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Internal Business Process Efficiency as a Driver of Financial Performance and Service Sustainability: A Balanced Scorecard Multi-Case Study of Indonesian Hospitals in the JKN Era

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ABSTRACT: The implementation of Indonesia's National Health Insurance (Jaminan Kesehatan Nasional/JKN) through the INA-CBGs prospective payment scheme has restructured hospital financial dynamics, with JKN revenue growing from 12.74% to 50.51% of total income while operating cost growth outpaces revenue growth, compressing operating profit. This study examines the internal business process efficiency strategy and its contribution to financial performance and service sustainability in three privately managed hospitals in East Kalimantan, Indonesia, using the Balanced Scorecard (BSC) internal business process perspective as the analytical framework. This article is part of a broader four-perspective BSC study; the full study integrates 16 strategic objectives and 41 KPIs. Employing a qualitative multi-case study design, data were collected through semi-structured interviews with 15 key informants and document review across RS X (Type C, 100 beds), RS Y (Type D, 60 beds), and RS Z (Type D Special, 38 beds). Thematic analysis identified four internal business process sub-themes: (1) digital innovation and system integration (SS9), (2) JKN claims management and pending mitigation (SS10), (3) clinical standard-based quality and cost control (SS11), and (4) governance and cross-unit collaboration (SS12)—supported by eight KPIs (I1–I8). Each hospital develops a distinct, contingency-shaped efficiency approach. The BSC strategy map demonstrates that these internal process improvements form a direct causal chain to financial outcomes: effective claims management reduces pending claim losses; clinical pathway compliance controls per-episode costs relative to INA-CBGs tariffs; and integrated systems accelerate revenue recovery. Findings affirm Contingency Theory and contribute a contextually grounded framework for hospital internal process governance under prospective payment systems.
KEYWORDS: *Balanced Scorecard; Internal Business Process; Hospital Efficiency; JKN; INA-CBGs; Financial Performance; Service Sustainability; Qualitative Case Study*

I. INTRODUCTION

Indonesian hospitals face increasing structural pressure on financial performance since the implementation of the Jaminan Kesehatan Nasional (JKN) programme on 1 January 2014 (Irwandy & Sjaaf, 2018). The shift from fee-for-service to a prospective payment system through the Indonesia Case-Based Groups (INA-CBGs) mechanism means hospitals receive predetermined fixed tariffs regardless of actual service costs, transferring financial risk directly to providers (Noviardi, 2020; Prabawati & Budiantara, 2023). This structural change demands that hospitals develop efficiency strategies that are not merely cost-cutting measures but comprehensive, adaptive approaches that simultaneously maintain service quality and sustain financial performance (Rabiulyati & Nurwahyuni, 2023; Martínez et al., 2024).

The research context involves three privately managed hospitals in East Kalimantan, Indonesia, RS X (Type C General Hospital, 100 beds, Bontang), RS Y (Type D General Hospital, 60 beds, Sangatta Utara), and RS Z (Type D Special Mother and Child Hospital, 38 beds, Balikpapan), operating under a single holding entity established in 2011. Financial data from these hospitals document the structural challenge clearly: JKN revenue grew from 12.74% of total income in 2015 to 50.51% in 2023, creating acute dependence on fixed tariff reimbursement. Meanwhile, total revenue grew 127.5% from 2015 to 2024 while operating costs grew 132.1%, resulting in operating profit declining from IDR 8.746 billion to IDR 2.426 billion. Compounding this, pending JKN claims surged from 679 total cases in 2023 to 10,014 cases in 2024, a direct consequence of BPJS Kesehatan's intensified verification procedures (Arlinta, 2025), with each unresolved claim representing deferred revenue that further strains cash flow.

These financial pressures make the internal business process perspective of the Balanced Scorecard (BSC) particularly salient. Kaplan and Norton (1992) propose that the BSC integrates four perspectives, financial, customer, internal business processes, and learning and growth, through a causal chain: process efficiency drives customer value, which drives financial outcomes. In the JKN context, this means that improvements to internal processes (claims management, clinical pathway compliance, digital integration, cross-unit coordination) translate directly into the financial indicators that determine service sustainability: reduced BOPO ratio, improved current ratio, faster BPJS receivables recovery, and higher EBITDA margin (Betto et al., 2022; Cleven et al., 2016).

This article presents findings from the internal business process perspective of a broader four-perspective BSC study on hospital efficiency strategy in the JKN era. The full research integrates 16 strategic objectives (SS1–SS16) and 41 KPIs across all four BSC perspectives. This article focuses exclusively on the four internal business process strategic objectives (SS9–SS12) and eight associated KPIs (I1–I8), with particular attention to their causal pathway toward financial performance (SS1–SS4) and service sustainability. The research question is: How do internal business process efficiency strategies manifest across hospitals with different organisational characteristics under JKN, and through what causal mechanisms do they contribute to financial performance and service sustainability?

II. THEORETICAL FRAMEWORK

2.1 BSC Internal Business Process Perspective and Financial Causal Logic

The Balanced Scorecard (BSC) by Kaplan and Norton (1992) reconceptualises organisational performance measurement by integrating financial and non-financial indicators through a cause-and-effect chain. The internal business process perspective evaluates the efficiency and effectiveness of core organisational processes, positioned causally between the learning and growth perspective (which builds organisational capabilities) and the customer perspective (which reflects service value delivery). The financial perspective is the ultimate outcome layer, receiving the aggregated effect of improvements across all three preceding perspectives (Behrouzi et al., 2014; Inamdar et al., 2022).

In a hospital operating under prospective payment, the internal business process perspective governs three critical process domains with direct financial implications: (1) claims management processes, accuracy and speed of INA-CBGs claim submission directly determines revenue recovery and cash flow; (2) clinical process standardisation, clinical pathway compliance controls per-episode costs relative to fixed tariffs; and (3) digital and administrative integration, system efficiency determines both the cost of service delivery and the completeness of documentation required for successful claims (Bohm et al., 2021; Tawse & Tabesh, 2023). Suboptimal performance in any of these domains generates direct financial losses: pending claims defer revenue, cost overruns create negative tariff gaps, and documentation failures trigger claim rejections.

2.2 Contingency Theory: Why Internal Process Strategy Cannot Be Uniform

Contingency Theory posits that organisational effectiveness depends on the alignment between internal governance structures, technology readiness, and external environmental dynamics (Suprapto & Karsa, n.d.). Applied to hospital internal process strategy under JKN, this means that hospitals facing different operational pressures, service complexity, patient volume, system maturity, resource capacity, must develop differentiated internal process approaches rather than uniform protocols. The Contingency Theory lens is essential for understanding why RS X, RS Y, and RS Z, despite operating under the same holding entity and regulatory framework, develop distinct internal process efficiency strategies that are each appropriately adapted to their specific context (Sari et al., 2024).

2.3 JKN-INA-CBGs: The Financial Pressure on Internal Processes

The INA-CBGs prospective payment system creates a structural financial risk for hospitals whose internal processes cannot efficiently control per-episode costs and successfully submit claims. Pending claims, arising from documentation errors, coding inaccuracies, medical record incompleteness, and verification interpretation differences (Syahira et al., 2024), directly erode three critical financial KPIs: the current ratio (liquidity), average BPJS receivable days, and the pending claim ratio. These are precisely the KPIs the study hospitals track under SS2 (Liquidity and Cash Flow Management) of the financial BSC perspective. Internal process improvements in claims management (SS10) are therefore not only operational improvements but direct financial interventions.

III. METHODOLOGY

This study employs a qualitative approach with a multi-case study design (Yin, 2018; Creswell & Creswell, 2018), examining three hospitals as units of analysis. The multi-case design enables analytical generalisation and cross-case comparison, appropriate for examining how internal process efficiency strategies

vary with organisational contingency factors (Moleong, 2019). Data collection involved: (1) semi-structured in-depth interviews with 15 key informants across three hospitals, Directors (M0), Finance Managers (M1), Service Managers (M2), Operational Managers (M3, primary informants for the internal business process perspective), and HR Managers (M4), and (2) document review of operational reports, INA-CBGs claim records, financial statements, and internal procedures.

Thematic analysis followed three coding stages: open coding (identifying key statements from informants), axial coding (grouping codes into conceptual categories), and selective coding (integrating categories into strategic themes mapped to the BSC framework). Themes for the internal business process perspective were validated through triangulation across interview data, document evidence, and member checking (Lincoln & Guba, 1985). The analysis produced four sub-themes, four strategic objectives (SS9–SS12), and eight KPIs (I1–I8). The financial contribution of each internal process objective was traced through the BSC causal chain to financial perspective KPIs (F1–F13).

IV. RESULTS AND DISCUSSION

4.1 Financial Context: Why Internal Processes Are the Critical Lever

Before examining the internal business process findings, it is important to contextualise the financial performance challenge that makes these findings consequential. Table 1 presents the revenue structure shift documented across the study hospitals, demonstrating the growing financial dependence on JKN fixed tariff reimbursement.

Table 1. JKN and Non-JKN Revenue Composition 2015–2023 (IDR Million)

Year	Non-JKN Revenue	% Non-JKN	JKN Revenue	% JKN	Total
2015	87,654	87.26%	12,796	12.74%	100,450
2016	74,148	77.18%	21,922	22.82%	96,070
2017	73,431	73.79%	26,084	26.21%	99,515
2018	78,350	69.86%	33,810	30.14%	112,160
2019	87,524	63.65%	49,989	36.35%	137,513
2020	123,568	70.53%	51,626	29.47%	175,194
2021	157,323	56.02%	123,511	43.98%	280,834
2022	108,442	48.23%	116,387	51.77%	224,829
2023	119,502	49.49%	121,960	50.51%	241,462

Source: Hospital Financial Data, 2026

With JKN revenue now constituting over 50% of total income, up from 12.74% in 2015, the hospitals are fundamentally dependent on successful INA-CBGs claim reimbursement. Table 2 shows that despite revenue growth of 127.5%, operating costs grew at 132.1%, compressing operating profit from IDR 8.746 billion to IDR 2.426 billion over the same period.

Table 2. Revenue vs. Operating Cost Comparison 2015–2024 (IDR Million)

Indicator	Year 2015	Year 2024	Change	Growth %
Total Revenue	196,009	249,847	+53,838	127.5%
Operating Costs	187,263	247,421	+60,158	132.1%
Operating Profit	8,746	2,426	(6,320)	27.7%
JKN Revenue	12,796	99,538	+86,741	-
JKN % of Total	6.5%	39.8%	-	-

Source: Hospital Financial Data, 2026

A further operational financial risk is illustrated by Table 3, showing the dramatic increase in pending JKN claims, direct evidence of internal process failures in documentation and coding that defer or lose reimbursement revenue.

Table 3. Pending JKN Claims 2023 vs. 2024

Period	2023 Outpatient	2023 Inpatient	2024 Outpatient	2024 Inpatient
January	380	5	2	6
February	34	9	4	12
March	8	18	5	7
April	11	11	6	4
TOTAL (year)	528	151	8,879	1,135

Source: Hospital Financial Data, 2026

4.2 Thematic Findings: Internal Business Process Efficiency Strategy

Thematic analysis identified the overarching theme for the internal business process perspective as "Tata Kelola Pelayanan Berbasis Sistem dan Proses Integrasi" (Governance of Service Delivery Through Systems Integration and Process Integration), comprising four sub-themes as presented in Table 4.

Table 4. Internal Business Process Perspective: Coding Structure

Code	Representative Quotation (translated)	Sub-Theme
IBP 01–02	"The hospital system is bridged with e-Claim BPJS and supported by electronic medical records." (M3, RS X)	1. Digital Innovation and System Integration (SS9)
IBP 03–04	"Coordination among DPJP, medical records, and casemix is needed so that claims do not become pending." (M3, RS Y)	2. Claims Management and Pending Mitigation (SS10)
IBP 05–06	"Clinical pathways are reviewed and compared against INA-CBGs tariffs to maintain quality and cost." (M3, RS X)	3. Quality and Cost Control via Clinical Standards (SS11)
IBP 07–08	"Clinical meetings and cross-unit communication resolve operational challenges." (M3, RS Z)	4. Governance and Cross-Unit Collaboration (SS12)

Source: Primary data, 2026

4.2.1 Digital Innovation and System Integration (SS9)

All three hospitals are developing integrated information systems, with implementation maturity reflecting their organisational contingency conditions. RS X prioritises the Enzim system as an instrument integrating service data and BPJS claims processing: "The Enzim system answers the company's needs and fulfils BPJS requirements for the claims process" (M3, RS X). This integration directly reduces administrative errors that generate pending claims. RS Y emphasises digital medical records to accelerate document verification: "Digital medical records help speed up document verification by the verification team" (M3, RS Y). RS Z focuses on data accessibility: "Through e-medical records, all inputted information can be accessed by authorised personnel" (M3, RS Z). KPIs: I1, SIMRS–BPJS bridging rate ≥ 90%; I2, Electronic Medical Record implementation ≥ 90%.

4.2.2 Claims Management Effectiveness and Pending Mitigation (SS10)

This is the most financially consequential internal process sub-theme, directly linked to the pending claim crisis documented in Table 3. Each hospital has developed a distinct mitigation approach reflecting its contingency characteristics. RS X enforces administrative process discipline in the medical records-to-casemix claims workflow: "In the MR unit, there is a coding process. After that, the files are transferred to the Casemix department" (M3, RS X). RS Y strengthens the internal verification function through a dedicated casemix physician: "The Casemix unit (internal verifier physician) is the primary person responsible for monitoring pending claims" (M3, RS Y). RS Z adapts to BPJS Kesehatan verifier directives: "We follow the directions of the BPJS Kesehatan verifier, even though this sometimes reduces the claim value" (M3, RS Z). KPIs: I3, clean and complete claim rate ≥ 95%; I4, pending claim ratio ≤ 5%.

4.2.3 Quality and Cost Control via Clinical Standards (SS11)

Clinical standard-based process control is the mechanism through which hospitals prevent per-episode costs from exceeding INA-CBGs tariff reimbursement. RS X conducts case-by-case clinical pathway review benchmarked against INA-CBGs tariffs: "We review each clinical pathway case, comparing it with the INA-CBGs tariff" (M3, RS X). This practice ensures that clinical decisions align with the reimbursement structure, directly protecting the financial KPI of unit cost ≤ INA-CBGs standard (I6). RS Y adopts unit cost calculation as the basis for cost control: "Cost control is based on unit cost calculations" (M3, RS Y). RS Z manages patient flow to reduce staffing and consumable costs: "Patient flow management is used to reduce staff numbers and disposable materials" (M3, RS Z). KPIs: I5, SPO/CP compliance rate ≥ 95%; I6, service unit cost ≤ INA-CBGs tariff standard.

4.2.4 Governance and Cross-Unit Collaboration (SS12)

Cross-unit coordination ensures that internal process improvements propagate consistently across clinical, administrative, and financial units. RS X institutionalises formal clinical meetings twice weekly, chaired by the director: "Clinical meetings are held twice a week, chaired by the director and managers" (M3, RS X). RS Y integrates information systems across units to eliminate administrative duplication: "Most service units are integrated; data does not need to be entered repeatedly" (M3, RS Y). RS Z employs flexible multi-channel cross-unit communication: "Cross-unit communication is optimised through group messaging and cross-unit meetings" (M3, RS Z). KPIs: I7, clinical meeting frequency ≥ 2 times/month; I8, cross-unit HR productivity improvement.

4.3 Cross-Hospital Comparative Analysis of Internal Process Efficiency

Table 5 presents the cross-hospital comparative analysis, demonstrating how internal process efficiency strategies are shaped by each hospital's contingency characteristics, consistent with Contingency Theory.

Table 5. Comparative Analysis of Internal Business Process Efficiency Strategies

Hospital	Organisational Characteristics	Dominant JKN Pressure	Efficiency Strategy	Strategic Meaning
RS X (Type C)	High administrative complexity; high service integration requirement	Risk of claim delays and INA-CBGs documentation discrepancies	System integration and process standardisation (Enzim, ERM, CP review)	Efficiency through governance systems and standardised internal processes
RS Y (Type D)	High-volume JKN patient dependency; high coordination demand	Maintaining service flow continuity and minimising pending claims	Cross-unit coordination strengthening and internal verification function	Efficiency through operational process effectiveness
RS Z (Type D Special)	Information system integration not yet fully optimal; limited resources	Adaptation to evolving BPJS Kesehatan policy and operational changes	Flexible coordination and adaptive cross-unit communication	Efficiency through organisational adaptive capacity

Source: Primary data processed, 2026

4.4 Strategic Objectives and KPIs: Internal Business Process Perspective

The four sub-themes generate four strategic objectives (SS9–SS12) and eight KPIs (I1–I8), presented in Table 6, derived directly from thematic findings and aligned with the BSC strategy map. These are part of the full set of 16 strategic objectives and 41 KPIs from the broader four-perspective study.

Table 6. Strategic Objectives and KPIs: Internal Business Process Perspective

Strategic Objective	SS	KPI Code	Key Performance Indicator
Digital Innovation and System Integration	SS9	I1	SIMRS–BPJS bridging rate ≥ 90%
		I2	Electronic Medical Record implementation ≥ 90%
Claims Management and Pending Mitigation	SS10	I3	Clean and complete claim rate ≥ 95%
		I4	Pending claim ratio ≤ 5%
Quality & Cost Control via Clinical Standards	SS11	I5	SPO/Clinical Pathway compliance ≥ 95%
		I6	Service unit cost ≤ INA-CBGs tariff standard
Governance and Cross-Unit Collaboration	SS12	I7	Clinical meeting frequency ≥ 2×/month
		I8	Cross-unit HR productivity improvement (trend)

Source: Primary data processed, 2026

4.5 Causal Pathway: From Internal Business Process to Financial Performance and Service Sustainability

The BSC framework establishes that internal business process performance does not directly produce financial outcomes in isolation; rather, it operates through a structured causal chain in which process improvements first enhance customer-facing outcomes, which in turn drive financial performance and service sustainability (Kaplan & Norton, 1992; Behrouzi et al., 2014). Table 7 presents this causal pathway systematically, tracing how each internal business process strategic objective (SS9–SS12) connects to specific customer perspective outcomes (SS5–SS8) and ultimately to financial performance indicators (SS1–SS4).

Table 7. Causal Pathway: Internal Business Process to Financial Performance

IBP Strategic Objective	SS	Customer Outcome Enabled	SS	Financial Performance Result	SS / KPI
Digital Innovation and System Integration	SS9	Optimisation of service accessibility and digital patient flow	SS6	Accelerated BPJS claim processing reduces average receivable days; improved digital access supports utilisation and revenue stability	SS2 / F6
Claims Management and	SS10	Improved patient satisfaction through	SS7	Reduction in pending claim ratio directly recovers deferred	SS2 / F7; SS1

IBP Strategic Objective	SS	Customer Outcome Enabled	SS	Financial Performance Result	SS / KPI
Pending Claims Mitigation		operational continuity and resource availability		JKN revenue and strengthens cash flow and liquidity	/ F1
Quality and Cost Control via Clinical Standards	SS11	Integrated quality and cost control: clinical efficiency without compromising service standards	SS5	Per-episode service cost aligned with INA-CBGs tariff reduces cost gap; formulary and pathway compliance improves BOPO ratio	SS1 / F1, F2, F3; SS4 / F10
Governance and Cross-Unit Collaboration	SS12	Effective complaint management and patient communication, strengthening trust and loyalty	SS8	Patient trust sustains utilisation volume and supports non-JKN revenue growth and diversification	SS3 / F8, F9

Source: Developed from strategy map analysis, Maryana (2026); Kaplan & Norton (1992).

The causal chain in Table 7 reflects the BSC cause-and-effect logic as articulated in the study's strategy map (Maryana, 2026). At the first level, SS9 (digital system integration) enables smoother patient access and claim processing flows, feeding into SS6 (accessibility and digital innovation). This in turn supports SS2 (liquidity and cash flow management), specifically the KPI of average BPJS receivable days ≤ 60 (F6), by accelerating the administrative cycle from service delivery to claim settlement.

At the second level, SS10 (claims management and pending mitigation) most directly affects financial sustainability. The 14.7-fold surge in outpatient pending claims—from 528 cases (2023) to 8,879 (2024), as documented in Table 3 represents deferred JKN revenue that erodes both the current ratio (F5) and the pending claim ratio (F7). Improvements in internal verification, coding accuracy, and documentation completeness translate directly into the financial KPI of claim recovery rate ≥ 95% (F11) and pending claim ratio ≤ 5% (F7), thereby strengthening SS2 (liquidity and cash flow).

At the third level, SS11 (clinical standard-based quality and cost control) addresses the structural cost-tariff gap under INA-CBGs. Clinical pathway compliance reviewed against each diagnosis group's tariff, as practiced at RS X, controls the cost of service delivery within the reimbursement envelope. This practice simultaneously supports SS5 (integrated quality and cost control from the customer perspective) and the financial KPIs of BOPO ratio ≤ 95% (F1), clinical pathway compliance ≥ 95% (F2), and pharmacy and consumables cost ≤ INA-CBGs standard (F3), contributing directly to SS1 (operational cost control and efficiency).

At the fourth level, SS12 (governance and cross-unit collaboration) strengthens patient communication responsiveness and complaint resolution, building the patient trust captured in SS8. This trust sustains consistent patient return rates, particularly for chronic JKN patients, and supports non-JKN revenue development, connecting to SS3 (revenue optimisation and diversification), with KPIs of non-JKN revenue proportion ≥ 40% (F8) and flagship service revenue growth ≥ 10% per year (F9). Across all four causal pathways, SS4 (performance monitoring and sustainability) serves as the integrating financial oversight mechanism, with EBITDA margin ≥ 8% (F10), BTO ≥ national standard (F12), and ALOS ≤ INA-CBGs standard (F13) providing consolidated benchmarks for long-term service sustainability.

Taken together, the causal pathway analysis confirms that no single internal process objective alone determines financial sustainability; rather, it is the integrated performance of all four objectives, functioning as an interconnected system, that builds the operational foundation for financial viability under Indonesia's JKN prospective payment environment.

4.6 Discussion: Theoretical and Practical Implications

Three theoretical and practical implications emerge from the findings. First, Contingency Theory is affirmed: internal process efficiency strategies cannot be standardised across hospitals. RS X's integration-intensive approach reflects high system maturity and service complexity; RS Y's coordination-centric approach reflects high JKN volume pressure; RS Z's adaptive flexibility reflects system integration limitations. This is consistent with Betto et al. (2022), who emphasise that BSC implementation in hospitals must accommodate organisational context and operational readiness. The implication for hospital management is that internal process improvement programmes must be preceded by an honest assessment of each hospital's dominant contingency constraint, rather than applying a single protocol universally.

Second, the pending claims data (Table 3) provides empirical grounding for SS10 (claims management) as the highest-priority internal process objective. The 14.7-fold increase in outpatient pending claims from 2023 to 2024 directly correlates with the financial pressure documented in Table 2 (declining operating profit).

Strengthening internal verification, coding accuracy, and BPJS alignment, as practiced differently by each hospital, constitutes a direct financial intervention. This finding extends the work of Syahira et al. (2024) and Imani et al. (2022) by quantifying the specific financial consequences of claims process failures under a multi-hospital setting.

Third, the clinical pathway review practice at RS X (SS11), benchmarking each case directly against the corresponding INA-CBGs tariff, represents a replicable, high-impact internal process governance model applicable across Indonesian hospital contexts. Ramayani et al. (2024) confirm that clinical pathway compliance is critical for balancing cost efficiency and service quality under INA-CBGs. This practice simultaneously drives the financial KPI (unit cost ≤ tariff standard, F6) and the customer KPI (integrated quality and cost control, SS5), demonstrating the integrated causal logic of the BSC across perspectives.

V. CONCLUSION

This study demonstrates that internal business process efficiency is the primary operational driver of financial performance and service sustainability for hospitals operating under Indonesia's JKN prospective payment framework. The BSC internal business process perspective, operationalised through four strategic objectives (SS9–SS12) and eight KPIs (I1–I8), provides a structured, measurable framework for governing the processes that determine whether hospitals can sustain viable financial performance under fixed INA-CBGs tariffs.

The four strategic objectives represent a hierarchy of process efficiency: digital system integration (SS9) creates the infrastructure for accurate data and claims processing; claims management (SS10) directly controls revenue recovery and cash flow; clinical standard compliance (SS11) governs per-episode cost relative to tariff; and cross-unit governance (SS12) ensures that these improvements operate coherently across the organisation. Through the BSC causal chain, improvements in SS9–SS12 translate into customer perspective outcomes (SS5–SS8), which in turn drive financial performance (SS1–SS4, including BOPO ratio, current ratio, EBITDA margin, and claim recovery rate).

A critical empirical finding is that internal process strategies must be differentiated by organisational contingency characteristics. Hospitals cannot adopt uniform internal process protocols; they must diagnose their dominant operational pressure, system complexity, volume, or resource limitation, and adapt accordingly. The dramatic 2023–2024 surge in pending claims (from 679 to 10,014 cases) underlines the urgency of this agenda: each unresolved pending claim is deferred revenue that directly erodes the financial sustainability essential for continuing healthcare service delivery. Future research should examine the longitudinal financial outcomes of BSC-guided internal process improvements and extend the framework to public hospital contexts.

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REFERENCES

[1] Arlinta, D. (2025, February 4). Klaim Tertunda BPJS Kesehatan Capai Rp 5 Triliun, Layanan Publik Jangan Terdampak. Kompas.

[2] Behrouzi, F., Shaharoun, A. M., & Ma'Aram, A. (2014). Applications of the balanced scorecard for strategic management and performance measurement in the health sector. *Australian Health Review*, 38(2), 208–217.

[3] Betto, F., Sardi, A., Garengo, P., & Sorano, E. (2022). The Evolution of Balanced Scorecard in Healthcare: A Systematic Review. *International Journal of Environmental Research and Public Health*, 19(16).

[4] Bohm, V., Lacaille, D., Spencer, N., & Barber, C. E. H. (2021). Scoping review of balanced scorecards for use in healthcare settings. *BMJ Open Quality*, 10(3).

[5] Cleven, A., Mettler, T., Rohner, P., & Winter, R. (2016). Healthcare quality innovation and performance through process orientation. *Technological Forecasting and Social Change*, 113, 386–395.

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

[7] Dubas, J., et al. (2022). The Association Between Hospital Financial Performance and the Quality of Care. *International Journal of Health Policy and Management*, 11(12), 2816–2828.

[8] Imani, A., Alibabayee, R., Golestani, M., & Dalal, K. (2022). Key Indicators Affecting Hospital Efficiency: A Systematic Review. *Frontiers in Public Health*, 10.

[9] Imansyah, F., Sjaaf, A. C., Nadjib, M., & Hartini, R. (2025). Contribution of National Health Insurance Patient Revenue to Financial Performance. *Kesmas: Jurnal Kesehatan Masyarakat Nasional*, 20(5), 37–46.
[10] Inamdar, N., Kaplan, R. S., & Bower, M. (2022). Applying the Balanced Scorecard in Healthcare Provider Organizations. *Journal of Healthcare Management*, 47(3).
[11] Irwandy, I., & Sjaaf, A. C. (2018). Dampak Kebijakan JKN terhadap Efisiensi Rumah Sakit. *Media Kesehatan Masyarakat Indonesia*, 14(4), 360.
[12] Kaplan, R. S., & Norton, D. P. (1992). *The Balanced Scorecard – Measures that Drive Performance*. Harvard Business Review.
[13] Lestari, W., Trisnantoro, L., & Andayani, N. L. P. E. P. (2021). Gambaran Kinerja Rumah Sakit Sebelum dan Sesudah Era JKN. *Jurnal Manajemen Pelayanan Kesehatan*, 24(3).
[14] Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. SAGE Publications.
[15] Martínez, M. A. S., et al. (2024). Analysis of 3 Financial Models in the Health System. *Asian Journal of Medicine and Health*, 22(12), 172–184.
[16] Maryana. (2026). Strategi Efisiensi Rumah Sakit di Era JKN: Capaian Kinerja Keuangan untuk Keberlanjutan Pelayanan. Tesis Magister Akuntansi, Universitas Mulawarman.
[17] Moleong, L. J. (2019). *Metodologi penelitian kualitatif.* PT Remaja Rosdakarya.
[18] Noviardi, I. (2020). Peran Akuntansi di Rumah Sakit Pemerintah Pasca BLU dan Adopsi INA-CBGs. *Jurnal JESKaPe*, 4(2).
[19] Prabawati, & Budiantara. (2023). Pengaruh Biaya Operasional, Persediaan, Utang Usaha dan Pendapatan terhadap Laba Bersih. *Journal of Management and Creative Business*, 1(3), 334–346.
[20] Rabiulyati, M., & Nurwahyuni, A. (2023). Strategi Efisiensi Rumah Sakit di Era JKN: Literatur Review. *Jurnal Kesehatan Tambusai*, 4(2).
[21] Ramayani, N., et al. (2024). Implementasi Clinical Pathway terhadap Mutu, Biaya dan Varians Pelayanan. *Jurnal Forum Ilmiah KesMas Respati*, 9(1), 32–40.
[22] Sari, P. P., Mulia, P. R., Purwadhi, & Yani, W. R. (2024). Transformasi Strategi Manajemen Rumah Sakit. *Journal of Innovation Research and Knowledge*, 4(5).
[23] Suprapto, S., & Karsa, S. (n.d.). *Manajemen: Prinsip Dasar Memahami Ilmu Manajemen*. Get Press Indonesia.
[24] Syahira, et al. (2024). Strategi Optimalisasi Klaim JKN di Unit Casemix Rumah Sakit. *Jurnal Administrasi Rumah Sakit Indonesia*, 10(2).
[25] Tawse, A., & Tabesh, P. (2023). Thirty years with the balanced scorecard: What we have learned. *Business Horizons*, 66(1), 123–132.
[26] Ulandari, L. P. S. (2021). Strategy Implementation of National Health Insurance Using BSC. *Jurnal Ekonomi Kesehatan Indonesia*, 5(2).
[27] Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.