

# Empowering Healthcare Leadership Through Facilitators of Evidence-Based Management: A Narrative Review and Proposed Conceptual Framework

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#### Abstract

Decision-making in healthcare leadership often relies on subjective experiences rather than structured, evidence-based approaches, leading to inefficiency, missed opportunities for improvement and ineffective control over rising healthcare costs. This narrative review examined key facilitators that enhance the adoption of Evidence-Based Management (EBMgt) in healthcare, focusing on leadership effectiveness, operational efficiency, and strategic decision-making. A comprehensive literature search was conducted across PubMed, ABI/INFORM, Google Scholar, Emerald, ResearchGate, Harvard Business Review, ProQuest, and Health Business Elite, covering studies from 2015 to 2025. After applying inclusion criteria, 37 studies were analyzed to identify enablers supporting EBMgt implementation. The most common study designs were quantitative cross-sectional studies (n=11), systematic literature reviews (n=6), and qualitative studies with semi-structured interviews (n=5), with most studies conducted in the United States (n=9), Iran (n=6), and Australia (n=4). The findings showed that leadership commitment, organizational culture, access to high-quality evidence,

professional development, stakeholder engagement, and digital solutions are crucial in fostering an EBMgt culture. Healthcare organizations that effectively leverage these facilitators demonstrate improved adaptability, better resource utilization, and more informed leadership decisions. This review introduced the EBMgt Implementation Pentagon Model, a new conceptual framework encompassing five key constructs — Implementation Intentions (II), Knowledge Management (KM), Implementation Science (IS), Organizational Culture (OC), and Stakeholder Engagement (SE) to evaluate EBMgt adoption and increase awareness of its importance. Assessment included four statements per construct, evaluated using a five-point Likert scale. EBMgt adoption was weighed through a structured scoring system, with higher percentages ( $\geq$ 80%) signifying stronger integration, leadership commitment, and organizational alignment, while lower percentages (<40%) indicate minimal or no adoption.

Strengthening EBMgt through research-based evidence-informed decision-making (EIDM), data transparency, managerial training, economic evaluation, cost management, and digital transformation is essential for sustaining evidence-based decision-making. Future research should focus on refining measurement tools, addressing implementation barriers, and assessing long-term outcomes of EBMgt adoption while leveraging health systems science to promote sustainable healthcare systems.

**Keywords:** Evidence-Based Management, EBMgt, healthcare leadership, decision-making, enablers, operational efficiency implementation strategies, healthcare organizations, research utilization, EBMgt Implementation Pentagon Model

#### 1. Introduction

Every day, individuals rely on various forms of evidence to guide their choices, often without pausing to think about what "evidence" truly means. Managers exist in every nation, business, and organization, and they operate within the confines of the specific cultures, regulations, and practices pertinent to their environments. Consequently, a manager may oversee a singular project, a small enterprise, or a substantial organization.

In recent decades, there has been a strong focus on conducting scientific research on management practices and developing innovative organizational and administrative models, including Evidence-Based Management (EBMgt) as a strategic approach to improving healthcare leadership and decision-making. (Briner et al., 2009; Greene, 2020) The term "evidence-based" first emerged in the medical field during the 1990s, but its principles have since been adopted in various disciplines, including education, public policy, social work, and, more recently, healthcare management (Rousseau, 2013).

Evidence-Based Management (EBMgt) involves making informed decisions by relying on data and research findings as the basis for decision-making (The Center for Evidence-Based Management (CEBMa), 2025). According to Barends & Rousseau (2018), "Evidence-Based Management is about making decisions through the conscientious, explicit and judicious use of the best available evidence from multiple sources." Evidence-Based Management aims to enhance decision-making (Briner et al., 2009). This approach to decision-making and daily operational practices enables management practitioners to rigorously assess the reliability of the evidence they possess (Cruz & Blaney, 2021).

Additionally, it assists them in identifying, locating, and evaluating further evidence pertinent to their decisions. Figure 1 illustrates the key components influencing decision-making in an Evidence-Based Management framework, emphasizing four essential factors: research and evaluation, practitioner experience and judgments, stakeholder preferences and values, and organizational context (Barends & Rousseau, 2018). These elements collectively shape decisions by integrating empirical evidence, professional expertise, stakeholder input, and situational factors, ensuring a comprehensive and informed approach to management.



Figure 1. The Four Elements of Evidence-Based Decision

Source: Adapted from Barends and Rousseau (2018) and modified by the author.

Integrating Evidence-Based Management (EBMgt) into healthcare has been inconsistent for over a decade and many healthcare organizations rely solely on experience-based decision-making, overlooking available data sources and sometimes disregarding evidence (Hedayatipour et al., 2024). For instance, Lugo-Gil et al. (2019) found that many government healthcare leaders lacked a clear understanding of evidence-based decision-making (EBDM), often relying on subjective data rather than rigorous, objective research when shaping policies and programs. This approach highlights a gap between the rapidly evolving business landscape and healthcare managers' practices that struggle to adapt to a data-driven world (Alavi et al., 2015; Daouk-Öyry et al., 2021; Orlu et al., 2023). In effect, it is asserted that "billions of dollars are 'left on the table' or even squandered when managers" disregard evidence-based business practices and instead rely on less reliable sources of information (Olivas-Luján, 2008). This gap arises from an organizational lack of interest, low awareness, and insufficient frameworks for effective implementation (Speicher-Bocija & Adams, 2012). Understanding the reasons for the slow adoption of EBMgt is essential to identifying obstacles and developing strategies for its practical use.

The increasing complexity and competitiveness characterizing the modern healthcare arena require practitioners and managers to adopt robust and efficient strategies for evidence-based decision-making (Guo et al., 2017). EBMgt is one such model, and its implementation substantially impacts healthcare facilities' performance, as it bridges gaps between theory and practice, leading to better organizational and managerial decisions (Azar et al., 2024; Jaana et al., 2013; Janati et al., 2018b; Janati et al., 2018a).

This review contributes to the field of Evidence-Based Management (EBMgt) by critically evaluating relevant literature, identifying key facilitators that enhance EBMgt adoption, and outlining a structured theoretical framework (Baba & HakemZadeh, 2012; Bastani et al., 2019; Humphries et al., 2014). Additionally, it proposes a model for assessing the readiness to adopt evidence-informed decision-making in healthcare leadership, offering insights into optimizing managerial practices through validated EBMgt principles (Eapen et al., 2023; Shafaghat et al., 2022a). Understanding the reasons for the slow adoption of EBMgt is essential to identifying obstacles and developing strategies for its practical use.

#### 2. Background and Overview

The diverse specialties, distinct professional cultures, and extensive range of services contribute to the complexities of managing healthcare (Walston, 2017). Contemporary healthcare systems face numerous challenges and escalating costs (Al Harshan et al., 2024; HealthManagement.org (HM), 2024). These issues necessitate innovative solutions from healthcare leaders equipped with the requisite skills and knowledge to execute new strategies grounded in the most reliable research evidence-based practices (Gifford et al., 2018; Kakemam et al., 2020; Saberi, 2018).

The evolution of Evidence-Based Practice (EBP) has significantly influenced decision-making in healthcare by promoting critical appraisal and the application of research (Barends & Briner, 2014). Motivated by the Evidence-Based Practice (EBP) movement, the Evidence-Based Management (EBMgt) approach started to be considered slowly but surely for managers to actively seek and critically evaluate evidence from management research to inform their professional practices (Guo et al., 2017). Due to the extensive nature of EBMgt as a management philosophy, there is currently no universally recognized or universally accepted EBMgt process (Briner et al., 2009). While EBMgt involves managers making decisions based on the best available evidence (Guo et al., 2018), healthcare executive leaders are crucial in effectively implementing evidence-based practices within their organizations (Reichenpfader et al., 2015).

#### 2.1 Evidence

Decision-making improves based on valid research and reliable data evidence (Ellen et al., 2014). The proficient use of evidence is crucial in enabling the smooth operation of establishments in present society, including governmental bodies, healthcare institutions, commercial enterprises, and various other groups (Ellen et al., 2013; Martelli & Hayirli, 2018).

Evidence can come from various sources, including scientific research that provides generalizable insights into the world, people, or organizational practices (Baba & HakemZadeh, 2012; Rynes et al., 2018). It may also stem from operational data, local business indicators such as company metrics, key performance indicators (KPIs), or observed workplace conditions. Kilgus et al. (2024) advocated that utilization of health data is frequently linked to enhanced efficiency and considerable financial savings. Additionally, professional experience is valuable evidence, as seen when entrepreneurs refine their strategies through multiple ventures. Stakeholders also contribute essential information by highlighting potential consequences and interests related to a decision. Figure 2 illustrates the progression from raw data to benchmarks in evidence-based decision-making, emphasizing the role of monitoring (descriptive) and statistical analyses (inferential).



Figure 2. Organizational Data Transformation Pathway for Evidence-Based Decision-Making Source: Adapted from Barends and Rousseau (2018) and modified by the Author.

#### 2.2 Historical Development of Evidence-Based Management in Healthcare Administration

Evidence-based practice emerged in medicine during the 1990s, prioritizing scientific research over clinical tradition (Claridge & Fabian, 2005). Discussions soon explored its application in healthcare administration (Kovner & Rundall, 2006; Rousseau, 2006). By the early 2000s, healthcare institutions integrated research into policy, operations, and leadership, supported by electronic health records (EHRs) to enhance decision-making (Rousseau & McCarthy, 2007).

In the 2010s, healthcare organizations standardized Evidence-Based Management (EBMgt) practices, emphasizing quality improvement and interdisciplinary collaboration (Ledger, 2010). By 2015, hospitals widely adopted EBMgt, using performance metrics and patient outcomes for decision-making (Guo et al., 2015). Policy

integration and specialized training programs further strengthened implementation (Rousseau & Gunia, 2016). By 2018, big data and analytics improved managerial decisions, while patient-centered care models emphasized EBMgt's role in enhancing outcomes (Barends & Rousseau, 2018).

In 2020, the COVID-19 pandemic highlighted the importance of rapid decision-making processes in crisis response, reinforcing data-driven strategies (Bastani et al., 2022; Sallam & Snygg, 2022; Yang, 2020; Yu et al., 2021). AI, big data, and predictive analytics enhanced efficiency and resource allocation (Sallam et al., 2024b). Digital health and machine learning will continue to shape managerial decision-making, fostering global standards (Brommeyer et al., 2023; Sturm et al., 2023). Figure 3 presents the progression of Evidence-Based Management (EBMgt) in healthcare administration.

## **Early 1990s**

## **Early 2000s**

#### **Origins of Evidence-Based Practice:**

Evidence-based practice emerged in based on scientific research rather than clinical expertise or tradition.

Healthcare administration began adopting medicine, emphasizing decision-making evidence-based principles, integrating research findings into policy development, operational strategies, and leadership decision-making.

**Expansion into Healthcare Management:** 

## 2015

## 2010

**Increased Adoption in Healthcare** Organizations:

Hospitals widely adopted EBMgt, using research, performance metrics, KPIs, and patient outcomes to guide decisions.

**Development of Formal EBMgt Frameworks:** Institutions introduced structured frameworks for EBMgt, focusing on integrating research, organizational data, and professional expertise in healthcare leadership.

## 2024-2025

### Technological Integration and AI in **EBMgt**

2020

AI and analytics boost evidence-based healthcare management, enhancing efficiency and care.

## **Continuous Innovation and Policy** Integration:

Ongoing developments in digital health, machine learning, and predictive analytics will further strengthen evidence-based management, shaping the future of healthcare administration with datadriven decision-making.

Figure 3. Timeline of Evidence-Based Management Development in Healthcare Administration Source: Author.

### 2.3 Evidence-Based Management (EBMgt) Theoretical Framework

The Evidence-Based Management (EBMgt) theoretical framework (Figure 4) emphasizes the role of improved information quality and use in enhancing learning and decision-making quality (Rousseau, 2013). It integrates human experience and judgment with the best available scientific knowledge and systematic attention to organizational facts to ensure informed decisions. Evidence-based decisions and ethical considerations refine information use, enabling managers to apply high-quality evidence in organizational settings (Hasan et al., 2024).

The case for EBMgt suggests that managers can navigate challenges more effectively, ensuring that decision-making is based on reliable evidence rather than tradition, trends, self-promotion, or unquestioningly replicating high-performing organizations (Pfeffer & Sutton, 2006).



Figure 4. Key Dimensions of Evidence-Based Management (EBMgt)

Source: Adapted from Rousseau (2013) and modified by the author.

Tools for healthcare executives and managers to practice Evidence-Based Management (EBMgt) are available (Shafaghat et al., 2022b). For example, the Agency for Healthcare Research and Quality (AHRQ) provides the Informed Decisions Toolbox as a structured six-step approach that guides decision-makers in gathering, evaluating, and applying evidence effectively. The six steps (Table 1) include framing the decision question, identifying information sources, evaluating accuracy, assessing applicability, determining actionability, and ensuring sufficiency of information, ensuring that healthcare leaders make informed, transparent, and accountable decisions that improve organizational efficiency and patient outcomes (Agency for Healthcare Research and Quality (AHRQ), 2019).

Step	Description	Key Questions
1. Framing the Question	Define the decision and identify key information needs.	What is the decision, and what do I need to know to make a well-informed choice?
2. Finding Sources	Ensure all relevant evidence sources are explored.	Have I (or my team) looked in all the right places for evidence?
3. Evaluating Accuracy	Assess the validity, reliability, and comprehensiveness of the information.	How accurate, valid, and comprehensive is this information? Am I missing critical perspectives?
4. Assessing Applicability	Determine if the information is relevant to the specific decision and organization.	Is this information applicable to my organization and the decision I need to make?
5. Assessing actionability	Identify which recommendations can be implemented and their potential effects.	Can I translate this information into a concrete plan? What are the expected and unintended effects of my decision?
6. Determining sufficiency	Ensure enough evidence is available to make a well-informed decision.	Do I have enough information to proceed? Is there a single best option, or are multiple reasonable options available? What if the information I need does not exist yet?

Table 1. Informed Decis	sions Toolbox:	Six-Step Approach
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Source: Adapted from the Agency for Healthcare Research and Quality (AHRQ) (2019).

#### 2.4 Evidence-Based Management and Leadership in Healthcare Settings

In the current climate of heightened accountability in the 21st century, executive leaders in the healthcare sector across numerous organizations seek to adopt robust management methodologies, such as Lean management

(Sallam et al., 2024a), Six Sigma (Alkeelani et al., 2025; Sallam, 2024a), and similar frameworks, in order to enhance operational performance (Sallam, 2024b).

Reichenpfader et al. (2015) emphasized the critical role of leadership within healthcare organizations in successfully implementing Evidence-Based Management (EBMgt) in health environments. Their analysis of 17 studies indicated that leadership was predominantly viewed as a key facilitator for successful implementation, mainly through supportive leadership. Considering that many researchers regard leadership as a crucial contextual factor in the implementation of EBMgt, it is essential to investigate how leadership, in conjunction with organizational culture, can cultivate the advancement of such a philosophy within hospitals. (Hargett et al., 2017)

To foster a sustainable EBMgt culture, healthcare organizations must prioritize leadership development, structured decision-making frameworks, and performance-driven strategies (Olariu, 2019). Recent studies highlight the role of Lean Leadership in optimizing hospital pharmacy operations, reducing waiting times, and enhancing patient satisfaction through evidence-based methodologies (Sallam et al., 2025). The integration of Lean Six Sigma principles supports operational efficiency, strengthens employee engagement, and aligns management practices with data-driven improvements, reinforcing the importance of EBMgt in achieving superior healthcare outcomes (Sood & Teherani, 2022).

Integrating Evidence-Based Management (EBMgt) into healthcare leadership enhances decision-making and operational efficiency by aligning managerial practices with validated evidence (Figure 5). This process involves four key components. First, sources of evidence serve as the foundation, incorporating scientific research, organizational data, expert insights, and stakeholder input to support informed leadership. Second, leadership integration ensures the application of this evidence in strategic decision-making, policy document formulation (Solberg et al., 2024), and operational enhancements, fostering best practices and managerial effectiveness (Abelsson et al., 2021; Jackson & Leung, 2018). Third, implementation factors determine the success of EBMgt adoption, influenced by leadership commitment, organizational culture (El Leithy, 2017), training (Ayeleke et al., 2016), and technology integration, which facilitate the seamless embedding of evidence-based strategies in healthcare operations (Speicher-Bocija & Adams, 2012). Finally, the outcomes of this integration are reflected in stronger leadership, improved decision-making, enhanced efficiency, and better patient outcomes. Aligning these elements reinforces the role of evidence-driven approaches in optimizing healthcare leadership and performance.



Figure 5. Integration of Evidence-Based Management in Healthcare Leadership

Source: Author.

#### 2.5 Balancing Cost and Quality for Sustainable Healthcare

Implementing evidence-based management (EBMgt) principles through data-driven methodologies and fostering stakeholder collaboration optimizes resource allocation, reduces financial pressures, and maintains high-quality care. The global long-term sustainability of healthcare systems depends on integrating cost-conscious decision-making with innovative, patient-centered strategies that enhance efficiency and accessibility. These strategies, which put the patient at the heart of decision-making, are crucial in our efforts to improve service delivery and achieve better health outcomes (HealthManagement.org (HM), 2024).

#### **3. Materials and Methods**

#### 3.1 Study Design

The study systematically conducted a narrative literature review (Ferrari, 2015; Green et al., 2006; Williams,

2018) to identify key facilitators of Evidence-Based Management (EBMgt) adoption in healthcare leadership. Based on the findings, the study introduces the Pentagon Model, a conceptual framework designed to assess and enhance EBMgt implementation through five key constructs: Implementation Intentions (II), Knowledge Management (KM), Implementation Science (IS), Organizational Culture (OC), and Stakeholder Engagement (SE).

#### 3.2 Statement of the Problem

Despite the increasing recognition of Evidence-Based Management (EBMgt) in healthcare leadership, its implementation in decision-making and operational efficiency remains inconsistent (Ledger, 2010; Rynes & Bartunek, 2017). Key facilitators that support its adoption are not always well-defined or effectively leveraged, underscoring the need for a structured approach to enhance and sustain its application in healthcare settings (Kazman Kohn et al., 2011).

#### 3.3 Theoretical Framework

This study is grounded in the Evidence-Based Management (EBMgt) Model, which emphasizes decision-making based on integrating scientific research, organizational data, professional expertise, and stakeholder input (Briner et al., 2009; Pfeffer & Sutton, 2006; Rousseau, 2006). The model provides a structured approach to improving leadership effectiveness and operational efficiency in healthcare by ensuring that managerial decisions are supported by credible evidence rather than intuition or tradition (Jepsen & Rousseau, 2022).

#### 3.4 Research Question (RQ)

What are the key facilitators of Evidence-Based Management (EBMgt) in enhancing decision-making and leadership effectiveness in healthcare?

#### 3.5 Literature Search Strategy

Relevant literature was identified through systematic searches (Figure 6) in PubMed, ABI/INFORM, Google Scholar, Emerald, ResearchGate, Harvard Business Review, ProQuest, and Health Business Elite.



Figure 6. Sources for Literature Search

Source: Author.

The search terms included combinations of "Evidence-Based Management enablers," "healthcare leadership," "decision-making," "operational efficiency," "management frameworks," "health systems science," and "healthcare administration." Boolean operators were applied to refine the search, using and to combine key concepts ("Evidence-Based Management" or "EBMgt") and ("facilitators" or "enablers" or "supporting factors") and ("decision-making" or "leadership effectiveness" or "managerial decision-making") and ("implementation"

or "adoption" or "policy integration") and ("healthcare" or "hospital management" or "healthcare organizations") not ("clinical management") not ("clinical trials") not ("evidence-based clinical practice" and "patient treatment decisions").

#### 3.6 Inclusion Criteria

Studies were included if they were peer-reviewed articles, systematic reviews, or empirical studies published in English, focusing on applying Evidence-Based Management (EBMgt) in the healthcare sector. Research examining facilitators of decision-making processes, operational efficiency, and leadership EBMgt frameworks in healthcare settings was prioritized. Only studies published within the last decade were included from 2015 to early 2025 to ensure relevance to current practices.

#### 3.7 Exclusion Criteria

Studies were excluded if they did not focus on healthcare leadership or EBMgt frameworks, as well as those concentrating solely on clinical decision-making rather than managerial applications. Non-English publications and studies with insufficient data were also excluded.

#### 3.8 Data Collection and Analysis

The screening process began with a review of article titles and abstracts, followed by a full-text assessment to confirm eligibility. Relevant data extracted included study characteristics, research methodology, key findings, and the influence on leadership decision-making and operational efficiency.

#### 4. Results

The initial search using combinations of the terms "Evidence-Based Management enablers," "healthcare leadership," "decision-making," "operational efficiency," "management frameworks," and "healthcare administration" focused on titles and abstracts of articles published in English, available in full text, from Jan 1, 2015, to Feb 14, 2025. This search yielded 6,747 records across the eight databases: PubMed (n=1,200), ABI/INFORM (n=258), Google Scholar (n=2,500), Emerald (n=150), ResearchGate (n=300), Harvard Business Review (n=50), ProQuest (n=2,089), and Health Business Elite (n=200).

After removing 1,970 duplicate records, 4,777 unique records remained for screening. 3,802 records were excluded based on title and abstract review due to irrelevance to Evidence-Based Management (EBMgt) in healthcare leadership. 975 articles underwent full-text assessment, resulting in 37 articles meeting the inclusion criteria. These articles encompassed elements revolving around five key thematic areas related to EBMgt enablers, including 1) Research, 2) Organizational culture and leadership support, 3) Capacity building and training strategies, 4) Technology and digital solutions strategies, and 5) Collaboration, knowledge sharing, and benchmarking strategies. Most studies included in this review were conducted in the United States (n=9), followed by Iran (n=6) and Australia (n=4), with additional studies originating from diverse regions, including Palestine, Sweden (n=2 each), and various other countries (n=1 each). The most common study design was quantitative cross-sectional studies (n=5). Conceptual framework development, mixed-methods studies, and scoping reviews were each used in three studies, while integrative literature reviews and case study approaches were each employed in two studies. An empirical study on Polish public hospitals (n=1) and a quasi-experimental design (n=1) were identified less frequently. The final selection of studies (Table 2) provided comprehensive insights into the facilitators driving EBMgt adoption in healthcare settings.

Author/Year	r	Journal	Study Design	Country	Key EBMgt Facilitators
(Sanaeifar al., 2025)	et	Frontiers in Public Health	Scoping Review	Iran	Identified key competencies for Evidence-Based Management in healthcare, including leadership, communication, technical knowledge, critical thinking, research skills, information management, and stakeholder engagement.
(Azar et 2024)	al.,	International Journal of Healthcare Management	Quantitative, Cross-Sectional Study	Jordan	All three theory of planned behavior (TPB) constructs (attitude, subjective norm, perceived behavioral control) significantly influenced EBMgt adoption. Subjective norm was the strongest predictor.
(Diane et	al.,	Journal of	Integrative	South	Executive support, continuous education,

Table 2. Overview of included studies

Author/Year	Journal	Study Design	Country	Key EBMgt Facilitators
2024)	Nursing Management	Literature Review	Africa	structuredincentives,effectivecommunication,andstakeholderengagement.
(Välimäki et al., 2024)	BMC Nursing	Mixed-Methods Study	Finland	Leadership support, training programs, access to EBMgt resources, stakeholder engagement.
(Alboliteeh et al., 2023)	Sustainability	Quantitative, Cross-Sectional Study	Saudi Arabia	Knowledge management strategies, leadership support, organizational learning, and sustainability-focused decision-making frameworks.
(Alsaqqa, 2023)	F1000Researc h	Perspective Framework Analysis	Palestine	Leadership engagement, structured EBMgt guidelines, organizational culture, evidence integration into decision-making, and systematic monitoring for EBMgt adoption.
(Abelsson et al., 2022)	Journal of Healthcare Leadership	Qualitative Content Analysis of Individual Interviews	Sweden	Leadership influence, organizational support, and structured EBMgt frameworks were key facilitators of effective decision-making.
(Elkhyer et al., 2022)	International Journal of Health Sciences	Quasi-Experime ntal Design	Egypt	Evidence-Based Decision-Making (EBDM) knowledge scores improved immediately and at 3 months post-training with a statistically significant increase in EBDM application.
(Sahakian et al., 2022)	Journal of Health Organization and Management	Scoping Review	Global	Leadership commitment, organizational culture, access to high-quality evidence, integration of evidence into decision-making, and stakeholder involvement.
(Shafaghat et al., 2022a)	Archives of Public Health	Quantitative, Cross-Sectional Study	Iran	Leadership commitment, training programs, supportive organizational policies, and access to evidence-based resources.
(Young, 2022)	Journal of Applied Leadership and Management	Design-Based Case Study	United States	Leadership readiness, structured interventions, strategic decision-making frameworks, training, and development for EBMgt adoption.
(Daouk-Öyry et al., 2021)	British Journal of Management	Qualitative Study with Semi-Structured Interviews	Lebanon	Thirteen competencies were identified and grouped into four dimensions: technical, cognitive, interpersonal, and intrapersonal. Key facilitators include open-mindedness, research knowledge, ethicality, resourcefulness, and relationship management.
(Shafaghat et al., 2021a)	Systematic Reviews	Scoping Review	Iran	Positive attitudes towards EBMgt, strong leadership, organizational support, teamwork and collaboration, sufficient infrastructure, workforce development, and access to research and data.
(Shafaghat et al., 2021b)	Journal of Education and Health Promotion	Mixed-Methods Study	Iran	Relevant and reliable evidence, researcher-decision-maker collaboration, strong supervision and control, reforming planning and decision-making systems.
(Cruz &	Muma	Systematic	United	Leadership advocacy, fostering an

Author/Year	Journal	Study Design	Country	Key EBMgt Facilitators
Blaney, 2021)	Business Review	Literature Review	States	organizational culture that values research evidence, strategic partnerships with scholars, structured decision-support tools, and integrating innovation diffusion strategies to enhance EBMgt adoption.
(Frączkiewicz- Wronka et al., 2021)	Risks	Empirical Study On 103 Polish Public Hospitals	Poland	Stakeholder engagement, structured risk management practices, financial stability frameworks, leadership involvement in decision-making, and integration of financial sustainability strategies.
(Criado-Perez et al., 2020)	Australian Journal of Management	Literature Review and Meta-Analysis	Australia	Information system capabilities, transformational leadership, employee collaboration, knowledge sharing, resource availability, external knowledge inflows, and inter-organizational collaboration.
(Sevy Majers & Warshawsky, 2020)	Nurse Leader	Case Study Approach	United States	Leadership support, structured decision-making framework, access to multiple evidence sources, stakeholder involvement, and competency development for EBMgt adoption.
(Alsaqqa, 2020)	International Journal of Health Services Research and Policy	Conceptual Framework Development	Palestine	Organizational culture, leadership engagement, structured decision-making frameworks, access to high-quality evidence, and stakeholder collaboration.
(Hasanpoor et al., 2019)	Worldviews on Evidence-Base d Nursing	Quantitative, Cross-Sectional Study	Iran	Leadership commitment, fostering an organizational culture that values research, continuous learning in management principles, stakeholder engagement, and social support for EBMgt adoption.
(Guo et al., 2019)	International Journal of Healthcare Management	Quantitative, Cross-Sectional Study	United States	Positive attitudes towards EBMgt perceived behavioral control education level as a moderator for EBMgt adoption.
(Christensen V, 2019)	Medical Care	Qualitative Study with Semi-Structured Interviews	United States	Timeliness of evidence, unbiased methodology, relevant scoping for decision-making, concise evidence summaries, stakeholder partnerships, and practical application guidance.
(Tate et al., 2019)	Journal of Health Services Research & Policy	Systematic Review and Meta-Synthesis of Qualitative Case Studies	Canada	Strong leadership support, integration of research evidence, stakeholder collaboration, and structured decision-making frameworks.
(Liang et al., 2018)	BMC Health Services Research	Quantitative, Cross-Sectional Study 360° Assessment Study	Australia	Leadership commitment, competency-based training, structured professional development programs, stakeholder engagement, and data-driven decision-making frameworks.
(Bianchi et al., 2018)	Journal of Nursing Management	Integrative Literature Review (N = 28)	Global	Twenty-eight studies were reviewed (2006–2016), all highlighting leadership as key to adopting evidence-based practice (EBP). Nurse managers shape EBP culture,

Author/Year	Journal	Study Design	Country	Key EBMgt Facilitators
				requiring training and resources.
(Afsaneh et al., 2018)	Management Decision	Systematic Literature Review	Italy	Integration of multiple evidence sources (published studies, real-world data, expert opinions), structured analysis of empirical evidence, and development of process-oriented frameworks for decision-making.
(Guo et al., 2018)	American Journal of Management	Quantitative, Cross-Sectional Study	United States	EBMgt culture, organizational support, access to EBMgt resources, and training programs.
(Greaves, 2017)	International Journal of Health Governance	Qualitative Study with Semi-Structured Interviews	Caribbea n (Small Island Developi ng States - SIDSs)	Leadership advocacy, fostering a research-oriented culture, integration of data-driven decision-making, cross-sector collaboration, and regional policy support for EBMgt adoption.
(Guo et al., 2017)	Leadership in Health Services	Quantitative, Cross-Sectional Study	United States	Leadership attitude toward EBMgt, organizational size, professional experience, access to organizational data, and stakeholder engagement.
(Janati et al., 2017)	Ethiopian Journal of Health Sciences	Qualitative Study with Semi-Structured Interviews and Focus Group Discussions (N=48)	Iran	Scientific and research evidence, hospital data and information systems, political-social development plans, professional expertise of managers, ethical-moral evidence, and stakeholder values and expectations.
(Liang et al., 2017)	Asia Pacific Journal of Health Management	Quantitative, Cross-Sectional Study 360° Assessment Study	Australia	Leadership commitment, competency-based training, stakeholder engagement, access to organizational data, structured decision-making frameworks, and continuous professional development.
(Sarkies et al., 2017)	Implementatio n Science	Systematic Literature Review	Global	Establishing an imperative for practice change, building stakeholder trust, developing a shared vision, employing effective communication strategies, providing resources to support change, knowledge brokering, targeted messaging, workshops, policy briefs, and research implementation strategies.
(Guo et al., 2016)	Hospital Topics	Quantitative, Cross-Sectional Study	United States	Leadership support, organizational culture fostering evidence use, access to high-quality data, structured decision-making frameworks, and training programs for EBMgt adoption.
(Wright et al., 2016)	British Journal of Management	Mixed-Methods Study	United Kingdom	Leadership commitment, structured decision-making frameworks, and access to reliable data sources.
(Guo et al., 2015)	Journal of Hospital Librarianship	Quantitative, Cross-Sectional Study	United States	Access to organizational data, reliance on professional networks and expert consultations, availability of decision-support resources, and enhanced information literacy skills among hospital administrators.

Author/Year	Journal	Study Design	Country	Key EBMgt Facilitators
(Martins & Isouard, 2015)	Asia Pacific Journal of Health Management	Framework Development & Systematic Analysis	Australia	Competency-based education, leadership development, strategic management training, and continuous professional education.
(Reichenpfader et al., 2015)	Leadership in Health Services	Systematic Literature Review	Sweden	Leadership commitment, organizational support, transformational leadership, role clarity, and structured decision-making frameworks.

#### 5. Discussion

#### 5.1 Core Determinants from the Narrative Review

This narrative review was motivated by the necessity to ascertain essential determinants that promote the adoption of Evidence-Based Management (EBMgt) among leaders in the healthcare sector (Kovner & Rundall, 2006). The body of literature surrounding Evidence-Based Management facilitators exhibited a diverse range of focus and breadth (Rynes & Bartunek, 2017). This examination concludes by identifying key facilitators that can be strategically deployed to support the successful application of Evidence-Based Management in healthcare administration contexts (Ellen et al., 2014).

While authors such as Janati et al. (2018b), Alboliteeh et al. (2023), Azar et al. (2024) considered all healthcare managers, others were more specific to nursing management (Bianchi et al., 2018; Diane et al., 2024; Elkhyer et al., 2022; Hasanpoor et al., 2019; Sevy Majers & Warshawsky, 2020; Välimäki et al., 2024). Sanaeifar et al. (2025) conveyed that Evidence-Based Management was a self-directed process that enabled healthcare managers to refine and enhance their management approaches.

Some studies critiqued and observed that healthcare managers frequently relied on personal experience to make their judgments prone to bias, systematic errors, and reduced decision quality (Daouk-Öyry et al., 2021; Wright et al., 2016).

#### 5.2 Facilitators of Evidence-Based Management (EBMgt)

Within a rapidly evolving and complex healthcare landscape, the importance of effective decision-making processes and leadership practices among healthcare administrators has become more pronounced than ever (Guo et al., 2018). Xuan Tho (2024) conveyed that formal incentive programs have the potential to facilitate the adoption of Evidence-Based Management.

This part travels through the inquiry of the key facilitators of Evidence-Based Management (EBMgt). It synthesizes insights into important enablers that can assist healthcare teams in successfully adopting Evidence-Based Management in their practice settings and managerial roles, an effort vital to improving health system outcomes (Spiri & MacPhee, 2013).

**Research and Education Strategies:** Strategies that involve collaboration with individuals, organizations, or policymakers facilitate the process of knowledge translation, ensuring that research findings are effectively integrated into healthcare management practices (Guo et al., 2019; Laustsen et al., 2021; Sarkies et al., 2017). Leveraging systematic reviews, real-world data analysis, and evidence synthesis enables healthcare managers to make informed decisions grounded in high-quality research (Afsaneh et al., 2018; Guo, 2020; Sahakian et al., 2022; Shafaghat et al., 2022a; Välimäki et al., 2024). Librarians can effectively contribute as collaborative team members by leveraging their skills and knowledge to aid hospital administrators in decision-making (Guo et al., 2015). Additionally, fostering partnerships with academic institutions, research bodies, and professional networks enhances access to relevant evidence, promotes innovation, and strengthens the adoption of Evidence-Based Management (EBMgt) across healthcare organizations (Preez et al., 2024).

**Organizational Culture and Leadership Support Strategies:** Hospital administrators hold both the responsibility and the authority to reshape their organization's structures and culture to foster research evidence that advances effective management decisions (Alsaqqa, 2020; Criado-Perez et al., 2020; Cruz & Blaney, 2021; Diane et al., 2024; Guo et al., 2017; Reichenpfader et al., 2015). As a result, the organizational board and executive leadership play a crucial role in ensuring that their institution's managerial culture is conducive to Evidence-Based Management (EBMgt) (Alsaqqa, 2023; Azar et al., 2024; Sanaeifar et al., 2025; Shafaghat et al., 2021a; Tate et al., 2019). To achieve this objective, leadership must familiarize themselves with the principles of EBMgt to identify areas where the integration of EBMgt practices and processes is necessary for optimizing patient healthcare outcomes (Abelsson et al., 2022; Bianchi et al., 2018; Christensen V, 2019; Rousseau, 2013; Shafaghat et al., 2021b; Young, 2022).

**Capacity Building and Training Strategies:** Successful EBMgt adoption depends on equipping healthcare managers with the necessary competencies to apply research-based decision-making in their leadership roles (Daouk-Öyry et al., 2021; Kakemam et al., 2020; Liang et al., 2018) Training programs, workshops, and continuous professional development initiatives play a crucial role in bridging the knowledge gap and ensuring that managers can interpret, critically appraise, and apply research findings effectively (Elkhyer et al., 2022; Guo et al., 2016; Sevy Majers & Warshawsky, 2020). Leadership development programs emphasizing analytical skills, research utilization, and problem-solving techniques further support EBMgt integration (Guo et al., 2018; Janati et al., 2017; Sanaeifar et al., 2025). Moreover, mentorship initiatives and experiential learning opportunities allow managers to practice evidence-informed strategies in real-world settings, reinforcing their ability to make data-driven decisions (Elkhyer et al., 2022). Health systems must prioritize structured competency and capacity-building efforts to ensure long-term sustainability and consistent application of EBMgt practices across managerial levels (Liang et al., 2018; Liang et al., 2017).

**Technology and Digital Solutions Strategies:** Technological advancements have significantly influenced the ability of healthcare leaders to implement and sustain EBMgt practices (Eapen et al., 2023). Digital solutions, including artificial intelligence (AI)-driven analytics, electronic health records (EHRs), and decision-support systems, enhance access to evidence and improve the efficiency of managerial decision-making (Greaves, 2017). Automated data analytics tools enable real-time performance monitoring, allowing leaders to identify trends, measure key performance indicators, and implement timely interventions based on empirical insights (Bates et al., 2014). To maximize the impact of technology in EBMgt adoption, healthcare organizations must invest in digital literacy training, ensure interoperability of information systems, and address data privacy concerns to build trust in digital decision-support mechanisms.

**Collaboration, Knowledge Sharing, and Benchmarking Strategies:** Collaborative networks, knowledge-sharing platforms, and benchmarking frameworks are essential enablers of Evidence-Based Management (EBMgt) in healthcare (Alboliteeh et al., 2023; Frączkiewicz-Wronka et al., 2021; Hasanpoor et al., 2019; Martins & Isouard, 2015). Onofre & Teixeira (2022) highlighted that open communication and shared learning enhance evidence-based decision-making, while Kulikowski (2021) emphasized the role of structured benchmarking in improving leadership effectiveness. Regular forums, peer-review panels, and leadership summits facilitate dialogue among managers, researchers, and policymakers, ensuring that decisions are informed by diverse expertise. Additionally, integrating institutional sources, expert advisory panels, and benchmarking models strengthens knowledge accessibility, reinforces credibility, and fosters continuous improvement in data-driven healthcare management (Sanaeifar et al., 2025).

#### 5.3 Developing a New EBMgt Implementation Pentagon Model

Classifying studies into five key thematic enablers provided a structured foundation for developing a comprehensive measurement model. The literature consistently identified these enablers as critical factors influencing EBMgt adoption in healthcare settings.

The Pentagon Model for EBMgt implementation was developed to assess and facilitate the adoption, adaptation, and application of Evidence-Based Management in healthcare. By integrating five conceptual theories: Implementation Intentions (II), Organizational Culture (OC), Knowledge Management (KM), Implementation Science (IS), and Stakeholder Engagement (SE), this model evaluates the system's capacity to implement and sustain EBMgt practices, supporting their effective dissemination in healthcare management (Figure 7).



Figure 7. The EBMgt Implementation Pentagon Model

Source: Author.

**Implementation Intentions (II):** These are purposeful strategies used when people may be motivated to act but cannot translate that motivation into action (Wijetunge et al., 2023). Implementation intentions are distinct from behavioral intentions because they specify the conditions under which a particular target behavior will be performed. The intention of healthcare managers to implement Evidence-Based Management principles in their practice is influenced by their attitudes, subjective norms, and perceived behavioral control.

Leadership is essential in translating motivation into action by fostering a culture of implementation and reinforcing commitment to Evidence-Based Management (Walston, 2017). It pairs with peer support to align individual intentions with organizational goals, enhancing the successful adoption of these principles (Reichenpfader et al., 2015).

**Knowledge Management (KM):** Knowledge is an essential resource for organizations. In line with this principle, many organizations are implementing knowledge management (KM) initiatives, recognizing that their competitive advantage lies in effectively capturing, retaining, storing, and sharing knowledge (Alboliteeh et al., 2023). The adoption of Evidence-Based Management principles by healthcare managers can increase significantly when they have access to and effectively utilize relevant knowledge, skills, and the latest research information, thereby facilitating institutional evidence-based decision-making (Mutua et al., 2024; Uneke et al., 2023). Dobbins et al. (2018) highlighted that effective knowledge brokering strengthens EBMgt adoption by enhancing decision-making skills. Additionally, providing evidence summaries in a clear and comprehensible language format facilitates the adoption of Evidence-Based Management by enhancing usability, bolstering credibility, and improving decision-making efficiency for healthcare leaders (Busert et al., 2018). Moreover, various training modalities, such as blended learning and distance education, significantly contribute to capacity building for evidence-based management in healthcare by effectively bridging skill gaps and enhancing decision-making abilities among healthcare managers (Jacob et al., 2018).

**Implementation Science (IS):** The scientific study of techniques and approaches that aid in accomplishing the uptake of evidence-based practice and research into regular use by managers and policy-makers (Eccles & Mittman, 2006).

The practical implementation of healthcare managers in Evidence-Based Management principles can increase with adequate support and scientific resources.

**Organizational Culture (OC):** The organizational culture refers to the core values and practices established by an organization to manage its internal challenges and adapt to changes in its external environment. It is crucial to evaluate the organizational culture accurately, considering the impact of leaders and management on shaping and preserving the culture (Zareivenovel et al., 2024). Adopting healthcare managers to use Evidence-Based Management principles can increase when the organizational culture is supported (Rousseau, 2013).

Stakeholder Engagement (SE): The involvement of stakeholders has become a common practice in various

industries, including healthcare (Frączkiewicz-Wronka et al., 2021). The successful implementation of Evidence-Based Management principles by practicing healthcare managers depends on their ability to engage effectively and involve different stakeholders (Damba et al., 2022; Petkovic et al., 2023). These stakeholders include internal and external groups, such as healthcare leadership, clinical and non-clinical staff, organizational decision-makers, and external entities like health regulatory agencies, insurance providers, other healthcare organizations, patients, and professional associations. Each plays a crucial role in policy development, financial sustainability, service delivery, and decision-making processes, making their engagement essential for aligning Evidence-Based Management practices with organizational and systemic goals.

#### 5.4 Evaluating and Scoring Healthcare Managers' EBMgt Adoption

Healthcare managers' EBMgt adoption can be assessed using a structured scoring system based on five key constructs of the EBMgt Implementation Pentagon Model: (1) Implementation Intentions (II), (2) Knowledge Management (KM), (3) Implementation Science (IS), (4) Organizational Culture (OC), and (5) Stakeholder Engagement (SE). A five-point Likert scale-based survey shall measure responses, with scores aggregated to determine overall adoption levels (Table 3). Each statement is rated on a five-point Likert scale (Bhandari & Nikolopoulou, 2023), with response options defined as follows: for agreement-based statements, responses range from 1 = strongly disagree (completely disagree), 2 = disagree (somewhat disagree), 3 = neither agree nor disagree (neutral), 4 = agree (somewhat agree), and 5 = strongly agree (completely agree). for frequency-based statements, responses range from 1 = never (does not happen at all), 2 = rarely (occurs occasionally but infrequently), 3 = sometimes (intermittently but not consistently), 4 = often (regularly but not always), and 5 = always (occurs all the time without exception).

Pentagon Construct	Statement	Likert Scale Option
Implementation Intentions (II)	1) Applying Evidence-Based Management (EBMgt) principles enhances the quality of healthcare decision-making and management.	Agreement
	2) A structured and actionable plan for implementing EBMgt is established within my organization.	Agreement
	3) I am highly motivated to integrate EBMgt principles into my managerial decision-making processes.	Agreement
	4) My colleagues, peers, and leadership actively support the implementation of EBMgt in our organization.	Agreement
Knowledge Management (KM)	5) My organization provides sufficient knowledge and training on EBMgt to support informed decision-making.	Frequency
	6) Exchanging knowledge and best practices is a fundamental component of effective EBMgt adoption.	Agreement
	7) EBMgt-focused training and professional development programs are regularly conducted in my organization.	Frequency
	8) Integrating research findings into managerial decision-making is essential for optimizing healthcare outcomes.	Agreement
Implementation Science (IS)	9) The EBMgt framework is relevant, comprehensible, and applicable to daily management tasks.	Agreement
	10) My workplace provides adequate support and resources to facilitate EBMgt implementation.	Frequency
	11) I have the necessary skills to evaluate and apply research findings in my managerial decisions critically.	Agreement
	12) My organization has well-defined guidelines for systematically implementing EBMgt strategies.	Frequency
Organizational Culture (OC)	13) Social norms and professional expectations influence how EBMgt is adopted in my organization.	Frequency
	14) The organizational culture within my workplace	Agreement

Table 3. EBMgt Implementation Pentagon Model Constructs and a Five- Points Likert Scale

Pentagon Construct	Statement	Likert Scale Option
	actively promotes and facilitates EBMgt adoption.	
	15) Leadership within my organization is visibly committed to the successful implementation of EBMgt.	Agreement
	16) Access to EBMgt-related resources, such as research databases and decision-support tools, is seamless and efficient.	Agreement
Stakeholder Engagement (SE)	17) Engaging stakeholders, "including healthcare providers, policymakers, and administrators," in the decision-making process is crucial for the effective implementation of EBMgt.	Agreement
	18) Key stakeholders are actively and consistently engaged in EBMgt planning.	Frequency
	19) Clear and structured communication channels enhance collaboration and contribute to the success of EBMgt.	Agreement
	20) The implementation of EBMgt practices effectively meets stakeholders' priorities and expectations.	Agreement

Scores are categorized into high, moderate, limited, or minimal adoption (Table 4), allowing for targeted analysis and improvement strategies. Statistical methods, including descriptive and inferential analyses, can be used to identify the distribution of responses and key enablers or predictors influencing EBMgt adoption, respectively. It also guides interventions to enhance evidence-based decision-making in healthcare management.

Score Range (%)	Adoption Level	Interpretation
80—100%	High Adoption	Strong integration of EBMgt principles, well-supported by organizational culture and leadership.
60 — 79%	Moderate Adoption	Partial implementation with room for improvement in specific areas.
40 — 59%	Limited Adoption	Basic application, but significant knowledge, support, or stakeholder engagement gaps exist.
< 40%	Minimal Adoption	Low or no integration, requiring targeted interventions to initiate and enhance EBMgt application.

#### 5.5 Implications for Practice and Future Research Directions

The outcomes of this investigation yielded significant insights that possess numerous practical implications for the adoption and integration of Evidence-Based Management (EBMgt) within hospitals and healthcare systems. Initially, healthcare executives must evaluate the current level of EBMgt practices across all leadership tiers and the institution as a unified entity, thereby establishing a foundational benchmark for evidence-based leadership methodologies. Health Systems Science (HSS) could provide a complementary approach by integrating system-wide thinking, interdisciplinary collaboration, and sustainable healthcare strategies to enhance EBMgt adoption (Sood & Teherani, 2022). The EBMgt Implementation Pentagon Model presents a structured framework to aid in this evaluation, offering a systematic means to measure the incorporation of EBMgt through its five principal constructs. This model enables healthcare organizations to identify gaps, reinforce supportive factors, and monitor their progress toward evidence-based decision-making (EBDM). To ensure the validity of the Pentagon Model, future research should assess its content validity index (CVI) through expert evaluations, measuring relevance, clarity, and applicability across healthcare settings.

Healthcare systems aspiring to integrate EBMgt must appreciate the facilitators involved in its implementation and acknowledge the necessary shifts in leadership style and organizational culture to realize this objective successfully.

Furthermore, health scholars and executives may engage in action research projects to assist health systems in

implementing Evidence-Based Management practices. Establishing partnerships with academic institutions and leveraging external expertise can enhance evidence accessibility (Preez et al., 2024).

Consequently, future research initiatives may encompass the execution of both cross-sectional and longitudinal studies within healthcare organizations.

Bridging the gap between research and decision-making requires targeted research, clear messaging, and capacity building to enhance evidence-based public health policies (Orton et al., 2011).

#### 5.6 Study Limitations

Despite the comprehensive approach taken in this review, several limitations must be acknowledged. The reliance on secondary data from existing literature may have introduced selection bias, as only published studies meeting predefined inclusion criteria were considered, potentially overlooking unpublished or grey literature. The heterogeneity of methodologies across the included studies limits direct comparisons and generalizability, as healthcare leadership and decision-making structures vary across regions and institutions. While the review focused on facilitators, systemic barriers such as resistance to change, resource constraints, and regulatory challenges were not deeply analyzed, which may impact the practical application of the study. Additionally, the Pentagon proposed model has not undergone empirical validation, requiring future research to conduct pilot studies and Content Validity Index (CVI) assessments to refine its applicability in different healthcare settings. Furthermore, the rapid evolution of digital health, AI, and big data in EBMgt was not fully captured, necessitating continuous updates to integrate emerging technological advancements. Addressing these limitations through further research will enhance the robustness of EBMgt frameworks and support the effective implementation of the Pentagon Model in diverse healthcare environments.

#### 6. Conclusion

Evidence-Based Management (EBMgt) offers a structured, research-driven approach to decision-making, enabling healthcare administrators to identify opportunity gaps and implement effective, organization-specific solutions. In shared leadership settings, decision-making involves diverse perspectives, requiring a coordinated effort among healthcare managers. Integrating EBMgt principles enhances leadership effectiveness, optimizes resource allocation, and reduces costly errors. Outcome measures should focus on improved decision accuracy, leadership cohesion, and organizational efficiency, reinforcing the need for structured implementation strategies.

Further research remains essential to refine EBMgt applications and support its successful adoption in healthcare organizations. Leaders must utilize high-quality evidence while actively generating it through experimentation and continuous evaluation. The evolving nature of healthcare management calls for a flexible yet systematic decision-making approach, emphasizing evidence credibility and organizational adaptability. Future studies should explore methods to improve knowledge accessibility, enhance training programs, and develop standardized frameworks for EBMgt integration, ensuring sustained improvements in healthcare leadership and operational efficiency.

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#### **Conflicts of Interest**

The authors declare no conflicts of interest.

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