

Review

Navigating Healthcare Excellence: Organizational Models, Human Capital, and the Power of Transversal Competencies

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Abstract

Background/Objectives: Contemporary healthcare systems face compound challenges (including technological acceleration, demographic aging, rising chronic disease burden, and growing patient expectations) that demand models that are simultaneously efficient, high-quality, and person-centered. Despite a substantial body of research addressing organizational design, human capital management, and clinical competencies, these dimensions have largely been theorized in isolation. This study aims to construct and justify an integrated theoretical framework explaining how organizational models, human capital, and transversal competencies may jointly shape care quality, patient safety, and institutional sustainability in healthcare organizations. **Methods:** A narrative literature review was conducted, integrating contributions from business economics, healthcare management, organizational psychology, and nursing sciences. This design was selected for its suitability in synthesizing heterogeneous, multidisciplinary knowledge into a coherent conceptual framework, a purpose for which systematic meta-analytic approaches are not appropriate. Sources encompassed 79 references: peer-reviewed journals (PubMed, JSTOR, Google Scholar), institutional reports (WHO, OECD, European Commission, Joint Commission), normative standards (ISO 30414:2018), and Italian regulatory frameworks, spanning foundational twentieth-century contributions through the most recent literature (2025). **Results:** Four principal findings emerged: (1) healthcare organizations are evolving from rigid hierarchical structures toward flexible, value-based configurations, with the Value-Based Healthcare (VBHC) paradigm redirecting institutional attention from service volume to patient-meaningful outcomes per unit of cost; (2) transversal competencies (communication, empathy, emotional intelligence, teamwork, and transformational leadership) are closely associated with care quality and patient safety, with 70–80% of sentinel events associated with communication failures; (3) human capital, encompassing technical expertise and relational capacity, constitutes the primary lever of competitive advantage in healthcare institutions; and (4) the trajectory from pyramidal toward participatory and self-managed models is supported by international evidence, including the Buurtzorg experience in the Netherlands. **Conclusions:** The integrated three-pillar framework (combining resource-based theory and dynamic capabilities, Value-Based Healthcare, and evolutionary organizational theory) provides a theoretically grounded basis for understanding how organizational structure, human capital, and transversal competencies are jointly associated with clinical performance. Healthcare institutions should systematically integrate soft-skills training into professional education and invest in participatory



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organizational structures. Health policy should revise financing mechanisms to incentivize patient-meaningful outcomes over service volumes and support the broader transition toward Value-Based Healthcare models. The Italian SSN is discussed as an illustrative national context rather than as the primary empirical focus of the review.

Keywords: healthcare management; organizational models; human capital; transversal competencies; soft skills; Value-Based Healthcare

1. Introduction

Healthcare organizational management has become a central concern in academic discourse and institutional governance. Contemporary health systems [1] face compound challenges (technological acceleration, demographic aging, rising chronic disease burden [2], and growing patient expectations) demanding models that are simultaneously efficient, high-quality, and person-centered. OECD data confirm [3] an upward trajectory of healthcare expenditure, requiring strategic choices to maximize value for every euro invested [4,5]. Unlike other industries, organizational failure in healthcare directly affects patient safety and clinical outcomes, rendering quality simultaneously an ethical imperative and a managerial concern [6]. Healthcare organizations must respond simultaneously to clinical, managerial, ethical, and social imperatives. The European and Italian healthcare context confronts growing multimorbidity and progressive population aging, demanding integrated and continuous care systems capable of overcoming traditional service fragmentation. The COVID-19 pandemic served to expose both the vulnerabilities and the adaptive resilience of health systems worldwide, accelerating organizational innovation and underscoring the critical importance of flexible, integrated models. Notwithstanding a substantial body of research addressing individual components (organizational design, human capital management, and clinical competencies), these dimensions have largely been theorized and studied in isolation. Organizational theories such as the Resource-Based View (RBV) and dynamic capabilities have rarely been applied in an integrated manner to healthcare governance; Value-Based Healthcare (VBHC) frameworks tend to focus on outcome measurement without adequately theorizing the organizational and workforce conditions that enable value creation; and the literature on soft skills in healthcare, while growing, remains fragmented across clinical specialties and seldom connected to broader organizational theory. Moreover, the empirical evidence supporting participatory and self-managed organizational models remains heterogeneous and strongly context-dependent, a tension this review seeks to engage explicitly rather than assume away. This conceptual gap informs and motivates the present paper, which is guided by the following research question: What integrated theoretical framework best explains how organizational models, human capital, and transversal competencies may jointly shape care quality, patient safety, and institutional sustainability in healthcare organizations? To address this question, the present paper advances a multi-level analytical framework grounded in three interconnected theoretical pillars: (1) resource-based and dynamic capabilities theory, to explain how human capital and transversal competencies function as sources of sustained organizational advantage; (2) the VBHC paradigm, to situate organizational choices within a value-creation logic oriented toward patient-meaningful outcomes; and (3) evolutionary organizational theory (from Burns and Stalker to Laloux) to trace the structural trajectory through which healthcare institutions can develop the adaptive capacity that value-based performance demands (Figure 1). The contribution afforded by this integration is twofold: it provides a theoretically coherent and evidence-grounded account of why relational and

organizational factors matter for clinical outcomes, and it offers healthcare managers, practitioners and policymakers a unified conceptual map for strategic decision-making. The intended novelty of this paper lies less in its individual constructs, which are well established, than in their explicit articulation: to our knowledge, although resource-based and dynamic-capabilities theory, the VBHC value logic, and evolutionary organizational theory have each been applied separately to healthcare, they have not previously been combined into a single multi-level framework that specifies how transversal competencies operate as organizational performance drivers across the structural, resource, and value levels of analysis at once. Beyond synthesis, the framework is advanced as an empirically testable proposition and is used to derive concrete, level-specific implications for management practice, professional education, and health policy (Sections 4.4 and 5). Throughout, the Italian National Health Service (SSN) is invoked as an illustrative national context that anchors the international evidence within a concrete, regulated public system, rather than as the primary empirical object of the review; the framework itself is internationally oriented and is intended to be transferable, with context-specific adaptation, across comparable health systems.

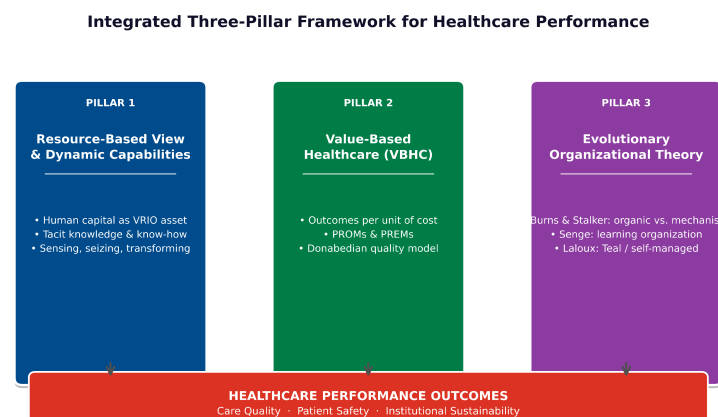


Figure 1. The integrated three-pillar theoretical framework connecting Resource-Based View and Dynamic Capabilities, Value-Based Healthcare (VBHC), and Evolutionary Organizational Theory to clinical performance outcomes.

2. Materials and Methods

2.1. Study Design and Data Sources

The aim of this paper is to construct and justify an integrated theoretical framework that connects organizational structure, human capital management, and transversal competencies to clinical performance outcomes in healthcare, a purpose that requires synthesis across heterogeneous disciplines rather than meta-analytic aggregation of primary studies. Accordingly, the present work employs a narrative literature review methodology, selected as the most appropriate design for synthesizing a heterogeneous body of knowledge spanning management theory, organizational science, healthcare research, and normative frameworks. Unlike systematic reviews, narrative reviews are well-suited to integrative, conceptual analyses that aim to build theoretical frameworks rather than calculate pooled quantitative estimates from homogeneous primary studies. This methodological choice is consistent with established typologies of literature reviews for complex, multi-disciplinary topics. No primary data collection, experimental intervention, or research involving human subjects was conducted, and accordingly, Institutional Review Board approval was not required. Sources encompassed monographs, articles published in indexed peer-reviewed journals (PubMed, JSTOR, Google Scholar), institutional documents (WHO, OECD, European Commission, Joint Commission), and normative standards (ISO 30414:2018). The

temporal scope encompasses foundational contributions from the second half of the twentieth century through the most recent literature available (2025), with particular emphasis on contributions published within the most recent fifteen-year period.

2.2. Analytical Framework

A multidisciplinary approach was adopted, integrating business economics, healthcare management, organizational psychology, sociology, and nursing sciences. The analysis covers two thematic axes: (1) theoretical foundations of organizational management; and (2) application to the healthcare context, focusing on human capital dynamics, transversal competencies, and the evolutionary trajectory of healthcare organizational models. Throughout this review, the term “clinical performance outcomes” is used to denote the patient-level and system-level indicators conventionally employed to gauge the quality and safety of care—namely, risk-adjusted mortality, hospital readmission and complication rates, patient-reported experience and satisfaction, and the incidence of adverse safety events (for example, medication errors, hospital-acquired infections, and falls). This operational definition delimits the dependent constructs against which the organizational and human-capital factors discussed below are appraised.

2.3. Evidence Selection

Evidence was selected by prioritizing: (a) peer-reviewed journal articles with documented scientific impact; (b) reports from authoritative international organizations; and (c) foundational theoretical works in management and organizational science. For each construct, seminal contributions and the most recent systematic reviews were sought. The literature search was predominantly conducted in English and Italian, which may have introduced a linguistic and geographical bias toward Anglophone and European contributions; non-Western healthcare systems and management traditions are underrepresented, and their experiences may differ substantially from those reported here. The primary search terms used across databases were: healthcare management, organizational models, human capital, transversal competencies, soft skills, Value-Based Healthcare (VBHC), resource-based view, dynamic capabilities, patient safety, communication failures, emotional intelligence, transformational leadership, Lean Healthcare, Teal organization, Buurtzorg, organizational well-being, burnout, and Italian National Health Service (SSN). Boolean operators (AND, OR) were applied to combine domain-specific terms (e.g., soft skills AND healthcare; VBHC; organizational models).

To strengthen methodological transparency, the following procedures were applied. Records were identified through systematic database searches and supplemented by backward and forward citation tracking of key sources, with coverage extending to the most recent literature available at the time of writing (2025). Sources were eligible for inclusion if they (a) addressed organizational models, human capital, transversal competencies, or value-based healthcare in a managerial or clinical context; (b) were available in full text in English or Italian; and (c) consisted of peer-reviewed articles, systematic or narrative reviews, authoritative institutional reports, recognized normative standards, or foundational theoretical works. Sources were excluded when they were not retrievable in full text, were editorials or opinion pieces lacking a substantive evidentiary or theoretical basis, or fell outside the thematic scope. Consistent with the integrative and conceptual aim of the review, formal risk-of-bias scoring was not applied; instead, each source was appraised qualitatively for scientific authority, methodological soundness, and disciplinary relevance, with greater interpretive weight assigned to systematic reviews, meta-analyses, and primary empirical studies than to theoretical or narrative contributions. The evidence was then organized through a thematic narrative synthesis: retrieved sources were grouped into

the sixteen thematic axes reported in the Results and integrated interpretively around the three theoretical pillars, rather than pooled quantitatively. To support transparent reporting, the review was prepared with reference to the recommendations of the SANRA (Scale for the Assessment of Narrative Review Articles) framework [7]. Given the integrative, non-systematic character of this narrative review, no formal PRISMA-style enumeration of records identified, screened, and included was undertaken; methodological transparency is instead ensured through the explicit databases, search terms, and inclusion and exclusion criteria reported above.

From the records identified through the database searches and citation tracking described above, sources were screened in two successive passes (title and abstract, then full text) against the inclusion and exclusion criteria, yielding the seventy-nine sources retained in the final corpus. A concise qualitative audit trail of this search and selection process, reporting the databases and sources consulted, the period of the search, representative search strings, and the inclusion, exclusion, and retention logic, is provided as Supplementary Table S1. Because searching and selection proceeded iteratively, as is characteristic of narrative reviews, record-level counts were not systematically logged at each stage and are therefore not reported. Consistent with the integrative aim of the review, this corpus was assembled to achieve conceptual saturation across the three theoretical pillars rather than exhaustive coverage of any single literature, and its sufficiency was judged by whether each pillar and each thematic axis were supported by converging contributions of adequate scientific authority. Conceptual saturation was operationalized pragmatically as the point at which the screening of additional sources ceased to introduce new themes, constructs, or theoretical relationships within a given pillar or thematic axis. Screening, thematic grouping, and the appraisal of saturation were discussed and cross-checked among the authors; any disagreements or uncertainties regarding inclusion, thematic assignment, or interpretive weighting were resolved through discussion until consensus was reached. The sixteen thematic axes reported in the Results were derived deductively from the three-pillar framework and then refined inductively as recurrent constructs emerged from the retrieved sources, so that the structure of the synthesis reflects both the guiding model and the literature actually reviewed. Because narrative synthesis is inherently interpretive, the authors acknowledge that the selection, weighting, and thematic grouping of sources necessarily reflect informed scholarly judgment; to mitigate the associated risk of selection bias, screening and interpretation were cross-checked among the authors and anchored, wherever possible, to systematic reviews, meta-analyses, and authoritative institutional sources, which were assigned greater interpretive weight than individual theoretical or narrative contributions. The limitations intrinsic to narrative reviews, namely the absence of a pre-registered protocol, the potential for author selection bias, and the heterogeneity of the synthesized evidence, are recognized here and revisited in Section 4.3.

3. Results

The sixteen subsections that follow are organized under the three pillars of the proposed framework so that the synthesis, rather than a sequential survey of constructs, remains visible throughout. The resource pillar (Sections 3.1–3.4, 3.8 and 3.15) establishes the resources and capabilities through which value is created: the firm as a complex system, distinctive competencies and the VRIO logic, dynamic capabilities, the Business Model Canvas, human capital, and the know-how/know-who synergy. The structural pillar (Sections 3.5–3.7, 3.9 and 3.16) describes the organizational forms that enable or constrain those resources: the mechanistic-to-organic transition, Laloux's paradigms, the principal organizational models, the Italian configuration, and the pyramidal-to-Teal trajectory. The value pillar (Sections 3.10–3.14) links resources and structures to patient-meaningful out-

comes through technical and transversal competencies, Value-Based Healthcare, and the clinical, organizational, and economic impact of soft skills. To help readers weigh the evidence, the synthesis also distinguishes among foundational theoretical works, primary empirical studies, authoritative institutional reports, and normative standards; the integrative links among these constructs are then drawn together in the Discussion (Table 1).

Table 1. The three pillars of the integrated framework: core concepts, relevance to healthcare, and expected contribution to performance, with an illustrative practical implication for each. The pillars are interdependent: the resource pillar specifies what is deployed, the structural pillar specifies the conditions under which it is deployed, and the value pillar specifies the outcomes against which deployment is judged.

Expected Contribution and Illustrative Implication	Relevance to Healthcare	Core Concepts	Theoretical Pillar
Sustained advantage and resilience to disruption. Implication: invest in simulation, structured debriefing, and communities of practice.	Human capital and transversal competencies behave as rare, inimitable, organizationally embedded assets that underpin adaptive capacity.	VRIO resources (value, rarity, inimitability, organization); tacit knowledge; sensing, seizing, transforming.	Resource pillar—RBV and Dynamic Capabilities (Barney; Teece et al.)
Aligns measurement and financing with value. Implication: build outcome-measurement infrastructure and integrated practice units.	Redirects attention from service volume to patient-meaningful outcomes, demanding coordination and distributed leadership.	Outcomes per unit of cost; allocative, technical, personal and social value; PROMs/PREMs; Donabedian structure–process–outcome.	Value pillar—Value-Based Healthcare (Porter & Teisberg; Gray; EC)
Adaptive capacity for complex environments. Implication: pilot participatory/Teal-inspired structures with attention to context.	Organic, participatory structures enable (and rigid hierarchies constrain) the deployment of relational resources.	Mechanistic–organic continuum; learning organization; Red-to-Teal paradigms; self-management.	Structural pillar—Evolutionary Organizational Theory (Burns & Stalker; Senge; Laloux)

3.1. The Firm as a Complex System: Resources and Strategies

The firm is commonly defined as a complex, open, and dynamic system constituted by an organized set of human, material, intangible, and financial resources oriented toward the achievement of economic and social objectives through interaction with the external environment [8,9]. Systems theory holds that the organization cannot be understood by analyzing its individual components in isolation [10] but must be interpreted as an ensemble of interconnected and interdependent elements whose collective functioning exceeds the sum of its parts [11]. Organizational resources are typically classified as tangible (physical, financial) or intangible (relational capital, structural capital, know-how, intellectual property, brand equity). Human resources are widely considered to occupy a hybrid position as both measurable assets and carriers of tacit knowledge and experience [12]. The theory of organizational knowledge creation developed by Nonaka and Takeuchi distinguishes between tacit knowledge, embedded in personal experience and difficult to codify, and explicit knowledge, which is formalizable and transferable. The process of organizational knowledge creation occurs through the SECI spiral (Socialization, Externalization, Combination, Internalization), describing the continuous transformation between tacit and explicit dimensions [13].

3.2. Distinctive Competencies and the VRIO Framework

Distinctive competencies may be defined as the unique capabilities and intangible resources a firm accumulates over time, enabling differentiation and sustained competitive advantage [14]. Selznick argued that organizations develop a distinctive character through long-term choices and commitments [15]. Jay Barney formalized the Resource-Based

View (RBV), establishing that sustainable competitive advantage derives primarily from the possession and effective utilization of internal resources. For resources to generate a sustained competitive advantage, they must satisfy four fundamental criteria, the VRIO framework: Value, Rarity, Inimitability, and Organization [16]. Teece, Pisano, and Shuen extended the RBV with the concept of dynamic capabilities, defined as the firm's capacity to integrate, build, and reconfigure internal and external competencies in response to rapidly changing environments, encompassing sensing, seizing, and transforming processes [17].

3.3. *Competitive Advantage and Corporate Strategy*

Competitive advantage is generally understood to derive from cost leadership or from distinctive value perceived by customers. Porter's value chain and five-forces framework identify value-generating activities and inform competitive strategies [18]. Inter-organizational alliances are key strategic levers. In healthcare, these include clinical networks, hospital consortia, and public-private partnerships.

3.4. *The Business Model Canvas as a Strategic Tool*

The Business Model Canvas (BMC), by Osterwalder and Pigneur [19], describes how an organization creates, delivers, and captures value through nine building blocks: customer segments, value propositions, channels, relationships, revenue streams, resources, activities, partnerships, and cost structure. Integration with design thinking [20] enables iterative prototyping and continuous organizational learning. In the healthcare context, the value proposition is centered on care quality, safety, and continuity, with customer segments extending to families, general practitioners, institutions, and insurers.

3.5. *From Mechanistic to Organic Views of the Organization*

The mechanistic organizational model, which was dominant during the Industrial Revolution and in the work of Taylor and Fayol [21,22], conceived the firm as a machine composed of functional, interchangeable parts with highly standardized processes and hierarchical vertical authority (suited to stable, predictable environments) [23]. As environmental complexity progressively increased, the organic view gained considerable prominence, interpreting the organization as a living, open, and interconnected system capable of learning and dynamic adaptation. Burns and Stalker drew a fundamental distinction between mechanistic systems (task specialization, vertical communication, centralized authority) and organic systems (role flexibility, lateral communication, decentralized decisions), with organic structures demonstrably outperforming their mechanistic counterparts in uncertain environments.

3.6. *Organizational Paradigms According to Laloux*

Frédéric Laloux identified five principal organizational paradigms: Red (centralized control based on personal power and fear); Amber (pyramidal structures with formalized roles and standardized processes); Orange (performance-oriented meritocracy with systematic innovation); Green (pluralistic culture guided by shared values and servant leadership); and Teal-Evolutionary (grounded in self-management, individual wholeness, and evolutionary purpose) [24]. In Teal organizations, it is argued, decisions emerge organically through peer consultation with full transparency. Buurtzorg (The Netherlands, 15,000+ workers) is the most-cited healthcare application, with extensively documented gains in care quality, staff satisfaction, and organizational sustainability.

3.7. *Principal Organizational Models*

Major models include: the hierarchical/bureaucratic model (Weber) [25]; the functional model; the divisional model; the matrix model with dual authority lines; the de-

centralized network model; the process/Lean model focused on waste elimination; and the holacratic/Teal model based on dynamic roles [26]. As Drucker notably emphasized, organizational effectiveness depends not so much on the perfection of formal structure as on the quality of the people within it and their capacity to collaborate toward shared objectives [27].

3.8. Human Capital in Strategic Healthcare Management

Human capital is broadly understood to encompass the cumulative competencies, knowledge, experiences, skills, and motivation of an organization's members, constituting one of the principal sources of intangible value for the enterprise [28]. In accordance with ISO 30414, human capital is understood to comprise the organization's cumulative personnel capabilities and represents the impact on long-term performance [29]. In the healthcare context, human capital extends well beyond clinical competencies to include tacit knowledge, relational capacities, accumulated experience, and practitioner motivation. The well-documented global shortage of healthcare personnel renders human capital management an increasingly critical strategic priority [30]. Employer branding, working environment quality, professional development pathways, and organizational well-being are widely recognized as key determinants of adequate human capital.

3.9. Organizational Models in the Italian Healthcare System

Hospitals operating within the Italian National Health Service are observed to adopt diverse organizational models [31–34]. The hierarchical functional model remains the most established and pervasive structure in public hospitals, with clear vertical articulation of responsibilities and specialization by homogeneous function. The matrix model is frequently employed in high-specialization hospitals (including IRCCS research institutes), where multidisciplinary teamwork is essential. The network/integrated model ensures care continuity through coordinated collaboration between multiple institutions. Lean Healthcare is increasingly finding application in Italian hospital settings [35], with documented impact in the areas of process simplification, waste elimination, and efficiency improvement. Concrete applications include reduction in emergency department waiting times, optimization of operating room workflows, and improvement of clinical documentation [36].

3.10. Technical and Transversal Competencies in Healthcare

Transversal competencies (soft skills) constitute a set of personal attributes, behaviors, and social capacities enabling effective interaction, teamwork, and situational adaptability. A widely circulated, if contested, estimate—attributed to studies originating from Harvard University, the Carnegie Foundation, and the Stanford Research Center—suggests that up to 85% of professional success may derive from transversal and interpersonal competencies, while only 15% is attributable to technical skills [37,38]. This figure, though broadly cited across management and education literature, has nonetheless proven difficult to trace to a single primary quantitative study and should therefore be interpreted as a contested, directional indicator rather than a validated empirical measure, and it is for this reason excluded from the evidentiary basis on which this review's argument rests. Accordingly, it is reported here only as an illustration of a widely held professional belief and is not treated as quantitative evidence; the argument advanced in this review rests instead on more methodologically robust recent evidence, including a systematic review and meta-analysis reporting that structured, simulation-based training in non-technical skills significantly improves communication, teamwork, and overall non-technical performance among healthcare professionals [39]. Among the most relevant transversal competencies in healthcare are critical thinking, emotional intelligence, effective communication, empathy, teamwork, problem-solving, time and stress management, adaptability, assertive leadership,

and interdisciplinary collaboration [40,41]. The effectiveness of healthcare interventions is widely understood to depend on the synergistic integration of both competency types: technical excellence in the absence of adequate communication skills risks compromising the therapeutic relationship and ultimately clinical outcomes.

3.11. Value-Based Healthcare

Value-Based Healthcare (VBHC), as proposed by Porter and Teisberg, is understood to mark the transition from a supply-oriented to a demand-oriented system, redirecting institutional attention from service volume toward patient-meaningful health outcomes achieved per unit of cost sustained [42]. In 2017, Sir Muir Gray expanded the VBHC framework by integrating three value dimensions: allocative, technical, and personal [43]. In 2019, the European Commission added a fourth dimension: social value [44]. Donabedian's structure–process–outcome model provides the reference framework for quality assessment within the VBHC paradigm [45]. Operational instruments of VBHC include Patient-Reported Outcome Measures (PROMs), Patient-Reported Experience Measures (PREMs), inter-institutional benchmarking, and cost analysis per care cycle. Recent reviews of VBHC implementation indicate, however, that adoption remains uneven: outcome- and cost measurement and integrated practice units are the most frequently implemented components, whereas comprehensive, system-wide adoption is comparatively rare and is consistently shaped by leadership, organizational culture, standardized outcome sets, and workforce engagement [46,47].

3.12. Impact of Transversal Competencies on Clinical Care

Empathic communication has been shown to reinforce patient trust, promote therapeutic compliance, and improve diagnostic accuracy. Empirical evidence suggests that physicians with a more patient-centered approach order 11% fewer diagnostic tests, contributing to a 3.5% reduction in overall healthcare expenditure [48]. Physical contact by the clinician has similarly been shown to improve medication adherence, as demonstrated by studies on the role of nonverbal communication in the therapeutic relationship [49]. Healthcare institutions demonstrating strong cultures of communication, empathy, and teamwork demonstrate: reduced repeated emergency department visits, lower rates of medical errors, greater patient trust, reduced readmission rates, and improved treatment adherence [50]. Emotional intelligence (the capacity to manage one's own emotions and to recognize those of the patient) is particularly critical in emergency and high-acuity settings [51].

3.13. Transversal Competencies and Organizational Well-Being

Organizational well-being, as described by Avallone [8], is understood to encompass the set of cultural nuclei, processes, and organizational practices that promote and maintain the quality of life and the physical, psychological, and social well-being of the working community. Psychological safety, a concept developed by Edmondson, is defined as the collectively held belief that the team constitutes a safe environment for interpersonal risk-taking, where every member feels free to express opinions, report errors, and propose ideas without fear of retaliation [52]. Healthcare organizations that actively foster psychological safety have been shown to demonstrate significantly lower rates of adverse events and higher levels of staff satisfaction. A recent systematic review of healthcare teams similarly identifies leadership behavior, a learning and improvement orientation, peer and organizational support, team familiarity, and inclusivity as the principal factors enabling psychological safety [53]. Key transversal competencies with documented impact on organizational well-being include: emotional intelligence, effective communication, resilience,

cultural competence, transformational leadership [54], and critical problem-solving [55] (Figure 2).

3.14. Economic Impact of Soft Skills in Healthcare

Current evidence indicates that an estimated 70–80% of sentinel events have been associated with communication failures occurring among healthcare professionals [56]. In surgical settings, severe communication breakdowns represent one of the leading causes of adverse events [57]. The implementation of structured communication tools such as the SBAR protocol [58] (Situation, Background, Assessment, Recommendation) has been shown to significantly reduce the incidence of communication errors and improve patient safety. Evidence-based procedural protocols (such as the central-line insertion checklist implemented by Pronovost in ICUs) have similarly demonstrated notable reductions in preventable infections [59]. The WHO estimates that approximately 1 in 10 patients sustains harm [60–62] during healthcare delivery and that more than 3 million people die annually from unsafe care. In this regard, the comparison with high-reliability organizations [63] is often invoked: the risk of patient death from a preventable medical error has been estimated at approximately 1 in 300. Although the frequently cited contrast with commercial aviation (historically expressed as a per-flight fatality risk on the order of one in several million) is rhetorically powerful, it compares non-equivalent denominators and exposure units, relies on figures that are now dated, and has been criticized within the patient-safety literature; it is therefore reported here only as an illustrative heuristic rather than as a precise quantitative equivalence [64]. Shanafelt and colleagues demonstrated, in a widely cited study, that physician burnout is associated with an approximate doubling [65] of the risk of medical errors, reduced productivity, and increased turnover, with replacement costs estimated in the hundreds of thousands of euros per departing professional [66]. Staff motivation constitutes, in this perspective, a further critical determinant of care quality. Herzberg’s two-factor theory distinguishes between hygiene factors (whose absence generates dissatisfaction) and motivational factors (whose presence generates engagement) [67]. Deci and Ryan’s self-determination theory identifies three innate psychological needs essential for intrinsic motivation: autonomy, competence, and relatedness [68]. An Italian study published in 2025 identified fifteen transversal competencies employed by nurses during surgical procedures in the operating room, confirming that professional effectiveness depends on the synergistic integration of technical and soft skills [69].

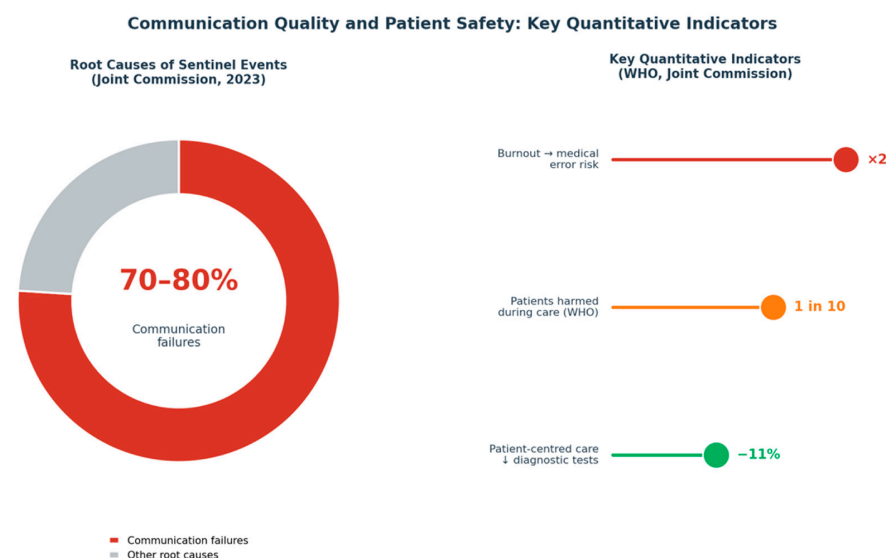


Figure 2. Key quantitative indicators on communication quality, clinician well-being, and patient safety, drawn from authoritative sources [56,66].

3.15. *Know-How, Know-Who, and Healthcare Organizational Growth*

Know-how is typically understood to refer to the technical, operational, and managerial knowledge constituting the soft heritage of an organization, while know-who refers to knowledge of the right people to engage for resources, information, support, or collaboration [70,71]. Both forms of intangible capital are widely regarded as essential to the competitiveness and sustainability of healthcare organizations. In healthcare, know-who manifests through multidisciplinary networks, diagnostic–therapeutic–care pathways (PDTA), and inter-institutional alliances. Knowledge creation is understood to occur through continuous tacit–explicit exchange in healthcare settings (clinical tutoring, case discussions, multidisciplinary meetings, and communities of practice) [72].

3.16. *From Pyramidal to Teal Organization in Healthcare*

From the 1990s onward, the healthcare sector underwent a profound and far-reaching transformation toward sustainability and patient-centeredness. New Public Management reforms [73] shifted systems from bureaucratic to output-based models; the 2000s introduced care pathways and integrated information systems [74]; and from 2010, the VBHC paradigm prompted fundamental organizational rethinking. Senge’s concept of the learning organization, grounded in five disciplines (personal mastery, mental models, shared vision, team learning, and systems thinking), provides a particularly apt and fitting framework for the healthcare context [75]. High-fidelity simulation and structured debriefing represent increasingly well-established tools for the assessment and development of non-technical skills [76]. Reflective practice, widely recognized as an essential component [77,78] of professional self-awareness, is understood to promote clinician autonomy and the productive integration of theory with practice [79].

4. Discussion

4.1. *Summary of Key Findings*

This paper addressed the following research question: What integrated theoretical framework best explains how organizational models, human capital, and transversal competencies may jointly shape care quality, patient safety, and institutional sustainability in healthcare organizations? The evidence synthesized across sixteen thematic sections appears to converge on a coherent answer: neither organizational structure, nor human capital, nor transversal competencies in isolation would appear sufficient; it is their systematic interdependence (articulated through the three-pillar framework advanced in this paper) that offers a theoretically coherent basis for interpreting the performance differentials observed across healthcare institutions. First, the evolutionary trajectory of healthcare organizational structures (from mechanistic, input-based hierarchies to organic, value-oriented configurations) appears to map directly onto the RBV prediction that organizations in dynamic, resource-constrained environments must develop inimitable, tacit capabilities rather than standardized processes. The VBHC paradigm operationalizes this shift: by redirecting institutional attention from service volume to patient-meaningful outcomes per unit of cost, it demands interprofessional coordination, distributed leadership, and person-centered care pathways. Taken together, these frameworks help explain why structural reform without corresponding investment in human and relational capital consistently fails to deliver sustained performance improvement. Second, transversal competencies (communication, empathy, emotional intelligence, teamwork, and transformational leadership) may be characterized, in RBV terms, as Valuable, Rare, Inimitable, and Organizationally embedded resources. Their absence is, in this perspective, not merely a cultural deficit but a patient safety and cost-containment concern: 70–80% of sentinel events have been associated with communication failures, and physician burnout has been associated with an approximate

doubling of the risk of medical errors. Framing soft skills as VRIO resources reframes the investment case for healthcare leaders and challenges the persistent subordination of relational training to technical specialization in professional education. Third, human capital (encompassing technical expertise, tacit knowledge, experiential heritage, and relational capacity) is argued to function as the primary source of dynamic capability in healthcare institutions. The know-how/know-who synergy corresponds directly to Teece et al.'s sensing and seizing mechanisms: institutions that embed knowledge-creation routines (clinical tutoring, communities of practice, structured debriefing) into their organizational fabric develop the adaptive capacity that technological and demographic disruption demands and that no amount of structural re-engineering can substitute. Fourth, the trajectory from pyramidal toward participatory and self-managed models is not merely a normative preference but a structural response to healthcare complexity. Burns and Stalker's organic-mechanistic continuum and Senge's learning organization disciplines provide the theoretical scaffolding for managing this transition; Laloux's Teal paradigm offers a coherent aspirational end-state. The Buurtzorg experience would appear to demonstrate organizational feasibility even at scale and within a regulated public health system, offering direct relevance to the Italian SSN context and to other European systems navigating similar structural pressures.

To move the framework from synthesis toward an empirically testable proposition, its central relationships can be expressed as four propositions. P1: Value-Based Healthcare adoption moderates the association between human-capital investment and clinical outcomes, such that the return on human capital is greater where outcome-and-cost measurement is in place. P2: The association between transversal competencies and patient safety is mediated by organizational structure, being stronger in organic and participatory configurations than in rigid hierarchies. P3: Dynamic capabilities (sensing, seizing, transforming) mediate the link between knowledge-creation routines (clinical tutoring, communities of practice, structured debriefing) and institutional adaptability. P4: The clinical benefit of participatory and self-managed models is conditional on contextual enablers, namely leadership, psychological safety, managerial capacity, and regulatory latitude, rather than universal. Consistent with the narrative design of this review, these propositions are advanced as hypotheses for future quantitative, qualitative, and mixed-methods testing, not as relationships the present synthesis has demonstrated (Section 4.3).

4.2. Comparison with Existing Literature (Figure 3)

The present findings are broadly consistent with, and serve to extend, the existing organizational science literature in ways that demonstrate the distinct and specific explanatory value of an integrated theoretical approach. Considered individually, each of the three theoretical pillars of the present paper is found to produce only a partial account. The RBV and dynamic capabilities literature, when applied to the healthcare context in isolation, accurately identifies human capital as a strategic asset yet offers comparatively limited guidance on which specific competencies generate clinical value and under what organizational conditions. The VBHC framework provides a compelling outcome-measurement logic yet remains largely silent on the organizational antecedents of value creation; it tells healthcare managers what to measure but not how to build the capacity that produces those outcomes. Evolutionary organizational theory, spanning the contributions of Burns and Stalker through to Laloux, offers structural archetypes and directional guidance, without, however, providing an adequate account of the resource mechanisms and competency profiles that render participatory structures clinically effective rather than merely administratively appealing. The integrated framework proposed in the present paper connects all three levels simultaneously: it specifies the structural conditions (organic, learning

organization), the resource mechanisms (VRIO human capital, dynamic capabilities), and the value logic (VBHC outcomes per unit of cost) within which transversal competencies function as organizational performance drivers. This integration is broadly corroborated by converging international evidence. Barney's RBV and Teece et al.'s dynamic capabilities are found to apply with particular relevance in healthcare contexts characterized by rapid technological and demographic change, as evidenced by the experiences of the Cleveland Clinic and Karolinska University Hospital. The well-documented correlation between communication quality and adverse events, documented by the Joint Commission and WHO, lends further support to the VRIO framing of soft skills. The Buurtzorg experience would appear to demonstrate that Teal-inspired, self-managed structures are organizationally feasible even at scale, generating well-documented outcomes in care quality, staff satisfaction, and sustainability; a result that individual theories could partially anticipate but not fully explain without recourse to the integrative framework advanced in the present paper.

A balanced reading must also engage the counter-evidence, which the integrated framework is intended to accommodate rather than ignore. The benefits of Lean are not uniform: several studies report limited, transient, or context-dependent effects, and a recurring tension exists between Lean's drive for standardization and the psychological safety and slack that learning and candid error-reporting require. Value-Based Healthcare, similarly, has diffused more slowly and unevenly than its proponents anticipated; system-wide adoption remains rare, and the paradigm has been criticized for privileging measurable outcomes over the relational, less quantifiable dimensions of care. Teal and other self-managed models, while compelling at the scale of small, community-based teams, have a thinner evidence base beyond such settings, and their transferability to large, regulated systems is contested. These tensions matter directly for implementation, which is shaped by identifiable barriers: professional resistance and entrenched hierarchies, resource and staffing constraints, regulatory and accountability requirements, the limited availability and interoperability of outcome data, institutional inertia, and uneven managerial capacity. They are especially salient for the Italian National Health Service, where regional heterogeneity, a strong physician hierarchy, and established bureaucratic traditions would likely require substantial adaptation before a Buurtzorg-style model could be transferred; the international evidence is therefore best read as demonstrating feasibility under specific enabling conditions rather than universal applicability.

Organizational Evolution Trajectory in Healthcare and Integrated Investment Priorities

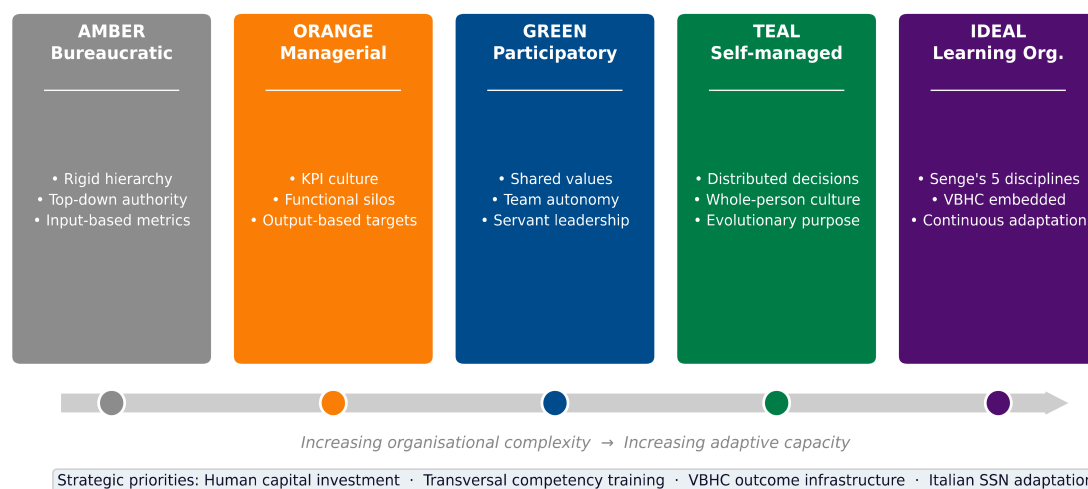


Figure 3. Organizational evolution trajectory in healthcare: from bureaucratic/Amber to Teal/self-managed models, with integrated strategic investment priorities ([24,75]; Buurtzorg model).

4.3. Limitations

Several limitations should be acknowledged when interpreting the findings of the present review. First, the narrative methodology, selected for its suitability to integrative and conceptual synthesis across heterogeneous disciplines, does not follow a pre-registered PRISMA protocol and accordingly does not permit the calculation of pooled quantitative estimates. Source selection, while guided by criteria of scientific authority and disciplinary relevance, was not exhaustive, and a formal assessment of publication bias was not undertaken. Second, the review draws predominantly on Anglophone and European sources. Non-Western healthcare systems (including those of East Asia, sub-Saharan Africa, and Latin America) are underrepresented, and their organizational experiences, cultural frameworks, and workforce dynamics may differ substantially from those described here; the generalizability of these findings beyond European contexts should be approached with appropriate caution. Third, certain statistics cited in the review (in particular, the frequently repeated claim that 85% of professional success derives from soft skills) originate from sources that are difficult to trace to a primary quantitative study. As acknowledged explicitly in the relevant section of this paper, this figure is more appropriately interpreted as a directional indicator rather than a validated empirical measure; the broader and methodologically robust clinical evidence on communication failures, burnout, and patient safety outcomes independently supports the present paper's central argument. Fourth, while Section 3.9 situates several findings within the Italian National Health Service (SSN), the normative, institutional, and cultural specificities of the Italian healthcare context (including its regional heterogeneity, the role of IRCCS research institutes, and the regulatory framework established by Legislative Decrees 502/1992 and 229/1999) may limit the direct applicability of internationally derived organizational models without context-specific adaptation. Fifth, and most fundamentally, the integrated three-pillar framework advanced here has not itself been subjected to empirical validation: it is offered as a theoretically grounded and internally coherent conceptual model, not as an empirically demonstrated causal structure. Its constituent propositions (set out in Section 4.1) remain to be tested in future quantitative, qualitative, and mixed-methods studies across heterogeneous healthcare systems before any claim of causal sufficiency could be sustained; the present contribution should accordingly be read as hypothesis-generating rather than hypothesis-confirming.

4.4. Implications for Practice and Research

From a practical standpoint, the present findings warrant systematic integration of soft-skills training in healthcare education using high-fidelity simulation, structured debriefing, and experiential learning. Healthcare institutions are accordingly encouraged to develop multimodal assessment tools for transversal competencies, foster cultures that value relational skills, and invest in transformational leadership development at all levels. Health policy is urged to invest in outcome measurement infrastructures and revise financing mechanisms to incentivize outcomes over volumes. Future research directions should encompass longitudinal studies on the causal impact of soft skills on clinical outcomes and controlled evaluations of Teal and holacratic models in Italian healthcare contexts.

5. Conclusions

Healthcare management faces an epochal challenge: reconciling efficiency, clinical excellence, and the humanization of care within resource-constrained systems confronting technological disruption and demographic change. The present review indicates that this challenge cannot be addressed by optimizing organizational structure, human capital, or transversal competencies in isolation. Rather, their systematic integration (articulated through the three-pillar framework connecting resource-based theory, Value-Based Health-

care, and evolutionary organizational theory) offers a theoretically coherent basis for understanding the potential interrelationships among organizational structure, human capital, transversal competencies, and healthcare performance across institutions internationally. Transversal competencies must be reframed from supplementary attributes to constitutive strategic assets, meeting the VRIO criteria of value, rarity, inimitability, and organizational embeddedness. Healthcare institutions should invest in high-fidelity simulation, structured debriefing, and communities of practice as evidence-based mechanisms of human capital development. Participatory and self-managed organizational models, as exemplified by the Buurtzorg experience, offer a feasible trajectory for public health systems navigating structural complexity. Consistent with the review's international orientation, the Italian SSN is treated throughout as an illustrative context rather than the primary object of analysis: its regional heterogeneity, entrenched professional hierarchies, and administrative constraints mean that such models would require substantial context-specific adaptation before transfer. Health policy should align financing mechanisms with patient-meaningful outcomes and support the infrastructure for systematic outcome measurement. Future research should pursue longitudinal evaluation of soft-skill interventions on clinical outcomes and controlled assessment of Teal-inspired models within regulated national health service contexts. In sum, placing people (their knowledge, relational capacities, and adaptive intelligence) at the center of healthcare strategy is not merely an ethical aspiration but is among the most evidence-grounded paths toward sustainable, high-quality, and person-centered care.

Supplementary Materials: The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/soc16070215/s1>, Table S1: Search and selection audit trail for the narrative/integrative review.

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