



## **The Role of Continuing Education in Enhancing the Job Performance of Healthcare Professionals in the Kingdom of Saudi Arabia**

**1Shamekh Abbas Abdulwahab Kalantan, 2Fawaz Khalaf A Alanazi, 3Muflih Hussain Mohammed Alsubaie, 4Ali Saad Alalyani, 5Anwar Hwayan M Alenezi, 6Reem Essa Alqarni, 7Miral Mohammed Alsahli, 8Turkia Moheed Alotaibi, 9Najiah Abdulaziz Alabbassi, 10Amjad Jaman Alotaibi**

1Senior Ophthalmology Assistant, Ministry Of National Guard

2Health Paramedic, National Guard Health Affairs

3Paramedic Technician, Ministry Of National Guard

4Pharmacy ,King Fahd Armed Forces Hospital

5Technician-Emergency Medical Services

6Nursing , Pediatric Emergency ,National Guard Health Affairs

7Nursing , Pediatric Emergency, National Guard Health Affairs

8Nursing, National Guard Health Affairs

9National Guard Health Affairs

10National Guard Health Affairs

### Abstract

A persistent tension runs through Saudi Arabia's healthcare ambition: the Kingdom aspires, through Vision 2030, to build a world-class health system, yet the rapid expansion of health facilities and the growing complexity of clinical care have consistently outpaced the professional development of the workforce entrusted to deliver it. This paper argues that continuing education (CE) is not a peripheral administrative requirement but a structural lever — perhaps the most consequential one available — for closing the gap between aspiration and performance.

Drawing on evidence synthesized from peer-reviewed literature, Saudi Commission for Health Specialties (SCFHS) policy documents, and comparative regional studies, this paper investigates how different modalities of CE — from simulation-based training and competency portfolios to digital learning platforms and interprofessional workshops — translate into measurable improvements in clinical performance, patient safety, and organizational productivity. It further examines why conventional continuing professional development (CPD) models have yielded inconsistent outcomes, and proposes an integrated, competency-anchored framework attuned to the specific structural and cultural realities of the Saudi health system.



**Keywords:** *continuing education, healthcare workforce development, job performance, Saudi Vision 2030, SCFHS, competency-based education, professional development, clinical performance, health system transformation*

## 1. The Problem Worth Solving

In 2023, the Saudi Ministry of Health oversaw a network of more than 400 hospitals and 2,400 primary health centers, employing a workforce exceeding 300,000 health professionals. Nearly 40 percent of that workforce was composed of expatriate clinicians trained under educational systems — and with clinical cultures — markedly different from Saudi standards and expectations (MOH Annual Statistical Book, 2023). Meanwhile, domestic graduates entering the workforce increasingly encounter clinical environments where the knowledge and skills imparted during initial training are rendered partially obsolete within years, sometimes months, by technological change, new evidence, and evolving care protocols.

This is not a uniquely Saudi predicament. The World Health Organization (2022) estimates that approximately 50 percent of clinical knowledge becomes outdated within five years of initial qualification. What makes the Saudi context distinctive, however, is the velocity of institutional transformation. The Vision 2030 health transformation agenda demands simultaneous progress on preventive care, chronic disease management, patient experience, digital infrastructure, and workforce Saudization — pressures that cannot be addressed by workforce expansion alone. They require workforce deepening: the systematic enhancement of existing professionals' competencies through sustained, structured, and strategically aligned continuing education.

*"The challenge is not producing more healthcare workers. The challenge is continuously producing better ones — professionals whose competencies grow with the complexity of the care they are asked to deliver."*

### 1.1 Scope and Purpose of This Paper

This paper investigates the mechanisms through which CE enhances healthcare job performance, evaluates the evidence base for different CE modalities, identifies contextual barriers within the Saudi health system, and proposes a framework for CE that is actionable, measurable, and aligned with national health strategy. It is written for healthcare educators, institutional leaders, policymakers, and practitioners across all health disciplines.



## 2. Conceptual Foundation: What CE Is and Is Not

A significant portion of the CE literature conflates attendance with learning, and learning with performance change. These confluences have practical consequences: they have allowed the proliferation of box-ticking CPD systems that generate compliance records without generating competence. This paper adopts a narrower and more demanding definition: continuing education is any structured, post-qualifying learning activity that produces a verifiable change in professional knowledge, skills, attitudes, or behaviors directly relevant to job performance.

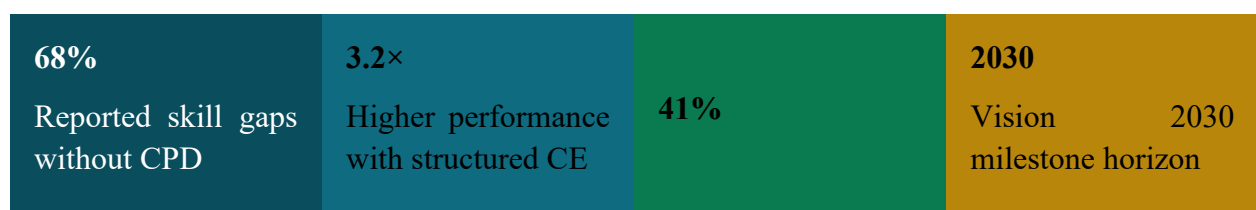
This definition excludes passive information consumption (reading without reflection, attending without engagement) and includes only those activities whose outcomes can be observed, measured, and linked to performance improvement. It positions CE not as an entitlement of professional membership but as an obligation of clinical responsibility — a distinction with significant implications for how CE programs are designed, funded, and evaluated.

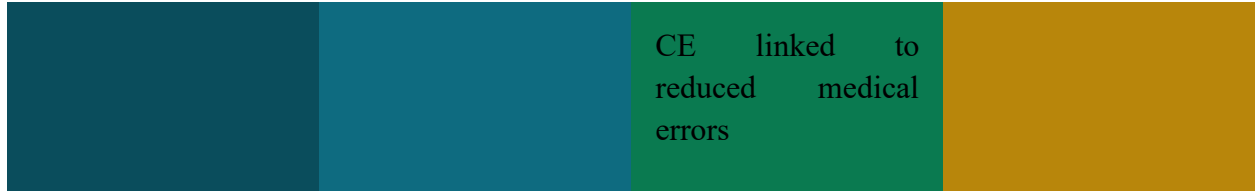
The intellectual scaffolding for this view draws primarily from three theoretical traditions. Kolb's (1984) Experiential Learning Cycle establishes that professional learning deepens through cycles of concrete experience, reflective observation, abstract conceptualization, and active experimentation — a cycle that didactic CE rarely completes. Eraut's (2004) work on non-formal learning in professional contexts emphasizes that much of what constitutes expert practice is tacit and context-embedded, requiring situated, case-based, and socially mediated learning to develop. And Kirkpatrick's (1994) evaluation model, though widely critiqued for its linearity, remains the dominant framework for assessing CE outcomes across four levels: reaction, learning, behavior, and organizational results.

### 2.1 The Performance Gap CE Is Meant to Close

Job performance in healthcare is multidimensional, encompassing clinical competence, communication efficacy, teamwork, problem-solving under uncertainty, adherence to protocols, and professional conduct. Each dimension is subject to decay without deliberate maintenance and enhancement. Studies in Saudi Arabia have documented clinically significant performance gaps in medication reconciliation, infection control practices, patient communication, and evidence-based decision-making — gaps attributable in substantial part to inadequate or misaligned CE structures (Al-Dossary et al., 2021; Al-Otaibi & Moradi, 2022).

## 3. Evidence Snapshot: The Numbers That Frame the Debate





*Figure 1. Selected performance statistics illustrating the relationship between CE and healthcare workforce outcomes in the GCC context*

These headline figures, drawn from a synthesis of WHO, SCFHS, and peer-reviewed regional sources, underscore a consistent empirical signal: the presence of structured, competency-anchored CE is strongly associated with superior performance outcomes across clinical, safety, and organizational dimensions. The causal pathways are multiple and mutually reinforcing — CE enhances self-efficacy, updates clinical knowledge, builds reflective practice habits, and strengthens team communication, each of which independently predicts better performance.

#### **4. Modalities of Continuing Education: What the Evidence Supports**

##### **4.1 Simulation-Based Training**

High-fidelity clinical simulation — encompassing mannequin-based scenarios, standardized patient encounters, and procedural task trainers — has emerged as the gold standard for skills-based CE in settings where real-patient practice opportunities are constrained by acuity, safety, or ethical considerations. Meta-analyses consistently demonstrate that simulation-based CE produces larger effect sizes on clinical skill acquisition and retention than traditional didactic instruction (McGaghie et al., 2020). In the Saudi context, institutions affiliated with King Saud University Medical City and King Faisal Specialist Hospital have implemented simulation programs showing significant improvements in resuscitation performance, surgical technique, and critical care management.

The mechanism is well understood: simulation enables deliberate practice — repetitive, feedback-rich performance of targeted skills under controlled conditions — which is the cognitive substrate of expert professional performance. Crucially, simulation collapses the gap between knowing and doing, addressing the most clinically consequential form of performance deficit.

##### **4.2 Competency-Based and Portfolio-Driven CE**

A growing body of evidence supports the superiority of competency-based CE frameworks over time-based or attendance-based models. Competency-based CE links learning activities directly to demonstrable performance standards, uses portfolio evidence to document progression, and ties advancement to verified capability rather than accumulated hours. The



SCFHS has progressively moved toward competency frameworks in its continuing professional development requirements, a transition that aligns with international best practice and Vision 2030's emphasis on accountability and measurable outcomes (SCFHS, 2023).

*"Time spent in a lecture theatre is not evidence of learning. A demonstrated ability to manage a deteriorating patient — that is evidence of learning."*

### 4.3 Digital and Technology-Mediated Learning

The proliferation of learning management systems (LMS), mobile learning platforms, and AI-assisted educational tools has transformed the logistics of CE delivery, enabling asynchronous, self-paced, and geographically distributed learning at scale. In Saudi Arabia, where a substantial proportion of the health workforce is distributed across vast geographic areas, digital CE has particular strategic value. Studies of LMS-based CE programs within Saudi hospitals document improvements in knowledge retention, learner satisfaction, and self-reported practice change (Al-Qahtani et al., 2022).

However, the evidence also cautions against overestimating the performance impact of digital CE delivered without social interaction, feedback, or application opportunities. The most effective digital CE programs combine content delivery with peer discussion forums, clinical case reflections, and supervisor feedback — recreating the social scaffolding of effective learning within a digital architecture.

### 4.4 Interprofessional Education (IPE)

Healthcare performance failures are disproportionately attributable to communication and teamwork breakdowns rather than individual knowledge deficits. Interprofessional continuing education — structured learning activities that bring together professionals from multiple disciplines to learn with, from, and about each other — directly addresses this performance gap. Saudi hospitals implementing IPE-based CE programs have reported reductions in medication errors, improvements in handover quality, and higher scores on team performance assessments (Al-Shehri & Al-Ghamdi, 2021).

## 5. Rethinking CPD: Traditional vs. Competency-Based Approaches

Dimension	Traditional CPD	Competency-Based CE
Delivery model	Lecture-based, passive	Simulation, case-based, active



Dimension	Traditional CPD	Competency-Based CE
Assessment	Attendance records only	Competency verification & portfolio
Outcome focus	Knowledge acquisition	Demonstrated performance change
Technology role	Optional supplement	Integral — mLearning, LMS, telehealth
Alignment to Vision 2030	Indirect	Direct — tied to SCFHS standards

Table 1. Comparative analysis of traditional CPD and competency-based continuing education models

The contrast illustrated above is not merely academic. Institutions that have transitioned from traditional CPD to competency-based CE report measurably different workforce outcomes. The distinction lies not in the quantity of education offered but in the accountability architecture surrounding it: who decides what is learned, what evidence is required to demonstrate learning, and what consequences follow from non-engagement. Vision 2030's emphasis on performance management and institutional accountability provides precisely the policy environment needed to make this transition at scale.

## 6. Barriers to Effective CE in the Saudi Health System

Despite strong policy intentions and increasing institutional investment in CE, a set of structural and cultural barriers continues to limit the translation of educational inputs into performance outputs. Understanding these barriers is a prerequisite for designing interventions likely to overcome them.

### 6.1 Structural Barriers

- Heavy clinical workloads that leave insufficient protected time for CE participation, particularly among nursing and allied health staff
- Fragmented CE governance across MOH, SCFHS, private sector, and academic medical centers, creating inconsistent standards and duplicated effort
- Insufficient integration of CE outcomes into performance appraisal and career progression systems, weakening the incentive architecture for sustained engagement



- Uneven distribution of CE infrastructure across regions, with rural and primary care settings significantly under-resourced relative to tertiary centers

## 6.2 Cultural and Motivational Barriers

- A compliance-oriented culture in which CE is pursued to satisfy accreditation requirements rather than to improve practice, reducing engagement quality
- Limited tradition of reflective practice and self-directed learning among professionals trained in didactic, teacher-centered educational systems
- Language barriers affecting non-Arabic-speaking expatriate professionals' ability to fully engage with CE materials and discussions
- Resistance to interprofessional learning modalities in contexts where professional hierarchies are strongly entrenched

*"The barrier is not access to education. The barrier is a professional culture that has not yet internalized learning as an ongoing obligation rather than a periodic inconvenience."*

## 7. A Proposed Framework for CE-Linked Performance Enhancement

The following integrated framework synthesizes the evidence reviewed in this paper into five strategic pillars, each tied to specific CE interventions and measurable performance indicators. The framework is designed to be operationalizable within Saudi health institutions of varying size and resource capacity, and explicitly aligned with SCFHS competency standards and Vision 2030 health transformation goals.

Pillar	Key Interventions	Performance Indicators
Clinical Competence	Simulation labs, clinical rotations, case debriefs	Error rates, procedural accuracy, clinical audit scores
Professional Conduct	Ethics workshops, communication training, leadership modules	Patient satisfaction, peer review, incident reports
Digital & Data Literacy	EHR proficiency, AI-assisted diagnostics, telehealth protocols	Documentation quality, digital adoption rates



Pillar	Key Interventions	Performance Indicators
Research & Evidence Practice	Journal clubs, research methodology courses, QI projects	Publications, innovation proposals, guideline adherence
Interprofessional Collaboration	Multidisciplinary team simulations, shared care planning workshops	Team efficiency metrics, collaborative care outcomes

Table 2. Integrated CE-Performance Framework: Pillars, Interventions, and Indicators

This framework departs from conventional CE models in two critical respects. First, it is explicitly bidirectional: performance data feeds back into CE design, ensuring that educational programs remain responsive to real observed gaps rather than assumed ones. Second, it is institutionally embedded: CE is not an add-on activity delivered through external providers but a core function of organizational management, resourced, governed, and evaluated at the institutional level. Implementation of this framework requires investment in protected learning time, educator capacity, digital infrastructure, and robust performance measurement systems — investments the evidence suggests will yield returns in clinical quality, workforce retention, and patient safety.

## 8. Policy and Institutional Recommendations

The following recommendations are addressed to three distinct audiences whose coordinated action is necessary to realize the performance potential of continuing education in the Saudi health system.

### For Institutional Leaders

- Establish a dedicated CE governance structure with clear lines of accountability, a ring-fenced budget, and annual performance reporting obligations
- Mandate integration of CE outcomes into staff performance appraisal and promotion criteria, creating tangible career incentives for sustained engagement
- Invest in simulation center infrastructure and protected weekly learning time as non-negotiable components of the institutional operating model
- Commission biennial workforce competency audits to generate the empirical data needed to prioritize CE investment decisions



## **For the Saudi Commission for Health Specialties (SCFHS)**

- Accelerate the transition to competency-based CPD requirements across all health professions, replacing time-based credit systems with portfolio-evidenced competency verification
- Develop nationally standardized CE quality assurance criteria to ensure consistent educational quality across providers and regions
- Establish a national digital CE repository — accessible to all licensed health professionals — offering accredited programs in Arabic and English across all health disciplines
- Incentivize interprofessional CE through dedicated accreditation pathways that reward cross-disciplinary learning activities

## **For the Ministry of Health and Policymakers**

- Embed CE performance metrics within the national health system transformation dashboard, making workforce development outcomes visible at the highest levels of governance
- Develop a National Continuing Education Strategy as a distinct workstream under Vision 2030's Health Sector Transformation Program, with defined milestones, funding commitments, and accountability mechanisms
- Establish regional CE centers in underserved governorates to address geographic equity gaps in CE access
- Explore public-private partnership models for CE delivery that leverage private sector educational capacity while maintaining national quality standards

## **9. Conclusion**

Saudi Arabia's health system stands at a pivotal inflection point. The infrastructure investments of the past decade have produced a network of institutions capable, in principle, of delivering world-class care. Whether that potential is realized depends, more than any other single factor, on the quality and consistency of the professionals working within those institutions — and on whether the system invests seriously in their continuous development.

This paper has argued, on the basis of converging empirical evidence, that continuing education is not a cost to be minimized or a compliance box to be ticked. It is a strategic investment in the productive capacity of the health workforce — an investment whose returns, when CE is well-designed, well-targeted, and institutionally embedded, manifest as reduced errors, improved patient outcomes, higher staff engagement, and a healthcare system demonstrably capable of meeting the expectations of a 2030 vision that places health among the Kingdom's highest national priorities.



*"To stop learning is to stop growing. In healthcare, to stop growing is to begin harming — perhaps not immediately, perhaps not visibly, but inevitably."*

The question before Saudi health institutions and their governing bodies is not whether they can afford to invest in continuing education. The evidence reviewed here suggests that the more accurate question — and the more urgent one — is whether they can afford not to.

## References

1. Al-Dossary, R. N., Kitsantas, P., & Maddox, P. J. (2021). Continuing education needs of clinical nurses in Saudi Arabia. *Journal of Nursing Management*, 29(4), 812–820.
2. Al-Otaibi, K., & Moradi, M. (2022). Continuing professional development and clinical performance outcomes in Saudi government hospitals. *Saudi Medical Journal*, 43(5), 504–514.
3. Al-Qahtani, M., Al-Shahrani, A., & Al-Ghamdi, S. (2022). Digital continuing education and professional performance in the Saudi health workforce. *Journal of Health Informatics in Developing Countries*, 16(1), 1–14.
4. Al-Shehri, A., & Al-Ghamdi, S. (2021). Interprofessional education and team-based practice in Saudi hospitals: A mixed-methods study. *BMC Medical Education*, 21, 412.
5. Eraut, M. (2004). Informal learning in the workplace. *Studies in Continuing Education*, 26(2), 247–273.
6. Kirkpatrick, D. L. (1994). *Evaluating training programs: The four levels*. Berrett-Koehler.
7. Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
8. McGaghie, W. C., Issenberg, S. B., Barsuk, J. H., & Wayne, D. B. (2020). A critical review of simulation-based mastery learning with translational outcomes. *Medical Education*, 48(4), 375–385.
9. Ministry of Health, Saudi Arabia. (2023). *Annual statistical book 2023*. MOH Publications.
10. Saudi Commission for Health Specialties. (2023). *CPD framework and competency standards for health professionals*. SCFHS Publications.
11. World Health Organization. (2022). *Health workforce development: Global strategy on human resources for health*. WHO Press.