

Strategic management instruments for emergency services in Brazil: integrative review

Instrumentos de gestão estratégica para os serviços de emergência do Brasil: revisão integrativa

Instrumentos de gestión estratégica de los servicios de emergencia en Brasil: revisión integrativa

ABSTRACT

Objective: To map strategic management instruments that meet the main needs of emergency services in Brazil. **Method:** this is an integrative literature review, using six recommended steps and the Rayyan software for database organization. **Results:** the search was conducted in five databases: MEDLINE, LILACS, Web of Science, Cochrane Library, and SciELO, generating a total of 306 studies, of which 11 were selected after meeting the established criteria. Once the final sample was defined, a critical evaluation of the included studies was carried out, according to the level of evidence. This review identified seven management instruments applicable to emergency services, distributed across five management domains: process management, quality management, care management, access management, and preventive management. **Final remarks:** the implementation of these instruments consolidates the transition from an empirical management model to a strategic, evidence-based approach focused on the effectiveness of managerial actions.

Descriptors: Emergency Medical Services; Health management; Strategic planning.

RESUMO

Objetivo: Mapear os instrumentos de gestão estratégica que atendam às principais especificidades dos serviços de emergência do Brasil. **Método:** Trata-se de uma revisão integrativa da literatura, na qual se utilizou seis etapas preconizadas e o programa Rayyan para organização do banco de dados. **Resultados:** A busca foi realizada em cinco bases de dados: MEDLINE, LILACS, Web of Science, Cochrane Library e SciELO, gerando um quantitativo de 306 estudos, dos quais, após atender aos critérios estabelecidos, foram selecionados 11. Estabelecida a amostragem final, foi realizada a avaliação crítica dos estudos incluídos, conforme o nível de evidência. Esta revisão identificou sete instrumentos de gestão aplicáveis aos serviços de emergência, distribuídos em cinco domínios gerenciais: gestão de processos, gestão da qualidade, gestão assistencial, gestão do acesso e gestão preventiva. **Considerações finais:** A implementação desses instrumentos concretiza a transição de um modelo de gestão empírica para uma abordagem estratégica, orientada por evidências e focada na efetividade das ações gerenciais.

Descritores: Serviços Médicos de Emergência; Gestão em saúde; Planejamento estratégico.

RESUMEN

Objetivo: mapear los instrumentos de gestión estratégica que respondan a las principales necesidades de los servicios de emergencia en Brasil. **Método:** se trata de una revisión integradora de la literatura, en la que se utilizaron seis etapas recomendadas y el programa Rayyan para la organización de la base de datos. **Resultados:** la búsqueda se realizó en cinco bases de datos: MEDLINE, LILACS, Web of Science, Cochrane Library y SciELO, lo que generó un total de 306 estudios, de los cuales, tras cumplir con los criterios establecidos, se seleccionaron 11. Una vez definida la muestra final, se llevó a cabo una evaluación crítica de los estudios incluídos, según el nivel de evidencia. Esta revisión identificó siete instrumentos de gestión aplicables a los servicios de emergencia, distribuidos en cinco dominios gerenciales: gestión de procesos, gestión de la calidad, gestión asistencial, gestión del acceso y gestión preventiva.

Consideraciones finales: la implementación de estos instrumentos consolida la transición de un modelo de gestión empírica a un enfoque estratégico, basado en evidencias y centrado en la efectividad de las acciones gerenciales. **Descriptor:** Servicios Médicos de Urgencia; Gestión en salud; Planificación estratégica.

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INTRODUCTION

The Brazilian Emergency Care Network was established in 2011 through Ordinance No. 1,600 of the Ministry of Health. It is organized into components that constitute the country's reference services for urgent and emergency care: Primary Health Care, the Mobile Emergency Care Service (Samu 192) and its Regulation Centers, Stabilization Rooms, Emergency Care Units (UPA 24h), and Hospital and Home Care services⁽¹⁾.

Emergency services operate 24 hours a day, seven days a week, continuously providing care to patients with life-threatening clinical and traumatic conditions. They serve as the main point of entry for critically ill patients within the healthcare system, across varying levels of complexity^(2,3). To ensure high-quality care in a context of clinical urgency and imminent risk to life, these services face multiple challenges that characterize the specificities of the sector—such as high and heterogeneous demand, indiscriminate use of emergency services, low problem-solving capacity in primary care settings, and shortages of financial, physical, human, and material resources⁽⁴⁾.

Despite these inherent challenges, ensuring high-quality and resolute care is imperative, underscoring the centrality of planning and managerial functions⁽⁵⁾.

Emergency unit management is marked primarily by unpredictability, highlighting the need for adaptive leadership. This complex, dynamic, and unstable environment requires that professionals responsible for management be highly qualified and prepared, which in turn assigns significant responsibility to these roles⁽²⁾.

Historically in Brazil, a shift in the

care paradigm has occurred, with an increasing focus on best practices and technological resources. Within this context, the transformation of managerial models in health services has become progressively necessary, given the interdependence between management and care delivery. A persistent issue is that advances in clinical practice are not always accompanied by parallel improvements in managerial practices⁽⁴⁾.

From a historical perspective, management positions in health services have often been occupied by healthcare professionals—reflecting a strong appreciation of technical expertise to the detriment of managerial knowledge. However, technical competence alone is insufficient for effective management; broader knowledge of strategies and supportive management tools is essential⁽⁴⁾.

In this regard, the qualification of managers remains a significant challenge throughout the Brazilian health system. The predominance of amateurism and empirical managerial practices generates negative repercussions and exacerbates the existing issues within emergency services⁽³⁾.

Globalization has intensified the need to transform management models within health services, prompting a transition from traditional, empirical approaches to strategic management practices aimed at creating increasingly efficient, cost-effective institutions and enhancing the quality of care delivered⁽⁶⁾. In response to the new managerial demands and the need to support decision-making for strategic, tactical, and operational challenges, the adoption of management support tools has become essential⁽⁵⁾.

Management tools are conceptually

defined as instruments or techniques that support managers in achieving strategic goals by optimizing and resolving challenges encountered in everyday organizational contexts⁽⁶⁾.

Given the high complexity and adversity within Brazilian emergency services—particularly regarding their management and operational specificities—management tools can assist in addressing the main challenges faced by these services⁽⁶⁾. Their implementation strengthens the transition from empirical management practices toward a strategic and resolute administrative model⁽⁴⁾.

Considering the relevance of this topic, the following research question was defined: Which strategic management instruments can be used in Brazilian emergency services, according to the specificities of this sector?

The objective of this study was to map strategic management instruments that address the principal specificities of emergency services in Brazil.

METHOD

This study is an integrative literature review, defined as a method of synthesis, analysis, and integration of existing knowledge, providing a comprehensive understanding of a given phenomenon and enabling the incorporation of scientific evidence into clinical and managerial practice⁽⁷⁾. The review followed the six stages recommended by Mendes et al.⁽⁸⁾: (i) identification of the theme and formulation of the research question; (ii) establishment of criteria for inclusion and exclusion of studies and sampling search in the literature; (iii) definition of the information to be extracted from the selected studies and categorization of these studies; (iv) evalua-

tion of the included studies; (v) interpretation of the results; and (vi) synthesis of the available knowledge.

The development of the research question and the definition of the search strategy were guided by the Participants, Concept, and Context (PCC) framework⁽⁹⁾, in which P (Population): managers of emergency health services; C (Concept): management instruments for emergency services; and C (Context): strategic management of emergency services.

The literature search was conducted in five databases: Medical Literature Analysis and Retrieval System Online (MEDLINE), Latin American and Caribbean Health Sciences Literature (LILACS), Web of Science, Cochrane Library, and Scientific Electronic Library Online (SciELO). The search strategy combined terms from the Health Sciences Descriptors (DeCS), the Medical Subject Headings (MeSH), and Boolean operators: *Serviços Médicos de Emergência AND Gestão em Saúde AND Planejamento Estratégico AND Administração de serviços de saúde; Emergency Medical Services AND Health Management AND Strategic Planning AND Health Services Administration*. Inclusion criteria comprised freely accessible full-text studies in English, Spanish, or Portuguese, published between 2013 and 2023, addressing management tools applicable to emergency services. Exclusion criteria were editorials, reviews, letters, and opinion articles. The temporal window of ten years was expanded due to the scarcity of studies in the scientific literature addressing the theme of this review, particularly in the Latin American context.

The search, selection, and review of the articles were carried out by two independent researchers. The Rayyan sof-

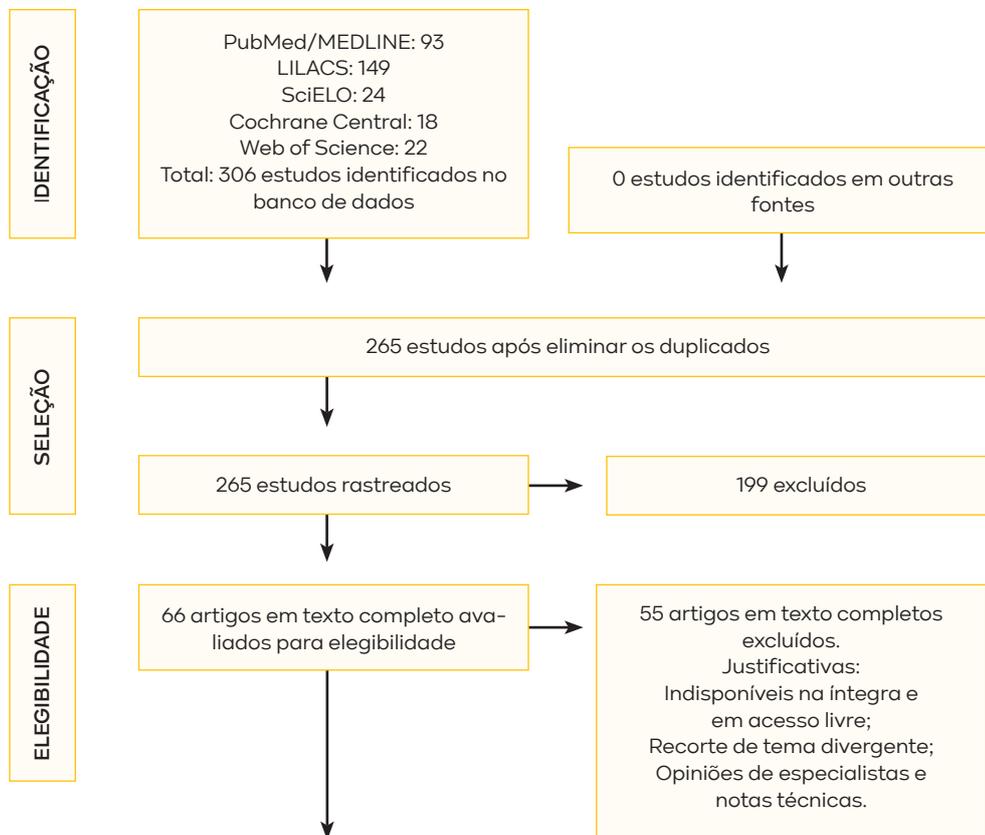
software was used to manage the records retrieved from the databases, organize the sampling process, remove duplicates, and support the screening and selection of studies. The initial screening was performed through title and abstract reading to identify studies aligned with the review topic. Subsequently, the selected articles were assessed in full to verify compliance with the inclusion criteria and to extract the main data for synthesis.

After defining the final sample, a critical appraisal of the included studies was performed according to their level of evidence, based on the Evidence-Based Practice classification⁽¹⁰⁾: Level 1 – evidence from meta-analyses of multiple random-

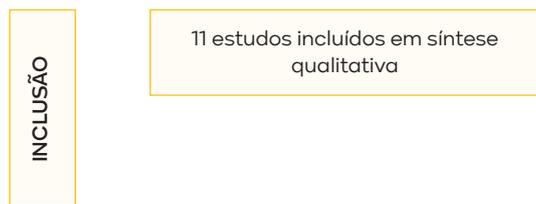
ized controlled trials; Level 2 – evidence from individual studies with an experimental design; Level 3 – evidence from quasi-experimental studies; Level 4 – evidence from descriptive (non-experimental) or qualitative studies; Level 5 – evidence from case reports or experience reports; Level 6 – evidence based on expert opinion.

Once all the systematic stages were completed, the synthesis of the evidence from the included studies was initiated, culminating in the writing of the present article. Figure 1 illustrates the process of identification, screening, exclusion, and selection of records retrieved from the databases.

Figure 1 – Flowchart of the search, exclusion, and selection process of the articles retrieved from the databases



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Source: Prepared by the authors in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), 2023⁽¹¹⁾.

RESULTS

Based on the defined search strategy, 306 studies were initially identified across the five databases. The refinement of the dataset began with the removal of 41 duplicate records, followed by title and abstract screening of the full sample and application of the eligibility and exclusion criteria. Subsequently, 66 studies were selected for full-text assessment. After this stage, 11 studies composed the final sample of this review.

The included studies originated from the following countries: Norway (1), South Africa (1), Chile (1), and predominantly Brazil (8). Nine of the articles were published between 2017 and 2022. Levels 4 and 5 of evidence were predominant in the sample,

with five studies each.

Although this review focuses on the context of Brazilian emergency services, the search strategy identified three studies conducted in other countries (Norway, South Africa, and Chile). Their inclusion is justified because they present management tools applicable to the managerial demands of Brazilian emergency services, such as the “PDCA Cycle” and the “Quality Program Assessment Tool,” both of which are discussed in this review.

Table 1 describes the studies included in the final sample, presenting their key characteristics: authors, year of publication, country, study design, sample, objectives, source database, and level of evidence.

Table 1. Characterization of the final sample of articles: authors, year of publication, country, study design, sample, objectives, source database, and level of evidence

| N° | Author, Year, Country, Database, Level of Evidence | Study Design, Sample | Objective |
|----|---|--|---|
| 1 | S Andersson et al., 2020. Noruega PUBMED Level 5 | Case study. Three cases experienced in the county of Sør-Trøndelag are presented. | Describe the model for the Maximum Expected Performance Location Problem for Heterogeneous Regions (MEPLP-HR), developed by Leknes, applied as a decision-support tool. |
| 2 | Howard I, Cameron P, Wallis L et al., 2020. África do Sul PUBMED Level 5 | Exploratory multiple-case study. Four provincial prehospital emergency medical services from the provinces of KwaZulu-Natal, Western Cape (WC), Limpopo (LP), and North West (NW) | Evaluate the quality systems of prehospital emergency medical services in South Africa. |

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| N° | Author, Year, Country, Database, Level of Evidence | Study Design, Sample | Objective |
|----|--|---|--|
| 3 | Amaya MR, Paixão DPSS, Sarquis LMM et al., 2020. Brasil SciELO Level 4 | Methodological research with a quantitative approach. Twenty-three health professionals in the first evaluation round and 20 in the second. | Develop and validate a checklist of patient safety actions in emergency care. |
| 4 | Sacoman TM, Beltrammi DGM, Andrezza R et al., 2019. Brasil SciELO Level 4 | Analytical and descriptive study. Two complementary analytical approaches. | Report and analyze the implementation experience of the Manchester Triage System in emergency services in the metropolitan region of São Paulo, highlighting the main challenges faced and those arising from the use of this technological arrangement. |
| 5 | Tobar AE, Retamal RA, Garrido CN, 2014. Chile LILACS Level 4 | Descriptive study. | Address general management aspects of emergency and urgent care services, indicators that help objectify their functioning, and how specific strategies can be implemented to guide improvements in patient care. |
| 6 | Fernandes et al., 2011. Brasil LILACS Level 4 | Descriptive study. | Generate foundational knowledge in business management applied to health, with emphasis on strategic planning for medical services in Intensive Care Medicine. |
| 7 | Mendonça RR, Salvador DLVF, Mata TCF et al., 2022. Brasil SciELO Level 4 | Cross-sectional study with a quantitative approach. Thirty professionals from a decentralized Samu base. | Evaluate the interest, access, and knowledge of Mobile Emergency Care Service (Samu) professionals regarding Information and Communication Technologies within the service. |
| 8 | Rocha HMN, Nascimento EB, Santos LC et al., 2021. Brasil SciELO Level 3 | Applied research with software development. Seventeen evaluators. | Develop and evaluate the usability of a system for monitoring emergency department admissions. |
| 9 | Coifman AHM, Pedreira LC, Jesus APS et al., 2021. Brasil SciELO Level 5 | Single-case, descriptive, qualitative study following the Consolidated Criteria for Reporting Qualitative Research (COREQ). Seven physicians, ten nurses, and five nursing technicians. | Map internal and external factors within an emergency unit that influence interprofessional communication practices. |
| 10 | Silva DA, Rocha IMS, Dias FA et al., 2017. Brasil LILACS Nível 5 | Intervention study. Seven bedside nurses. | Describe an intervention experience using a standardized and computerized tool during shift handover in an Emergency Care Unit (UPA). |
| 11 | Von Randow RM, 2012. Brasil LILACS Nível 5 | Qualitative case study. Twenty-four managers from eight Emergency Care Units (UPAs) in the municipality of Belo Horizonte | Analyze the practices carried out by Emergency Care Unit (UPA) managers in the context of structuring the Health Care Network. |

Source: Prepared by the authors, 2023.

From the studies included in the final sample, this review identified seven management instruments applicable to the specificities of emergency services. These instruments were classified into five managerial domains within the broader field of strategic management: process management, quality management, care

management, access management, and preventive management. Table 2 presents the reference studies, the management instruments identified, and their respective applications in emergency service management according to the managerial domains.

Table 2. Instruments identified in the final sample of studies and their application to the management of emergency services

| Study Identification | Management Instrument | Application in emergency services |
|---|--|---|
| Andersson et al., 2020. Tobar AE, Retamal RA, Garrido CN, 2014. | "PDCA Cycle": Plan, Do, Check, and Act. | Process management: establishes the sequential organization of steps to achieve a defined managerial objective. |
| Howard I, Cameron P, Wallis L et al., 2020. | "Quality Program Assessment Tool." | Quality management: provides support for managers to identify and correct factors that influence the quality of care and management, with the aim of improving institutional quality and promoting user satisfaction. |
| Amaya MR, Paixão DPSS, Sarquis LMM et al., 2020. | "Patient Safety Checklist for Emergency Care." | Care management: defines systematized actions for identifying, preventing, and reducing risks and adverse events associated with the care provided. |
| Sacoman TM, Beltrammi DGM, Andrezza R et al., 2019. | Risk Classification Systems and clinical deterioration assessment tools. | Access management and organization of care demands: enables risk stratification and prioritization of care for users with severe clinical conditions or imminent risk of death. |
| Fernandes et al., 2011. Rocha HMN, Nascimento EB, Santos LC et al., 2021. | Health Information Systems (e.g., DATASUS). | Preventive management: allows for the analysis of the local epidemiological situation and the monitoring of hospital admissions, supporting priority decision-making in public health. |
| Mendonça RR, Salvador DLVF, Mata TCF et al., 2022. Coifman AHM, Pedreira LC, Jesus APS et al., 2021. Von Randow RM, 2012. | Information and Communication Technologies (ICT). | Process management: contributes to the optimization of care delivery and health management, with emphasis on efficiency, timeliness, data integration, and support for managerial decision-making. |
| Silva DA, Rocha IMS, Dias FA et al., 2017. | "ISBAR": Identification, Situation, Background, Assessment and Action, and Recommendation. | Care management: promotes the standardization of data and information during interprofessional communication processes. |

Source: Prepared by the authors, 2025.

DISCUSSION

From the perspective of managerial practice within emergency units, the articles included in this review revealed a series of challenges and specificities, which allowed the grouping of findings into the following categories: interprofessional and organizational communication, high and unpredictable demand, strategic planning of managerial actions, data management, quality management and user satisfaction, safety of critically ill patients, and the epidemiological profile of the service location^(12,13,15,16,19,17,21). Categorizing these sector-specific characteristics enabled the identification of the most appropriate management tools to address the corresponding managerial demands.

Interprofessional communication refers to the exchange of information inherent to the work process among the various professional groups involved, ideally occurring collaboratively and effectively. It is recognized as a patient safety measure by the international patient safety goals proposed by the World Health Organization⁽¹²⁾. However, the adverse circumstances characteristic of emergency services—particularly high demand and stressful working conditions—hinder communication processes among professionals⁽¹³⁾.

In emergency service settings, where agility and rapid response are essential for patient care, verbal communication among professionals becomes predominant. However, this form of communication may be compromised by the lack of standardization and the interference of external factors in the form of “noise,” resulting in fragmented continuity of care, distortion or loss of essential information, and dissatisfaction among professionals and patients⁽¹²⁾.

Therefore, the need for standardized communication among professionals working in emergency services is urgent. This can be achieved through the use of the ISBAR communication tool, a structured acronym referring to Identification, Situation, Background, Assessment and Action, and Recommendation⁽¹³⁾. ISBAR serves as a synthesized format for communicating patient identification data, reason for admission, health history, current clinical assessment, and recommendations, thereby supporting continuity of care. It also functions as an accessible and practical method for standardizing clinical information, with a focus on quality and safety, and assisting in the management of care delivery⁽¹²⁾.

Within the broader scope of communication in health services at the organizational level, Information and Communication Technology (ICT) plays a prominent role. ICT is defined as an integrated set of technological resources aimed at optimizing health care and management, emphasizing efficiency, speed, data integration, and managerial decision support. In emergency services, where the need to optimize both clinical and managerial activities is urgent, ICT promotes agility in patient care, speed in information transfer, and standardization of clinical procedures⁽¹⁴⁾.

“Data” and “information” are prevalent concepts in modern management, and solving the multifactorial problems inherent to the emergency sector requires robust data management⁽¹⁵⁾. This can be achieved through the broad field of Information Technology, which enables pragmatic strategies to address challenges based on the monitoring and critical analysis of data generated by the health

service itself through process informatization⁽¹⁶⁾. However, it is important to emphasize that investing solely in equipment and technological infrastructure does not ensure the informatization of health services; training staff to use these tools is imperative in order to align technological and human resources⁽⁴⁾.

Moreover, managers of reference services and entry points within the healthcare network must possess strategic knowledge of epidemiological and care-related indicators⁽¹⁵⁾, since the unpredictability of emergency care can be mitigated by understanding the seasonality, morbidity and mortality patterns, and acute incidence of diseases, conditions, and health-related events in the region of operation. In this regard, Health Information Systems, such as DATASUS, constitute robust databases regulated by state and municipal authorities and serve as valuable tools for investigating the local epidemiological situation and monitoring hospital admissions across healthcare facilities⁽¹⁷⁾. The data generated by these systems enable managers to proactively organize services in order to meet expected demands and support priority decision-making.^(15,17,16)

Overcrowding and congestion are longstanding issues in emergency services. These challenges are faced globally, and in Brazil they affect both public and private sectors, exacerbated by the country's large geographic territory⁽¹⁸⁾. Contributing factors include population growth without proportional expansion of hospital beds, insufficient funding and physical resources, increasing complexity of care, and low problem-solving capacity in Primary Health Care. The consequences are severe: prolonged waiting times, delayed

care for critically ill patients, increased risk of iatrogenic events, unfavorable clinical outcomes due to higher morbidity and mortality, elevated costs, and excessive workloads for health teams⁽³⁾. A national survey conducted in 2013 by the Federal Court of Accounts found that 64% of public hospitals assessed were overcrowded, and 47% had patients accommodated in corridors⁽¹⁸⁾.

It is important to note that organizing patient demand mitigates overcrowding and congestion by reducing the time between patient arrival and care provision. Risk Classification Systems, particularly the Manchester Triage System, are critical tools for managing access to care and structuring service flow. By stratifying clinical risk levels, they prioritize patients with severe and life-threatening conditions and ensure timely access to care⁽¹⁸⁾⁽¹⁹⁾.

Management of care flow does not depend solely on the manager; it requires engagement from the entire multidisciplinary team⁽⁴⁾. Benefits include reduced complications, increased user and staff satisfaction, more accurate allocation of human and material resources, cost savings, generation of data to characterize patient profiles, and identification of clinical conditions that could be addressed at other levels of care within the health network⁽¹⁹⁾.

In a context marked by adversity, ensuring patient safety is a persistent challenge influenced by multiple factors. A key strategy involves preventing risks and adverse events related to care delivery, a process facilitated through the use of care management tools. Checklists serve as structured guides for clinical verification⁽²⁰⁾⁽²¹⁾. An example is the Patient Safety

Checklist for Emergency Care, consisting of 18 items grouped into the following categories: patient identification, medication administration, infection risk, fall risk, pressure injury risk, and surgical risk⁽²¹⁾. Such tools standardize communication among care providers, reduce the likelihood of iatrogenic events, and significantly improve the quality and safety of care⁽²⁰⁾.

Quality management has gained increasing relevance within emergency services, posing a challenge given the provision of care to critically ill patients in unstable environments with scarce resources. Managers can employ specific tools to diagnose and address predictors of care and managerial quality, aiming to build high-performing services⁽⁴⁾. One example is the Quality Program Assessment Tool developed by the Institute for Healthcare Improvement, consisting of an 18-question scale rated from 0 to 5 and encompassing the following domains: quality structure, quality planning, quality measurement, quality improvement activities, team involvement in the quality program, and program evaluation⁽²²⁾. This tool supports managers in developing strategies to improve institutional quality and enhance patient satisfaction.

The studies included in this review identified several tools that support managerial practice. However, strategic planning remains essential for guiding managerial actions and decisions. Planning is understood as a rational process focused on defining steps to achieve predefined objectives through strategies that ensure effectiveness⁽²³⁾. The initial step is situational diagnosis—primarily based on institutional indicators (economic, legal, care-related, and organizational)—which

equips managers for assertive decision-making. These indicators function as monitoring measures and metrics for processes, services, and staff performance⁽⁶⁾.

Systemic analysis of the organization, understanding institutional operations, and mapping barriers and challenges are fundamental components of planning⁽¹⁵⁾. The PDCA Cycle—Plan, Do, Check, Act—is a simple yet powerful tool to support this process, ensuring the achievement of goals through sequential and indispensable stages of strategic planning and effective implementation^(5,6,24).

Contributions of the study: Empowering managers through strategic management tools offers substantial potential to address the principal challenges in emergency services. Resolving the complex issues within emergency settings requires, among other elements, strategic managerial action. Strategic administration aimed at improving resolutiveness involves diagnosis, planning, implementation, and evaluation—stages in which management tools demonstrate utility, effectiveness, and low cost in supporting decision-making and guiding managerial practice.

As limitations of this review, it is important to note the scarcity of scientific studies addressing strategic management instruments in the context of emergency services in Brazil. The scientific production on this topic is largely concentrated in European and North American countries, whose healthcare systems differ substantially from those of developing nations. Furthermore, this integrative review presents methodological limitations inherent to its design. Study selection was restricted to publications available in five databases and limited to Portuguese, English, and Spanish, which may have excluded re-

levant studies published in other languages. Although well-defined inclusion and exclusion criteria were applied, the absence of a formal risk-of-bias assessment of the included studies is acknowledged, which may affect the robustness of the analyzed content. Finally, the methodological quality assessment of the included studies was predominantly based on levels of evidence 4 and 5, which constrains the strength of the conclusions drawn.

FINAL CONSIDERATIONS

The complexity and adversity inherent to emergency services in Brazil—particularly regarding the management of this sector—are evident. Management tools can optimize and support the resolution of the main challenges faced in these environments. This review identified seven management instruments applicable to emergency services, classified into five managerial domains: process management, quality management, care management, access management, and preventive management.

There is an urgent need for the implementation and consistent use of these instruments in order to transform the managerial reality of emergency care settings, thus enabling the transition from an empirical management model to a strategic and resolute administrative approach.

Although this review demonstrates the importance and utility of management tools in managerial practice, it is essential that managers carefully consider the selection, maintenance, and correct application of such instruments. Management tools must be adapted to the institutional context and processes—not the opposite.

Furthermore, the studies included in

this review demonstrated inefficiencies among emergency service managers in several relevant aspects, particularly regarding the formulation of resolute strategies to address sector challenges, the lack of specific administrative training for managerial roles, and the predominance of empirical managerial practices. There is consensus across the studies that managerial practice cannot be restricted to task execution and operational supervision; instead, it must be grounded in strategic planning and reflective managerial practice.

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