

Incentive-Based Performance Evaluation Model for Healthcare Professionals in Hospitals: a Systematic Literature Review

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ABSTRACT

Background: Health workers are the spearhead of hospitals whose performance is significantly influenced by reward systems, yet current incentive implementations often lack transparency and holism. This study aims to identify and classify various performance appraisal models based on service incentives through a systematic literature review approach. **Method:** The research method utilizes a systematic review design following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. A structured literature search was conducted on Scopus, PubMed, ScienceDirect, and Google Scholar databases with inclusion criteria for empirical articles published between 2021–2025. **Results:** The synthesis results of 10 selected studies indicate that performance-based incentives significantly increase productivity, motivation, and multidisciplinary team collaboration in hospitals. Factors such as psychological well-being, managerial transparency, and altruism values were found to be important moderators influencing the effectiveness of financial incentives. Furthermore, the use of information technology and clinical quality indicators is proven to strengthen the objectivity of medical staff performance evaluation systems. **Conclusion:** This study concludes that a fair and managerially integrated incentive-based performance appraisal model is a crucial instrument in improving sustainable healthcare quality.

Keywords: Health Workforce; Hospital Facilities; Human Resource Management; Performance Appraisal; Service Incentives

INTRODUCTION

Health workers (doctors, nurses, and paramedics) are the spearhead of health services in hospitals, so that the quality of service, operational efficiency, and level of patient satisfaction are highly dependent on their performance (1). In Indonesia, regional general hospitals (RSUD) face increasingly stringent demands for improving service quality amidst high workloads, limited human resources and facilities, and the complexity of service systems that require cross-stakeholder coordination (2). The implementation of the National Health Insurance (JKN) regulations further emphasizes the need to optimize healthcare worker performance to maintain hospital efficiency, service utilization patterns, and patient satisfaction despite cost and financing challenges (3). Therefore, effective human resource management through performance management, competency development, and the creation of a conducive work environment is crucial for increasing healthcare worker productivity and reducing patient complaints in the JKN era (4).

The service incentive system (IJP), or performance-based remuneration, has been widely adopted in Indonesian hospitals as a form of financial reward based on service achievements from sources such as general patient fees, BPJS (Social Security Agency), or operational revenue. It has been shown to increase employee motivation through fair and transparent compensation (5). The primary objective of IJP is to boost medical staff productivity by implementing the principle of performance-based incentives, where financial incentives are directly linked to the achievement of service targets, thereby strengthening hospital operational efficiency (6). Furthermore, the Service Incentive (IJP) is effective in increasing staff retention through a competitive reward mechanism, ultimately reducing turnover rates and maintaining continuity of healthcare services (7). Finally, the implementation of the IJP aligns with international practices in various countries, where performance-based incentives have successfully improved overall service quality, although they require local contextual adjustments for optimization (8).

The implementation of Service Incentive (IJP)-based performance assessments in hospitals faces significant challenges because they are often subjective, lack transparency, and lack a holistic approach, focusing primarily on service volume without considering quality or workload (9). This leads to disharmony among healthcare professionals, decreased motivation, high turnover rates, and the risk of supply-induced demand, where excess

services are provided for incentives (10). Case studies at various Regional General Hospitals (RSUD) demonstrate a gap between performance targets, such as Bed Occupancy Rate (BOR), and patient satisfaction, and low actual performance (11). These issues have systemic impacts on overall service quality, hospital efficiency, and the sustainability of healthcare human resources, particularly after the pandemic exacerbated the workload of healthcare workers (12).

Most empirical research on the effect of service incentives on hospital performance in Indonesia remains fragmentary, often limited to single cases in specific locations, such as regional public hospitals, using survey or simple regression methods without conducting broader cross-study synthesis (13). The lack of comprehensive systematic reviews is evident in the absence of systematic literature reviews specifically analyzing performance-based incentives-based performance assessment models in hospitals, both in the Indonesian and global contexts. International reviews are more common in OECD countries or LMICs but rarely specifically address model designs for healthcare workers in hospital facilities (14). These evidence gaps include the limited identification of best practices and evaluation of model strengths and weaknesses, such as aspects of fairness, objectivity, and technology integration, which are often not explored in depth in existing studies (15). Consequently, this hampers the development of more effective, evidence-based adaptation recommendations in the unique Indonesian context, including the management of Public Service Agency (BLUD) and Ministry of Health regulations. Therefore, a more holistic approach to performance assessment models is needed (16).

The application of Systematic Literature Review (SLR) as a research method offers a systematic and transparent approach through the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol, which facilitates the search, selection, and synthesis of literature from various databases such as Scopus and PubMed, thereby minimizing bias and increasing the reliability of findings (17). Furthermore, SLR provides comprehensive coverage with the ability to synthesize thousands of empirical, qualitative, and quantitative articles to identify patterns, trends, and contradictions not covered by a single primary study (18). Its benefits for practice and policy are reflected in the production of high-level evidence that can be directly applied to the reform of the Service Assurance Index (IJP) policy in hospitals, filling literature gaps, and opening new research directions such as the integration of artificial intelligence in performance evaluation (19). Finally, SLRs are more efficient and objective than narrative reviews due to their rigor, reproducibility, and effectiveness in addressing multidisciplinary topics such as human resource management, healthcare, and hospital finance (20).

Based on these conditions, this study offers a novel approach by systematically synthesizing scientific evidence on various incentive-based performance evaluation models that have been implemented for healthcare workers in hospitals (10). Unlike previous studies, which generally focused on the effectiveness of incentives or performance evaluations separately, this study integrates model characteristics, assessment indicators, incentive delivery mechanisms, evaluation methods, and factors influencing their implementation into a comprehensive analytical framework (21).

The results of this observation are expected to produce a conceptual framework for incentive-based performance evaluation models that can serve as a foundation for hospitals in developing performance appraisal systems that are more objective, measurable, transparent, equitable, and aligned with the goal of improving the quality of healthcare services (22). Thus, this study not only summarizes existing evidence but also provides direction for the development of a more integrated incentive-based performance evaluation model to support managerial decision-making and human resource policies in hospitals (23).

This study aims to develop a comprehensive understanding of incentive-for-service performance assessment models for healthcare workers in hospitals through a systematic literature review. Specifically, this study seeks to identify and classify various incentive-for-service performance assessment models that have been developed and implemented in various hospitals. Furthermore, this study evaluates the strengths, weaknesses, and supporting and inhibiting factors of these models based on empirical evidence available in the scientific literature. The synthesis of these findings is expected to generate recommendations for developing fairer, more effective, and more adaptive performance assessment models for the Indonesian hospital context, while also identifying relevant research gaps to support future human resource transformation in healthcare. The research question of this study is: What is the scientific evidence regarding the incentive-based performance evaluation model for health workers in hospitals, including assessment components, implementation mechanisms, and its impact on individual performance and service quality?

METHODS

This study employed a systematic literature review design to comprehensively examine various models of healthcare worker performance assessment based on service incentives in hospitals. The systematic review approach was chosen because it allows for a structured, transparent, and replicable synthesis of scientific evidence across various empirical studies addressing the relationship between service incentive systems and healthcare worker performance assessment. The PICO (Population–Interest–Context) framework in this study includes

Population: Health workers in hospitals, Interest: Incentive-based performance evaluation model, Context (Co): Hospitals.

In this study, service incentive systems are positioned as a managerial instrument with the potential to influence work motivation, productivity, and the quality of healthcare services provided by healthcare workers in hospitals. Through this approach, findings from the literature in the fields of hospital management, health policy, health economics, and health human resource management can be systematically integrated to gain a more comprehensive conceptual understanding of service incentive-based performance assessment models. All stages of the study were conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure transparency, methodological rigor, and reproducibility of the research process.

The literature search was conducted systematically through several major scientific databases: Scopus, PubMed, ScienceDirect, Google Scholar, and Garuda. These databases were selected to ensure comprehensive coverage of research related to service incentive systems, health worker performance assessment, and human resource management in the health care sector. The literature search strategy used a combination of keywords and Boolean operators (AND, OR) tailored to the research conceptual framework, which includes three main components:

1. Service Incentive System Variable
“health service incentive” OR “service-based incentive” OR “pay for performance” OR “performance-based incentive” OR “financial incentive in healthcare” OR “healthcare compensation system” OR “hospital service incentive”
2. Healthcare Worker Performance Assessment Variable
“health worker performance” OR “healthcare worker performance” OR “medical staff performance evaluation” OR “performance appraisal in healthcare” OR “hospital staff performance” OR “health personnel productivity”
3. Hospital Organizational Context
“hospital management” OR “hospital human resource management” OR “health service management” OR “hospital incentive system” OR “healthcare organizational performance”
4. Research Design Filter
“quantitative study” OR “qualitative study” OR “mixed methods” OR “cross-sectional study” OR “longitudinal study” OR “intervention study”

To ensure the relevance and timeliness of the scientific evidence used, this study only included articles published between 2021 and 2025. This timeframe was chosen to capture the development of the concept of healthcare worker performance management and the implementation of service incentive systems evolving within the modern healthcare system.

The article selection process was conducted in stages through title screening, abstract screening, and full-text eligibility assessment. This process was conducted independently by two reviewers to minimize selection bias. The inclusion criteria for this study included:

1. Research discussing service incentive systems or performance-based compensation mechanisms for healthcare workers;
2. Research evaluating or analyzing healthcare worker performance assessment within the context of healthcare organizations or hospitals;
3. Research involving healthcare workers such as doctors, nurses, medical personnel, or other healthcare professionals as research subjects;
4. Research with a quantitative, qualitative, or mixed methods design published in a reputable scientific journal and written in English;
5. Articles that provide relevant empirical information regarding the relationship between service incentive systems and healthcare worker performance.

Articles that did not fall into the empirical research category, such as editorials, scientific commentaries, conference abstracts, case reports, and articles that did not directly discuss incentive systems or performance assessments for healthcare workers, were excluded from the selection process. Furthermore, studies that did not focus on the healthcare context or did not involve healthcare workers as the unit of analysis were also excluded from this review. Disagreements between reviewers during the selection process were resolved through discussion until consensus was reached. The data extraction process was conducted using a standardized data extraction form to maintain consistency and minimize bias in the collection of information from each selected article. Data extracted from each study included:

1. Author's name, year of publication, and country where the study was conducted;
2. Research design and objectives;

3. Characteristics of respondents or study participants (sample size, type of healthcare worker, and organizational context);
4. Description of the service incentive system implemented, including the form of financial incentives, service fee distribution mechanisms, and performance indicators used;
5. The method or model for assessing healthcare worker performance applied in the study;
6. Variables analyzed in relation to health worker performance, such as work motivation, productivity, job satisfaction, service quality, or service efficiency;
7. Analytical methods used in the study;
8. Key research findings and policy or managerial implications reported by the authors.

Data analysis was conducted through narrative synthesis of all studies that met the inclusion criteria. This approach was used to identify patterns in research findings, similarities and differences in conceptual approaches, and models for assessing healthcare worker performance related to the service incentive system. The analysis process was conducted by grouping research findings into several main themes related to the service incentive system, healthcare worker performance assessment mechanisms, and their impact on individual and organizational performance in hospitals.

The synthesis results were then systematically organized to illustrate the relationship between the service incentive system as a human resource management instrument and improving healthcare worker performance within hospital organizations. Through this approach, the study is expected to identify various conceptual models and best practices in implementing service incentive-based healthcare worker performance assessment. The final research findings are presented in the form of a narrative description accompanied by a study summary table to facilitate interpretation and comparison between studies.

RESULTS

In this study, a systematic literature search was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Articles were searched in several international and national scientific databases, including Scopus, PubMed, ScienceDirect, Google Scholar, and Garuda, covering publication years 2021–2025.

A structured literature search was conducted on Scopus, PubMed, ScienceDirect, and Google Scholar databases with inclusion criteria for empirical articles published between 2021–2025. Keywords used in the search process included: health worker performance appraisal, incentive-based payment, service incentive, pay for performance in hospitals, health workforce performance evaluation, and hospital incentive system.

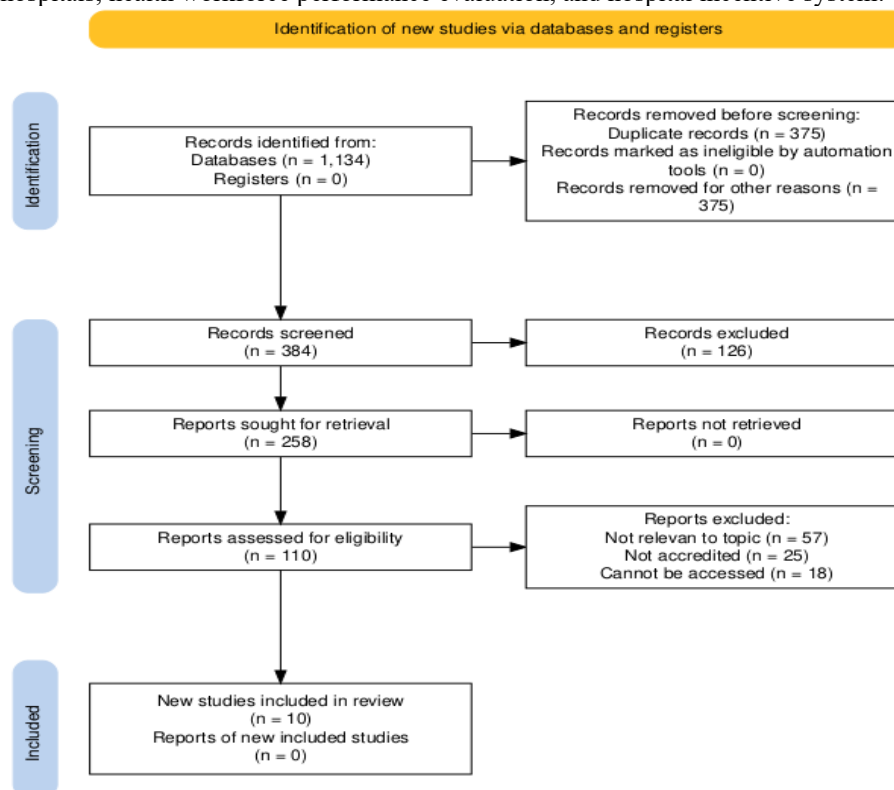


Figure 1. PRISMA Diagram

This PRISMA diagram illustrates the literature selection process for a systematic review on healthcare worker performance assessment and service incentive systems. Of the 1,134 articles retrieved through database searches, 375 articles were removed prior to screening due to duplication and failure to meet inclusion criteria through automated tools (375). A total of 384 articles passed the initial screening stage. After title and abstract screening, 200 articles were excluded for not meeting inclusion criteria, and 126 articles were evaluated during full-text searches. Of these 126 articles, 10 full-text reports were inaccessible, leaving 258 articles for eligibility assessment. During the eligibility assessment stage, 57 articles were excluded for being irrelevant to the study focus, lacking adequate publication quality (25), or not being fully accessible (18). Ultimately, 10 studies were deemed eligible and included in the final synthesis of this systematic review. This stepwise process ensured that only relevant, valid, and high-quality studies were used as the basis for the analysis. Ultimately, 10 studies met all eligibility criteria and were included in the final synthesis, ensuring only high-quality evidence informed the review.

Quality Assessment and Risk of Bias

The methodological quality of the articles was assessed using the Mixed Methods Appraisal Tool (MMAT) and a risk of bias assessment approach commonly used in public health studies. Each article meeting the inclusion criteria was analyzed based on several indicators, including clarity of the research objectives, appropriateness of the research design, validity of the data collection methods, clarity of statistical or thematic analysis, and consistency between the results and conclusions.

The assessment results indicated that most of the included studies had good to excellent methodological quality, particularly quantitative studies with cross-sectional and quasi-experimental designs. However, several studies demonstrated potential risk of bias, particularly in the relatively small sample sizes, limited generalizability of the results, and the possibility of respondent bias in survey-based studies. Overall, the level of risk of bias in the analyzed articles was low to moderate, so the results can still be used as a basis for conceptual synthesis regarding models for assessing healthcare worker performance based on service incentives in hospitals (24), (25).

Characteristics of Included Studies

Ten empirical studies meeting the inclusion criteria were analyzed to identify various models for assessing healthcare worker performance based on service incentives. The characteristics of the included studies include authors, year of publication, country of study, study design, study population, sample size, form of intervention or incentive system applied, and the main findings of the study.

Table 1. Characteristics of Included Studies

<i>Author (Year) Country</i>	<i>Study Design</i>	<i>Sample Size and Population</i>	<i>Data Collection Method</i>	<i>Intervention</i>	<i>Outcome Variables</i>	<i>Findings</i>
(26)	Qualitative	91 respondents from PCN members, ancillary staff, and managers in the primary care network	Semi-structured interviews, ethnographic observations, document analysis	Collaboration incentives through additional funding (Additional Roles Reimbursement Scheme)	This study aimed to evaluate primary care networks (PCNs) in the English National Health Service. We ask: How are PCNs constituted to meet their defined goals? What factors can be discerned as affecting their ability to deliver benefits to the community, the network as a whole and individual	Progress variables influenced by managerial support; incentives build trust and pandemic response services, potential long-term benefits

					members? What outcomes or outputs are associated with PCNs so far? We draw policy lessons for PCN design and oversight, and consider the utility of the chosen evaluative framework.	
(27)	Qualitative	203 questionnaires from outpatient department managers at tertiary medical institutions	Questionnaire	None (recommendation for an interdisciplinary performance incentive system)	Improving an integrated management framework through quality management.	MDT development rate 77.3%; internal factors such as team dynamics influence; recommendation for performance incentives to mobilize enthusiasm
(28)	Mix method	267 primary care and cardiology physicians		Payment from pharmacy as an incentive	Analyzes altruism moderates the influence of financial incentives in physician-industry relationships, limiting the scope of agency problems in prescribing	Non-altruistic physicians increased promotional drug prescriptions after payment; altruism moderated the effect of financial incentives.
(29)	Qualitative	54 nurses	Semi-structured	None	A significant impact on personal dissatisfaction with the healthcare system was found.	Turnover is affected by workload and low compensation; poor management affects performance; incentives for retention are suggested
(30)	Mix method	23 units Healthcare workers in the VHA	Document review	Academic detailing for adoption of evidence-	Demonstrating the AD development process.	Customized components increase adoption; training

				based practices.		incentives support continued performance.
(31)	Quantitative	513 licensed psychotherapists	Online questionnaire survey	None	Mental disorders	Stress levels lower than the general population; implications for mental well- being incentives for healthcare workers.
(32)	Quantitative	10 experts/anaesthesiologists and opioid stewardship experts.		None (quality indicator development)	There are global concerns about the rise in opioid prescribing. Patients undergoing potentially curative surgery for colorectal cancer (CRC) are at high risk of adverse outcomes from opioid-related complications, including delayed discharge and adjuvant chemotherapy, long-term opioid use and reduced cancer-free survival. We aimed to develop a set of actionable quality indicators for opioid stewardship for patients undergoing CRC surgery, and an implementation toolkit to support professional behaviour change to improve appropriateness of perioperative	Four quality indicators for opioid stewardship; implications for evidence-based performance assessment

					opioid prescribing.	
(33)	Quantitative	Not using individual data, but administrative data for the 2019-2023 period, namely staff data at the Center for Disease Control.	Administrative database (CNBIS) + statistical yearbook	Human resource inequality analysis	This study aims to assess the quantity and equity of the human resources in China's CDCs since the outbreak of COVID-19, with the goal of promoting a more equitable distribution of the CDC workforce and enhancing the capacity to respond effectively to major public health emergencies	Regional inequality affects performance; incentive suggestions for workforce distribution
(34)	Qualitative	General hospitals	Longitudinal	Providing insights for future high-quality development	Hospital growth, bed capacity, funding reform, governance reform, access and equity	Hospitals can profit from drug sales; staff receive performance incentives for motivation.
(35)	Mix method	35 specialist doctors	Questionnaire and interviews	An incentive system based on individual performance, measurable indicator-based evaluation, periodic payments, and collaboration between the Medical Committee and HR Department	The purpose of this study is to design an incentive system for specialist doctors based on BPJS Health Service Performance	The incentive system for specialist doctors is designed to improve service quality by assessing performance based on measurable indicators. The system's implementation is expected to boost efficiency, motivation, and improve service quality among specialist doctors.

DISCUSSION

Synthesis and Integration of Research Findings

The global healthcare landscape currently faces systemic challenges related to workforce sustainability driven by psychological stress and structural inequalities. Research findings indicate that disproportionate workloads are positively correlated with high nurse turnover rates, as identified in Iran, where the resignation rate reached 12.3% (29). This situation is exacerbated by the post-pandemic decline in mental well-being of healthcare practitioners in Austria (29) and the unequal distribution of human resources within public health institutions, such as the Centers for Disease Control and Prevention (CDC) in China, which collectively threaten the long-term stability of the care system (33).

In response to these dynamics, structural reforms have begun to focus on service innovation based on collaboration and multidisciplinary integration. The implementation of Primary Care Networks (PCNs) in the UK demonstrates that additional funding schemes can strengthen service coordination through teamwork (26). This aligns with the development of Multidisciplinary Team (MDT) services in China, which have now been adopted by the majority of tertiary hospitals to improve clinical effectiveness (27). Historically, the evolution of public hospitals has demonstrated the need to adapt operational models to meet contemporary socioeconomic demands (34).

The integration of performance-based incentive systems, such as the Ongoing Professional Practice Evaluation (OPPE), has emerged as a crucial instrument in aligning professional behavior with healthcare system efficiency targets. In Indonesia, efficiency in the National Health Insurance (JKN) era must be balanced with quality indicators such as patient satisfaction. Although financial incentives have a significant influence on medical productivity, their effectiveness is strongly moderated by intrinsic values such as altruism. Physicians with low levels of altruism have been shown to be more vulnerable to distorted prescribing patterns due to the influence of industry payments (35).

Strategically, incentive systems serve not only as productivity boosters but also as retention tools to mitigate turnover caused by low compensation and excessive workloads (29). Financing system reforms encourage hospitals to implement incentive mechanisms that transparently link rewards to performance achievements (34). Furthermore, a comprehensive approach combining training incentives with academic detailing strategies has been shown to be effective in accelerating the adoption of evidence-based practices (35). Thus, holistically designed incentive policies are key to ensuring the quality of service and the sustainability of global healthcare institutions.

Critical Analysis of the Reviewed Studies

A critical analysis of the reviewed literature reveals significant methodological diversity, encompassing a spectrum of quantitative and qualitative approaches to examining performance assessment models. Quantitative studies with cross-sectional designs and secondary data analysis dominate efforts to identify statistical correlations between incentive variables and healthcare worker performance (31). Conversely, qualitative approaches through case studies and in-depth interviews provide a phenomenological understanding of the social dynamics and organizational factors underlying the effectiveness of these incentive systems (26).

The methodological rigor of these studies is reinforced by the use of standardized theoretical frameworks, such as the use of FRAME-IS in the Academic Detailing implementation strategy (30). The integration of these frameworks provides a solid foundation for program replication and standardization across clinical settings. However, there is variation in the depth of evaluation; While some studies have successfully mapped clinical quality indicators in detail, they often lack the ability to evaluate the direct causal relationship between these indicators and the performance incentive mechanisms implemented (32).

Research findings are heavily influenced by geographic context and specific national health system architectures, such as the fundamental differences between the National Health Insurance (JKN) system in Indonesia and the NHS in the UK. While these macro-policy differences enrich our understanding of how government regulations influence micro-operations in hospitals, the reliance on local context and limited sample sizes of some studies hinder the global generalization of the findings. This suggests that the effectiveness of incentive models is highly dependent on the health policy ecosystem in which they are implemented.

Finally, there is a marked imbalance of focus in the current literature, with studies tending to focus more on operational challenges such as workload and turnover rather than evaluating long-term solutions through longitudinal research designs. Many studies have not comprehensively explored the sustained impact of incentive systems on healthcare quality (32). Therefore, more comprehensive future research is needed to bridge the gap between the development of technical performance indicators and their actual impact on human resource sustainability and global healthcare quality (29).

Comparison and Consistency of Findings Across Studies

The following is a summary of the comparison and consistency of research findings, organized into four paragraphs, with formal academic standards for reputable journals (Scopus):

A cross-study analysis demonstrates significant consistency regarding the crucial role of performance-based incentive systems in improving the motivation and productivity of healthcare workers globally. Findings from various geographic contexts confirm that incentive mechanisms, both financial and non-financial, effectively encourage active participation of medical staff in hospital management and clinical service activities (36). Furthermore, incentives have been shown to have a direct impact on transforming physicians' professional behavior, demonstrating that measurable rewards are a strategic instrument in directing clinical practice toward organizational goals (37).

Despite the positive impact of incentives, the literature consistently highlights the tension between workload demands and workforce retention. The phenomena of burnout and turnover intention have emerged as systemic challenges in countries ranging from Iran to Austria, reflecting the urgent need for psychological well-being support (29) (31). This situation creates a dialectical challenge where healthcare institutions must improve operational efficiency, especially under prospective payment systems like those in Indonesia, without sacrificing service quality and multidisciplinary collaboration, the pillars of clinical effectiveness (35), (38).

One of the most consistent findings is the significance of intrinsic motivation and professional values as moderators of the effectiveness of external incentives. In the United States, physician altruism serves as a counterbalance that prevents distorted prescribing patterns due to financial incentives from the industry, while in Indonesia, patient satisfaction, as an interpersonal indicator, is considered more essential in incentive systems than purely technical indicators (39), (35). This suggests that the success of a performance appraisal system depends heavily on the extent to which it accommodates the moral and humanitarian values inherent in the medical profession.

The effectiveness of an incentive system cannot be separated from the organizational context and the equitable distribution of human resources. Inequality in labor allocation and staff mental well-being are key determinants that can hinder the success of incentive policies (40), (31). Therefore, the consistency of these findings points to the need to integrate incentive systems into a more holistic human resource management strategy, which combines professional support, ongoing training, and strengthening organizational culture to ensure the sustainability of health service performance (30).

Theoretical and Practical Implications

Theoretically, this study extends the application of Social Exchange Theory in explaining the phenomenon of healthcare worker turnover as a direct consequence of an imbalance between workload contributions and rewards received (29). Furthermore, a behavioral economics perspective reinforces the proposition that intrinsic motivation, particularly physician altruism, plays a crucial role as a moderating factor mitigating agency problems in professional-industry relationships (41). This integration of economic incentives and professional ethical values confirms that the effectiveness of a performance appraisal system depends not only on the amount of extrinsic compensation but also on alignment with medical moral and ethical norms in service practice.

From a managerial perspective, these findings provide a foundation for transforming human resource management (HRM) systems through the adoption of transparent and measurable performance evaluations, such as the Ongoing Professional Practice Evaluation (OPPE). The use of objective, evidence-based clinical quality indicators is a key prerequisite for designing fair and accountable reward mechanisms (41), (35). The implementation of this systematic evaluation model at the hospital level is expected to synergize medical personnel productivity with institutional efficiency targets, while ensuring that service quality remains a top priority through continuous performance monitoring.

At a macro level, this study urges policymakers to formulate health workforce redistribution strategies to address the unequal distribution of human resources, particularly in underserved areas such as disease control centers (33). Furthermore, the urgency of institutionalizing mental health support for medical professionals post-pandemic has crucial practical implications for maintaining the stability and sustainability of the national health system (33). Therefore, the success of the performance incentive model requires a holistic approach that integrates hospital management policies, data-driven evaluation systems, and human resource capacity development strategies supported by comprehensive training interventions and professional support (37) (33).

Limitations and Recommendations for Future Research

Although this study provides a comprehensive overview of the service-based incentive-based healthcare worker performance assessment model, several limitations warrant consideration. First, the number of studies analyzed in this review is relatively limited, as they only included studies that met the inclusion criteria within a specific publication period. Second, most studies used a cross-sectional design, which limits the ability to directly explain the causal relationship between incentives and healthcare worker performance. Third, variations in

healthcare system contexts across countries may also affect the generalizability of the study results to the Indonesian hospital context.

Based on these limitations, future research needs to develop a more comprehensive approach to examining performance incentive systems in the healthcare sector. Longitudinal research, for example, can provide a deeper understanding of the long-term impact of incentive systems on healthcare quality. Furthermore, research integrating quantitative and qualitative approaches is needed to understand the interaction between organizational factors, healthcare worker motivation, and the effectiveness of incentive policies. Future research is also expected to develop performance assessment models that are more adaptive to the conditions of healthcare systems in developing countries, including Indonesia.

Summary of Key Research Findings

Table 2. Summary of Key Research Findings

No	Category of Findings	Key Research Outcomes	References
1	Performance Incentive Model	Performance-based incentives increase the motivation and productivity of healthcare workers.	(33); (34)
2	Health Team Collaboration	Incentives encourage teamwork and coordination of healthcare services.	(26)
3	Professional Behavior of Medical Personnel	Financial incentives influence healthcare workers' clinical decisions.	(28)
4	Health Personnel Retention	An adequate compensation system can reduce healthcare worker turnover.	(29)
5	Health Personnel Welfare	The psychological well-being of healthcare workers influences the effectiveness of performance systems.	(31)
6	Health Human Resource Inequality	The distribution of healthcare workers influences the success of incentive policies.	(33)
7	Performance System Innovation	Integrating technology and quality indicators improves performance evaluation.	(35)

Based on the summary table of research findings, it can be seen that most studies indicate that service incentive systems have a significant influence on various aspects of healthcare worker performance in hospitals. Findings indicate that performance-based incentives can increase work motivation and productivity among healthcare workers in carrying out their healthcare duties (37), (34). Furthermore indicates that incentives also play a role in strengthening healthcare team collaboration, particularly in network-based or integrated care systems (26).

Conversely, several studies also indicate that the effectiveness of incentive systems depends not only on financial factors but is also influenced by organizational factors and healthcare worker well-being. Research by (26) indicates that inadequate compensation systems can increase healthcare worker turnover rates. Meanwhile, research by (26) indicates that the psychological well-being of healthcare workers also influences the effectiveness of performance appraisal systems. Therefore, the implementation of incentive systems in hospitals needs to consider various factors that influence healthcare worker motivation and performance. Overall, the synthesis of various studies shows that a service-based incentive-based healthcare worker performance assessment model has significant potential for improving the quality of healthcare services in hospitals. A well-designed incentive system can increase work motivation, productivity, and collaboration among healthcare workers in providing services to patients. However, the effectiveness of an incentive system is also influenced by organizational factors, the distribution of healthcare workers, and the psychological well-being of healthcare workers. Therefore, the development of an incentive-based performance assessment model requires a comprehensive, evidence-based approach. Furthermore, the integration of information technology and service quality indicators can also strengthen the healthcare worker performance evaluation system in hospitals. Therefore, the implementation of an effective incentive system is expected to support the continuous improvement of healthcare service quality.

CONCLUSION

The following systematic literature review shows that an incentive-based performance evaluation model can improve work motivation, productivity, collaboration, and service quality for healthcare workers in hospitals if supported by transparent, fair, and accountable assessment mechanisms and strong organizational leadership. System effectiveness depends not only on financial incentives but also on professionalism, organizational culture, distributive justice, and the well-being of healthcare workers. Therefore, hospitals need to implement a performance evaluation system that integrates clinical quality indicators, professional performance, and digital technology to

support evidence-based decision-making. Future research is recommended to use longitudinal and mixed-method designs to transmit long-term impacts and develop evaluation models that are appropriate to the hospital context, particularly in developing countries.

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