

All content is licensed under the [Creative Commons BY 4.0 International license](https://creativecommons.org/licenses/by/4.0/)

**МЕНЕДЖМЕНТ
MANAGEMENT**

UDC 331.108 + 614.2

doi: <https://doi.org/10.15330/apred.1.22.25-34>

Петрашиук Ю. М.¹, Василівська А. В.²

**ІНСТРУМЕНТИ ПРОЄКТНОГО МЕНЕДЖМЕНТУ ТА ДІЛОВИХ
КОМУНІКАЦІЙ У ФОРМУВАННІ КОМАНДНОЇ КУЛЬТУРИ ТА
ЕФЕКТИВНОЇ СПІВПРАЦІ В МЕДИЧНИХ ЗАКЛАДАХ**

¹ Тернопільський національний медичний університет
імені І.Я. Горбачевського
Міністерства охорони здоров'я України,
кафедра громадського здоров'я та управління охороною
здоров'я,
Майдан Волі, 1, м. Тернопіль,
46001, Україна,
тел.: 067-339-23-42,
e-mail: yurii.m.petrashyk@tdmu.edu.ua
ORCID: <https://orcid.org/0000-0003-1286-110X>

² Тернопільський національний медичний університет
імені І.Я. Горбачевського
Міністерства охорони здоров'я України,
Майдан Волі, 1, м. Тернопіль,
46001, Україна,
тел.: 068-978-35-29,
e-mail: vasylivska_angvit@tdmu.edu.ua
ORCID: <https://orcid.org/0009-0000-5501-458X>

Анотація. Адаптивна інтеграція інструментів управління проєктами та ділового спілкування є основною передумовою формування стійкої командної культури та співпраці в охороні здоров'я, хоча універсальні підходи можуть бути надто обтяжливими для невеликих закладів. Сучасне надання медичних послуг спирається на систематизовані інструменти, що дозволяють вирішувати проблеми в умовах, коли помилки комунікації ставлять під загрозу безпеку пацієнтів. У цьому дослідженні узагальнено дані щодо того, як структуровані комунікаційні моделі, процеси лідерства та навчання на власному досвіді функціонують як інструменти управління. Проаналізовано, як інструменти, такі як TeamSTEPPS, сприяють формуванню середовища співпраці, підвищують безпеку та руйнують ієрархічні бар'єри. У цьому дослідженні застосовано методологію систематичного огляду літератури. Хоча цей підхід узагальнює обширні наукові дані, використання опублікованих досліджень підкреслює необхідність подальшої емпіричної перевірки в конкретних клінічних умовах. Для аналізу було використано дані, що стосувалися механізмів втручання та результатів співпраці. Результати показують, що поодинокі втручання рідко призводять до стійких змін у корпоративній культурі; стійкі покращення відбуваються лише тоді, коли інструменти застосовуються комплексно. Механізми комунікації повинні поєднуватися зі структурними механізмами, такими як міждисциплінарні наради, щоб закріпити координацію. Важливо, що покращення показників безпеки досягає своєї межі протягом двох–чотирьох років і залишається вразливим до кадрової плинності без стратегій підтримки, таких як залучення лідерів-колег. Новизна полягає в поєднанні корпоративних парадигм управління проєктами із соціально-технічними обмеженнями клінічного середовища. У статті концептуалізується поріг, за яким комунікаційні

інструменти виявляються неефективними без згладжування клінічної ієрархії та динаміки повноважень. Стаття розвиває тему організаційної поведінки, переосмислює співпрацю як цілеспрямований структурний результат, опосередкований психологічною безпекою та колективним лідерством. Вона доводить, що впровадження симуляції діє як макроорганізаційна практика, що змінює сприйняття закладу. Наголошуючи на спільній відповідальності персоналу «знизу вгору» та трансформаційному лідерстві, вона пропонує стратегії для формування організацій з високим рівнем надійності, мінімізації помилок та підвищення рівня збереження персоналу.

Ключові слова: медичні заклади, культура роботи в команді, інструменти проєктного менеджменту, моделі ділової комунікації, співпраця між фахівцями, культура безпеки пацієнтів, TeamSTEPPS, психологічна безпека, колективне лідерство.

Petrashyk Yu.M.¹, Vasylivska A.V.²

PROJECT MANAGEMENT AND BUSINESS COMMUNICATION TOOLS FOR BUILDING A TEAM CULTURE AND EFFECTIVE COLLABORATION IN HEALTHCARE FACILITIES

¹ Ivan Horbachevsky Ternopil National Medical University,
The Ministry of Health of Ukraine,
Department of Public Health and Healthcare Management,
Maidan Voli, 1, Ternopil,
46001, Ukraine,
tel.: 067-339-23-42,
e-mail: yurii.m.petrashyk@tdmu.edu.ua
ORCID: <https://orcid.org/0000-0003-1286-110X>

² Ivan Horbachevsky Ternopil National Medical University,
The Ministry of Health of Ukraine,
Maidan Voli, 1, Ternopil,
46001, Ukraine,
tel.: 068-978-35-29,
e-mail: vasylivska_angvit@tdmu.edu.ua
ORCID: <https://orcid.org/0009-0000-5501-458X>

Abstract. The adaptive integration of project management and business communication tools is a primary requirement for building resilient team cultures and collaboration in healthcare, although one-size-fits-all approaches may overburden smaller facilities. Modern delivery relies on systematic instruments to navigate environments where miscommunication compromises patient safety. This study synthesizes evidence on how structured communication frameworks, leadership processes, and experiential learning function as management instruments. It evaluates how tools like TeamSTEPPS cultivate collaborative environments, improve safety, and dismantle hierarchy. This study employs a systematic literature review methodology. While this approach synthesizes extensive scientific data, its reliance on published studies highlights the need for future empirical validation in specific clinical settings. The analysis utilizes data on intervention mechanisms and the outcomes of collaboration. Findings reveal isolated interventions rarely produce durable cultural change; sustainable improvements occur when tools are bundled. Communication frameworks must combine with structural mechanisms, such as multidisciplinary huddles, to embed coordination. Crucially, safety gains plateau within two to four years, remaining vulnerable to turnover without sustainment strategies like peer champions. The novelty lies in bridging corporate project management paradigms with the socio-technical constraints of clinical settings. It conceptualizes the threshold where communication tools fail without the mitigation of clinical hierarchy and power dynamics. The article advances organizational behavior discourse by redefining collaboration as a deliberate structural outcome mediated by psychological safety and collective leadership. It proves embedded simulation acts as a macro-organizational practice shifting facility perceptions. By emphasizing bottom-up staff co-

ownership and transformational leadership, it offers strategies to cultivate high-reliability organizations, reduce errors, and enhance retention.

Key words: healthcare facilities, team culture, project management tools, business communication frameworks, interprofessional collaboration, patient safety culture, TeamSTEPPS, psychological safety, collective leadership.

Introduction. The delivery of healthcare in contemporary clinical settings is characterized by immense complexity, high stakes, and the absolute necessity of seamless interdisciplinary coordination. Unlike traditional corporate environments, healthcare facilities operate under continuous pressure where miscommunication or project management failures can directly compromise patient safety. Consequently, healthcare organizations are increasingly adopting business communication frameworks and project management methodologies to construct a robust team culture and facilitate effective collaboration among diverse medical professionals [1]. The transition from traditional, siloed medical practice to a coordinated, team-based care model necessitates the implementation of structured, evidence-based management tools.

Historically, the medical field relied heavily on individual clinical excellence rather than systematic team integration. However, contemporary literature demonstrates that building a team culture cannot be achieved through mere administrative mandates; it requires the deliberate application of multifaceted management tools [2]. These tools serve to standardize interactions, clarify roles, mitigate the effects of entrenched clinical hierarchies, and establish psychological safety – a shared belief that the team environment is safe for interpersonal risk-taking and candid communication.

The landscape of management tools employed to build team culture in healthcare can be broadly categorized into four intersecting domains: structured communication and team-training frameworks, project management and organizational process tools, leadership and governance interventions, and simulation-based experiential learning [1]. The application of these tools varies significantly across settings – from large academic medical centers implementing system-wide quality collaboratives to individual acute care units introducing localized shift huddles [2; 3]. Because large multidisciplinary hospitals possess greater resources for complex models, applying these exact same universal frameworks to smaller institutions can be overly complex and resource-intensive; the goal is not strict universalization, but rather the adaptive implementation of these tools tailored to the specific organizational culture and resource constraints of the facility. Despite this heterogeneity, a consistent theme emerges from the literature: the most durable improvements in safety culture, communication openness, and interprofessional teamwork are achieved when interventions are bundled. A single communication protocol or project management tool, applied in isolation, often fails to overcome the deeply rooted cultural and structural barriers present in healthcare facilities. Instead, effective collaboration is best fostered when communication frameworks are integrated with structural process changes and reinforced by engaged leadership [4].

This article provides a comprehensive analysis of these management tools, detailing their mechanisms of action, empirical effectiveness, and the contextual factors required for successful implementation. By examining tools such as the TeamSTEPPS framework, Crew Resource Management (CRM), safety checklists, and multidimensional leadership models, this synthesis aims to equip healthcare administrators and clinical leaders with actionable strategies for building a collaborative and high-performing organizational culture.

Task Statement. The primary purpose of this article is to synthesize contemporary evidence regarding how structured communication frameworks, leadership-driven organizational processes, and experiential learning modalities function as powerful management instruments. Specifically, the article aims to evaluate how these tools cultivate

collaborative clinical environments, improve patient safety metrics, and dismantle entrenched hierarchical barriers.

Results.

Structured Business Communication Frameworks as Team Tools. At the core of interprofessional collaboration is the exchange of accurate, timely, and contextually relevant information. In healthcare, structured communication frameworks function similarly to standardized reporting protocols in corporate business environments – they reduce ambiguity, ensure critical data is transmitted efficiently, and flatten power distances that might otherwise inhibit open dialogue.

The most extensively documented communication framework in the literature is Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) [2]. Originally adapted from aviation and military environments, TeamSTEPPS provides a comprehensive suite of business communication tools designed to optimize team structure, leadership, situation monitoring, mutual support, and communication itself. Implementations of this framework have demonstrated significant capacity to alter the cultural fabric of healthcare units. For instance, large-scale deployments across multi-hospital health systems, involving the training of tens of thousands of staff members, have resulted in measurable improvements across multiple dimensions of patient safety culture, including feedback and communication about error, overall perceptions of safety, and teamwork within units [2].

The intensity and scale of these communication projects vary widely. While some organizations utilize brief, one-hour training sessions to achieve short-term gains in perceived teamwork [5], others embed the framework over 12-month periods with ongoing coaching and integration into the unit's operational rhythm [6]. The adaptability of these communication tools is further evidenced by their successful translation across diverse cultural contexts, including adaptations that aligned the framework with national medical safety management requirements in China, yielding substantial reductions in perioperative death rates and critical transfusion episodes [7].

Other frameworks, such as Crew Resource Management (CRM) and standardized protocols like SBAR (Situation, Background, Assessment, Recommendation), also serve as critical communication tools. These protocols address the precise mechanics of information transfer [4]. Research indicates that hospitals employing standardized teamwork interventions, including daily briefings and SBAR frameworks, achieve significantly enhanced care coordination and demonstrate reductions in hospital-acquired infection rates by an average of 23.7% [8]. By standardizing the format of communication, these tools remove the cognitive burden of deciding how to present information, allowing clinicians to focus entirely on the clinical content.

Moreover, as shown in Table 1, the implementation of these communication protocols often leads to profound behavioral shifts. Pre- and post-intervention evaluations have shown that structured communication training significantly improves staff's ability to share information for timely decision-making, anticipate colleagues' needs, and exchange relevant data proactively [3]. However, the success of these communication projects heavily depends on robust implementation strategies. Needs analyses, practice opportunities, and formal feedback mechanisms are essential, yet a substantial portion of healthcare team-training programs lack these foundational project management elements, highlighting a critical gap in organizational execution [1].

Table 1

Typology of Business Communication and Project Management Tools in Healthcare

Tool Category	Examples	Primary Function	Key Outcomes
Structured Communication Frameworks	TeamSTEPPS, CRM, SBAR	Standardizes information exchange and flattens communication hierarchy.	Enhanced situational awareness, reduced miscommunication, improved safety culture scores.
Project Management and Process Tools	Daily Huddles, Safe Surgery Checklists (SSC), MDT Proformas	Embeds coordination into daily operational workflows, mandating collaboration.	Sustained safety improvements, early risk identification, process bottleneck resolution.
Leadership and Governance Interventions	Executive Walkarounds, Co-Lead Models, Guiding Coalitions	Distributes accountability and fosters psychological safety at all levels.	Increased event reporting, higher staff engagement, enhanced conflict management.
Simulation and Experiential Learning	In-situ Simulation, OR Debriefing, Shared Off-site Education	Provides a safe laboratory for testing team coordination under cognitive load.	Improved interdisciplinary synergy, enhanced speaking-up behavior, practice modifications.

Source: developed by the authors based on [3; 5; 6; 8; 9; 10; 12; 13; 14; 15; 17; 18; 19; 20; 21; 22; 26]

Project Management and Process Re-engineering Interventions. Beyond interpersonal communication frameworks, building a collaborative team culture requires structural project management tools that embed teamwork into the daily operational workflow. These tools function as organizational forcing functions, mandating collaboration and creating predictable forums for interdisciplinary problem-solving.

Daily multidisciplinary huddles represent one of the most effective project management tools utilized in clinical settings. Functioning similarly to ‘stand-up’ meetings in software development, huddles are lightweight, high-frequency coordination mechanisms that facilitate rapid information sharing, alignment of daily objectives, and proactive identification of potential safety risks. A 14-year longitudinal study evaluating a multifaceted safety initiative – which prominently featured daily huddles alongside peer review and structured incident learning systems – demonstrated sustained improvements in patient safety culture over more than a decade [9]. Similarly, the integration of daily interdisciplinary huddles and physician-led safety rounds in a cancer center achieved a 20% improvement in communication openness and a 17% improvement in non-punitive response to error within a two-year timeframe [10].

Checklists and structured proformas serve as another crucial category of process management tools. The Safe Surgery Checklist (SSC), while fundamentally a clinical tool, acts as a powerful catalyst for organizational change and cultural improvement. Its implementation forces a pause in operational momentum, requiring all team members, regardless of hierarchy, to participate in verbal verification processes. Studies have shown a significant association between the management practices required to implement the SSC and

broader improvements in overall safety culture and perceived teamwork [11]. In specialized multidisciplinary team (MDT) settings, the introduction of scheduling proformas combined with targeted efforts to promote psychological safety has been shown to significantly elevate MDT performance scores and correlate with reduced emergency readmissions [14].

On a macro level, statewide or regional quality improvement collaboratives represent large-scale project management initiatives designed to foster a culture of safety across multiple independent facilities. Participation in such collaboratives provides hospitals with structured methodologies, shared performance metrics, and peer benchmarking. Evidence from large surgical quality collaboratives demonstrates that these structural engagement incentives can produce significant, system-wide improvements in teamwork climate, safety climate, and physician-nurse collaboration, with the most profound gains observed in organizations that began with the lowest baseline culture scores [12].

Furthermore, cross-functional team redesign initiatives leverage socio-technical systems principles to restructure work environments. For example, redesigning operating room scheduling teams around self-management and collective goal-setting enhances collaboration, allows teams to independently identify process bottlenecks, and fosters double-loop learning – a critical component of continuous quality improvement [13]. The quantitative impacts of the application of communication frameworks and process tools are summarized in Table 2.

Table 2

Quantitative Impact of Communication Frameworks and Process Tools

Intervention Type	Study Context	Measurement Focus	Key Quantitative Findings
Daily Huddles and Safety Rounds	Cancer Center [10]	Communication Openness and Error Response	20% improvement in communication openness; 17% improvement in non-punitive error response.
Statewide Quality Collaborative	Illinois Hospitals [12]	Teamwork and Safety Climate	3.9% improvement in teamwork climate; 8.4% reduction in communication breakdowns.
Brief TeamSTEPPS Training	Emergency Department [5]	Teamwork Perceptions (T-TPQ)	Significant overall improvement in T-TPQ scores (mean 121.4 to 128.2, $p<0.001$).
TeamSTEPPS Integration	Labor and Delivery [3]	Timely Decision-Making	Significant post-training improvements (mean change 0.2632, $p=0.0033$).

Source: developed by the authors based on [3; 5; 10; 12]

Leadership as a Driver of Culture and Collaboration. The efficacy of any communication or project management tool is inextricably linked to the leadership culture within the organization. Leadership style and behavior constitute independent and highly influential variables in the equation of team culture, with ethical and transformational

leadership consistently correlating with improved teamwork, communication openness, and organizational learning [15].

Traditional, top-down hierarchical management models are increasingly recognized as incompatible with the demands of highly collaborative healthcare environments. Instead, shared and collective leadership models are gaining traction. These models distribute accountability and decision-making authority across the multidisciplinary team rather than concentrating it in a single focal leader [16; 17]. Collective leadership programs, such as the Co-Lead intervention, deliberately co-design leadership modules with frontline staff and patient advocates. This approach has proven highly effective in improving psychological safety, shared sense of responsibility, and team cohesion [18; 19].

Translating leadership intent into cultural change often requires specific organizational structures, such as guiding coalitions. These coalitions – multidisciplinary teams charged with owning and driving improvement projects – serve as the engine for cultural transformation. Research indicates that the success of these coalitions depends less on their size and more on the authentic participation of members from diverse disciplines and hierarchical levels, as well as their capacity for effective conflict management [20; 21].

Moreover, leadership engagement must be visible and continuous. Executive walkarounds – where senior leaders routinely visit clinical areas to engage directly with staff about safety concerns – bridge the gap between administration and frontline clinicians, fostering dialogue and demonstrating a tangible commitment to a safety-oriented culture [22]. At the unit level, nurse managers play a pivotal role in maintaining team cohesion and establishing environments characterized by appreciation, equitable workload distribution, and transparent safety handling [23; 24]. The leadership styles adopted by these mid-level managers directly influence error management culture and the psychological safety required for staff to report near-misses without fear of reprisal [25].

Crucially, leadership interventions must explicitly address power dynamics and clinical hierarchy, which remain the most pervasive structural barriers to effective communication and collaboration [26; 27]. Hospital culture and team leadership must be simultaneously supportive to foster the intrinsic motivation required for authentic multidisciplinary teamwork [28]. Entrenched negative cultures and steep hierarchies can be dismantled, but doing so requires sustained external regulatory pressure and deliberate, long-term internal leadership development [29].

Simulation and Experiential Learning as Team-Building Projects. Simulation-based training and structured experiential learning modalities function as dynamic laboratories for testing and refining team communication and project management skills. Unlike traditional didactic instruction, simulation immerses clinical teams in realistic, high-pressure scenarios where they must practice coordination and conflict resolution under cognitive load.

When simulation is embedded as a routine organizational practice – such as integrating it directly into duty rosters – it transcends individual skill acquisition and begins to shift broader cultural perceptions regarding management support and working conditions [30]. Similarly, routine debriefing sessions following complex clinical events or surgical cases serve as structured retrospective project reviews. These sessions promote reflective practice, enhance psychological safety, and provide a dedicated forum for addressing operational inefficiencies and disruptive interpersonal behaviors [31; 32].

Experiential interventions that specifically target speaking-up behaviors and the mitigation of hierarchical barriers are essential for empowering subordinate team members to voice concerns [33; 34]. Furthermore, shared educational programs that bring together diverse professional groups (e.g., anesthesia and surgical teams) for off-site, informal collaborative learning have been shown to drastically improve interdisciplinary engagement and lead to

measurable practice changes, including optimized handoff procedures and a reduction in clinical errors [35; 36].

Implementation Strategies and Sustainability. The literature unequivocally demonstrates that the initial implementation of a management tool is vastly different from sustaining its cultural impact over time. The most successful cultural transformations utilize a bottom-up, staff-empowered approach to change management. Engaging frontline healthcare professionals in the co-design of interventions ensures that the solutions address authentic practical challenges and fosters a sense of ownership that top-down mandates cannot achieve [37; 38; 39]. There is a necessity of adapting tools to local contexts; project management tools must be customized to fit the specific specialization and scale of the medical facility to prevent administrative overload, particularly in resource-constrained environments.

As illustrated in Table 3, sustainability represents the paramount challenge in team culture development. Cultural gains are highly vulnerable to erosion from staff turnover, financial pressures, and external crises. To combat this attrition, organizations must deploy explicit sustainment strategies. Champion models – where highly engaged staff members are trained to serve as peer coaches and auditors – are frequently utilized to maintain momentum independent of continuous executive oversight [40]. However, the most robust sustainability is achieved through bundled interventions that seamlessly weave communication and project management tools into the very fabric of the organization’s standard operating procedures, annual mandatory training, and overarching governance structures [1; 9].

Table 3

Strategic Implementation Factors for Sustaining Team Culture

Implementation Phase	Key Activities	Leadership Role	Sustainability Mechanism
Design and Planning	Co-design with frontline staff, needs assessment, aligning with context.	Authorize pilot programs, allocate protected time for staff.	Staff ownership prevents rejection of top-down mandates.
Active Rollout	Bundled communication training, integration of process checklists.	Visible participation (e.g., walkarounds), modeling open communication.	Creating a critical mass of trained, interdisciplinary personnel.
Long-term Maintenance	Champion selection, continuous auditing, refresher simulations.	Sustaining a non-punitive culture, rewarding collaborative behaviors.	Integration into standard workflows and annual evaluations.

Source: developed by the authors based on [3; 9; 10; 13; 14; 17; 18; 21; 22]

Conclusions. Building a resilient, highly collaborative team culture in healthcare facilities requires far more than the isolated deployment of a single training module. It demands a comprehensive, integrated approach utilizing sophisticated project management and business communication tools. Frameworks like TeamSTEPPS and SBAR provide the essential vocabulary and structure for accurate information exchange, while process tools such as daily huddles and safety checklists operationalize teamwork into daily clinical workflows.

Crucially, these structural and communication interventions must be underpinned by transformational and collective leadership models that actively dismantle prohibitive hierarchies and foster psychological safety. Experiential learning and continuous debriefing

serve to refine these skills in real-time, cementing them as core organizational competencies. Ultimately, effective collaboration is not an end-state but a continuous organizational commitment. Healthcare administrators must approach team culture as a long-term strategic project, employing multilayered, co-designed interventions that are meticulously sustained through embedded processes, peer accountability, and unwavering leadership support.

Limitations and Future Research. The systematic review methodology aggregates a significant volume of scientific data, but is inherently limited because it relies on previously published research with varying methodological approaches and contexts. The absence of direct empirical testing of these synthesized findings limits complete practical validation. Future applied research and empirical studies are required to confirm the effectiveness and adaptability of these proposed project management approaches within real-world, specific medical facilities.

References

1. Weaver, S. J., et al. "Team-training in healthcare: a narrative synthesis of the literature." *BMJ Quality & Safety*, 2014, <https://doi.org/10.1136/bmjqs-2013-001848>.
2. Thomas, L., and C. Galla. "Building a culture of safety through team training and engagement." *BMJ Quality & Safety*, 2012, <https://doi.org/10.1136/bmjqs-2012-001011>.
3. Ralyea, C. "For Labor and Delivery staff, how does the implementation of TeamSTEPPS compared to current practice impact quality indicators over a six-month period?" Capella University ProQuest Dissertations & Theses, 2013.
4. Alsabri, M., et al. "Impact of Teamwork and Communication Training Interventions on Safety Culture and Patient Safety in Emergency Departments: A Systematic Review." *Journal of Patient Safety*, 2020, <https://doi.org/10.1097/PTS.0000000000000782>.
5. Matzke, C. M., et al. "Incorporating TeamSTEPPS training to improve staff collaboration in an academic level I emergency and trauma center." *International Emergency Nursing*, 2021, <https://doi.org/10.1016/j.ienj.2020.100959>.
6. Aaberg, O. "Interprofessional Teamwork in Hospital Units: A human factors approach to patient safety." 2022, <https://doi.org/10.31265/usps.219>.
7. Shi, Y., et al. "TeamSTEPPS improves patient safety." *BMJ Open Quality*, 2024, <https://doi.org/10.1136/bmjopen-2023-002669>.
8. Melebari, S. H., et al. "The Power of Teamwork: A Systematic Review of Multidisciplinary Team Management in Saudi Healthcare." *Journal of Ecohumanism*, 2025, <https://doi.org/10.62754/joe.v4i3.6906>.
9. Mazur, L., et al. "Assessing the Sustainability of Initiatives Aimed to Enhance Patient Safety Culture: A > 10-year Experience with Multifaceted Interventions." *International Journal of Radiation Oncology, Biology, Physics*, 2023, <https://doi.org/10.1016/j.ijrobp.2023.06.562>.
10. Banavage, A., et al. "Impact of a Systemic Plan to Improve Organizational Culture." *Biology of Blood and Marrow Transplantation*, 2016, <https://doi.org/10.1016/j.bbmt.2015.11.999>.
11. Tietschert, M. V., et al. "Safe Surgery Checklist Implementation: Associations of Management Practice and Safety Culture Change." *Advances in Health Care Management*, 2024, <https://doi.org/10.1108/S1474-823120240000022006>.
12. Yuce, T. K., et al. "Association Between Implementing Comprehensive Learning Collaborative Strategies in a Statewide Collaborative and Changes in Hospital Safety Culture." *JAMA Surgery*, 2020, <https://doi.org/10.1001/jamasurg.2020.2842>.
13. Bitter, J. "Improving Multidisciplinary Teamwork in Preoperative Scheduling." 2017, <https://hdl.handle.net/2066/162862>.
14. Khan, M. F., et al. "Can a culture of team psychological safety and MDT proforma improve team performance and patient outcomes in spinal MDTs?" *British Journal of Neurosurgery*, 2022, <https://doi.org/10.1080/02688697.2021.1967288>.
15. Althobaiti, F. M. "The effects of leadership on patient safety culture in health care: a systematic review." *BMC Nursing*, 2026, <https://doi.org/10.1186/s12912-025-04263-7>.
16. Aufegger, L., et al. "Can shared leadership enhance clinical team management? A systematic review." *Leadership in Health Services*, 2019, <https://doi.org/10.1108/LHS-06-2018-0033>.
17. Curşeu, P., et al. "Collaborative and Shared Leadership Dynamics in Healthcare Action Teams: A Systematic Literature Review." *Journal of Healthcare Leadership*, 2025, <https://doi.org/10.2147/JHL.S520534>.
18. De Brún, A., et al. "The Collective Leadership for Safety Culture (Co-Lead) Team Intervention to Promote Teamwork and Patient Safety." *International Journal of Environmental Research and Public Health*, 2020, <https://doi.org/10.3390/ijerph17228673>.

19. McAuliffe, E., et al. "Collective leadership and safety cultures: developing an alternative model of leadership for healthcare teams." *International Journal of Integrated Care*, 2017, <https://doi.org/10.1093/intqhc/mzx125.84>.
20. Bradley, E., et al. "How guiding coalitions promote positive culture change in hospitals: a longitudinal mixed methods interventional study." *BMJ Quality & Safety*, 2017, <https://doi.org/10.1136/bmjqs-2017-006574>.
21. Mannion, R., and J. A. Smith. "Hospital culture and clinical performance: where next?" *BMJ Quality & Safety*, 2017, <https://doi.org/10.1136/bmjqs-2017-007668>.
22. Girerd-Genessay, I., and P. Michel. "[Should we establish patient safety leadership walkrounds? A systematic review]." *Revue d'épidémiologie et de santé publique*, 2015, <https://doi.org/10.1016/j.respe.2015.08.005>.
23. Caldwell, M., et al. "Behind the numbers: Factors influencing nurse manager satisfaction and retention." *Nursing Management*, 2024, <https://doi.org/10.1097/nmg.000000000000177>.
24. Giordano, N., et al. "Approaches Implemented by Nurse Managers Linked to High-Performing Clinical Care Teams." *Journal of Nursing Administration*, 2025, <https://doi.org/10.1097/NNA.0000000000001624>.
25. Moraca, E., et al. "Nursing leadership style and error management culture: a scoping review." *Leadership in Health Services*, 2024, <https://doi.org/10.1108/lhs-12-2023-0099>.
26. Kearns, E., et al. "Power dynamics in healthcare teams – a barrier to team effectiveness and patient safety: A systematic review." *BJS Open*, 2021, <https://doi.org/10.1093/bjsopen/zrab032.091>.
27. Schilling, S., et al. "Understanding teamwork in rapidly deployed interprofessional teams in intensive and acute care: A systematic review of reviews." *PLoS ONE*, 2022, <https://doi.org/10.1371/journal.pone.0272942>.
28. Meng, Z., et al. "Fostering participation motivation and multidisciplinary teamwork collaboration through hospital culture and team leadership in Chinese tertiary public hospitals – A cross-sectional study." *PLoS ONE*, 2025, <https://doi.org/10.1371/journal.pone.0334831>.
29. Konteh, F., et al. "Changing leadership, management and culture in mental health trusts." *Mental Health Review Journal*, 2022, <https://doi.org/10.1108/mhrj-03-2022-0018>.
30. Schram, A., et al. "Simulation-based team training and patient safety culture: A controlled multi-site study in pediatric departments." *Clinical Simulation in Nursing*, 2026, <https://doi.org/10.1016/j.ecns.2026.101936>.
31. Skegg, E., et al. "Debriefing to improve interprofessional teamwork in the operating room: A systematic review." *Journal of Nursing Scholarship*, 2023, <https://doi.org/10.1111/jnu.12924>.
32. Atkinson, J. M. A., et al. "Using Debriefing to Address Disruptive Behaviors and Improve Clinician Well-Being." *AORN Journal*, 2024, <https://doi.org/10.1002/aorn.14193>.
33. Weller, J., and J. A. Long. "Creating a climate for speaking up." *British Journal of Anaesthesia*, 2019, <https://doi.org/10.1016/j.bja.2019.03.003>.
34. LaPlante, R. D., et al. "Essential elements and outcomes of psychological safety in the healthcare practice setting: A systematic review." *Applied Nursing Research*, 2025, <https://doi.org/10.1016/j.apnr.2025.151946>.
35. Ridley, C. H., et al. "Building a collaborative culture: Focus on psychological safety and error reporting." *Annals of Thoracic Surgery*, 2020, <https://doi.org/10.1016/j.athoracsur.2020.05.152>.
36. Thurston, K., et al. "Development of an Interprofessional Health Care Team Shared-Education Program to Promote Collaboration and Teamwork in Anesthesiology." *Journal of Perianesthesia Nursing*, 2025, <https://doi.org/10.1016/j.jopan.2025.08.013>.
37. Davis, C., et al. "Improving Unit Culture from the Ground Up - Empowering Staff to Make the Change." *Simulation in Healthcare*, 2013, <https://doi.org/10.1097/01.SIH.0000441405.28564.20>.
38. Eriksen, K. Å., and S. Heimestøl. "Developing a culture of pride, confidence and trust: enhanced collaboration in an interdisciplinary team." *International Practice Development Journal*, 2017, <https://doi.org/10.19043/IPDJ.7SP.004>.
39. Benson, A. "Creating a culture to support patient safety. The contribution of a multidisciplinary team development programme to collaborative working." *Zeitschrift für Evidenz, Fortbildung und Qualität im Gesundheitswesen*, 2010, <https://doi.org/10.1016/J.ZEFQ.2009.12.030>.
40. Pate, K., et al. "Falls reduction and sustainability." *Nursing Management*, 2024, <https://doi.org/10.1097/nmg.000000000000181>.

Submission date: 17.06.2026

Date of acceptance for publication: 15.07.2026