

# FROM REACTIVE RESPONSE TO INSTITUTIONAL CAPACITY: AN UMBRELLA REVIEW AND PROPOSED FRAMEWORK FOR BURNOUT PREVENTION IN HEALTHCARE SETTINGS

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**Abstract:** Burnout among healthcare professionals has been associated with working conditions, occupational demands, leadership practices, and the resources available to teams during periods of increased pressure. Individual-focused interventions may reduce specific symptoms and strengthen personal resources, but their effects may be limited when relevant causes of exhaustion remain embedded in the work environment. This study aimed to synthesize systematic reviews and meta-analyses addressing organizational interventions, leadership, psychological safety, and institutional support in healthcare settings and, based on this literature, propose a framework for burnout prevention and institutional response. An umbrella review was designed according to PRISMA 2020 and PRIOR recommendations, with searches planned in MEDLINE/PubMed, Embase, CINAHL, PsycINFO, Scopus, and Web of Science for publications between January 2016 and September 2026. Methodological quality will be assessed using AMSTAR 2 and, when appropriate, ROBIS. The literature shows heterogeneous findings for organizational interventions. Changes in working conditions and work processes produce favorable effects in part of the studies, while other interventions show small, null, or inconsistent results. Leadership and psychological safety are associated with workforce well-being and team communication, although much of this evidence is observational. Based on these findings, an institutional model is proposed around four connected functions: assessment of work-related risks, intervention on modifiable factors, leadership preparedness, and outcome monitoring. The framework is presented as a conceptual proposal requiring implementation studies rather than as

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a previously validated intervention.

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## INTRODUCTION

Burnout has increasingly become a focus of research on occupational health and the organization of health services. In the International Classification of Diseases, the World Health Organization describes it as an occupational phenomenon resulting from chronic workplace stress that has not been successfully managed. The definition encompasses exhaustion, mental distancing or negative feelings toward one's job, and reduced professional efficacy (World Health Organization, 2019).

Classifying burnout as an occupational phenomenon matters for how the problem is investigated. Exhaustion does not occur apart from the concrete conditions under which work is carried out. In hospitals and other health services, professionals contend with long shifts, time pressure, decisions that may carry risk for patients, administrative demands, recurring contact with suffering, and the need to coordinate across different teams. The intensity of these conditions varies across services and units, just as institutional capacity to respond to them varies.

Many initiatives aimed at reducing burnout focus on the individual worker. Mindfulness programs, stress-management techniques, cognitive-behavioral interventions, and resilience training are recurring examples. These approaches can produce benefits. The problem arises when they are used as the primary response in situations where the source of exhaustion is related to workload, team functioning, shift schedules, poorly defined processes, or conditions over which the professional has little control.

Aust et al. (2024) analyzed organizational interventions aimed at the mental health and well-



being of healthcare professionals. The review included 22 studies, described across 23 publications. Among the studies that assessed burnout, 11 of 13 found improvement in at least one of the indicators considered. Results were most consistent for interventions involving changes to tasks and to the organization of work. The authors themselves, however, pointed out methodological differences among the studies and limitations in the quality of the evidence.

DeChant et al. (2019) examined 50 studies on organization-directed interventions targeting physicians. The strategies included changes to teamwork, time use, work processes, and technological components. Thirty-five studies reported improvement in burnout, satisfaction, or stress. Interventions addressing workflows, team composition, and administrative burden were among those associated with favorable outcomes.

De Simone, Vargas, and Servillo (2021) likewise found reductions in burnout in studies that modified aspects of work organization. These findings contributed to the expansion of an approach less centered on individual adaptation. They do not mean, however, that any organizational change will produce good results.

This caveat became clearer in later studies. Boskma et al. (2025) evaluated 54 studies of organization-directed interventions and identified 419 outcomes. Results varied considerably. Some interventions showed favorable effects, others produced no detectable difference, and some were associated with unfavorable outcomes. The overall certainty of the evidence was rated as very low.

The discrepancy among these findings should not be treated as a contradiction to be resolved away. It points to a methodological and practical problem: interventions grouped under the label “organizational” differ widely from one another and are applied in equally distinct contexts. A change in scheduling, for instance, addresses a different problem than an intervention aimed at team communication. A manager-training program is unlikely, on its own, to correct a persistent staffing shortfall.

The World Health Organization adopted similar reasoning when formulating its guidelines on mental health at work. The document brings together organizational interventions, manager training,



worker-directed interventions, and return-to-work measures, without presenting any single strategy as a universal response (World Health Organization, 2022).

In the United States, the National Institute for Occupational Safety and Health has developed approaches that likewise shift part of the focus onto the conditions under which work takes place. The Total Worker Health program integrates safety, health, and well-being, and prioritizes eliminating or reducing risks inherent to the work itself before relying on measures directed exclusively at individual behavior (National Institute for Occupational Safety and Health, 2016). The Impact Wellbeing Guide, aimed specifically at hospitals, addresses operational conditions, barriers to help-seeking, institutional communication, and the integration of well-being into hospital management processes (National Institute for Occupational Safety and Health, 2024).

Another recurring component in the literature is the relationship between leadership and the work experience. Niinihuhta and Häggman-Laitila (2022) found associations between leadership styles and indicators such as burnout, job satisfaction, trust, and empowerment among nurses. Most of the studies evaluated were observational. These findings therefore describe relationships between variables but do not demonstrate that changing leadership style, on its own, is sufficient to reduce burnout.

A similar issue arises with psychological safety. LaPlante, Ponte, and Magny-Normilus (2025) identified relationships among psychological safety, willingness to voice concerns, team-based learning, and leadership practices. Here, the concept can help explain why institutional mechanisms that formally exist are well used in some organizations and little used in others. A professional is unlikely to report being overwhelmed, an error, or a need for help if they anticipate punishment, embarrassment, or professional harm.

The institutional response following adverse events also deserves attention. Busch et al. (2020) pooled 18 studies covering 11,649 professionals involved in adverse events and identified a high frequency of symptoms such as anxiety, guilt, intrusive memories, and emotional distress. The review shows that the impact on workers is real, but it does not establish any single support model as



superior to the others.

These lines of research tend to be studied separately. Interventions on work processes appear in one body of literature, leadership in another, psychological safety in another, and support following critical events in yet another. The problem guiding this article arises from that fragmentation. Rather than proposing yet another specific intervention, the aim is to understand which functions need to exist so that an institution can identify its own risks, decide where to intervene, apply the chosen measure, and verify what happened afterward.

The aim, therefore, was to synthesize systematic reviews and meta-analyses on organizational interventions associated with burnout and well-being among healthcare professionals, and to use that synthesis to build a proposal for organizing institutional capacity. The review question was formulated as follows: which organizational functions find recurring support in the literature to guide burnout prevention in health services subject to high occupational pressure?

## METHOD

This study was designed as a systematic review of reviews, also known as an umbrella review. This design was chosen because systematic reviews already exist on the different components under investigation. The aim of this work is not to repeat the analysis of each primary study, but to examine where the results of these syntheses converge and where they remain uncertain.

Reporting was guided by PRISMA 2020, developed to increase transparency in the reporting of systematic reviews (Page et al., 2021), and by PRIOR, a guideline specific to overviews of reviews (Gates et al., 2022).

The search strategy was defined for MEDLINE/PubMed, Embase, CINAHL, PsycINFO, Scopus, and Web of Science. The period spans January 2016 to September 2026. Studies published in English, Portuguese, or Spanish were considered. Searches combined terms related to healthcare professionals, burnout and occupational well-being, organizational interventions, leadership,



psychological safety, institutional support, and systematic reviews or meta-analyses.

Systematic reviews, with or without meta-analysis, that included healthcare professionals and examined interventions or exposures related to work organization were considered eligible. Burnout, emotional exhaustion, occupational stress, and work-related well-being were defined as primary outcomes. Job satisfaction, psychological safety, absenteeism, turnover intention, staff turnover, and emotional consequences related to critical events were considered when they helped explain organizational processes associated with the primary outcomes.

Narrative reviews without a systematic search method, editorials, commentaries, and stand-alone primary studies were excluded from the effectiveness synthesis. Studies devoted exclusively to the individual clinical diagnosis or treatment of mental disorders were also excluded.

Study selection will be conducted independently by two reviewers. The first stage corresponds to the screening of titles and abstracts, and the second to full-text reading. Disagreements will be resolved by consensus and, when necessary, by a third reviewer. The same procedure will be used for data extraction.

From each review, information will be extracted on population, primary study design, intervention characteristics, comparators, outcomes, effect measures, heterogeneity, authors' conclusions, and limitations. Methodological quality will be assessed using AMSTAR 2, proposed by Shea et al. (2017). The instrument has 16 items and rates the overall confidence in the results of a review without converting the criteria into a simple numeric score. ROBIS will be used when its application is appropriate to the nature of the review, following the approach proposed by Whiting et al. (2016).

The same primary study may have been included in more than one systematic review. To prevent this repetition from being interpreted as independent evidence, a matrix of overlap among primary studies will be constructed. Where the data from the reviews allow, this overlap will be estimated using the Corrected Covered Area.

The construction of the framework was methodologically separated from study selection.



The components of the model will not be used as mandatory categories during extraction. First, the factors, interventions, and mechanisms described in the reviews will be identified. These elements will then be coded according to the function they serve within the organization. The final step consists of grouping codes that show conceptual proximity and recurring support across different reviews.

This procedure seeks to reduce the risk of using the literature merely to justify a previously established model. Even so, the resulting framework should be understood as an interpretation of the findings, not as a result equivalent to an effect estimate.

## RESULTS

The literature examined shows greater consistency for some components than for others. Findings on changes to work organization draw on intervention reviews, although they remain heterogeneous. Leadership and psychological safety appear recurrently, but much of the evidence derives from observational studies. The literature on critical events describes the consequences for professionals with more confidence than it does the comparative effectiveness of different support programs. This difference in the amount and type of evidence was preserved in the synthesis.

Aust et al. (2024) identified favorable results for interventions that modified tasks, processes, or other concrete features of the job. DeChant et al. (2019) found a similar pattern among physicians, especially for interventions related to team organization, time, and work processes. De Simone, Vargas, and Servillo (2021) likewise found reduced burnout in strategies directed at the organization.

The review by Boskma et al. (2025) introduces caution into this interpretation. By pooling a larger number of studies and outcomes, the authors found inconsistent effects and low certainty of evidence. Generically classifying an intervention as “organizational,” therefore, does not indicate whether it matches the predominant problem in that setting.

This finding informs the first component of the proposed framework: before choosing an intervention, it is necessary to identify what is happening in that particular work context. The



literature does not provide a single list of variables that must be applied uniformly across all services. Workload, autonomy, shift schedules, task distribution, communication, leadership support, exposure to critical events, and indicators of turnover or leave are examples of dimensions that may be examined depending on the problem being studied.

The proposed assessment is organizational in nature. It is not intended to diagnose individual workers. Its purpose is to identify patterns that help distinguish, for example, a unit whose main difficulty relates to workload from another where communication failures or recurring problems in team coordination predominate.

Following this assessment, the intervention must bear a direct relationship to the identified risk. The studies pooled by Aust et al. (2024) and DeChant et al. (2019) include examples of changes to tasks, team organization, processes, shift schedules, and administrative activities. This does not mean that all these measures need to be part of the same program. One organization may need only one of them and not the others.

The second function of the framework, then, is to establish an explicit link between problem and intervention. Rather than applying a standardized well-being program across all departments, the institution defines which factors are modifiable, who is responsible for them, and what outcome it expects to observe following the change.

Leadership appears in another part of the literature. Niinihuhta and Häggman-Laitila (2022) identified associations between leadership practices and various well-being indicators among nurses. These associations justify attention to leadership but do not warrant treating it as an isolated cause of burnout or of its prevention.

In the proposed model, managers function chiefly as implementation agents. They are the ones who most often receive reports of being overwhelmed, manage schedules, distribute tasks, apply procedures, and handle communication between the team and higher levels of the organization. Training can expand these professionals' capacity to recognize problems and make use of resources already available. It is not the manager's role to take on clinical responsibilities or to substitute for



specialized services.

Psychological safety helps explain the communication dimension. In the review by LaPlante, Ponte, and Magny-Normilus (2025), it was related to the ability to voice concerns, discuss problems, and take part in learning processes within teams. The framework treats it as a condition that can facilitate the use of preventive mechanisms. This formulation is more restrained than claiming that psychological safety, on its own, reduces burnout.

The same caution was applied to the literature on critical events. Busch et al. (2020) showed that professionals involved in adverse events can experience significant distress. This finding is sufficient to justify an institution having some form of prepared response before an event occurs. It is not sufficient to conclude that any particular support protocol is superior to the others.

The organizational response may include defining responsibilities, initial support, communication mechanisms, and criteria for referral to specialized professionals. The format needs to be evaluated according to the service in question and the evidence available for that particular intervention.

The last component identified in the synthesis concerns outcome monitoring. The heterogeneity found by Boskma et al. (2025) makes it difficult to defend interventions implemented without any subsequent evaluation. If effects vary across contexts, measuring the outcome ceases to be an optional step.

Implementation indicators can show whether an intervention reached the intended people or units and whether it was applied as planned. Measures related to burnout, well-being, satisfaction, psychological safety, absenteeism, or turnover intention can be used depending on the objective. The choice of an indicator must precede the interpretation of results. Changes observed after an intervention should not be automatically attributed to it when the study design does not permit causal inference.

The synthesis of these findings yielded four functions: assessing the risks present in the workplace, selecting interventions related to the identified problems, preparing the leaders responsible



for implementation, and monitoring outcomes. Together they form a cycle in which the data obtained after the intervention feed back into the assessment process.

## DISCUSSION

The main problem identified in this review is not the absence of interventions for burnout. Many exist. The difficulty lies in deciding which one matches the conditions of a given organization and in verifying what happens after it is applied.

This issue helps explain why studies on organizational interventions produce different results. A strategy may work when it acts directly on a relevant source of overload and produce little effect when applied in a service where the dominant problem is something else. Context is not merely a backdrop. It shapes the choice of intervention and, likely, its execution as well.

This is why the proposed framework begins with assessment. The logic is close to that of risk management: identify the problem, establish a compatible response, carry out the measure, and monitor the outcome. This sequence is not new in organizational management. What this article proposes is its articulated application to burnout and to the psychosocial working conditions of health services.

It is also necessary to situate this proposal in relation to existing models. The World Health Organization's guidelines combine organizational interventions, manager training, and worker-directed measures (World Health Organization, 2022). Total Worker Health adopts an integrated approach to health and safety, prioritizing changes to working conditions (National Institute for Occupational Safety and Health, 2016). The Impact Wellbeing Guide was developed for hospitals and includes assessment of operations, leadership involvement, reduction of barriers to help-seeking, and institutional planning (National Institute for Occupational Safety and Health, 2024).

There is overlap between these initiatives and the framework presented in this article. It would be incorrect to claim that organizational assessment, leadership, or monitoring are novel elements.



The proposed contribution lies in how these functions are linked together in a decision cycle driven by the risk identified within the service itself.

The model also includes a dimension of preparedness for events involving heightened emotional pressure. This dimension should remain proportional to the available evidence. The literature demonstrates the emotional consequences of adverse events on professionals more consistently than it demonstrates the superiority of any specific mode of support. For this reason, the framework calls for response capacity without specifying, at this stage, a clinical protocol or standardized program.

Another point requires conceptual distinction. Individual resilience and organizational capacity are not equivalent. A person may develop resources to cope better with adverse situations without the factors that produced the adversity ever being modified. Likewise, a team made up of experienced professionals can still operate within an organization that maintains fragile processes.

In this study, organizational resilience refers to the capacity to recognize vulnerabilities, respond to situations that affect team functioning, learn from outcomes, and modify processes when necessary. This definition avoids shifting onto workers the responsibility of indefinitely enduring conditions that are within the institution's control.

Leadership occupies an intermediate position in this process. Managers do not control every factor associated with burnout, but they do influence part of teams' day-to-day experience and the application of policies. The available literature does not support reducing this relationship to simple causality. Even so, excluding managers from an organizational strategy would create an artificial separation between formal policy and its execution.

Psychological safety presents a similar limitation. There is evidence of its association with communication, learning, and team behavior, but not enough basis to describe it as a universal causal mechanism. Within the framework, its function is more delimited: it can facilitate or hinder the communication needed for risks to be identified and institutional resources to be used.

The proposal now needs to be tested. An initial study could be carried out in one or more health units, with an assessment of working conditions before the intervention. Based on that data,



measures related to the identified problems would be selected. The study would need to record not only the final outcomes but also how the intervention was implemented, what adaptations occurred, and what level of adherence it achieved.

A before-and-after comparison can serve as an initial feasibility step but will not be sufficient to establish causality. Subsequent studies could use comparison units, quasi-experimental designs, or cluster trials, depending on the type of intervention and institutional conditions.

This sequence is necessary because the proposal in this article remains at the conceptual level. The literature provides a foundation for its components but does not demonstrate that this specific combination of functions produces results superior to existing models.

This review also has limitations. An umbrella review depends on the quality of the reviews already published. Problems in the primary studies do not disappear when those studies are pooled into a new synthesis. Assessment with AMSTAR 2 and ROBIS may help identify some of these weaknesses, but it does not eliminate them.

There is also heterogeneity in the concepts and instruments used. Burnout can be measured using different scales. Organizational interventions encompass very different strategies. Studies on leadership and psychological safety frequently use cross-sectional designs. The literature on critical events is more consistent in describing professionals' distress than in the comparative evaluation of support programs.

The possible repetition of the same primary studies across different reviews is another problem. Without controlling for this overlap, several reviews may convey the impression that a given association has been confirmed by independent bodies of evidence when, in reality, some of them draw on the same underlying studies. The citation-matrix and CCA analysis must be completed before final submission.



## CONCLUSION

The reviews analyzed do not point to a single intervention capable of preventing burnout across different health services. They show that working conditions can be modified and that certain changes are associated with better outcomes, but the effects vary according to the intervention, the context, and the quality of the studies.

This uncertainty does not preclude an organizational response. It changes how that response should be built.

The proposed framework starts from identifying the risks present in each context, links those risks to selected interventions, includes leadership in implementation, and provides for outcome monitoring. Its function is to organize decisions, not to prescribe a fixed package of measures.

The proposal remains conceptual. The next step is to determine whether this way of organizing assessment, intervention, and monitoring is feasible in real-world services and whether it produces results that can be reproduced in other institutions. The answer to that question depends on implementation studies, not merely on a theoretically consistent formulation.

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