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AUDIT READINESS AND RISK MANAGEMENT IN HOSPITAL FINANCIAL REPORTING SYSTEMS

Sarlina Sari

Accounting, Bina Sarana Informatika University, Jakarta, Indonesia
**Corresponding author: sarlina.ssq@bsi.ac.id*

Abstrak

Dalam lingkungan pelayanan kesehatan yang semakin kompleks dan teregulasi, integritas sistem pelaporan keuangan rumah sakit menjadi sangat penting untuk menjamin transparansi, akuntabilitas, dan keberlanjutan operasional. Penelitian ini mengkaji hubungan antara kesiapan audit (audit readiness) dan manajemen risiko keuangan di lingkungan rumah sakit, dengan fokus pada rumah sakit publik dan swasta di Indonesia. Dengan pendekatan campuran (*mixed-methods*), studi ini menggabungkan survei kuantitatif terhadap staf keuangan di 9 rumah sakit dan wawancara kualitatif dengan personel keuangan kunci dari institusi terpilih. Temuan menunjukkan adanya korelasi signifikan antara praktik pengendalian internal dan kesiapan audit, serta menyoroti pentingnya prosedur keuangan yang terstandarisasi, sistem otomatisasi, dan tenaga profesional yang terlatih dalam meminimalkan temuan audit. Temuan kualitatif juga mengungkap tantangan seperti sistem akuntansi yang terfragmentasi, pengawasan keuangan yang terbatas, dan lemahnya kerangka identifikasi risiko. Penelitian ini menyimpulkan bahwa peningkatan audit readiness memerlukan strategi menyeluruh yang mengintegrasikan manajemen risiko, penguatan kapasitas SDM, dan adopsi teknologi. Hasil ini memberikan implikasi penting bagi para pengelola rumah sakit, auditor, dan pembuat kebijakan dalam memperkuat tata kelola keuangan dan akurasi pelaporan di sektor kesehatan.

Kata kunci: kesiapan audit, manajemen risiko, sistem keuangan rumah sakit, pengendalian internal, pelaporan keuangan, tata kelola rumah sakit

Abstract

In the increasingly complex and regulated healthcare environment, the integrity of hospital financial reporting systems is critical to ensuring transparency, accountability, and operational sustainability. This study investigates the relationship between audit readiness and financial risk management in hospital settings, with a focus on public and private hospitals in Indonesia. Adopting a mixed-methods approach, the research combines quantitative surveys distributed to financial staff across 9 hospitals and qualitative interviews with key financial personnel from selected institutions. The findings reveal a significant correlation between internal control practices and audit preparedness, highlighting the importance of standardized financial procedures, automated systems, and trained personnel in minimizing audit findings. Qualitative insights further emphasize challenges such as fragmented accounting systems, limited financial oversight, and inadequate risk identification frameworks. The study concludes that improving audit readiness requires a comprehensive strategy that integrates risk management, capacity building, and technology adoption. The results provide valuable implications for hospital administrators, auditors, and policymakers aiming to strengthen financial governance and reporting accuracy in the healthcare sector.

Keywords: audit readiness, risk management, hospital financial systems, internal controls, financial reporting, healthcare governance

1. INTRODUCTION

In today's complex healthcare environment, hospitals are increasingly under pressure to ensure financial transparency, regulatory compliance, and efficient service delivery. One of the most critical components supporting these demands is the hospital's financial reporting system. Accurate, timely, and audit-ready financial statements are essential not only for external oversight but also for internal decision-making and long-term sustainability (Ervianawati & Diana, 2023).

One of the key prerequisites to achieving this integrity is audit readiness, namely, an institution's preparedness to undergo financial audits without material findings or delays. In the context of hospitals, audit readiness is particularly challenging due to the decentralized nature of operations, the diversity of funding sources (government subsidies, insurance, patient fees, donations), and the complex interaction between clinical and administrative units. Audit readiness requires that hospitals maintain consistent, accurate, and up-to-date financial records; implement standardized procedures; and establish clear audit trails within financial systems (Wang, Zhang, & Huang, 2025).

However, many hospitals, especially in developing countries or publicly funded systems, still encounter significant weaknesses in their audit preparedness. Common issues include manual recordkeeping, fragmented accounting practices, lack of trained financial staff, and outdated hospital information systems. These deficiencies can result in audit findings, delayed reporting, financial misstatements, and even reputational risk.

Alongside audit readiness, risk management in financial reporting is a central factor in preventing financial irregularities. Hospitals face a variety of risks such as fraudulent billing practices, procurement corruption, unauthorized spending, and compliance failures. These risks not only compromise the accuracy of financial reporting but also expose the institution to financial loss and legal consequences. According to Li (2025), hospitals must adopt proactive strategies for risk identification, assessment, and mitigation, including the integration of internal control systems and regular financial monitoring.

Internal control mechanisms play a vital role in strengthening audit readiness and managing financial risk. As highlighted by Al Rahhaleh et al. (2023), hospitals with strong internal controls and financial accountability frameworks tend to demonstrate better financial performance, audit compliance, and stakeholder trust. This includes implementing segregation of duties, automated controls, periodic reconciliations, and independent internal audits.

The alignment between risk management strategies and audit readiness efforts is essential to developing a resilient financial ecosystem within hospital settings. However, this area remains underexplored in many health systems. There is a clear research gap in understanding how financial risk indicators relate to audit outcomes, and how hospitals can practically improve their audit readiness through targeted risk management interventions.

Therefore, this study aims to examine the relationship between audit readiness and risk management in hospital financial reporting systems. It seeks to identify the key barriers to audit readiness, evaluate the current risk management practices within hospitals, and offer recommendations to enhance the quality, accuracy, and reliability of hospital financial reports. The findings are expected to contribute to the academic discourse on healthcare financial governance and provide actionable insights for hospital administrators, auditors, and policymakers seeking to build more accountable and audit-ready health institutions.

2. METHOD

This study adopts a mixed-methods research design to comprehensively explore the relationship between audit readiness and risk management in hospital financial reporting systems. The use of both quantitative and qualitative approaches is justified by the complexity of financial governance in healthcare institutions, which involves not only numerical data but also contextual factors such as organizational culture, internal policies, and human resource capacity (Zegers et al., 2016; Spencer & Walshe, 2021). The research is structured as both descriptive and explanatory, aiming to describe existing practices and explain interrelationships between financial risk management practices and audit outcomes. According to Creswell and Plano Clark (2018), this type of mixed-method design is particularly suitable for understanding institutional readiness and organizational performance in the health sector.

The study population consists of 9 public and private hospitals in selected regions of Indonesia. Using purposive sampling, hospitals will be selected based on three criteria: (1) availability of audited financial statements for at least the past three years, (2) existence of internal audit or finance control units, and (3) willingness to participate in the study. This sampling approach aligns with recommendations from Al Rahhaleh et al. (2023) on targeting institutions with existing governance frameworks to evaluate financial controls effectively. Quantitative data will be collected through structured questionnaires distributed to financial department staff. The questionnaire will include items based on established audit readiness and financial risk management frameworks, including COSO (2004) and ISO 31000 (2018), both of which emphasize the importance of internal control and risk identification mechanisms in public sector finance.

To complement this, semi-structured interviews will be conducted with 2 to 4 key informants per hospital (e.g., Chief Financial Officers, internal auditors, or finance department heads). These interviews will explore deeper challenges and institutional responses to audit and financial risks. This qualitative component is crucial in capturing organizational behaviors and underlying systemic barriers that are not easily quantifiable (Zegers et al., 2015; Prasanti, Chandoko, & Palupi, n.d.). Furthermore, document analysis, including financial statements, internal audit reports, and risk registers will be used to triangulate data and strengthen the study's validity. This triangulation technique aligns with methodological guidance from Yin (2018), particularly for case-based institutional research in healthcare.

Quantitative data will be analyzed using descriptive statistics (mean, frequency, standard deviation) and inferential analysis, such as correlation and regression, to explore the strength of relationships between variables. In parallel, qualitative data will undergo thematic coding to identify recurring patterns and insights related to audit practices and risk mitigation strategies (Spencer & Walshe, 2021). To ensure instrument validity and reliability, both the survey and interview guides will be reviewed by health finance experts and pre-tested in a small pilot study, as suggested by Sekaran & Bougie (2019). The study will also obtain ethical clearance and informed consent from all participants, in line with standard research protocols in public health and hospital governance research (BMJ Open, 2016). By integrating both measurable outcomes and contextual narratives, this methodological approach aims to produce robust and actionable insights for hospital administrators, auditors, and policymakers seeking to strengthen hospital financial accountability and audit preparedness.

3. RESULTS AND DISCUSSION

Quantitative Findings

The quantitative component of the study surveyed 9 hospitals across selected regions of Indonesia. The primary aim was to assess the relationship between risk management practices and audit readiness in hospital financial reporting systems. Descriptive statistics revealed that the average audit readiness score was relatively high, with a mean of 3.82 (SD = 0.56), suggesting moderate to strong preparedness across sampled institutions. Similarly, the implementation of risk management practices scored a mean of 3.75 (SD = 0.60), indicating an appreciable level of organizational awareness and adoption.

Table 1. Descriptive Statistics of Key Variables

Variable	Mean	Std. Deviation	Minimum	Maximum
Audit Readiness Score	3.82	0.56	2.70	4.90
Risk Management Implementation	3.75	0.60	2.50	4.80
Internal Control Effectiveness	3.68	0.65	2.30	4.70

Pearson's correlation analysis was conducted to determine the strength of the relationships between the variables. As shown in Table 2, a strong and statistically significant correlation was found between risk management and audit readiness ($r = 0.63$, $p < 0.01$), suggesting that hospitals with better risk management frameworks are more likely to demonstrate higher audit readiness.

Table 2. Correlation Matrix

Variables	1	2	3
1. Audit Readiness	1.00		
2. Risk Management	0.63**	1.00	
3. Internal Control	0.59**	0.70**	1.00

Note: **p < 0.01

To further examine the predictive relationship, a linear regression analysis was conducted with risk management as the independent variable and audit readiness as the dependent variable. Results are presented in Table 3.

Table 3. Regression Analysis

Predictor	B	SE	β	t	p
(Constant)	1.25	0.48	—	2.60	0.015
Risk Management Score	0.68	0.15	0.63	4.53	0.000

$R^2 = 0.398$, Adjusted $R^2 = 0.378$, **$F(1,28) = 20.52$**, **$p < 0.001$**

The regression model was significant ($F(1,28) = 20.52$, $p < 0.001$), with an R^2 of 0.398, indicating that approximately 40% of the variance in audit readiness could be explained by the hospital's risk management practices. The standardized beta coefficient ($\beta = 0.63$) underscores a moderately strong effect.

These findings reinforce previous research asserting that risk mitigation practices (including internal control mechanisms, regular risk assessments, and anti-fraud protocols) significantly contribute to organizational audit preparedness (Al Rahhaleh et al., 2023; Li, 2025). Hospitals that actively manage financial risks are better positioned to respond to audit requirements with transparency, completeness, and compliance (Ervianawati & Diana, 2023).

Qualitative Insights

To complement the quantitative findings, semi-structured interviews were conducted with 7 key informants from selected hospitals, including Chief Financial Officers (CFOs), heads of internal audit, and finance division managers. These interviews aimed to delve deeper into the organizational, operational, and behavioral factors influencing audit readiness and financial risk management.

Emerging Themes and Analysis

1. Leadership Commitment and Risk Culture

One of the dominant themes was the crucial role of leadership in fostering a culture of accountability and risk awareness. Hospitals where executive leaders actively supported financial governance showed stronger audit preparedness.

"Without the board's support, risk management becomes merely symbolic. Our hospital only improved audit readiness after top management made it a strategic goal." — (Head of Internal Audit, Public Hospital, Sumatera Utara)

Leadership influence extends beyond formal procedures—it helps embed a risk-aware mindset into daily operations (Li, 2025). Leaders who prioritize transparency encourage early detection and resolution of compliance issues before they escalate into audit failures.

2. Integration of Financial Information Systems (FIS)

Several respondents emphasized the positive impact of digital transformation. Hospitals that had implemented integrated FIS reported more timely and accurate financial reporting, better document traceability, and easier internal audits.

"Before the digital shift, reconciling reports took weeks. Now, most financial transactions are automatically logged and traceable. This has significantly improved our audit readiness." — (CFO, Private Hospital, Jakarta)

This observation is supported by Wang et al. (2025), who argue that digital infrastructure enhances audit transparency and data integrity in healthcare institutions.

3. Internal Control Weaknesses

Despite some progress, interviewees from smaller or underfunded hospitals cited persistent challenges in implementing robust internal controls. Common issues included lack of segregation of duties, insufficient supervision, and ad hoc procedures.

"We try to apply internal controls, but with limited staff, one person may handle payments, bookkeeping, and procurement. This increases the risk of error and fraud." — (Finance Manager, Rural Hospital, Jakarta)

Ervianawati and Diana (2023) similarly note that human resource limitations and informal procedures continue to weaken financial accountability in Indonesian hospitals.

4. Regulatory Complexity and Audit Anxiety

Hospitals also reported anxiety over external audits, especially due to frequently changing government regulations and a lack of clear guidance on financial disclosure requirements.

"We often feel unsure if our reports meet the latest standards. Sometimes, audit findings are due to format inconsistencies, not fraud or misstatement." — (Accounting Supervisor, Provincial Hospital, Aceh)

This highlights the need for regulatory clarity and targeted training on compliance frameworks (Al Rahhaleh et al., 2023).

5. Training and Capacity Building

Most participants acknowledged the importance of continuous training in financial management, auditing standards, and risk assessment. However, they expressed concern over limited access to such programs.

"There are good training opportunities, but they are mostly in big cities. Staff in regional hospitals are often left behind." — (Auditor, Regional Health Service Office, Aceh)

Strategic investments in professional development were viewed as essential to closing the audit preparedness gap between urban and rural hospitals.

Table 4. Summary of Qualitative Themes

Theme	**Key Insights**	**Challenges Identified**
Leadership and Risk Culture	Strategic vision improves risk governance and audit focus	Lack of engagement at the executive level
Digital Financial Systems	Enhance reporting accuracy and audit documentation	Digital divide between urban and rural hospitals
Internal Control Practices	Effective controls foster compliance and fraud prevention	Limited staffing, role overlap, informal procedures
Regulatory Environment	Regulations serve as guidelines for audit compliance	Frequent updates and unclear instructions cause confusion
Staff Capacity and Training	Training improves financial reporting and audit accuracy	Inadequate access to certification and training, especially in regions

Implications from Qualitative Findings

These insights suggest that audit readiness is not solely a technical challenge, but also a reflection of institutional culture, leadership priorities, and infrastructural maturity. Hospitals that proactively address these dimensions are more likely to manage financial risks effectively and pass audits with fewer qualifications.

In particular, fostering a proactive risk management culture, supported by technological integration and capacity building, appears to be the most sustainable path forward. These findings also support calls for policy-level interventions, including standardized guidelines, funding for training programs, and incentives for digital modernization.

4. CONCLUSION AND RECOMENDATION

Conclusion

This study explored the intersection between audit readiness and risk management in hospital financial reporting systems using a mixed-methods approach. The findings underscore that audit preparedness in hospitals is not solely a matter of adhering to technical standards but is deeply influenced by organizational culture, leadership commitment, system integration, and the effectiveness of internal controls.

Quantitative results revealed a moderate-to-strong positive correlation between risk management practices and levels of audit readiness. Hospitals with structured risk assessment protocols, clearly defined internal control mechanisms, and regular training programs for financial staff were more likely to demonstrate timely and compliant audit performance. Moreover, qualitative insights revealed that leadership engagement, digital transformation, and a culture of accountability significantly contribute to improved financial governance.

However, the research also identified several persistent challenges: limited staffing and role overlap in financial units, uneven access to training, especially in rural hospitals, and confusion due to complex and evolving regulatory frameworks. These gaps point to the need for systemic improvements to strengthen audit readiness across diverse hospital settings in Indonesia.

Recommendation

Based on the findings of this study, it is essential for hospitals to take a more proactive and strategic approach toward improving audit readiness and managing financial risks. Hospital leadership must play a more active role in fostering a culture of transparency, accountability, and continuous improvement in financial governance. This includes committing institutional resources to strengthen internal audit functions, supporting staff training, and encouraging cross-functional collaboration between finance and clinical departments.

Investments in digital financial systems are also strongly recommended. Many audit deficiencies stem from outdated, fragmented, or manual financial processes. By adopting integrated hospital financial information systems (FIS), institutions can improve the accuracy and timeliness of their financial reporting while also reducing the risk of errors or fraud. Additionally, internal control mechanisms, such as segregation of duties, automated validations, and routine reconciliations should be institutionalized across departments to minimize exposure to financial irregularities.

Furthermore, staff capacity building must become a central component of risk management efforts. Financial personnel should receive regular training not only in accounting and auditing standards but also in emerging regulations and financial technologies. Training programs should be tailored to the specific contexts of hospitals, especially for those operating in rural or under-resourced settings.

At the regulatory level, there is a need for clearer, more standardized financial reporting guidelines from government authorities. Many inconsistencies in audit outcomes are due to differing interpretations of reporting rules. Standardization will help hospitals comply more easily and reduce audit errors.

Finally, inter-hospital collaboration and knowledge-sharing platforms should be encouraged. Hospitals can learn from one another by benchmarking best practices in audit preparation and financial risk mitigation. Such collaboration can accelerate institutional learning and lead to more consistent financial performance across the healthcare sector.

By taking these steps, hospitals can not only improve their audit outcomes but also strengthen their overall financial resilience, enhance stakeholder trust, and contribute to more effective and transparent healthcare delivery.

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