient visit data and program reports are used by management for service planning.

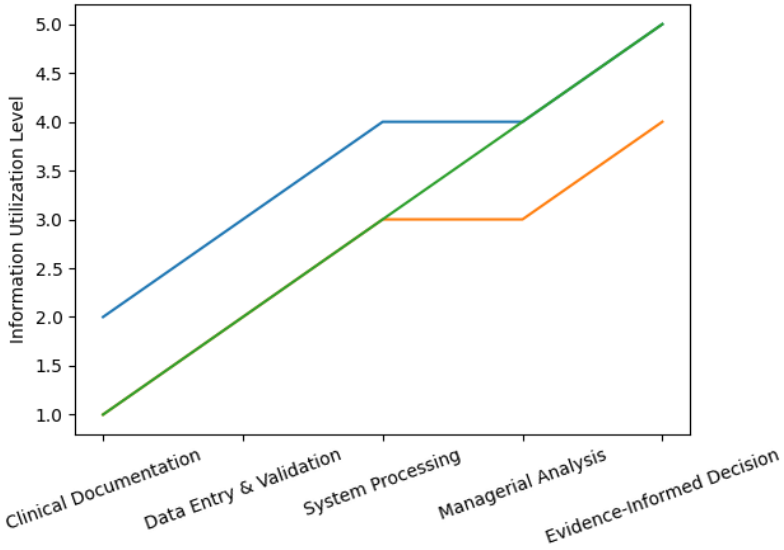

Figure 4. Information systems

"We use the data for performance evaluation and service planning." (KP-01). Physicians utilize information systems for service recording and case monitoring, but identify system limitations that affect the quality of clinical data.

"Data input is quite time-consuming, sometimes not directly real-time. So clinical decisions remain more based on field conditions." (DR-01). The SIMPUS officer added that the limitations of integration between systems cause clinical data to not be fully utilized optimally in managerial decision-making. This condition places doctors as key actors in bridging clinical information and management discussions.

5. Clinical Managerial Link as a Cross Theme

Overall, the results show that doctors have a strategic role as a liaison between clinical practice and PHC management.

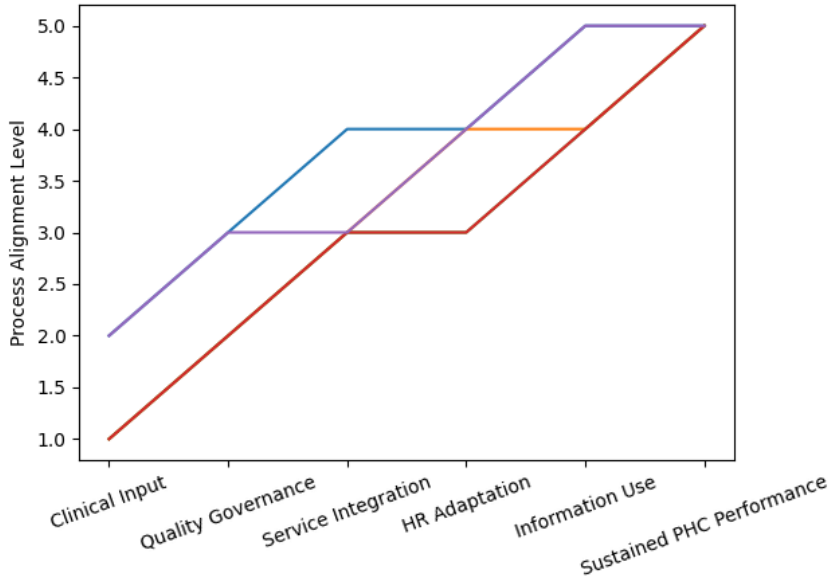

Figure 5. Clinical managerial link.

The contribution of doctors is not only limited to medical services, but also to:

- Implementation of clinical SOPs as part of organizational quality,
- Coordination of primary service integration,
- Presentation of the clinical implications of managerial policies,
- Balancer of data-driven decisions and field realities.

Physician involvement in management forums reinforces the alignment between organizational policies and the clinical needs of patients.

Discussion

Quality governance in the studied PHC was strongly shaped by accreditation standards, routine management meetings, and internal audits. While accreditation provided a structured framework for quality management, sustaining a quality culture required continuous institutional commitment and active clinical engagement. This finding aligns with evidence that accreditation can trigger quality improvements but may become symbolic if not embedded in everyday practice (Wulandari & Darma, 2025).

Service integration was operationalized through coordination across programs and efforts to simplify patient flows, reflecting a practical interpretation of integration at the facility level. This understanding is consistent with the literature describing integration as a multidimensional coordination strategy aimed at improving continuity and efficiency of care (Amir et al., 2024). However, persistent sectoral silos and administrative burden indicated governance and behavioral barriers to integration, echoing national-level findings on uneven PHC reform implementation (Setiaasih et al., 2025).

Human resource constraints significantly influenced both managerial efficiency and clinical quality. High workloads and task overlapping reduced opportunities for patient education and comprehensive clinical encounters. These findings reinforce prior evidence that workforce shortages in PHC disproportionately affect service quality and patient experience (WHO, 2023). In this context, the involvement of physicians in managerial discussions became critical to ensure that operational decisions reflected clinical priorities.

Health information systems supported performance monitoring and planning but were constrained by fragmented platforms and non–

real-time data. As a result, decision-making relied on a hybrid approach combining digital data, professional judgment, and team discussions. This mirrors recent evaluations of SIMPUS, which emphasize its potential for decision support while highlighting ongoing technical and data quality challenges (Dewi, 2025).

Overall, the findings underscore the strategic importance of strengthening the clinical–managerial link. Recent leadership literature emphasizes a shift toward collective and clinical leadership models, where physicians actively contribute to organizational governance and quality improvement (Dai et al., 2025). Embedding such models in PHC management may enhance alignment between policy objectives, managerial decisions, and patient-centered care.

1. Quality Governance and Patient Safety: Beyond Accreditation Compliance

This study demonstrates that quality management at the PHC level is primarily structured around accreditation standards, routine management meetings, internal audits, and patient safety incident reporting. The emphasis on a no-blame culture reflects a system-oriented understanding of patient safety, which is consistent with contemporary quality improvement principles in primary health care.

However, recent evidence suggests that accreditation alone does not automatically translate into sustained quality culture. Wulandari and Darma (2025) caution that post-accreditation quality activities may become symbolic if not institutionalized, noting that "quality planning, quality control, and quality improvement have mostly been limited to ceremonial activities" (p. 128). This finding reinforces the importance of embedding continuous quality improvement (CQI) mechanisms such as regular feedback loops, clinical audits, and iterative SOP revisions into everyday organizational routines.

The proactive follow up actions described by management indicate progress toward CQI. Nevertheless, long-term sustainability depends on consistent leadership commitment and the active involvement of clinical staff in quality governance.

2. Primary Care Integration: Organizational Coordination as a Managerial Challenge

Integration of primary health care services in the studied PHC was operationalized through inter-program coordination, family-centered approaches, and simplified service flows aimed at reducing patient fragmentation. This operational understanding aligns with the conceptualization of integration as a multidimensional coordination strategy. Amir et al. (2024) describe integration as "a multi-dimensional strategy to enhance patient care coordination and maximize resource efficiency" (p. 371).

Despite these efforts, the persistence of sectoral silos and administrative burden highlights governance and behavioral barriers to integration. This mirrors broader system-level challenges in Indonesia, where implementation of primary care reforms varies substantially across local governments. A national mixed-methods study reported that "not all districts/cities have implemented the change" even after two years of policy rollout (Setiaasih et al., 2025, p. 6).

These findings suggest that effective integration requires more than structural alignment; it demands formal coordination mechanisms, shared accountability across programs, and managerial capacity to mitigate inter-program competition.

3. Human Resource Constraints and Clinical Quality: The Importance of the Clinical Managerial Interface

Human resource shortages emerged as a critical constraint affecting both managerial efficiency and clinical quality. Task overlapping and high workloads compelled adaptive strategies such as task-shifting and flexible scheduling. While these strategies provide short-term relief, they may

compromise clinical quality particularly patient education and consultation time if sustained without additional support.

The inclusion of a physician as a clinical informant revealed the tangible impact of managerial decisions on frontline clinical practice. This finding underscores the importance of clinical leadership within primary care organizations. A recent scoping review on medical leadership emphasizes a paradigm shift toward shared leadership, stating that "a shift towards collective leadership with a focus on team-based, patient-centred approaches" is essential for service quality (Dai et al., 2025, p. 345).

Physicians play a pivotal role in translating clinical realities into managerial deliberations, ensuring that operational policies remain aligned with patient care needs.

4. Health Information Systems: Data-Driven Aspirations and Hybrid Decision-Making

Health information systems were identified as key enablers for performance evaluation and service planning. Nevertheless, fragmented platforms, time-consuming data entry, and non–real-time reporting limited their full utilization for strategic decision-making. Consequently, managerial decisions often relied on a hybrid approach combining digital data, professional judgment, and team discussions.

This finding is consistent with recent evaluations of SIMPUS implementation, which affirm its intended role in supporting managerial decisions while also acknowledging ongoing technical and data quality challenges. Dewi (2025) notes that SIMPUS "provides information to support decision-making processes," yet its effectiveness depends on system integration and information relevance (p. 149).

The results highlight the need to strengthen interoperability, streamline data workflows, and enhance analytical capacity at the facility level to move toward genuinely data-driven management.

5. Strengthening the Clinical Managerial Link for Sustainable Primary Care Management

Synthesizing these findings, this study emphasizes the strategic role of the clinical–managerial link in strengthening primary health care management. Three interrelated domains require reinforcement:

1. Quality governance, ensuring that accreditation catalyzes sustained CQI rather than episodic compliance (Wulandari & Darma, 2025).
2. Service integration, supported by formal coordination structures and local implementation readiness (Amir et al., 2024; Setiaasih et al., 2025).
3. Clinical leadership and digital enablement, aligning operational decisions with clinical realities while improving the usability of health information systems (Dai et al., 2025; Dewi, 2025).

By positioning physicians as active contributors to managerial processes, PHC can better align quality improvement, service integration, and digital transformation with patient-centered care goals.

Conclusion

This qualitative study demonstrates that effective health management at the PHC level depends on the integration of quality governance, coordinated service delivery, adequate human resources, and functional health information systems. Crucially, physicians play a pivotal role in linking clinical practice with managerial decision-making. Strengthening this clinical managerial link is essential to enhance the quality, efficiency, and sustainability of primary health care services in Indonesia, particularly in urban settings with high service demand (WHO, 2022; Dai et al., 2025).

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