

STRENGTHENING THE FINANCIAL SUSTAINABILITY OF RURAL AND COMMUNITY HOSPITALS THROUGH INTEGRATED HEALTH MANAGEMENT: AN INTEGRATIVE LITERATURE REVIEW

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Abstract: Background: rural and community hospitals play a structuring role in ensuring healthcare access for geographically dispersed populations, yet they face chronic financial fragility stemming from low patient volumes, unfavorable payer mix, dependence on non-operating revenue, and technological lag. Objective: to systematize and critically analyze the national and international scientific literature published between 2021 and 2026 on hospital financial sustainability, articulating it with four related axes — governance, Revenue Cycle Management (RCM), leadership, and operational efficiency — through the lens of integrated health management. Methods: an integrative literature review, with search and screening steps inspired by PRISMA, conducted by a single author with the support of academic search engines and indexed databases (PubMed/MEDLINE, Scopus, Web of Science, SciELO, BVS/LILACS, PLOS, Frontiers, and institutional grey literature). Seventy-eight unique records were screened, 38 full texts assessed, and 32 studies and documents included in the final synthesis, subjected to a simplified methodological quality appraisal inspired by the AMSTAR-2 and MMAT instruments. Results: the studies reviewed reveal a cyclical, cumulative pattern of financial vulnerability in small hospitals, in which governance deficiencies, the absence of structured revenue-cycle management, leadership gaps and low operational efficiency reinforce one another. A relevant asymmetry was identified between the bodies of literature reviewed: the financial-sustainability axis is dominated by U.S. studies, whereas the leadership axis is dominated by lower-impact Brazilian literature — a limitation explicitly discussed. Conclusion: as a theoretical contribution of the author,

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an integrated management model is proposed, combining participatory governance, professionalized revenue-cycle management, leadership development, and indicator-driven operational efficiency, underpinned by stable public financing policies — a proposal that still requires direct empirical testing.

Keywords: Financial sustainability; Rural hospitals; Hospital management; Health governance; Revenue cycle; Leadership; Operational efficiency; Integrative review.

Introduction

The financial sustainability of rural and community hospitals constitutes one of the most urgent issues on the contemporary health policy agenda, both in high-income countries and in emerging economies. These institutions, often small or medium-sized, play an irreplaceable role as points of access to emergency care, obstetrics, and basic specialized care in regions where the nearest alternative may lie dozens or hundreds of kilometers away. At the same time, such institutions operate under structural constraints that make them intrinsically more vulnerable than large urban hospitals: low population density, reduced patient volumes, an unfavorable payer mix, dependence on few sources of financing, and difficulty attracting and retaining qualified professionals.

In the United States, recent systematic reviews have documented that financial vulnerability — characterized by revenue instability, low patient volumes, an unfavorable payer mix, and dependence on non-operating revenue — stands as the dominant precursor of closures and service discontinuities in rural hospitals (BELLARD et al., 2026; BALAKRISHNAN et al., 2025). Surveys by the Kaiser Family Foundation indicate that, in states that did not adopt Medicaid expansion, half of rural hospitals reported negative operating margins, underscoring the decisive role that the design of public financing policies plays in the viability of these institutions (KAISER FAMILY FOUNDATION, 2025).

In Brazil, the scenario holds important specificities but converges on the same diagnosis of structural fragility. The Santas Casas de Misericórdia and other philanthropic hospitals, responsible

for a significant share of care complementary to the Brazilian Unified Health System (SUS) in small and medium-sized municipalities, have repeatedly reported chronic underfunding, dependence on emergency transfers, and a gap between the amounts paid for procedures and the actual costs of providing them (AGÊNCIA SENADO, 2025; CMB, 2023). The enactment of Law No. 14,820/2024, which established the periodic annual review of the reimbursement values for services provided by these entities, illustrates both the severity of the problem and the limits of stopgap solutions in the face of a structural imbalance (BRASIL, 2024).

Given this picture, the present article starts from the premise that hospital financial sustainability cannot be treated as a strictly accounting or budgetary problem, but rather as an emergent outcome of an integrated health management system, in which four axes are inseparably interlinked: (i) institutional governance; (ii) Revenue Cycle Management (RCM); (iii) leadership; and (iv) operational efficiency. It should be made explicit from the outset that this articulation among the five axes is an interpretive proposal put forward by the author, built from an integrated reading of the reviewed literature, and not a conclusion directly drawn from studies that have empirically tested such integration — none of the 32 documents included in this review assesses all five axes simultaneously and in an integrated manner.

The objective, therefore, is to systematize the national and international scientific literature published between 2021 and 2026 on these five thematic axes, identifying convergences, gaps, and practical implications for strengthening the management of rural and community hospitals, with additional emphasis on the context of the SUS and Brazilian philanthropic entities.

Methods

This is an integrative literature review, with search, screening, and results-presentation steps inspired by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) statement. The term “systematic review” is deliberately avoided in the title and throughout the text,

being reserved for reviews with a pre-registered protocol, independent double screening, and formal risk-of-bias assessment — elements that this work does not fully meet, as detailed below.

Information Sources and Search Strategy

The PubMed/MEDLINE, Scopus, Web of Science, PLoS, Frontiers, ScienceDirect, and Semantic Scholar databases were consulted for the international literature, as well as SciELO, BVS/LILACS, Dialnet, and Brazilian institutional journals for the national literature, accessed through an academic search engine. In addition, institutional grey literature was used (OECD, Kaiser Family Foundation, HFMA, NRHA, McKinsey & Company, IHF, CMB), given the applied nature of the topic and the currency it demands, always identified as such in the synthesis and evidence table.

Sixteen structured searches were carried out, combining descriptors in Portuguese and English (“sustentabilidade financeira hospitalar”; “financial sustainability rural hospitals”; “hospital governance”; “governança hospitalar”; “Revenue Cycle Management”; “denial management healthcare”; “gestão do ciclo de receita”; “liderança em saúde”; “healthcare leadership”; “eficiência operacional hospitalar”; “hospital operational efficiency”; “Data Envelopment Analysis hospitals”; “Lean healthcare”; “Santas Casas”; “hospitais filantrópicos”; “gestão integrada em saúde”), carried out in July 2026, without the use of formal Boolean operators native to proprietary databases — a limitation made explicit in Section 2.4.

Eligibility Criteria

Original articles, systematic reviews, scoping reviews, institutional technical reports, and normative documents published between January 2021 and July 2026, in Portuguese or English, that directly addressed at least one of the five thematic axes in hospital contexts were included. Excluded were studies focused exclusively on non-hospital primary care, editorials without an empirical or

documentary basis, promotional vendor materials lacking analytical support, and duplicate records.

Selection Process and Quality Appraisal

Title/abstract screening and full-text assessment were conducted by a single author (Lupércio de Castro Pedra), with the support of artificial-intelligence-assisted search and organization tools. There was no independent double screening nor a formal process for resolving disagreements between reviewers — a relevant limitation of this work, discussed in Section 5. Figure 1 presents the flow of identification, screening, eligibility, and inclusion of records, with the corresponding counts for each stage.

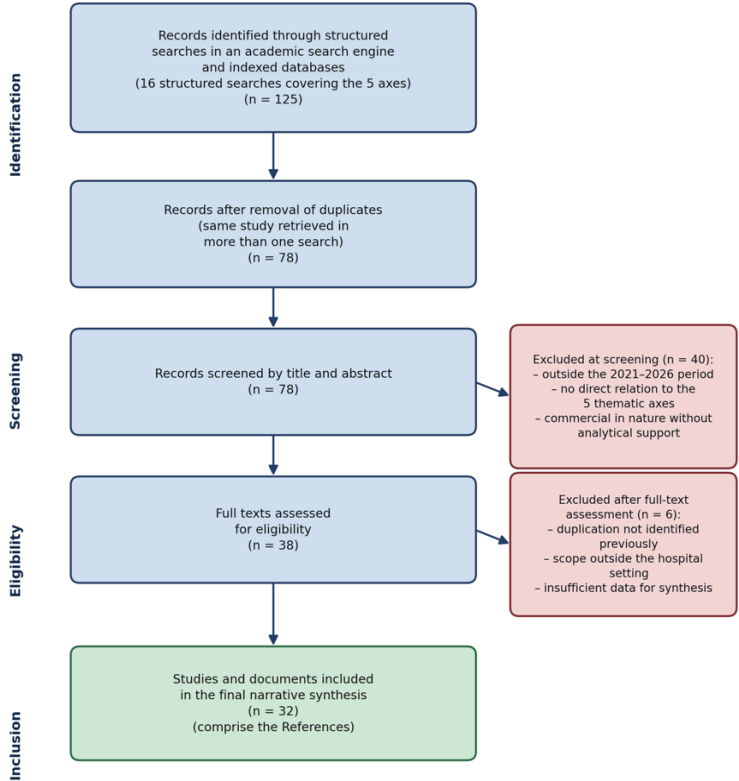
For the included studies, a simplified methodological quality appraisal was applied, inspired by the general criteria of AMSTAR-2 (for systematic and scoping reviews) and the MMAT — Mixed Methods Appraisal Tool (for primary empirical studies), considering: (a) clarity of the research question and design; (b) transparency of the search or data-collection strategy; (c) treatment of biases or limitations; and (d) adequacy of the synthesis to the data presented. Each study was qualitatively classified as having High, Moderate, or Low methodological confidence (Table 1). It should be noted that this appraisal was based on what is reported in the abstracts and, when accessible, in the full text, and does not constitute a formal, independent risk-of-bias assessment.

Methodological Limitations

This work does not constitute a systematic review in the strict methodological sense: (i) there was no pre-registered protocol (e.g., in PROSPERO); (ii) the search was carried out using a general academic search engine, rather than Boolean strings run directly in the native interfaces of each database (PubMed, Scopus, Web of Science), which may have introduced coverage bias; (iii) screening and data extraction were conducted by a single author, without independent cross-checking; and (iv)

the methodological quality appraisal was simplified and did not fully follow any validated instrument in its complete form. For these reasons, this work is classified here as an integrative review, and the results should be interpreted as a qualified synthesis, rather than as evidence of systematic certainty.

Figure 1 — Flow of identification, screening, eligibility, and inclusion of records (adapted from the PRISMA framework). Source: prepared by the author.



Results

Thirty-two studies and documents were included in the final synthesis. Table 1 presents a sample of 20 of these records — prioritizing empirical studies and reviews with a more explicit

design — with authorship, country/context, methodological design, main thematic axis, central finding, and a simplified methodological confidence classification. The remaining 12 documents (predominantly institutional/normative literature, such as HFMA, McKinsey, and NRHA reports and Brazilian normative acts) are listed in the References but were treated as supporting context rather than empirical evidence, and are not included in the synthesis table.

Table 1 — Synthesis of included studies (sample of 20 empirical and review records)

Author(s), Year	Country	Design	Thematic axis	Central finding	Confidence*
Balakrishnan et al., 2025	USA	Systematic review (PRISMA)	F i n a n c i a l sustainability	Five categories of predictors of rural hospital closure; proposes an AI-supported early-warning system (RHCT); empirical validation still incipient.	High
Bellard et al., 2026	USA	Rapid systematic review (PRISMA)	F i n a n c i a l sustainability	Financial vulnerability as the dominant precursor of hospital closures and service discontinuities; cyclical pattern among finances, efficiency, and workforce.	High
Mills et al., 2024	USA	Literature review	F i n a n c i a l sustainability	Rural hospital closures generate measurable economic and healthcare-access effects on affected communities.	Moderate
Malone; Pink; Holmes, 2025	USA	Q u a n t i t a t i v e study (predictive model)	F i n a n c i a l sustainability	Update of a predictive model for rural hospital financial distress, useful for managers and policymakers.	Moderate
Kaiser Family Foundation, 2025	USA	Technical report	F i n a n c i a l sustainability	Rural hospitals in states without Medicaid expansion show a higher proportion of negative operating margins.	Moderate
Almeida et al., 2024	Brazil	Q u a n t i t a t i v e study (hospital costs)	F i n a n c i a l sustainability	Weaknesses in the accounting systems of Brazilian public hospitals hinder cost estimation and planning.	Moderate
Martins da Silva; Travassos, 2022	Brazil	Descriptive study	F i n a n c i a l sustainability	Trend of concentration and financialization in the Brazilian private hospital sector, with competitive pressure on philanthropic hospitals.	Moderate
Jalilvand; Raeisi; Shaarbafchizadeh, 2024	Iran	Scoping review	Governance	Lack of conceptual standardization in hospital accountability frameworks; recommends integration between clinical and administrative management.	High
Thanasas et al., 2023	Multiple countries	S y s t e m a t i c literature review	Governance	103 studies (2014-2022); predominance of qualitative approaches; shortage of international samples and quantitative methods.	Moderate
Mourajid et al., 2023	Morocco	Critical analysis	Governance	Weaknesses in role definition, accountability, and social participation in public hospitals in a resource-limited setting.	Moderate
Saúde e Sociedade (SciELO), 2023	Brazil	Qualitative study	Governance / Leadership	Technocratic, top-down management models, with low workforce participation, show signs of burnout.	Moderate
Studies in Health Sciences, 2025	Brazil	Qualitative study	Leadership	Coaching-style leadership and team resilience associated with better handling of organizational stress and care quality.	Low

Revista de Gestão e Saúde, 2023	Brazil	Descriptive qualitative study	Operational efficiency	Public health managers report benefits and challenges in using hospital key performance indicators.	Low
Zubir et al., 2024	Multiple countries	Systematic review (PRISMA)	Operational efficiency	89 studies (2014-2022) on variable selection in hospital DEA; no methodological consensus on optimal parameters.	High
Małyszko et al., 2026	Poland	Quantitative study (DEA, bootstrap CI)	Operational efficiency	Sharp decline in operational technical efficiency during the pandemic, with partial recovery; divergence between operational and financial efficiency.	High
Sun et al., 2023	China	Quantitative study (DEA + Tobit)	Operational efficiency	22.45% of the hospitals assessed were simultaneously technically and scale efficient; occupancy rate as a relevant determinant.	Moderate
Al-Sabahi et al., 2025	Oman	Quantitative study (DEA + Tobit)	Operational efficiency	Bed occupancy rate and nurse-to-bed ratio as variables significantly correlated with hospital efficiency.	Moderate
Choi et al., 2024	U S A (Dept. of Defense)	Quantitative study (DEA, MPI)	Operational efficiency	Inefficiency attributed mainly to low pure technical efficiency, not to inadequate scale; distinct patterns across military branches.	Moderate
Guerra; Morgan; Alves, 2022	Brazil	Quantitative study (DEA)	Operational efficiency / Financial sustainability	Level of indebtedness and operating margin as determinants of the financial efficiency of Brazilian hospitals.	Moderate
Petrov; Khuntia, 2025	USA	Academic research brief	RCM	Automation and AI applied to revenue-cycle management associated with 15-30% reductions in days in accounts receivable.	Low

*Methodological confidence classified in simplified form by the author, inspired by the general criteria of AMSTAR-2 (reviews) and MMAT (primary studies), and does not constitute a formal, independent risk-of-bias assessment (see Section 2.3).

Financial Sustainability of Rural and Community Hospitals

Recent systematic reviews conducted in the United States identify financial vulnerability — characterized by revenue instability, low patient volumes, an unfavorable payer mix, and dependence on non-operating revenue — as the dominant precursor of hospital closures and service discontinuities in rural areas (BELLARD et al., 2026, with 59 studies included; BALAKRISHNAN et al., 2025, with 15 studies). These studies describe a cyclical, cumulative pattern: financial pressures reduce efficiency and investment, which undermines care quality and, in turn, feeds back into financial fragility. A complementary review by Mills et al. (2024), synthesizing 21 studies over eight years,

corroborates that rural hospital closures produce measurable economic and access effects on the affected communities.

Predictive models of hospital-closure risk, updated by Malone, Pink and Holmes (2025) based on the North Carolina Rural Health Research Program, and systematized by Balakrishnan et al. (2025) under a proposal for AI-supported early-warning systems, acknowledge that prospective empirical validation of these models is still incipient. Surveys by the Kaiser Family Foundation (2025) show that state adoption of Medicaid expansion is a determining factor in hospital financial health: rural hospitals in non-expansion states had negative operating margins in about half of the cases in 2023.

In Brazil, the financial fragility of the Santas Casas and philanthropic hospitals has been the subject of successive public hearings and emergency measures (AGÊNCIA SENADO, 2025). Managers of these institutions attribute this situation to chronic underfunding of the SUS and to the gap between reimbursement amounts and actual costs, even after the enactment of Law No. 14,820/2024 (BRASIL, 2024). A study by Almeida et al. (2024) on hospital cost estimation and planning in the SUS reveals that weaknesses in the accounting systems of Brazilian public hospitals themselves hinder an accurate diagnosis of these units' financial situation — a finding that qualifies, and partly tempers, direct comparisons with the U.S. literature, which is more robust in standardized financial data. A study on the dynamics of the Brazilian private hospital sector (MARTINS DA SILVA; TRAVASSOS, 2022) also points to a trend of concentration and financialization, a phenomenon that tends to heighten the competitive fragility of philanthropic and small hospitals in the face of consolidated hospital groups.

Hospital Governance

A scoping review of accountability structures in hospitals (JALILVAND; RAEISI; SHAARBAFCHIZADEH, 2024), analyzing 40 documents from 2010 to 2023, points to the need for greater conceptual standardization and for strategies integrating clinical and administrative

management as a condition for more efficient and transparent hospital systems. A systematic literature review on clinical governance (THANASAS et al., 2023), covering 103 studies published between 2014 and 2022, highlights the interdisciplinary nature of the field and the predominance of qualitative approaches in developed countries, pointing to the need for broader international samples and quantitative methods.

In resource-limited settings, a critical analysis of governance in Moroccan public hospitals (MOURAJID et al., 2023) points to weaknesses in role definition, accountability, and social participation, suggesting that governance models adapted to the local reality are more promising than simply transplanting models from high-income countries. In Brazil, although specific research on formal hospital governance is still incipient compared to the international literature, a study published in *Saúde e Sociedade* (2023) on strategic planning in a public health institution reveals tensions between technocratic, top-down management models and the need for greater workforce participation in managerial decisions — a finding that directly engages with the international agenda on participatory governance, albeit based on a single-case qualitative design with limited external validity.

Revenue Cycle Management

Unlike what was stated in a previous version of this work, the RCM axis also has peer-reviewed academic literature, albeit in smaller volume than the other axes. An article published in *Plastic and Reconstructive Surgery – Global Open* (2024) describes, based on a narrative review of the health-management literature, the conceptual architecture of the revenue cycle — from patient registration and eligibility to billing and denial management — and discusses the rising cost of denial-management activity. An article published in the *European Modern Studies Journal* (2025) proposes a strategic roadmap for reducing billing denials in RCM, systematizing strategies for preventing and correcting coding and prior-authorization errors. Academic research from the Health Administration

Research Consortium at the University of Colorado (PETROV; KHUNTIA, 2025) associates the adoption of artificial intelligence and robotic process automation in RCM with reductions of 15% to 30% in days in accounts receivable and improvements of 20% to 40% in clean-claim rates — evidence that is still preliminary, drawn from a policy brief rather than a controlled study.

Industry reports from the Healthcare Financial Management Association (HFMA) show that, in 2023, American hospitals allocated the majority share of their expenses to personnel costs, while Medicare reimbursement covered a proportion below the actual cost of care. Research by McKinsey & Company (2025) among RCM leaders identifies a structural shift in the sector toward growing investment in artificial intelligence combined with integrated outsourcing models, prioritizing functions with the greatest impact on stabilizing payment denials. Even so, it must be acknowledged, as a limitation of this axis, that market literature (HFMA, McKinsey, NRHA) remains proportionally more represented than peer-reviewed academic literature specifically on RCM in rural and community hospitals — a gap that future studies should prioritize.

Health Leadership and Hospital Management

Recent Brazilian literature on leadership in the hospital environment emphasizes the shift from command-and-control models toward relational, coaching, and transformational leadership styles. A qualitative study published in a lower-impact Brazilian journal (STUDIES IN HEALTH SCIENCES, 2025) associates coaching-style leadership and nursing-team resilience with better handling of organizational stress, but it is a single institutional case study, whose generalization should be viewed with caution — a limitation explicitly acknowledged in this synthesis. A study published in *Saúde e Sociedade* (2023) on strategic planning reinforces that technocratic managerial models, with minimal professional participation, tend to show signs of organizational burnout.

In the international literature, reviews on clinical governance corroborate this finding by demonstrating an association between the active participation of clinical leaders in governance

bodies and better institutional performance (THANASAS et al., 2023; JALILVAND; RAEISI; SHAARBAFCHIZADEH, 2024), reinforcing that leadership and governance are analytically distinct but empirically interdependent axes. It is important to note, however, that this is the thematic axis with the greatest asymmetry in quality and volume of evidence among the five analyzed in this review: no high-impact international studies dealing specifically with leadership in rural and community hospitals were located in the search process documented here, which constitutes a relevant gap in the literature — and not merely in the search process.

Operational Efficiency

The measurement of hospital operational efficiency has, in Data Envelopment Analysis (DEA), one of its main methodological tools in the international literature. A systematic review by Zubir et al. (2024), covering 89 articles published between 2014 and 2022, categorizes variable-selection approaches into four groups, highlighting methodological diversity and the absence of consensus on optimal measurement parameters.

Recent case studies apply DEA to different contexts: border regional hospitals in Poland, between 2015 and 2024 (MAŁYSZKO et al., 2026), revealed a sharp decline in operational technical efficiency during the COVID-19 pandemic, with partial recovery in the post-pandemic period, and a relevant divergence between operational performance and financial performance in some units; public hospitals in Fujian Province, China (SUN et al., 2023), and Oman's government hospital network (AL-SABAHI et al., 2025) were assessed for technical efficiency and its determinants, highlighting variables such as bed occupancy rate and nurse-to-bed ratio; and hospitals of the U.S. Department of Defense (CHOI et al., 2024) were assessed through overall technical efficiency, pure technical efficiency, scale efficiency, and the Malmquist Productivity Index, revealing that inefficiency stems mainly from low pure technical efficiency rather than inadequate scale. A study applied to the Brazilian context (GUERRA; MORGAN; ALVES, 2022) showed that the level of indebtedness and

the operating margin are central determinants of the financial efficiency of hospitals in the country, corroborating the interdependence between the operational-efficiency and financial-sustainability axes proposed in this review.

Alongside DEA, the Lean healthcare methodology has become established as an approach oriented toward waste reduction and the optimization of care flows. A literature review on the implementation of Lean healthcare, published in 2024, maps implementation strategies, organizational barriers, and future research directions. In the sphere of Brazilian public management, a qualitative study on hospital key performance indicators (REVISTA DE GESTÃO E SAÚDE, 2023) — of descriptive design and a sample restricted to public managers in the Southeast region — identifies benefits and challenges in using these indicators as a management tool, without, however, allowing causal inferences or national generalization.

Discussion

An Interpretive Model Proposed by the Author — Not a Conclusion Emerging from the Data

It is necessary to precisely delineate the nature of the argument presented in this section. None of the 32 studies and documents included in this review empirically tests the simultaneous integration of financial sustainability, governance, RCM, leadership, and operational efficiency in rural and community hospitals. What follows is a theoretical proposal by the author — an interpretive model built through an articulated reading of the reviewed literature — and not a synthesis of direct evidence on the integration of these five axes. This distinction matters because, in literature reviews, it is common for researchers to advance interpretations that go beyond what the individual data support; the intention here is to avoid that risk by explicitly signaling where the reviewed evidence ends and where the author's theoretical construction begins.

With that caveat made, a cross-cutting reading of the five axes allows for the proposal of a model in which the financial sustainability of rural and community hospitals would not stem from

isolated actions on revenues or costs, but from the systemic articulation among governance, revenue-cycle management, leadership, and operational efficiency — a model here termed integrated health management. The findings on hospital closures (BELLARD et al., 2026; BALAKRISHNAN et al., 2025) reveal a cyclical pattern of deterioration consistent with this proposal, but do not prove it as an integrated model: each study individually examines isolated factors or pairs of factors, never all five axes together.

Asymmetry Between the Bodies of Literature Reviewed

A cross-cutting finding of this review, which should be read as a limitation rather than merely as a result, is the significant asymmetry between the bodies of literature drawn upon for each axis. The financial-sustainability axis is largely dominated by U.S. studies and reports (BELLARD et al., 2026; BALAKRISHNAN et al., 2025; MALONE; PINK; HOLMES, 2025; KAISER FAMILY FOUNDATION, 2025), with a secondary contribution from smaller-volume Brazilian studies (ALMEIDA et al., 2024; MARTINS DA SILVA; TRAVASSOS, 2022). Conversely, the leadership axis is dominated by Brazilian literature published in lower-impact, lower-circulation journals (STUDIES IN HEALTH SCIENCES, 2025; SAÚDE E SOCIEDADE, 2023), with no direct counterpart in the high-impact international literature specifically focused on rural hospitals.

This asymmetry should not be read as neutral: it reflects both real differences in the maturity of scientific production on each axis across countries and the limits of the search strategy employed here (Section 2.4). An international reader might reasonably question whether the leadership axis, as treated in this review, reflects the state of the art of the field or merely the convenience of the search sample. Both explanations likely carry weight: there is indeed less high-impact international production on leadership specifically in rural hospitals (a real gap in the literature), but it is also likely that additional searches in proprietary databases, using formal Boolean strings, would reveal international studies not captured by the process documented here.

Implications of the Theoretical Proposal

With the foregoing caveats, revenue-cycle management (RCM) stands out among the five axes as the operational lever most directly convertible into short- and medium-term financial results, with evidence of 15% to 30% gains in accounts-receivable indicators associated with automation (PETROV; KHUNTIA, 2025) — although this evidence is preliminary and was not produced specifically in rural hospitals. Hospital governance, in turn, qualifies strategic decision-making (JALILVAND; RAEISI; SHAARBAFCHIZADEH, 2024; THANASAS et al., 2023), and operational efficiency, as measured by DEA, provides an analytical basis for identifying where resources are underutilized (ZUBIR et al., 2024; MALYSZKO et al., 2026; GUERRA; MORGAN; ALVES, 2022). The proposed integration among these axes remains, however, a working hypothesis to be empirically tested in future studies that simultaneously measure indicators from all five domains in the same sample of rural hospitals.

Final Considerations

This integrative review showed that the financial sustainability of rural and community hospitals is a multidimensional phenomenon, in which financial, governance, revenue-cycle-management, leadership, and operational-efficiency factors appear systemically associated in the reviewed literature — even though no individual study has tested this articulation in an integrated way. The integrated health management model proposed here therefore constitutes a theoretical contribution by the author to be empirically validated, rather than a direct conclusion of the synthesized evidence.

In the Brazilian context, the financial fragility of the *Santas Casas* and philanthropic hospitals emblematically illustrates this review's general diagnosis, although peer-reviewed Brazilian academic production on the topic — especially regarding the governance, RCM, and leadership axes — remains proportionally smaller and of lower impact than the international literature on financial sustainability.

The limitations of this study include: (i) it is an integrative review, not a systematic review in the full sense — without a pre-registered protocol, independent double screening, or a formal risk-of-bias assessment; (ii) the search and screening were conducted by a single author, with the support of AI-assisted tools, without cross-checking; (iii) the search was carried out using a general academic search engine rather than formal Boolean strings run directly in the native interfaces of proprietary databases; (iv) the asymmetry between the bodies of literature drawn upon for the different axes, discussed in Section 4.2; and (v) the theoretical, not yet empirically tested, nature of the proposed integrated management model. Future studies are recommended to: (a) empirically validate the proposed integrated model, simultaneously measuring governance, RCM, leadership, and operational-efficiency indicators in the same sample of Brazilian rural hospitals; (b) conduct a formal systematic review, with a registered protocol and independent double screening, on leadership in rural hospitals, given the gap identified; and (c) expand the peer-reviewed academic literature on RCM applied specifically to small hospitals.

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