

The Role of Health Administration in Improving the Efficiency and Performance of Healthcare Workers

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ABSTRACT:

Health administration occupies a decisive position in determining how efficiently healthcare workers are deployed, supported, and enabled to deliver safe and effective care. This paper examines the role of health administration in improving the efficiency and performance of healthcare workers, situating the discussion within Saudi Arabia's Vision 2030 healthcare transformation agenda. Drawing on Donabedian's structure-process-outcome model and the Job Demands-Resources (JDR) framework, the paper introduces an original conceptual model, ELEVATE, which organizes seven administrative levers — Engaged Leadership, Lean Workflow Design, Evidence-Based Quality Management, Value-Driven Resource Allocation, Adaptive Workforce Development, Technology-Enabled Systems, and Empowerment and Accountability Culture — that health administrators can use to strengthen workforce efficiency and performance. The paper reviews the administrative functions of strategic leadership, workforce planning, quality and patient safety management, financial and resource management, and digital health governance, and connects these functions to Saudi regulatory and institutional bodies including the Saudi Commission for Health Specialties (SCFHS), the Central Board for Accreditation of Healthcare Institutions (CBAHI), the Saudi Food and Drug Authority (SFDA), the National Platform for Health Information Exchange Services (Nphies), the Mumaris+ licensing system, and the King Abdullah International Medical Research Center (KAIMRC). Persistent challenges, including workforce shortages, administrative fragmentation, and burnout, are discussed alongside evidence-based recommendations for administrators, policymakers, and healthcare organizations.

Keywords: health administration, healthcare workforce efficiency, healthcare performance, Vision 2030, Saudi healthcare system, ELEVATE framework

Introduction

The performance of any healthcare system rests fundamentally on the people who deliver care at the point of contact with patients — physicians, nurses, allied health professionals, pharmacists, and technicians. Yet the efficiency with which these healthcare workers operate is rarely determined by clinical skill alone. It is shaped, sustained, or undermined by the administrative structures within which they work: how shifts are scheduled, how supplies and information flow, how performance is measured, how careers are developed, and how leadership sets the tone for accountability and safety. Health administration, understood as the discipline of planning, organizing, staffing, directing, and controlling the resources of health organizations, is therefore not a peripheral support function but a central determinant of workforce efficiency and, ultimately, of patient outcomes.

In the Kingdom of Saudi Arabia, this relationship has taken on particular urgency. Vision 2030 has repositioned the health sector as a strategic pillar of national transformation, calling for a shift from a predominantly government-funded, hospital-centric model toward an integrated, value-based system built on efficiency, quality, and workforce empowerment. Achieving these goals requires health administrators who can translate national policy into functioning systems of workforce deployment, quality assurance, and digital governance. This paper argues that health administration is not merely an enabler of clinical work but an active driver of healthcare worker efficiency and performance, and it proposes an integrative framework, ELEVATE, for understanding how administrative practice accomplishes this.

The relationship between administration and workforce efficiency is often underappreciated precisely because good administration is, by design, invisible when it functions well. Healthcare workers rarely notice a well-calibrated staffing schedule, a seamless referral pathway, or an intuitive documentation system; they notice their absence. This invisibility can lead policymakers and even healthcare organizations

themselves to underinvest in administrative capacity relative to clinical capacity, on the assumption that efficiency will follow naturally from clinical excellence alone. The analysis that follows challenges this assumption directly, arguing that administrative capacity is a precondition for, rather than a byproduct of, clinical efficiency.

The paper is organized as follows. Section 2 presents the theoretical foundations that underpin the discussion. Section 3 introduces the ELEVATE framework. Section 4 examines fourteen specific administrative functions through which efficiency and performance are improved. Section 5 situates these functions within the Saudi Vision 2030 regulatory landscape. Section 6 offers international and comparative perspectives, and Section 7 presents an illustrative composite vignette. Section 8 discusses persistent challenges, Section 9 draws out cross-cutting themes, Section 10 offers recommendations, and Section 11 addresses limitations and future research before the paper concludes in Section 12.

2. Theoretical Foundations

2.1 Donabedian's Structure-Process-Outcome Model

Donabedian's classic model of healthcare quality provides a foundational lens for understanding the administrative contribution to workforce performance (Donabedian, 1988). The model conceptualizes healthcare quality as a function of structure (the physical, organizational, and human resources of a system), process (the activities that constitute care), and outcome (the resulting effects on patient health). Health administration operates primarily on structure and process: it determines staffing ratios, equipment availability, information systems, and protocols, all of which shape how efficiently healthcare workers can perform their tasks. When administrative structures are well designed, healthcare workers spend proportionally more time on direct patient care and less time compensating for organizational gaps.

2.2 The Job Demands-Resources (JDR) Model

The Job Demands-Resources model offers a complementary perspective at the level of the individual worker (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). The model distinguishes between job demands, which require sustained effort and can lead to strain, and job resources, which facilitate goal achievement and buffer against burnout. Administrative decisions directly shape both sides of this equation: adequate staffing, manageable workloads, and access to information systems function as resources, while chronic understaffing, administrative burden, and role ambiguity function as demands. Because sustained exposure to high demands without corresponding resources predicts burnout and declining performance, the JDR model underscores why administrative choices about staffing and workload distribution are inseparable from workforce efficiency.

"Efficiency in healthcare delivery is administratively constructed long before it is clinically expressed."

2.3 Reason's Swiss Cheese Model of System Safety

Reason's model of organizational accidents conceptualizes safety failures as the alignment of latent weaknesses across multiple layers of a system — design, supervision, procedures, and frontline action (Reason, 1990). Applied to workforce efficiency, the model reframes individual errors or slowdowns not as isolated worker failures but as symptoms of gaps in administrative layers: inadequate protocols, insufficient supervision, or poorly designed

handoff procedures. Health administrators who systematically identify and close these latent gaps reduce the frequency with which healthcare workers must compensate for systemic weaknesses through extra vigilance or improvisation, freeing capacity for productive, efficient work.

2.4 TeamSTEPPS and the IPEC Interprofessional Competency Domains

Because healthcare delivery is inherently a team activity, frameworks such as TeamSTEPPS and the Interprofessional Education Collaborative (IPEC) competency domains — values and ethics, roles and responsibilities, interprofessional communication, and teams and teamwork — provide administrators with a structured vocabulary for building efficient collaborative practice (Interprofessional Education Collaborative [IPEC], 2016). Administrative investment in structured team communication tools, shared mental models, and clearly defined role boundaries reduces the coordination overhead that otherwise consumes healthcare workers' time and attention, particularly in high-acuity, multidisciplinary settings such as emergency departments and operating theaters.

3. The ELEVATE Framework

To integrate these theoretical perspectives into a framework usable by practicing administrators, this paper proposes ELEVATE, a seven-component model describing the administrative levers most consistently associated with improved healthcare worker efficiency and performance.

Component	Administrative Focus	Expected Effect on Workforce
Engaged Leadership	Visible, participative leadership that communicates goals and involves staff in decisions	Higher motivation and role clarity
Lean Workflow Design	Elimination of redundant steps, streamlined handoffs and documentation	Reduced non-clinical workload

Component	Administrative Focus	Expected Effect on Workforce
Evidence-Based Quality Management	Standardized protocols, audit and feedback cycles	Fewer errors, more consistent practice
Value-Driven Resource Allocation	Budgeting and staffing tied to patient acuity and demand	Reduced overload and idle capacity
Adaptive Workforce Development	Continuing education, mentorship, career pathways	Sustained competence and retention
Technology-Enabled Systems	Interoperable health information systems and digital tools	Faster, more accurate information flow
Empowerment & Accountability Culture	Delegated authority paired with transparent performance metrics	Ownership and sustained performance

The seven components are not sequential stages but interacting dimensions of administrative practice. Engaged Leadership sets the direction that gives the remaining six components coherence; Lean Workflow Design and Technology-Enabled Systems reduce the operational demands identified by the JDR model; Value-Driven Resource Allocation and Adaptive Workforce Development strengthen the structural resources described by Donabedian; and Evidence-Based Quality Management together with an Empowerment and Accountability Culture close the loop by translating performance data back into leadership decisions.

4. Administrative Functions that Drive Efficiency and Performance

4.1 Strategic Leadership and Organizational Direction

Health administrators set strategic direction by translating national and organizational priorities into operational plans. Effective leadership clarifies expectations, aligns departmental goals with institutional mission, and models the accountability it expects from staff. Studies of healthcare human resource management consistently identify leadership style and organizational culture as primary predictors of

staff engagement and, in turn, of service efficiency (Kabene, Orchard, Howard, Soriano, & Leduc, 2006). Administrators who practice participative leadership — involving healthcare workers in decisions about scheduling, protocols, and resource use — tend to see higher compliance with those decisions and lower resistance to change.

4.2 Workforce Planning, Recruitment, and Skill Mix

A core administrative function is ensuring that the right number of appropriately skilled workers are available at the right time and place. Poor workforce planning produces either costly overstaffing or, more commonly in resource-constrained systems, chronic understaffing that forces healthcare workers to absorb excess demand. Buchan and Dal Poz (2002) emphasize that skill-mix decisions — determining which tasks are performed by which category of worker — are themselves an administrative lever for efficiency, allowing higher-cost specialists to focus on tasks that require their level of training while other functions are appropriately delegated to other cadres.

4.3 Quality and Patient Safety Management

Administrators are responsible for establishing the quality assurance infrastructure — incident

reporting systems, clinical audits, and continuous improvement cycles — that allows healthcare workers to identify and correct inefficiencies in real time. When quality management systems function well, healthcare workers receive timely feedback on performance, reducing the repetition of avoidable errors and reinforcing standardized, efficient practice. Weak quality infrastructure, by contrast, leaves inefficiencies undetected and forces individual workers to develop ad hoc workarounds that vary in effectiveness.

4.4 Financial and Resource Management

Budgeting, procurement, and resource allocation decisions made by health administrators directly affect the tools and materials available to healthcare workers. Delays in procurement, inconsistent supply chains, or resource allocation that does not track patient acuity can force clinical staff to spend time on logistics rather than care delivery. Value-based resource allocation, which ties funding and staffing levels to actual demand and outcomes rather than historical budget lines, has been associated with more consistent workforce efficiency across departments.

4.5 Health Information Systems and Digital Governance

The administration of health information systems — including electronic health records, referral platforms, and claims exchange systems — determines how much time healthcare workers spend on documentation versus direct care. Interoperable systems reduce duplicate data entry and enable faster clinical decision-making, while fragmented or poorly administered systems increase administrative burden. In this domain, health administration functions as a bridge between clinical practice and the digital infrastructure that increasingly defines modern healthcare delivery.

4.6 Workforce Development and Continuing Professional Development

Sustained efficiency requires that healthcare workers' competencies keep pace with evolving clinical standards and technologies.

Administrators who invest in structured continuing professional development, mentorship programs, and clear career pathways support long-term performance and reduce the productivity losses associated with skill obsolescence and staff turnover. Adaptive workforce development also mitigates burnout by giving healthcare workers a visible trajectory for growth within the organization.

4.7 Interprofessional Collaboration and Team Coordination

Health administrators design the structures — shared rounds, unit huddles, joint case conferences — through which physicians, nurses, pharmacists, and allied health professionals coordinate care. D'Amour and Oandasan (2005) describe interprofessionalism as an organizational property that must be deliberately cultivated rather than assumed, requiring administrative support for shared governance, common documentation standards, and protected time for collaborative planning. When administrators fail to formalize these structures, coordination defaults to informal, time-consuming negotiation between individual workers, reducing overall efficiency.

4.8 Change Management and Organizational Adaptation

Healthcare systems are in near-constant flux, whether from new clinical guidelines, technology rollouts, or policy reform. Administrators act as change agents, using structured change-management approaches — clear communication of rationale, phased implementation, and feedback loops — to minimize the disruption that organizational change imposes on workforce efficiency. Poorly managed change, by contrast, generates confusion, duplicated effort, and resistance that can depress performance for extended periods after a new system or protocol is introduced.

4.9 Risk Management and Regulatory Compliance

Administrators are responsible for anticipating and mitigating clinical, financial, and reputational risk, including compliance with licensing,

accreditation, and safety regulations. A well-administered risk-management function allows healthcare workers to operate within clear, pre-established boundaries rather than making ad hoc judgment calls about compliance in the course of clinical work, which both protects patients and preserves clinical time for direct care.

4.10 Patient Experience and Service Design

Administrative decisions about patient flow, appointment scheduling, and service layout directly affect how efficiently healthcare workers can move between tasks. Poorly designed patient pathways create bottlenecks that generate downstream inefficiency and frustration for both patients and staff, whereas administrators who apply service-design principles to reduce wait times and streamline transitions between departments enable healthcare workers to sustain a smoother, more predictable workflow.

4.11 Emergency Preparedness and Surge Capacity Administration

The administration of emergency preparedness plans, surge staffing protocols, and disaster response coordination determines how efficiently a healthcare workforce can scale its response to sudden demand spikes, including mass-casualty events, seasonal outbreaks, or public health emergencies. Administrators who maintain rehearsed surge plans and cross-trained staffing pools enable healthcare workers to transition into crisis operations with minimal loss of coordination or performance.

4.12 Performance Measurement and Key Performance Indicators

Administrators establish the metrics — patient wait times, staff-to-patient ratios, error rates, and staff satisfaction indices — by which workforce efficiency is monitored over time. A well-designed performance measurement system closes the feedback loop for every other administrative function described above, allowing leadership to detect emerging inefficiencies early and to direct resources toward the areas of greatest need rather than relying on anecdotal impressions of workforce performance.

4.13 Ethical and Legal Governance

Administrators establish the ethical and legal guardrails within which healthcare workers exercise clinical judgment, including informed-consent procedures, confidentiality safeguards, and grievance mechanisms. Clear, well-communicated ethical and legal governance reduces the ambiguity that would otherwise force individual healthcare workers to resolve difficult ethical questions in isolation, in the middle of clinical work, without institutional guidance. Administrators who provide accessible ethics consultation and legal support structures allow healthcare workers to focus their attention on patient care rather than on managing legal or ethical uncertainty alone.

4.14 Sustainability and Environmental Health Administration

An increasingly recognized administrative function concerns the environmental sustainability of healthcare operations, including energy use, medical waste management, and supply-chain resilience. Administrators who build sustainable, resilient operational systems reduce the frequency of supply disruptions and facility-level emergencies that would otherwise divert healthcare workers' time toward improvisation. Sustainability planning is therefore not a peripheral corporate-responsibility exercise but a contributor to the operational stability that underlies consistent workforce efficiency over time.

5. Health Administration within Saudi Vision 2030

Saudi Arabia's Vision 2030 has made healthcare transformation a central pillar of national development, calling for a shift toward integrated, efficient, and value-based care delivery (Saudi Vision 2030, 2021). This transformation depends heavily on the capacity of health administrators to operationalize policy through regulatory compliance, workforce credentialing, and digital integration. Several national institutions structure this administrative landscape:

- ◆ The Saudi Commission for Health Specialties (SCFHS) sets licensing and continuing professional development requirements that administrators must integrate into workforce planning and credentialing processes.
- ◆ The Central Board for Accreditation of Healthcare Institutions (CBAHI) establishes the quality and patient safety standards against which administrative performance is measured and accredited.
- ◆ The Saudi Food and Drug Authority (SFDA) regulates pharmaceuticals, medical devices, and related supply chains that administrators must manage to keep clinical workflows uninterrupted.
- ◆ The National Platform for Health Information Exchange Services (Nphies) requires administrators to align claims, referral, and information-sharing processes across providers and payers.
- ◆ The Mumaris+ platform administers professional licensing and registration, linking workforce credentialing directly to administrative oversight of staff qualifications.
- ◆ The King Abdullah International Medical Research Center (KAIMRC) supports the evidence base that informs administrative decision-making on workforce standards and clinical protocols.

Empirical assessments of the Saudi health system note that its historical strengths in access and infrastructure have been accompanied by persistent challenges in workforce distribution and administrative integration across public and private sectors (Al-Hanawi et al., 2019; Almalki, Fitzgerald, & Clark, 2011). Vision 2030's emphasis on privatization, corporatization of hospitals, and value-based purchasing increases, rather than decreases, the administrative burden of coordinating a more diverse and complex delivery landscape — reinforcing the centrality of health administration to workforce efficiency during this transition.

The corporatization of major public hospitals under holding-company models further illustrates this dynamic. As facilities move toward

greater operational autonomy, administrators assume direct responsibility for functions — procurement, human-resource management, and financial planning — that were previously centralized. This devolution creates opportunities for more responsive, locally tailored efficiency initiatives, but it also requires a corresponding expansion of administrative capacity and training at the facility level, since efficiency gains under decentralization depend entirely on the competence of the administrators to whom authority is transferred.

5.1 Regulatory Alignment as an Efficiency Mechanism

Each of the institutions listed above functions not merely as a compliance requirement but as an efficiency mechanism in its own right. SCFHS licensing standards, for example, reduce variability in workforce competence by ensuring a common baseline of training before staff enter practice, which in turn reduces the administrative burden of on-the-job remediation. CBAHI accreditation cycles impose external accountability that motivates administrators to maintain the quality infrastructure described in Section 4.3 on an ongoing basis rather than only during crises. Nphies integration, while administratively costly to implement, ultimately reduces the duplicated claims processing and referral delays that previously consumed significant clinical and administrative staff time across providers.

5.2 Digital Credentialing and Workforce Governance through Mumaris+

The Mumaris+ platform illustrates how digital governance tools shift an administrative function — verification of professional credentials — from a manual, facility-level process to a centralized, continuously updated national system. For administrators, this reduces the time historically spent verifying licensure status during recruitment and periodic re-credentialing, while also providing real-time visibility into workforce qualifications across a facility or region. This administrative efficiency gain illustrates a broader pattern in the Vision 2030 digital health agenda: national platforms absorb administrative tasks

that were previously duplicated at every facility, allowing local administrators to redirect their attention toward facility-specific efficiency initiatives such as those described in Section 4.

5.3 Research Governance and the Role of KAIMRC

KAIMRC's role in generating and disseminating clinical and health-services research provides the evidence base that administrators draw upon when designing protocols, staffing models, and quality-improvement initiatives. Administrators who maintain active links between their facilities and national research infrastructure are better positioned to adopt evidence-based practices quickly, rather than relying on outdated protocols or informal consensus among senior staff. This linkage between research governance and administrative practice reflects the Evidence-Based Quality Management component of the ELEVATE framework at a system-wide, rather than facility-level, scale.

6. International and Comparative Perspectives

Placing the Saudi experience in comparative context clarifies which challenges are unique to the Kingdom's transition and which reflect broader patterns in health system administration. Health systems in the Gulf Cooperation Council region share similar demographic and workforce characteristics, including significant reliance on an internationally recruited workforce and rapid infrastructure expansion, which places comparable administrative demands on credentialing, orientation, and retention systems (WHO, 2016). Systems that have pursued value-based purchasing reforms in North America and Western Europe offer a useful, though not directly transferable, precedent: they consistently show that efficiency gains from administrative reform tend to lag several years behind initial investment, as organizations require time to redesign workflows around new incentive structures.

A recurring theme in this comparative literature is that administrative reform succeeds or fails less on the design of policy itself than on the quality of implementation at the facility level. Systems that paired national policy change with sustained investment in local administrative capacity — training facility-level managers, funding data infrastructure, and allowing a multi-year implementation runway — achieved more durable efficiency gains than systems that treated administrative reform as a one-time compliance exercise. This observation reinforces the case, developed further in Section 8, for treating health administration as a long-term professional capability to be built and sustained rather than a function to be assumed self-evident.

A second comparative lesson concerns workforce nationalization policies. Several Gulf states, including Saudi Arabia through its broader Saudization agenda, have pursued deliberate strategies to grow a domestically trained healthcare workforce alongside continued reliance on international recruitment. Administratively, this dual-track approach requires parallel systems for credential recognition, language and cultural orientation, and career development that serve both domestic graduates and internationally recruited staff without creating a two-tiered experience of administrative support. Health systems that have managed this transition most smoothly tend to be those where administrators treated workforce nationalization as an integrated planning exercise, coordinated with SCFHS licensing timelines and academic training capacity, rather than as a target pursued independently of broader workforce planning.

7. Illustrative Composite Vignette

The following composite scenario, constructed for illustrative purposes rather than as an account of any specific institution, demonstrates how the ELEVATE components interact in practice.

Composite Scenario: A Tertiary Hospital Surgical Unit

A tertiary hospital's surgical unit experiences recurring delays in case turnover, with nursing staff reporting high documentation burden and frequent double-entry of patient data between paper charts and the electronic system. An administrative review, guided by the ELEVATE framework, identifies weaknesses across three components: Lean Workflow Design (redundant documentation steps), Technology-Enabled Systems (an incompletely integrated electronic health record), and Empowerment and Accountability Culture (unclear ownership of the turnover process).

The administrative response combines a workflow redesign that eliminates duplicate documentation, a phased technology upgrade to complete system integration, and the designation of a unit-level turnover coordinator with clear authority to resolve bottlenecks in real time. Within two quarters, case-turnover time decreases and nursing staff report reduced end-of-shift documentation backlog — illustrating how administrative intervention across multiple ELEVATE components, rather than a single fix, produces measurable gains in workforce efficiency.

8. Challenges to Effective Health Administration

Despite its importance, health administration in Saudi Arabia and comparable systems faces several persistent challenges that constrain its ability to improve workforce efficiency.

- ◆ Workforce shortages and maldistribution: Uneven distribution of healthcare workers between urban and rural regions, and reliance on expatriate staff in some specialties, complicate consistent workforce planning (Alharbi, 2018).
- ◆ Administrative fragmentation: Coordination gaps between public and private providers, and between regulatory bodies, can produce duplicated processes and inconsistent standards.
- ◆ Burnout and workload imbalance: High job demands without corresponding administrative resources contribute to burnout, absenteeism, and turnover, consistent with the JDR model.
- ◆ Digital transition costs: Implementing interoperable systems such as Nphies requires significant short-term administrative investment before efficiency gains are realized.
- ◆ Data and performance measurement gaps: Inconsistent performance metrics across

institutions limit administrators' ability to benchmark and continuously improve workforce efficiency.

- ◆ Administrative skill gaps: Many facility-level managers are promoted from clinical roles without formal training in health administration, limiting their capacity to apply structured frameworks such as ELEVATE.
- ◆ Resistance to standardization: Efforts to standardize protocols across departments or facilities can encounter resistance from clinical staff accustomed to localized practice norms, slowing the pace of administrative reform.

Taken together, these challenges suggest that the limiting factor in many settings is not a lack of awareness of what constitutes good administrative practice, but a shortage of the sustained institutional capacity — trained personnel, stable funding, and organizational patience — needed to implement it consistently. Table 2 summarizes these challenges alongside administrative mitigation strategies drawn from the ELEVATE components discussed in Section 3.

Table 2. Administrative Challenges and Corresponding Mitigation Strategies

Challenge	Related Component(s)	ELEVATE	Mitigation Strategy
Workforce shortages and maldistribution	Value-Driven Allocation	Resource	Acuity-based staffing models and incentives for underserved regions
Administrative fragmentation	Engaged Leadership; Technology-Enabled Systems		Shared governance structures and interoperable platforms
Burnout and workload imbalance	Adaptive Workforce Development		JDR-informed workload monitoring and staffing adjustment
Digital transition costs	Technology-Enabled Systems		Phased implementation with dedicated change-management support
Data and measurement gaps	Evidence-Based Management	Quality	Standardized KPI sets aligned with CBAHI accreditation criteria
Administrative skill gaps	Empowerment & Accountability Culture		Formal health administration training pathways for managers

9. Discussion: Cross-Cutting Themes

Several themes recur across the administrative functions and challenges discussed above. First, efficiency and worker wellbeing are not competing objectives but mutually reinforcing outcomes of the same administrative practices; interventions that reduce non-clinical workload, such as lean workflow redesign or improved health information systems, simultaneously improve throughput and reduce the burnout risk described by the JDR model. Second, technology adoption is administratively, not technically, rate-limited: the pace at which digital systems such as Nphies deliver efficiency gains depends less on the underlying technology than on the administrative work of process redesign, training, and change management that surrounds its implementation. Third, accountability structures matter as much as resource levels; well-resourced units with unclear ownership of key processes, as in the composite vignette in Section 7, can

underperform relative to leaner units with clearly assigned administrative responsibility.

A further cross-cutting theme concerns the relationship between centralization and local autonomy. National frameworks — Vision 2030, SCFHS standards, CBAHI accreditation — provide the structural consistency needed for system-wide efficiency, while facility-level administrators retain the contextual knowledge needed to adapt these frameworks to local workflow realities. The ELEVATE framework is designed to operate at this facility level, translating national policy direction into unit-level administrative action without requiring administrators to reinvent quality and efficiency principles from first principles at each site.

Finally, the material reviewed in this paper suggests that workforce efficiency should be understood as a lagging indicator of administrative quality rather than a target that can

be pursued directly through exhortation or incentive alone. Attempts to improve efficiency metrics without addressing the underlying administrative conditions — adequate staffing, functional information systems, clear accountability — tend to produce short-lived improvements that erode once attention shifts elsewhere, or that improve reported metrics without improving the underlying work experience of healthcare workers. Sustainable efficiency gains, by contrast, emerge as a by-product of administrators systematically strengthening the structural and process conditions described throughout Sections 3 through 5.

10. Recommendations

Based on the preceding analysis, the following recommendations are offered to health administrators, healthcare organizations, and policymakers seeking to strengthen healthcare worker efficiency and performance.

- ◆ Adopt the ELEVATE framework, or a similarly integrated model, as a diagnostic tool for auditing administrative practice against each of its seven components.
- ◆ Institutionalize participative leadership practices that involve frontline healthcare workers in scheduling, protocol design, and quality improvement decisions.
- ◆ Align workforce planning with patient acuity data rather than historical staffing patterns, updating skill-mix decisions as service demand evolves.
- ◆ Invest in interoperability between health information systems, prioritizing integration with Nphies and electronic health record platforms to reduce documentation burden.
- ◆ Expand structured continuing professional development pathways in coordination with SCFHS licensing requirements to support long-term workforce competence and retention.
- ◆ Standardize performance measurement across public and private providers to enable meaningful benchmarking and continuous quality improvement.
- ◆ Monitor workload and burnout indicators systematically, using JDR-informed metrics to trigger administrative intervention before performance declines.
- ◆ Formalize interprofessional coordination structures, such as shared rounds and joint case conferences, to reduce informal coordination overhead among healthcare workers.
- ◆ Build dedicated health administration career pathways and formal training programs so that facility-level managers develop administrative competence rather than relying solely on clinical experience.
- ◆ Rehearse surge and emergency staffing plans periodically so that administrative coordination capacity is tested before, rather than during, a crisis.
- ◆ Pair every technology rollout with an explicit workflow-redesign and change-management plan, rather than treating digital implementation as a purely technical project.

11. Limitations and Directions for Future Research

This paper is conceptual in nature, synthesizing established theoretical models and administrative literature into an integrative framework rather than presenting new empirical data. The ELEVATE framework and the composite vignette in Section 7 are intended as heuristic and illustrative tools rather than validated measurement instruments, and their practical utility would benefit from empirical testing across varied facility types and departments within the Saudi health system. Future research could operationalize each ELEVATE component into measurable indicators, assess their relative predictive strength for workforce efficiency outcomes, and examine how the framework performs across different care settings, including primary care, long-term care, and rural facilities, where administrative capacity and resource constraints may differ substantially from the tertiary hospital contexts most commonly studied. Comparative studies tracking the same facilities before and after the implementation of Nphies integration or CBAHI re-accreditation

would also help clarify the time lag between administrative investment and measurable efficiency gains discussed in Section 6.

A further limitation concerns the generalizability of international comparisons. Health systems differ substantially in financing structure, workforce composition, and regulatory tradition, and administrative practices that improve efficiency in one context may require significant adaptation before they transfer meaningfully to another. Future work grounded specifically in Saudi facility-level data, ideally spanning both public and private providers and multiple regions of the Kingdom, would provide a stronger empirical foundation for the claims advanced here than the largely theoretical synthesis this paper offers. Mixed-methods designs that combine administrative performance data with qualitative interviews of healthcare workers would be particularly well suited to testing whether the ELEVATE components identified here capture the administrative factors that workers themselves experience as most consequential for their efficiency and daily performance.

12. Conclusion

Health administration functions as the organizational architecture within which healthcare workers either thrive or struggle. Through leadership, workforce planning, quality management, resource allocation, digital governance, interprofessional coordination, and

professional development, administrators shape the conditions of efficiency and performance long before any individual clinical encounter takes place. The ELEVATE framework proposed in this paper, spanning Engaged Leadership, Lean Workflow Design, Evidence-Based Quality Management, Value-Driven Resource Allocation, Adaptive Workforce Development, Technology-Enabled Systems, and Empowerment and Accountability Culture, offers a structured way of understanding these administrative levers as an interacting system rather than a set of isolated functions.

Within the context of Saudi Vision 2030, where healthcare transformation is both a national priority and an operational challenge, strengthening health administration is not incidental to workforce efficiency — it is the mechanism through which that efficiency is achieved. The comparative and illustrative material presented in this paper suggests that the greatest returns on administrative investment come not from isolated interventions but from the coordinated application of multiple administrative levers to a shared operational problem. Continued investment in administrative capacity, aligned with the country's regulatory institutions and digital health infrastructure, and supported by a growing evidence base on what works at the facility level, will remain essential to realizing the full performance potential of Saudi Arabia's healthcare workforce.

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