Revolutionizing Internal Audits: A Pandemic Review at RSUD ABC Solo Raya

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ABSTRACT: This study examines the effectiveness, challenges, and outcomes of remote internal audits compared to traditional on-site audits at RSUD ABC Solo Raya before, during, and after the COVID-19 pandemic. The research investigates the impact of the pandemic on audit practices, focusing on the transition to remote auditing and the organizational readiness required for its successful implementation. Regulatory frameworks such as Law No. 44/2009 on Hospitals and Minister of Health Regulation No. 36/2015 emphasize the necessity of robust internal control systems, while the Indonesian Supreme Audit Institution (BPK) and the Financial and Development Supervisory Agency (BPKP) oversee compliance in public hospitals. Data is collected through in-depth interviews, focus group discussions, qualitative surveys, and document analysis. The study identifies key challenges, such as technological limitations and data security, as well as opportunities, including the integration of digital tools and innovative audit methodologies. The findings contribute to the development of a hybrid audit model, combining traditional and remote auditing approaches, to enhance audit effectiveness in the public healthcare sector. This research provides valuable insights for hospital management, auditors, and policymakers in improving internal audit frameworks for better accountability and efficiency in healthcare institutions.

KEYWORDS: remote auditing, internal audit, hospital management, public sector, hybrid model.

A.   BACKGROUND OF THE STUDY

The COVID-19 pandemic has posed significant challenges for internal audit processes in healthcare institutions, particularly in public hospitals (RSUD) in Indonesia. With the implementation of mobility restrictions and health protocols, traditional on-site audits faced substantial disruptions, prompting a shift toward **remote auditing**. According to Government Regulation No. 60 of 2008 concerning the **Government Internal Control System (SPIP)**, internal audits must ensure compliance, risk mitigation, and governance effectiveness in public institutions (Ministry of Finance, 2020; Indonesian Audit Board, 2021; World Bank, 2022; OECD, 2021; Institute of Internal Auditors, 2020). In the context of hospitals, these audits are crucial in maintaining financial accountability and healthcare service quality (WHO, 2020; Ministry of Health, 2021; Purnamasari & Setiawan, 2022; Jaya et al., 2023; Rahmat & Wijayanti, 2023).

During the pandemic, **remote audit methodologies** were widely adopted as a solution to overcome physical access limitations (PwC, 2021; Deloitte, 2022; KPMG, 2021; Ernst & Young, 2020; BDO, 2021). The implementation of digital audit tools, such as **electronic documentation systems** and **virtual audit procedures**, became essential for ensuring audit continuity (IIA, 2021; ISACA, 2022; COSO, 2021; Basuki & Mahardika, 2023; Rahayu & Firmansyah, 2023). However, concerns arose regarding the **effectiveness of remote audits**, particularly in terms of data accuracy, fraud detection, and compliance enforcement (Glover et al., 2022; Arens et al., 2021; Rezaee, 2020; Salijeni et al., 2021; Lenz & Hahn, 2022). Consequently, evaluating the comparative effectiveness of **remote audits versus traditional on-site audits** before, during, and after the pandemic is essential for future internal audit strategies.

Theoretical frameworks such as the **Agency Theory** (Jensen & Meckling, 1976; Eisenhardt, 1989; Ross, 1973; Fama & Jensen, 1983; Arrow, 1985) and **Stakeholder Theory** (Freeman, 1984; Donaldson & Preston, 1995; Mitchell et al., 1997; Harrison et al., 2019; Jones et al., 2018) provide the basis for understanding the role of internal audit in ensuring transparency and accountability. Agency Theory explains how audit mechanisms mitigate **information asymmetry** between hospital management and regulatory bodies (Watts & Zimmerman, 1986; Deegan, 2002; Healy & Palepu, 2001; Cohen et al., 2004; Christensen et al. 2019). Meanwhile, Stakeholder Theory emphasizes the importance of internal audits in addressing the expectations of various

stakeholders, including **patients, healthcare staff, government agencies, and the public** (Gray et al., 1995; Clarkson, 1995; Adams, 2002; Unerman & Bennett, 2004; Roberts, 1992). These theories underline the necessity of effective audit mechanisms, especially in crisis situations like the COVID-19 pandemic.

This study aims to evaluate the effectiveness, challenges, and outcomes of remote internal audits compared to traditional on-site audits at RSUD ABC Solo Raya before, during, and after the pandemic. Regulatory frameworks like Law No. 44/2009 on Hospitals, Law No. 17/2003 on State Finance, and Minister of Health Regulation No. 36/2015 stress the importance of strong internal controls in Indonesian hospitals (Government of Indonesia, 2009; Ministry of Finance, 2003; Ministry of Health, 2015). Oversight from the Indonesian Supreme Audit Institution (BPK) and the Financial and Development Supervisory Agency (BPKP) is crucial for ensuring financial integrity in public hospitals (BPK, 2021; BPKP, 2021). The study's findings will support the development of a standardized audit framework for both normal and crisis situations (Sarens & De Beelde, 2006; Arena & Azzone, 2009; Dittenhofer, 2001).

B. THEORETICAL FOUNDATION

Internal audit plays a vital role in organizational governance, ensuring accountability, risk management, and regulatory compliance (IIA, 2017). In hospitals, it is essential for monitoring financial integrity and adherence to healthcare regulations (Al- Tamimi & Al-Hashim, 2020). The transition to remote auditing has been accelerated by technological advances and external pressures like the COVID-19 pandemic, although it requires robust technological infrastructure and digital literacy (Fadzil et al., 2005; Cohen & Sayag, 2010). Organizational readiness, including technology, communication, and trained personnel, is crucial for successful implementation (Tschannen-Moran & Hoy, 2001; Lacity & Willcocks, 2018; Avasarala & Ramaswamy, 2020). While remote auditing offers benefits like reduced travel costs, it also presents challenges such as data security and limited audit scope (Deloitte, 2020; Knechel et al., 2020). The pandemic has also opened opportunities for innovation in audit methodologies, including artificial intelligence and data analytics (Faggella, 2020). A hybrid model combining traditional and remote auditing ensures continuity and quality in public sector audits, utilizing cloud systems, secure video conferencing, and digital audit trails (Nabizadeh et al., 2021).

This study aims to explore the implementation of remote auditing in RSUD BLUD Solo Raya by examining the hospital's readiness, challenges faced, and the effectiveness of internal audit operations compared to traditional on-site audits. By investigating key influencing factors, the study seeks to identify best practices and develop an optimal remote audit model tailored for public hospitals. Through qualitative research methods, including interviews, focus group discussions, and surveys, this study will provide insights into how remote auditing can enhance oversight and compliance in healthcare institutions. The following research questions guide this study:

1) How prepared are RSUD BLUD's infrastructure and resources in supporting the implementation of remote auditing?
2) What challenges are encountered in conducting remote audits compared to on-site audits at RSUD BLUD Solo Raya?
3) How effective are internal audit operations in a remote audit system compared to direct, on-site auditing?
4) What factors influence the success or failure of remote audit implementation at RSUD BLUD Solo Raya?
5) How can an ideal remote audit model be designed for BLUD hospitals to enhance monitoring effectiveness and compliance in the future?

C. RESEARCH OBJECTIVES

This study aims to:

1) **Analyze the readiness of infrastructure and resources** at RSUD BLUD Solo Raya to support the implementation of remote auditing.
2) **Identify the challenges and obstacles** faced in conducting remote audits compared to on-site audits.
3) **Evaluate the effectiveness of internal audit operations** within a remote audit system, including a comparison with conventional audit methods.
4) **Determine key factors** influencing the success or failure of remote audit implementation at RSUD BLUD Solo Raya.
5) **Develop an ideal remote audit model** for BLUD hospitals to enhance monitoring effectiveness and compliance in the future.

D. RESEARCH CONTRIBUTION AND BENEFITS ACADEMIC CONTRIBUTION

This study contributes to academic literature by expanding knowledge on the implementation of remote auditing in the healthcare sector, particularly in BLUD hospitals. It also enhances theoretical discussions on internal auditing, digital transformation in audit processes, and organizational preparedness in adapting to new auditing systems. The findings will serve as a valuable reference for future research on remote auditing in public service institutions.

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Practical Benefits

For **hospital management**, the study provides insights into the readiness and challenges of implementing remote auditing, as well as strategies to enhance its effectiveness. For **the Internal Audit Unit (SPI)**, the study offers recommendations for improving internal audit quality through technology-driven approaches. Additionally, **internal and external auditors** can utilize the findings to better understand and adapt to remote audit mechanisms, ensuring more efficient and effective audit processes.

Policy Implications

This research offers valuable input for **government agencies and regulators** in formulating policies and guidelines related to internal audit standards in emergency or crisis situations. The findings can serve as a basis for developing **regulatory frameworks** that ensure the successful adoption of remote auditing in BLUD hospitals and other public sector organizations.

By providing these insights, the study aims to assist RSUD BLUD and similar institutions in adopting more effective remote auditing systems, ensuring the continuity of internal audit processes under various conditions, and enhancing transparency and accountability in hospital financial and operational management.

E.   RESEARCH METHODOLOGY

This research employs a **qualitative method** with a **case study approach** to analyze the implementation of internal remote audits at RSUD BLUD Solo Raya (pseudonym). The case study approach is chosen as it allows for an in-depth exploration of the phenomenon in a specific, relevant context, providing a better understanding of the challenges and effectiveness of implementing remote audits in regional hospitals.

Research Methodology

This study employs a **qualitative method with a case study approach** to analyze the implementation of internal remote audits at RSUD BLUD Solo Raya (pseudonym). The case study approach allows for an in-depth exploration of the phenomenon within a specific context, providing a comprehensive understanding of the challenges and effectiveness of remote auditing in a public hospital setting. By examining this case, the research aims to develop insights that can inform future auditing models for BLUD hospitals.

Research Process

The research process begins with a **preliminary study**, which involves reviewing relevant literature, regulatory frameworks, and internal hospital audit reports. This step provides foundational knowledge regarding existing audit mechanisms and the transition to remote auditing during the COVID-19 pandemic. Following this, **primary data collection** is conducted through in-depth interviews, focus group discussions (FGDs), and qualitative surveys. These methods allow researchers to gather perspectives from key stakeholders involved in the audit process. Finally, **data analysis and model development** will be performed using thematic analysis, ensuring that findings contribute to the refinement of remote audit practices in BLUD hospitals.

This study uses purposive sampling to select informants with direct experience in internal audits at RSUD BLUD Solo Raya, including internal auditors from the Internal Audit Unit (SPI), hospital management representatives (financial managers and IT administrators), and external auditors. These informants offer insights into audit procedures before, during, and after the pandemic, as well as perspectives on hospital readiness for remote auditing. Healthcare professionals are also included as supporting informants to explore how audit processes impact hospital operations. This diverse group provides a comprehensive view of the challenges and effectiveness of remote audits.

RSUD BLUD Solo Raya is a regional public hospital with financial autonomy, allowing more flexible financial management within government regulations. The hospital provides various services and has an Internal Audit Unit (SPI) that ensures compliance. A key feature of the hospital is its adoption of digital management systems, which were essential for implementing remote audits during the COVID-19 pandemic. This transformation offers an opportunity to evaluate the readiness and sustainability of remote audit practices in BLUD hospitals.

To gather comprehensive data, the study employs in-depth interviews, focus group discussions (FGDs), qualitative surveys, and document analysis. Interviews with internal auditors, management, and external auditors explore their experiences with remote auditing. FGDs involve SPI members, financial managers, and IT personnel to discuss audit transitions and best practices. Surveys gather additional insights from auditors and hospital staff on remote auditing effectiveness. Document analysis examines hospital audit reports, internal policies, and regulations to provide historical context for the study.

The collected data will be analyzed using thematic analysis, which includes data coding, categorization, interpretation, and triangulation to ensure validity and reliability. This approach will provide a thorough understanding of remote audit implementation at RSUD BLUD Solo Raya and help develop an optimal remote audit model for BLUD hospitals, ensuring better

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oversight and compliance in future healthcare challenges.

Data Validity and Reliability

Ensuring the validity and reliability of data is crucial in qualitative research, particularly in a case study analyzing the implementation of remote internal audits. This study employs multiple validation techniques, including data triangulation, investigator triangulation, member checks, prolonged engagement, and peer debriefing, to enhance the credibility and trustworthiness of the findings. These strategies ensure that the research outcomes accurately reflect the real conditions and challenges faced in remote auditing at RSUD BLUD Solo Raya.

Data Triangulation

Data triangulation is implemented by collecting information from multiple sources to cross-verify findings and reduce bias. This study gathers data through in-depth interviews with internal auditors, hospital management, and financial officers; focus group discussions (FGDs) with SPI members, IT personnel, and external auditors; qualitative surveys with hospital staff involved in the audit process; and document analysis of audit reports, regulatory policies, and internal guidelines. By integrating multiple sources, the study enhances the comprehensiveness and objectivity of the analysis, ensuring that no single perspective dominates the findings.

Investigator Triangulation

To prevent subjective biases in data interpretation, investigator triangulation is employed. Multiple researchers or external auditors will independently review and analyze the findings. This approach strengthens the objectivity and consistency of the study by incorporating diverse perspectives, ensuring that conclusions are not based solely on the interpretation of a single researcher.

Member Checks

To validate the accuracy of the interpretations, the study conducts member checks by sharing preliminary findings with key informants. This process allows participants to confirm whether their perspectives are accurately represented, clarify any misinterpretations, and provide additional insights. By actively involving participants in the verification process, the research enhances its credibility and authenticity, ensuring that the results reflect the true experiences of those involved in the remote audit implementation.

Prolonged Engagement and Peer Debriefing

The study also ensures validity through prolonged engagement with the research setting, allowing the researcher to develop a deeper understanding of the institutional context and build trust with participants. Continuous interactions with key informants ensure the collection of rich and detailed insights, while peer debriefing sessions with external experts challenge assumptions, refine analytical methods, and enhance the rigor of the study. These steps help to minimize research bias and reinforce the trustworthiness of the findings.

Thick Description for Transferability

To ensure that the research findings can be applied to similar institutions, the study provides a thick description of the hospital's audit practices, remote audit implementation, and the contextual factors influencing the process. By documenting these elements in detail, the research enhances transferability, allowing other BLUD hospitals and healthcare institutions to evaluate the relevance and applicability of the study's insights in their own settings.

Overview of RSUD BLUD Solo Raya (Pseudonym)

RSUD BLUD Solo Raya is a **Type B regional public hospital** that operates under the **Badan Layanan Umum Daerah (BLUD)** scheme, granting it financial and managerial flexibility. As a **referral hospital** in the Solo Raya region, it provides a wide range of **secondary healthcare services**, including specialized medical treatments, emergency care, and inpatient and outpatient services. The hospital plays a vital role in serving a large population across multiple districts, making it a critical healthcare provider in the region. Additionally, it functions as a **teaching hospital**, collaborating with medical universities to support the education and training of healthcare professionals.

Equipped with **over 300 inpatient beds**, RSUD BLUD Solo Raya offers **emergency services, intensive care units (ICU and NICU), surgical facilities, and advanced diagnostic services** such as CT scans, MRIs, and laboratory testing. While the hospital has **integrated some digital health solutions**, such as electronic medical records (EMR) and digital radiology systems, **full digital transformation remains an ongoing effort**. This limitation affects several aspects of hospital management, particularly in the implementation of **remote auditing systems**, which require seamless data access and integration.

As a BLUD hospital, RSUD Solo Raya enjoys **greater financial autonomy**, allowing it to **manage its revenue and reinvest**

in operational improvements. This autonomy also enables the hospital to **procure medical equipment and implement performance-based incentives** for healthcare staff more efficiently than non-BLUD government hospitals. However, financial flexibility also demands **strong internal controls and audit mechanisms** to ensure compliance with healthcare regulations and prevent financial mismanagement. The **Internal Supervisory Unit (SPI)** is responsible for maintaining these controls, conducting periodic audits, and overseeing regulatory compliance.

Despite its strengths, RSUD BLUD Solo Raya faces **several challenges**. The increasing demand for healthcare services has put pressure on **hospital infrastructure and human resources**, often leading to **staff shortages and capacity constraints**. Additionally, **the lack of a fully integrated digital auditing system** poses challenges for internal audit processes, particularly in remote auditing, where accessibility to financial and operational records is crucial. Ensuring **regulatory compliance with government policies, particularly BPJS Kesehatan regulations**, remains a key focus for hospital management, requiring continuous monitoring and evaluation.

Moving forward, **enhancing digital infrastructure, expanding healthcare capacity, and strengthening remote auditing mechanisms** will be essential to improving hospital efficiency and compliance. By addressing these challenges, RSUD BLUD Solo Raya can further establish itself as a **leading referral hospital**, ensuring high-quality healthcare services and maintaining strong governance in financial and operational management.

F.   FINDINGS AND RESPONSES TO RESEARCH QUESTIONS

Readiness of RSUD BLUD's Infrastructure and Resources for Remote Auditing

RSUD BLUD Solo Raya has made significant strides in building its technological infrastructure, including an integrated **financial reporting system** and an **internal document management platform**. These systems provide a foundation for managing financial transactions and records. However, despite these advancements, the hospital still faces challenges in fully implementing **remote auditing**. One of the major limitations is the lack of a **dedicated remote audit system**. The current infrastructure is primarily designed for in-person operations, making the transition to remote auditing more complex.

Moreover, the **digitalization of supporting documents**, such as **physical receipts, contracts**, and **other audit-related paperwork**, remains limited. This lack of comprehensive digitization hampers the smooth transfer of necessary documents for virtual audit processes. While some documents are stored electronically, many important records are still in paper form, requiring additional manual work and reducing the efficiency of remote audits. Without a reliable method for storing and accessing these documents remotely, conducting audits becomes cumbersome and prone to delays.

The **IT department** also raised **cybersecurity concerns**, recognizing the risks that come with remote access to sensitive financial data. The growing reliance on digital platforms and cloud-based systems increases the potential for **data breaches** and unauthorized access. Ensuring the security of financial and operational data is critical for the hospital to maintain the integrity of its audit process and protect patient and hospital information. To address these concerns, enhanced cybersecurity measures, including encryption and multi-factor authentication, are necessary to safeguard remote audit operations.

In addition, **internal auditors** expressed concerns over their **lack of training** with digital audit tools and virtual collaboration platforms. Many auditors are accustomed to traditional, on-site audit practices and have limited exposure to the **technology-based audit tools** required for remote auditing. This gap in knowledge and expertise creates barriers to the effective implementation of remote audits and underscores the need for **capacity-building programs** aimed at familiarizing auditors with new digital tools and methods.

In conclusion, while RSUD BLUD Solo Raya has a basic technological foundation in place, it is evident that the hospital is not fully prepared for a seamless transition to remote auditing. To ensure successful implementation, the hospital must prioritize investments in **cloud-based document management**, **cybersecurity measures**, and **training for internal auditors**. Addressing these gaps will enable the hospital to take full advantage of remote auditing, improving efficiency and compliance while safeguarding sensitive data.

Challenges in Conducting Remote Audits Compared to On-Site Audits

Remote auditing at RSUD BLUD Solo Raya presented significant operational challenges, primarily arising from the limitations of accessing physical documents and real-time financial activities. One of the main obstacles was **limited access to physical documents**, such as invoices, receipts, and contracts, which are essential for verifying financial transactions. Auditors were often forced to rely on **scanned or digital versions** of these records, which were not always readily available or complete. This reliance on electronic records sometimes resulted in incomplete or delayed verification, which impacted the accuracy and thoroughness of the audit process.

Communication barriers also emerged as a major challenge. The shift to virtual meetings and email correspondence

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created delays in obtaining responses from key personnel, making it difficult for auditors to address issues promptly. In traditional, on-site audits, auditors could directly interact with relevant staff and departments, enabling quicker problem resolution and clarification. However, the remote setting led to misunderstandings and delays, as some information was misinterpreted or overlooked during virtual communication, further slowing the audit process.

Additionally, **auditors struggled with validating real-time transactions** as they could not directly observe ongoing financial activities in the hospital. In on-site audits, auditors can monitor financial operations, ask questions on the spot, and ensure that processes are being followed correctly. This was not possible during remote audits, where auditors could only rely on **reporting and documentation**, making it difficult to verify transactions as they occurred or ensure that hospital financial procedures were being executed in real-time.

Another issue identified was **inconsistencies in compliance enforcement**. During on-site audits, auditors have the ability to provide immediate feedback and direct supervision, which encourages adherence to compliance standards. However, remote audits lacked this immediacy, as auditors could not offer the same level of direct oversight, resulting in **potential gaps in compliance enforcement**. This diminished the effectiveness of the audit, particularly in ensuring that hospital staff followed established financial controls and procedures.

In conclusion, the **challenges faced during remote auditing** at RSUD BLUD Solo Raya highlighted significant limitations, including difficulties in accessing documents, communication delays, and the inability to monitor real-time transactions directly. These obstacles suggest that a **hybrid auditing approach** may be more effective in overcoming these challenges. By combining **remote auditing techniques with periodic on-site verification**, the hospital could ensure that audits remain thorough, accurate, and aligned with compliance standards while taking advantage of the efficiency of remote methods.

Effectiveness of Internal Audit Operations in Remote Auditing vs. On-Site Auditing

The comparison between **remote audits** and **on-site audits** at RSUD BLUD Solo Raya reveals a clear contrast in their **efficiency** and effectiveness across various audit functions. On one hand, **remote audits** proved to be more efficient in certain areas, particularly in the **administrative processing** of audit tasks. Remote audits significantly reduced the need for travel, which allowed auditors to spend more time reviewing documentation and conducting digital assessments. This not only improved the speed of document review but also streamlined some of the more administrative tasks involved in the audit process. The time saved by eliminating travel and on-site logistics enabled auditors to handle larger volumes of data more quickly. However, while remote audits excelled in administrative efficiency, **on-site audits** maintained superiority in terms of **detecting irregularities**. Direct observation during on-site audits enabled auditors to witness firsthand how financial operations were conducted, providing immediate opportunities to identify discrepancies and anomalies that might have been missed during virtual assessments.

In terms of **audit scope**, there were notable differences between the two methods. Remote audits were predominantly confined to reviewing **financial records** and **digital documentation**. Auditors relied heavily on electronic files and virtual communication, which limited their ability to evaluate other important areas of the hospital's operations. In contrast, **on-site audits** allowed auditors to perform a broader evaluation of the hospital's processes, including compliance with **operational policies** and **internal controls**. The ability to observe day-to-day operations, interact with various departments, and assess physical records gave auditors a more comprehensive understanding of how financial systems were integrated with hospital practices. This broader scope of on-site auditing made it a more thorough approach, especially for ensuring that operational and regulatory compliance standards were being met.

A key challenge identified in remote audits was **accountability**. Auditors found it significantly harder to enforce accountability when conducting audits remotely. Many stakeholders were either slow to respond to inquiries or sometimes avoided direct engagement altogether. Without the immediacy of face-to-face interaction, it became difficult for auditors to address issues or hold individuals accountable for any lapses in procedure. **On-site audits**, on the other hand, provided a more direct avenue for ensuring accountability, as auditors could directly approach individuals, ask questions, and prompt immediate corrective actions if necessary.

When it came to **fraud detection**, the **on-site audit** method was far superior. The presence of auditors at the site enabled them to assess the financial activities and practices of staff in real-time, allowing them to identify signs of potential **fraud** or **financial mismanagement** as they occurred. **Remote audits** lacked the **real-time observation** capabilities of on-site audits, which made it more challenging to detect fraudulent behavior or financial irregularities. Without the ability to observe staff behavior and interact immediately with the data, remote audits were more reliant on document review, which could overlook subtle but significant discrepancies that might indicate fraud.

In conclusion, while remote auditing offered certain advantages in terms of efficiency, particularly in **documentation processing**, it remained limited in several key areas, such as fraud detection and **real-time compliance monitoring**. On-site audits, with their ability to provide direct oversight and comprehensive evaluations, were found to be more effective in these critical

areas. Given the strengths and weaknesses of both approaches, it is evident that a **hybrid auditing approach** that integrates both remote techniques and on-site verification would enhance the overall effectiveness of the internal audit process at RSUD BLUD Solo Raya. This combination would allow for **greater efficiency** while maintaining the **thoroughness and oversight** required for comprehensive audits.

Factors Influencing the Success or Failure of Remote Auditing

The success of **remote auditing** at RSUD BLUD Solo Raya was significantly influenced by a variety of factors, with **technological readiness** being one of the most critical. Despite the hospital having a basic **IT infrastructure**, its **digital document management system** was not fully optimized to support remote auditing effectively. Auditors and financial management teams faced challenges accessing **real-time data** remotely, as the system was not designed to facilitate smooth online access to all necessary documents. The lack of a robust, integrated digital platform created barriers in efficiently managing audit materials and monitoring financial transactions. Consequently, auditors had to rely on **scanned copies** or incomplete documentation, which hindered the effectiveness of the audit process. **Technological upgrades**, including the implementation of a more advanced **cloud-based system** and seamless integration with financial tools, would be crucial to improving the **data accessibility** needed for remote auditing.

Another significant factor contributing to the challenges faced in remote auditing was the **lack of regulatory clarity**. Internal auditors pointed out that there were no established guidelines or **regulatory frameworks** specifically addressing the procedures for conducting audits remotely. The absence of formalized protocols led to inconsistencies in audit practices, as auditors were unsure how to adapt traditional audit standards to a virtual environment. In the absence of clear **regulatory support**, audits became prone to variations in execution, and there was uncertainty around how best to ensure compliance with existing laws and standards. The introduction of specific guidelines or updated regulations that explicitly address the requirements for **remote audit practices** would help standardize the process and ensure better consistency and compliance across audits.

Moreover, **staff adaptation** played a significant role in the effectiveness of remote audits. Many hospital staff members were not well-versed in remote auditing processes, which led to delays in responding to audit requests and difficulties in fulfilling the information needs of auditors. The learning curve associated with new technologies, virtual platforms, and audit procedures contributed to inefficiencies and frustration among staff. As a result, some audit tasks took longer to complete due to miscommunication or delays in providing necessary data. To address this issue, it is essential to invest in **training programs** that familiarize hospital staff with remote audit practices and improve their responsiveness and efficiency when engaging in the audit process.

Finally, **top management support** was recognized as a key driver of remote audit success. The backing of hospital executives played a pivotal role in ensuring the availability of resources and **compliance** with audit requirements. Leadership's commitment to the remote auditing process was reflected in their efforts to prioritize resources, provide necessary technological support, and address any issues that arose during audits. Moreover, the encouragement from management contributed to fostering a culture of **cooperation** among various departments, ensuring that staff engaged with the audit process proactively. Without strong leadership, the remote audit process could have faced more resistance, delays, and non-compliance.

Designing an Ideal Remote Audit Model for BLUD Hospitals

Based on the findings from RSUD BLUD Solo Raya, the ideal remote audit model for **BLUD hospitals** should incorporate several critical components to enhance audit effectiveness, ensure compliance, and maintain operational efficiency. The first and most essential element is the **Integrated Digital Audit Platform**. This platform would be a **centralized, cloud-based system** where auditors can access real-time financial data, audit reports, and all supporting documents from any location. By leveraging **cloud technology**, the platform would facilitate seamless document management, real-time updates, and access to relevant information, making the audit process more efficient. In addition, enhanced **cybersecurity measures** are necessary to safeguard sensitive financial data, prevent unauthorized access, and ensure that patient and financial records remain confidential and protected from potential breaches. This would help mitigate the risks associated with remote auditing, ensuring that the digital tools and systems in place are secure and reliable.

The second component is the **Hybrid Audit Framework**, which is essential for balancing the advantages of remote auditing with the need for on-site verification. While remote audits can efficiently handle document verification and financial data analysis, they lack the **real-time observation** and **fraud detection capabilities** that come with on-site audits. A hybrid approach would integrate both methods by combining **remote document reviews** with **periodic on-site visits**. This would allow auditors to validate data in person, perform direct observations of hospital operations, and conduct interviews with relevant staff, ensuring more **accurate and comprehensive audits**. Additionally, a **risk-based auditing** approach should be implemented, where high-risk areas—such as departments with significant financial transactions or complex operations—receive more frequent and detailed audits. This would help prioritize resources and ensure that potential issues are identified and addressed promptly.

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Regulatory standardization is another key element in designing the ideal remote audit model. For remote auditing to be effective across all **BLUD hospitals**, clear **standard operating procedures (SOPs)** must be developed. These SOPs would guide the implementation of remote audit practices, ensuring **consistency** in procedures, expectations, and methodologies. Government support is also critical, as **legally binding frameworks** for remote audits would provide the necessary regulatory foundation. By establishing these legal guidelines, auditors can follow standardized practices across hospitals, reducing discrepancies and ensuring compliance with national regulations. Government policies that formally recognize and support **remote auditing** would also strengthen the credibility and legitimacy of this approach, encouraging its adoption by more hospitals.

Finally, **auditor capacity building** is essential to the success of any remote audit model. As remote auditing relies heavily on technology and digital tools, **auditors** must be adequately trained in **digital audit tools**, **data security**, and **remote communication protocols**. This training ensures that auditors are not only familiar with the necessary technology but also understand how to handle potential risks such as data breaches and system vulnerabilities. Regular **collaboration with external auditors** would also be beneficial, as sharing best practices and **improving audit methodologies** can help auditors stay up-to- date with the latest trends and technologies in the field. Additionally, fostering an environment of continuous learning and **peer support** would help improve the overall effectiveness and adaptability of the internal audit team.

Triangulation Results and Key Findings

Triangulation of data confirmed that RSUD BLUD Solo Raya faced significant operational and infrastructure challenges in adopting remote audits, especially at the onset of the pandemic. Despite the efficiency gains offered by remote audits—such as reduced travel and administrative delays—issues like limited technology, access to physical documents, and insufficient auditor training emerged. The lack of access to physical records slowed the audit process, while communication barriers from virtual meetings and emails caused delays and misunderstandings.

Before the Pandemic: The hospital relied on traditional, on-site audits with physical document checks and face-to-face coordination. While stable, the system lacked flexibility and the ability to integrate digital tools, limiting efficiency.

During the Pandemic: The rapid shift to remote audits revealed challenges in digital infrastructure, limited access to essential records, and a lack of auditor expertise in using digital platforms. These difficulties highlighted the hospital's unpreparedness for remote audits and the need for improved technology and training.

After the Pandemic: The hospital adopted a hybrid audit model combining remote and on-site audits. This model leveraged remote audits for document review and on-site audits for real-time fraud detection and compliance monitoring. However, significant technological upgrades and regular training were identified as essential for the success of the hybrid system.

Table 1 illustrates the dynamics of changes in each indicator of internal audit effectiveness based on the three time periods: before the pandemic, during the pandemic, and after the pandemic. The transition from traditional, on-site audits to remote audits during the pandemic revealed challenges related to digital infrastructure, auditor preparedness, and communication. Moving forward, the hospital aims to refine the hybrid audit model, combining the strengths of both methods while addressing the technological and training gaps that were identified during the pandemic.

Table 1 illustrates the dynamics of changes in each indicator of internal audit effectiveness

Effectiveness Indicator	Before the Pandemic	During the Pandemic	After the Pandemic
Audit Model	Traditional (On-site)	Rapid transition to remote audits, but limited	Hybrid (combination of on-site and remote audits)
Technology Infrastructure	Limited, reliant on manual and physical systems	Limited, unprepared to support remote audits	Requires technological upgrades to support hybrid audits
Access to Documents	Easy, with physical documents accessed directly	Difficult, dependent on digitization and remote access	Combination of digital and physical document access, more flexible
Audit Coordination	Face-to-face coordination that is direct and efficient	Slower coordination, with delays due to virtual meetings	More efficient coordination with a mix of virtual and in-person meetings
Auditor Skills	Experience with manual procedures, familiar with systems	Limited skills with the use of digital platforms	Skills enhanced through training and technology improvements
Audit Process Efficiency	Stable, with consistent timing but lacking flexibility	Delayed, influenced by infrastructure limitations and tech knowledge	More efficient with the use of technology and hybrid systems
Fraud Detection & Compliance	More effective with direct physical checks	Less effective, difficulty with physical access and communication delays	More effective detection with a combination of physical and remote audit techniques
Monitoring &	Direct and more in-depth	Limited, difficult to	Better monitoring with a

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Effectiveness Indicator	Before the Pandemic	During the Pandemic	After the Pandemic
Supervision	monitoring	supervise directly	combination of both remote and on-site methods

This table illustrates the dynamic changes in each indicator of internal audit effectiveness in the hospital, occurring as time and circumstances evolved during and after the pandemic.

DISCUSSION AND ANALYSIS

The dynamics of internal audit effectiveness at RSUD ABC Solo Raya demonstrate significant transformations across various indicators, influenced by the pandemic and subsequent changes in audit practices. Before the pandemic, audits were primarily conducted on-site, relying heavily on manual and physical systems for document access and audit coordination. This model, while stable and effective, lacked flexibility, which became a major limitation as the world transitioned to remote operations due to COVID-19. According to the Government Regulation No. 60/2008 on Government Internal Control System (SPIP), the traditional approach aligned with the control and oversight functions but was not adaptable enough to quickly respond to crises like the pandemic.

During the pandemic, the hospital rapidly transitioned to remote audits, though this shift exposed several weaknesses, particularly in terms of technological infrastructure and auditor skills. The effectiveness of this transition was hindered by the limited technology available, resulting in slower coordination and less efficient processes. The difficulties faced in accessing physical documents, and delays in communication were key challenges during this phase. This highlights a gap between regulatory expectations for continuous compliance and the hospital's ability to leverage technology effectively, as per the Minister of Health Regulation No. 36/2015, which stresses the need for modern management tools to ensure financial integrity and accountability.

The post-pandemic period marked a shift towards a hybrid audit model, combining the benefits of both traditional and remote audits. This approach allowed RSUD ABC Solo Raya to improve audit efficiency by balancing face-to-face and virtual coordination, as well as document access. The hybrid model also provided a more adaptable structure, allowing auditors to capitalize on technological advancements while still retaining the strengths of traditional on-site audits. This aligns with the principles set out in the Institute of Internal Auditors (IIA) guidelines, which emphasize the importance of adaptability and continuous improvement in audit practices to maintain integrity and efficiency.

The integration of remote auditing techniques post-pandemic reflects the hospital's responsiveness to the growing need for technological upgrades and auditor training. With the support of frameworks such as Law No. 44 of 2009 on Hospitals and other financial management regulations, the hospital is better equipped to meet audit requirements while improving fraud detection and compliance monitoring. Moreover, the hybrid model's combination of digital tools and physical audits enhances the oversight function, ensuring a more comprehensive and efficient audit process. This transformation is in line with the findings of Sarens & De Beelde (2006) and Arena & Azzone (2009), who highlight the critical role of internal audit in governance and risk management, which is especially important in healthcare settings.

CONCLUSION AND RECOMMENDATIONS

Based on the triangulation of data, the study concludes that while remote audits provide notable efficiency in administrative processes, the challenges—such as **limited access to physical documents**, **communication barriers**, and **insufficient fraud detection** capabilities—highlight the need for significant improvements in the remote auditing process. The adoption of a **hybrid audit model** seems to be the most feasible solution, combining **remote audits** for document reviews with **on-site audits** for real-time interaction and fraud detection. To facilitate this transition, **technological enhancements**, such as the integration of a **centralized digital audit platform**, **improved cybersecurity measures**, and **auditor training programs**, are essential. Additionally, **regulatory clarity** and the establishment of **standard operating procedures (SOPs)** for remote audits will ensure consistency and reliability in the auditing process.

Table 2: Summary Audit Before, During, and After the Pandemic

Audit Period	Challenges	Operational Changes	Key Findings
Before the Pandemic	- Limited digital infrastructure	- Traditional, on-site audits with manual document management	- Standard auditing procedures in place, but limited technological integration.
During the Pandemic	- Digital infrastructure strain	- Remote audits implemented in response to COVID-19	- Difficulty accessing physical documents and communication barriers. Limited remote audit tools.

Audit Period	Challenges	Operational Changes	Key Findings
		restrictions	
After the Pandemic	- Need for continuous remote audit integration	- Hybrid audit approach (remote and on-site) being explored	- Increased efficiency in administrative processing, but challenges in fraud detection and real-time monitoring. Need for better training and digital tools.

This study's findings underscore the need for **continuous technological adaptation**, comprehensive **regulatory frameworks**, and **capacity building** for auditors. By embracing a **hybrid approach** and investing in **digital tools** and **training programs**, RSUD BLUD Solo Raya and other BLUD hospitals can improve their audit systems, ultimately enhancing **financial transparency**, **compliance**, and **accountability** across the healthcare sector in Indonesia. The lessons learned during the pandemic offer invaluable insights for creating a sustainable and effective auditing framework in the future.

CONCLUSION

This study provides significant insights into the implementation of remote audits at RSUD BLUD Solo Raya, focusing on its effectiveness during the COVID-19 pandemic. The research demonstrates that while remote audits offer administrative benefits—such as reduced travel time and faster document processing—they are also faced with considerable challenges. These include difficulties in accessing physical documents, communication barriers, and limited technological infrastructure. Furthermore, the absence of real-time fraud detection mechanisms and challenges in enforcing accountability were identified as major drawbacks of remote audits compared to on-site audits.

The findings of this study highlight the importance of adopting a **hybrid audit model**, which integrates both remote and on-site audit techniques. Such an approach combines the efficiency of remote audits for document verification with the thoroughness of on-site audits for fraud detection and compliance monitoring. In addition, it is essential to focus on enhancing **digital infrastructure**, **cybersecurity**, **auditor training**, and the creation of **standard operating procedures (SOPs)** for remote auditing. These measures will ensure that the remote audit process remains effective, secure, and efficient in the long term.

LIMITATIONS

Several limitations were encountered during the research that should be acknowledged. Firstly, this study was conducted in a single hospital (RSUD BLUD Solo Raya), which may limit the generalizability of the findings to other hospitals in Indonesia. The experiences of other hospitals, particularly in different geographical areas, might differ due to variations in resources, infrastructure, and institutional practices. Secondly, the research was conducted during a period of rapid technological change, meaning that the digital tools and infrastructure at the time may have evolved, potentially affecting the relevance of the findings in the future. Thirdly, the research relied on qualitative data, including interviews and focus group discussions, which, while valuable, may be subject to biases and may not capture all perspectives from different departments within the hospital. Finally, the research was limited by time constraints and focused on short-term challenges and solutions rather than long-term trends and developments.

RECOMMENDATIONS

Based on the research findings, several recommendations are proposed for enhancing the implementation of remote audits in RSUD BLUD Solo Raya and other BLUD hospitals. First, there is a critical need to **invest in digital infrastructure**. Hospitals should prioritize the development of **cloud-based systems**, **digital document management platforms**, and **cybersecurity measures** to support effective remote audits. These systems will facilitate access to real-time financial data and improve the efficiency of audits.

Second, a **hybrid audit approach** is recommended. This approach would combine the speed and efficiency of remote audits with the thoroughness of on-site audits. Regular on-site visits should be conducted periodically to supplement remote auditing and address limitations such as fraud detection and real-time compliance monitoring.

Third, the development of **clear regulatory frameworks** for remote audits is essential. The government should establish policies and guidelines that define the standards and procedures for conducting remote audits in the healthcare sector. These frameworks will ensure consistency and compliance across BLUD hospitals.

Additionally, hospitals should focus on **enhancing auditor training**. Training programs should be implemented to equip internal auditors with the necessary skills in using **digital tools**, understanding **remote communication protocols**, and addressing **cybersecurity concerns**. These training initiatives will help auditors effectively manage remote audits and reduce potential risks associated with them.

Finally, **top management support** is vital for the success of remote audits. Hospital leadership must ensure adequate resources are allocated for the implementation of remote audits and provide continuous support for technology upgrades. They

must also foster a culture of compliance and transparency to ensure the success of audit processes.

In conclusion, while remote auditing has the potential to increase efficiency, overcoming the current challenges will require ongoing improvements in infrastructure, training, and regulatory practices. By adopting a hybrid model and addressing these key areas, hospitals can improve their financial accountability, operational transparency, and overall effectiveness in monitoring compliance.

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