

-RESEARCH ARTICLE-

THE MEDIATING ROLE OF QUALITY IMPROVEMENT CAPABILITY IN THE RELATIONSHIP BETWEEN LEADERSHIP COMPETENCY AND ORGANIZATIONAL PERFORMANCE IN UAE HEALTHCARE FACILITIES

Fatema Mohammed Saeed Binalwan Alhebsi*

School of Business Management, Universiti Utara
Malaysia, 06010 Sintok, Kedah, Malaysia
ORCID: <https://orcid.org/0009-0005-7131-3156>
Email: fatema.alwan@gmail.com

Muhammad Zulqarnain Arshad

School of Business Management, Universiti Utara
Malaysia, 06010 Sintok, Kedah, Malaysia
ORCID: <https://orcid.org/0000-0001-9539-8530>
Email: m.zulqarnain.arshad@uum.edu.my

Rawiyah Abd Hamid

School of Business Management, Universiti Utara
Malaysia, 06010 Sintok, Kedah, Malaysia
ORCID: <https://orcid.org/0009-0007-5036-4696>
Email: rawiyah@uum.edu.my

—Abstract—

This study examined the association between leadership competency and organizational performance and the potential mediating role of quality improvement capability in healthcare facilities in the United Arab Emirates. A quantitative cross-sectional survey produced 292 usable responses from administrative and clinical leaders in Emirates Health Services. Partial least squares structural equation modelling with 5,000 bootstrap resamples showed positive associations from leadership competency to quality improvement capability and from quality improvement capability to organizational performance. The direct leadership competency–performance path was nonsignificant,

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whereas the indirect association was significant ($\beta = 0.516$; bias-corrected 95% CI [0.401, 0.626]). This pattern is statistically consistent with indirect-only mediation. However, quality improvement capability and organizational performance failed discriminant-validity assessment (HTMT = 0.922; Fornell–Larcker correlation = 0.905), and common-source diagnostics indicated possible method-related inflation. The findings therefore provide provisional, noncausal support for the proposed mechanism and require validation with longitudinal, multi-source, and objective performance data.

Keywords: Leadership Competency; Quality Improvement Capability; Organizational Performance; Healthcare Management; UAE Healthcare.

INTRODUCTION

Healthcare organizations contend with compounding demands for enhancements in service quality and patient safety and in operational efficiency, financial sustainability, and workforce development. In this study, organizational performance is assessed from a broad, multidimensional standpoint and includes the outcomes of stakeholder satisfaction alongside the internal processes of the organization and the learning and growth of the organization. The Balanced Scorecard is useful in this context, since it integrates specific strategic goals and the corresponding outcomes the organization must achieve. Recent studies reported that the Balanced Scorecard framework positively affects the management and the excellence of hospitals (Guo et al., 2024). In the UAE, the successful application of the Balanced Scorecard in hospitals showed increased improvements in hospitals (Alaa Mushtaha, 2024).

One of the key enablers to the improved outcomes of hospitals is the competency of leadership. This is due to the multitude of complex tasks that healthcare leaders must accomplish, including, but not limited to, the management of complex decisions and extensive collaboration with other professionals. Modern studies indicate that the healthcare sector calls for leaders who have emotional, social, cognitive, strategic, and adaptive skills to address the challenges of this sector (Samantha Spanos, 2024). A recent multilevel framework similarly emphasizes that contemporary healthcare leadership requires managerial, relational, motivational, ethical, and system-level competencies (Aleix Fontanals-Jimenez, 2026). In the same vein, hospital managers require certain skills and competencies to effect changes within the organization: analysis, interpersonal skills, technical skills, and skills in managing change (Ndayishimiye et al., 2023). Leadership, however, may not have a bearing on performance unless the pertinent organizational elements that translate leadership actions into practice are in place.

Quality improvement capability may be one of the mechanisms in question. It describes

an organization's skill to utilize performance data, assist staff, and apply improvement techniques, as well as develop a learning culture that makes improvement methods part of everyday routine. Healthcare organizations with stronger learning and improvement skills generally have stronger leadership support, stronger measurement systems, a more competent workforce, and a culture that supports improvement (Kees de Kok, 2023). Continuous quality improvement requires coordinated leadership, suitable tools, staff participation, and a culture of learning within the organization (Aklilu Endalamaw, 2024). This transforms the leadership team's guidance into adequate processes, and better services and results for the organization.

Previous research has linked leadership with healthcare outcomes. However, the association between leadership competency and organizational performance through quality improvement capability remains underexamined in UAE public healthcare services. Leadership may operate through organizational mechanisms (Abdelaliem & Zeid, 2023), and UAE evidence suggests that internal capabilities can help explain the relationship between leadership-related resources and performance (Alhosani & Ahmad, 2024). Accordingly, this study examines leadership competency, organizational performance, and the potential mediating role of quality improvement capability in UAE healthcare services.

LITERATURE REVIEW

Theoretical Discussion

This study uses the Resource-Based View (RBV) as its primary theoretical framework. RBV distinguishes between possessing valuable resources and mobilizing them through organizational capabilities. Leadership competency is therefore conceptualized as a strategic human and managerial resource comprising emotional, social, and cognitive capacities, including self-regulation, communication, relationship management, problem-solving, and critical judgment. Contemporary healthcare leaders also require adaptability, systems thinking, collaboration, communication, and evidence-informed decision-making (Samantha Spanos, 2024). Hospital managers similarly require interpersonal, analytical, strategic, and change-management competencies to engage the workforce and align organizational systems with healthcare objectives (Ndayishimiye et al., 2023). Research on physician leadership further identifies critical thinking, collaboration, integrity, self-leadership, and structured leadership development as important competencies (Rawan Ibrahim, 2025).

Organizational performance is described as healthcare organizations attaining their goals or targets along the strategic, operational, and developmental fronts, as well as with the services they render. In this study, performance is described within the framework of the four Balanced Scorecard perspectives: financial performance, customer or stakeholder performance, internal-process performance, and learning and

growth. This approach is appropriate for healthcare systems as organizational performance cannot solely be obtained from financial performance. It should also account for the quality of services rendered, the satisfaction of the clients (or patients), the efficiency of processes, the development of employees, innovation, and the sustainability of the institution. Recent studies have indicated that in the context of hospitals, the Balanced Scorecard can improve strategic performance, employee performance, and performance excellence of the organization (Guo et al., 2024). In the context of hospitals in the UAE, successful implementation of the Balanced Scorecard practices improved organizational performance by linking strategic goals to measurable operational goals (Alaa Mushtaha, 2024).

Quality improvement capability is the ability of an organization to find performance gaps, apply structured improvement methods, utilize data for decision-making, improve the skills of the staff, and integrate improvements into daily operations. Quality improvement capability is evident through management support of quality improvements, staff improvement competence, systems-oriented improvement and measurement, and improvement culture and structural integration of quality practice. Compared to other organizations, healthcare organizations that possess strong quality improvement capabilities are better able to learn from their mistakes, utilize performance information, actively engage staff in the resolution of improvement issues, and establish a culture of quality improvement in all areas of the organization. In health care institutions, supportive leadership, the presence of a clear strategy, a focus on measurement, collaboration within the organization, and an open culture toward learning from mistakes strengthen the ability of the institution to learn and improve (Kees de Kok, 2023). Within organizations, especially in the health care sector, the use of management improvement models, staff skills, quality enhancement, organizational learning and performance measures, and support from management enhance continuous quality improvement (Aklilu Endalamaw, 2024).

RBV implies that leadership competency will contribute to superior performance only when it is deployed through organizational systems, routines, and capabilities. In the present model, quality improvement capability performs this conversion function: competent leaders allocate resources, establish improvement teams, support measurement, remove implementation barriers, and embed quality work in routine operations (Gagnon et al., 2024). Quality-management practices can subsequently strengthen process control, organizational learning, coordination, and service outcomes (Heng Xiea, 2024). The proposed contribution is therefore not simply that leadership is a valuable resource, but that its performance value depends on a resource-to-capability-to-performance sequence. Leadership competency is the strategic resource, quality improvement capability is the operational capability through which that resource is mobilized, and multidimensional organizational performance is the resulting organizational outcome.

Hypotheses Development

Leadership Competency and Organizational Performance

Leadership competencies include emotional, social, and cognitive aspects that support leaders in managing behavior, establishing communication, building trust, solving complex issues, and aligning employees with organizational goals. Healthcare leadership requires all these competencies due to the need to manage multidisciplinary teams, uncertainties, and quality and efficiency issues concerning the clinical and administrative support of healthcare services. There is a positive relationship between effective healthcare leadership and organizational, staff, and patient outcomes. This is because effective healthcare leadership facilitates improved coordination and communication and supports the achievement of organizational priorities (Marja Hult, 2023). Leadership correlates positively with adaptive performance. This is because of the capability of the leadership to facilitate the organization's staff to respond to the demands and pressures of the organization (Alice Bonini 2024; Benlahcene et al., 2022). Additional evidence from hospitals shows that good leadership practices improve the performance of employees through enhanced motivation, accountability, and commitment to common goals (ZA & EM, 2023). Recent empirical evidence also demonstrates that hospital managers' leadership competencies are significantly associated with hospital performance (Badakhshana et al., 2025). This implies that improvement in leadership competency will strengthen performance in UAE healthcare services.

H1: *Leadership competency has a significant positive effect on organizational performance in UAE healthcare facilities.*

Leadership Competency and Quality Improvement Capability

Leadership competency is expected to enhance capability for quality improvement because leaders create the culture, equip the resources, set the priorities, and provide frameworks for sustained improvement. Emotionally competent leaders can manage resistance and stay calm during improvement, while socially competent leaders take the time to build trust and promote both communication and collaboration among the groups. Cognitive competency helps leaders analyze the data that relates to performance, identify challenges to the organization, and make improvement decisions that are based on evidence. Evidence from a Saudi hospital context further indicates that KPI-driven leadership supports accountability, resource allocation, staff performance, service efficiency, and data-informed quality decisions (Alshahrani et al., 2026). Decision-makers in healthcare improve the quality of the service by setting improvement priorities and providing the resources necessary to support the priority along with integrating the improvement activities into the fabric of the organization's strategic framework (Gagnon et al., 2024). Evidence-based leadership improves the

quality of the service by actively involving the staff members and fostering their improvement, providing coaching and supporting professional development, and promoting learning in the organization (Maritta Välimäki, 2024). Good leadership and governance enhance both accountability and oversight and improve quality in healthcare services (Mourajid et al., 2024). Thus, healthcare organizations led by competent leadership can cultivate improvement, measurement, and support quality improvement systems with a high degree of integration.

H2: *Leadership competency has a significant positive effect on quality improvement capability in UAE healthcare facilities.*

Quality Improvement Capability and Organizational Performance

Quality improvement capability refers to an organization's capacity to identify performance gaps, use reliable information, develop employee competence, implement corrective actions, and sustain successful changes. This ability in a healthcare organization can improve the performance of the organization by decreasing mistakes, eliminating delays in service, improving patient safety, and promoting the standardization of processes and the establishment of new practices. High-quality performance data enable healthcare organizations to identify weaknesses, monitor interventions, evaluate results, and make evidenced-based improvement decisions (Lighterness et al., 2024). Other than having this quality improvement capability, organizations must have the quality improvement practices integrated in their everyday clinical and administrative functions. Recent evidence shows that organizational culture influences staff participation, implementation processes, and the sustainability of quality improvement initiatives within healthcare organizations (Sloth et al., 2026). This is necessary for organizations to effectively translate the policies in the improvement of quality to the service that is being rendered at the front line. Quality management practices enhance the performance of the healthcare organization by improving control of the processes, coordination and learning of the organization, and the outcomes of the services that the organization provides (Heng Xiea, 2024). Organizations possessing these capabilities may therefore be better positioned to achieve stronger overall performance.

H3: *Quality improvement capability has a significant positive effect on organizational performance in UAE healthcare facilities.*

Mediating Role of Quality Improvement Capability

Leadership competency may not automatically improve organizational performance unless leadership knowledge and behaviour are translated into effective organizational practices. Leaders with skills and knowledge are able to set a vision for the firm, motivate and assist staff, allocate firm resources, and encourage teamwork. However,

the firm or organization has to incorporate inputs from leadership to its systems and processes to sustain results. One of the systems and processes is the measurement system. For leadership capability, the improvement capability of an organization acts as a tool to achieve positive outcomes for the organization. There are leadership studies in healthcare that support the concept that indirect links exist between leadership and organizational outcomes (Abdelaliem & Zeid, 2023). Studies conducted in the UAE healthcare sector provide evidence that describes the mediating role of an organization's internal capabilities to enhance organizational performance based on leadership resources (Alhosani & Ahmad, 2024). The improvement capability of an organization conveys leadership support in operational staff competence, and continuous organizational learning, and fosters quality practices that are integrated within the organization (Saoula & Johari, 2016). For this reason, the mediating role of quality improvement capability in this context is valid (Cheah et al., 2021).

H4: *Quality improvement capability mediates the relationship between leadership competency and organizational performance in UAE healthcare facilities.*

As illustrated in Figure 1, the conceptual framework identifies leadership competency as the independent variable, organizational performance as the dependent variable, and the mediating variable is quality improvement capability. According to this framework, leadership competency can affect organizational performance on its own and can also strengthen quality improvement capability. Quality improvement capability, in this framework, will improve organizational performance by facilitating continuous improvement, the effective use of performance data, staff participation, learning within the organization, and embedding quality activities into day-to-day healthcare services. Therefore, this framework further posits that the impact of leadership competency on organizational performance is likely to be realized to some extent through the organization's capability to create and maintain quality improvement capability.

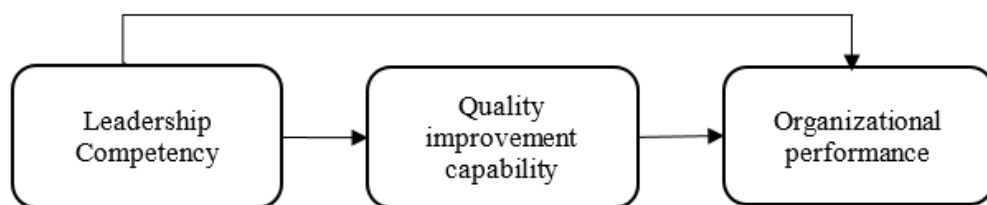


Figure 1: Conceptual Framework

METHODOLOGY

This study employed a quantitative cross-sectional survey design to examine associations among leadership competency, quality improvement capability, and organizational performance within healthcare facilities managed by Emirates Health Services in the United Arab Emirates. The unit of analysis was the individual

administrative or clinical leader. Respondents were selected because their roles involved leadership, quality improvement, planning, or performance oversight and therefore provided informed perceptions of organization-oriented practices and outcomes within their healthcare settings. Nevertheless, an individual response remains a perceptual proxy rather than an objective facility-level measure, and this level-of-analysis limitation is addressed in conclusion. Partial least squares structural equation modelling (PLS-SEM) was selected because the model contained multiple latent variables, direct paths, and an indirect path ([Marko Sarstedt, 2021](#)). Because the data were collected at one point in time, the results support associations and statistical mediation, not definitive causal or temporal claims.

The target population comprised 1,689 administrative and clinical leaders, drawn from approximately 10,395 employees working across Emirates Health Services facilities. Eligible respondents were permanent, full-time employees occupying designated managerial or clinical leadership positions, had served in their current role for at least six months, and were sufficiently involved in leadership, quality improvement, planning, or performance oversight. Temporary, acting, interim, trainee, clerical, support, and part-time employees were excluded. A complete sampling frame was developed from official institutional records and organized according to emirate, facility type, and managerial role. A total of 300 respondents were selected using a proportionate stratified probability-sampling technique to ensure adequate representation of the principal organizational and managerial subgroups. Following data screening, 292 complete and usable questionnaires were retained for the final analysis.

Data was collected using a structured questionnaire containing adapted multi-item measures. Organizational performance was measured using 16 items representing the Balanced Scorecard perspectives of financial performance, stakeholder performance, internal processes, and learning and growth, adapted from [Robert S. Kaplan \(1996\)](#) and [Abujaber and Nashwan \(2022\)](#). Leadership competency was assessed using 12 items covering emotional, social, and cognitive competencies, adapted from ([Boyatzis, 2008, 2011](#)). Quality improvement capability was assessed using 20 items covering leadership support, workforce improvement competence, learning and measurement systems, improvement-oriented culture, and structural integration, adapted from [S M Shortell \(1998\)](#) and [Paul Bate \(2008\)](#). The three variables were modelled as overall reflective latent constructs because the hypotheses concerned their aggregate relationships and the adapted items were intended to represent manifestations of each overarching construct. A multidimensional or higher-order specification was not adopted because the study did not hypothesize dimension-specific paths. Future research should compare this parsimonious specification with theoretically validated higher-order models. All items used a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree).

The questionnaire was administered electronically through Microsoft Forms within the

approved Emirates Health Services DataHub environment. Participants received an invitation explaining the purpose of the study, the voluntary nature of participation, confidentiality protections, and instructions for completing the survey. The questionnaire began with an electronic informed-consent statement, and only respondents who indicated their agreement were able to proceed. Reminder messages were distributed through approved neutral administrative channels during the data-collection period to support participation without creating pressure. The questionnaire and consent materials were provided in Arabic and English to support comprehension and equivalence across respondents. No respondent names, facility names, or direct personal identifiers were collected, and the electronic data were stored in password-protected and encrypted files. Access to individual responses was restricted to the researcher and academic supervisor, and the findings were reported only in aggregate form.

IBM SPSS Statistics 27.0.1 was used for data screening and descriptive analysis. The PLS-SEM model was estimated to be using SmartPLS version 4.1.0.9. The dataset was examined for incomplete responses, duplicates, coding errors, inconsistent patterns, missing values, and potential outliers. Measurement-model assessment included indicator loadings, Cronbach's alpha, composite reliability, average variance extracted (AVE), the heterotrait-monotrait ratio (HTMT), and the Fornell–Larcker criterion (Cheung et al., 2024). Measurement model is a structural correlation among latent variables and their indicators (Fareed et al., 2016). Structural-model assessment included path coefficients, t-statistics, p-values, coefficients of determination, and bootstrapping with 5,000 subsamples, a two-tailed test, a 5% significance level, and bias-corrected percentile 95% confidence intervals. The indirect effect was evaluated in accordance with PLS-SEM mediation procedures (Cheah et al., 2021). Because all variables were obtained from the same respondents in a single questionnaire, anonymity, neutral administration, confidentiality assurances, and separation of construct sections were used as procedural safeguards. Post hoc diagnostics were also conducted. Harman's unrotated single-factor analysis indicated that the first factor accounted for 62.4% of total item variance. Full-collinearity VIF values based on the three construct scores were 1.53 for leadership competency, 5.44 for organizational performance, and 5.73 for quality improvement capability. These diagnostics do not establish that common-method variance caused the observed relationships, but they indicate that common-source inflation cannot be ruled out and should be considered when interpreting the strong quality improvement capability–performance association.

Ethical and administrative approvals were obtained before data collection. Participation was voluntary, and respondents were informed that participation, refusal, or withdrawal before questionnaire submission would not affect their employment, professional standing, appraisal, or relationship with facility management. Participants could discontinue the questionnaire before submission without penalty. Because the survey

was anonymous and no direct identifiers were collected, individual responses could not be withdrawn after submission. All data were analyzed anonymously and reported in a manner that prevented the identification of any participant or healthcare facility.

FINDINGS

This section presents the empirical findings obtained from the analysis of the 292 usable responses. It begins with the preliminary assessment of data distribution and descriptive statistics, followed by evaluation of the measurement model in terms of indicator reliability, internal consistency, convergent validity, and discriminant validity. The structural model is then examined to determine the explanatory power of the proposed relationships and to test the direct and indirect hypotheses concerning leadership competency, quality improvement capability, and organizational performance. As presented in [Table 1](#), the normality of the data was assessed using skewness and kurtosis for the 292 usable responses. Leadership competency recorded a skewness value of -1.534 and a kurtosis value of 6.162 , quality improvement capability recorded a skewness value of -1.003 and a kurtosis value of 1.416 , and organizational performance recorded a skewness value of -0.950 and a kurtosis value of 1.337 . The negative skewness values indicate that responses were concentrated toward the higher end of the five-point scale. All skewness values were within the acceptable absolute threshold of 2, while the kurtosis values remained below 7. Therefore, the distributions did not indicate severe univariate non-normality and were considered suitable for the subsequent PLS-SEM analysis.

Table 1: Normality test

	N	Skewness	Kurtosis
LC	292	-1.534	6.162
QIC	292	-1.003	1.416
OP	292	-0.950	1.337

LC: Leadership Competency; QIC: Quality improvement capability; OP: Organizational performance

[Table 2](#) shows that leadership competency had the highest average score, and that respondents perceived leadership competency to be high ($M = 4.313$, $SD = 0.611$). The score for quality improvement capability was also relatively high ($M = 4.025$, $SD = 0.782$). This finding suggests that the respondents perceived their healthcare facilities to have strong organizational capability to provide and sustain quality improvement. The mean score for organizational performance was comparatively lower, and therefore, was relatively high ($M = 3.942$, $SD = 0.763$). The results for the descriptive statistics indicated that all three constructs were viewed positively, though the strongest positive assessment was given to leadership competency, followed by quality improvement capability and organizational performance.

Table 2: Summary of Descriptive Analysis

	N	Mean	Std. Deviation
LC	292	4.313	0.611
QIC	292	4.025	0.782
OP	292	3.942	0.763

LC: Leadership Competency; QIC: Quality improvement capability; OP: Organizational performance

Figure 2 summarizes the measurement-model assessment for leadership competency, quality improvement capability, and organizational performance. Detailed indicator loadings and reliability estimates are reported in Table 3. All retained indicators loaded above 0.70, and internal-consistency and convergent-validity criteria were satisfied. These results supported proceeding to discriminant-validity assessment; they did not, however, resolve the subsequent lack of empirical separation between quality improvement capability and organizational performance.

Measurement-model assessment



Note. Detailed indicator loadings are reported in Table 3.

Figure 2: Evaluation of Measurement Model

As presented in Table 3, all indicator loadings exceeded 0.70. Leadership competency loadings ranged from 0.780 to 0.917, organizational performance loadings from 0.777 to 0.882, and quality improvement capability loadings from 0.790 to 0.928. Cronbach's alpha values were 0.971, 0.972, and 0.987, while composite reliability values were 0.975, 0.974, and 0.988 for leadership competency, organizational performance, and quality improvement capability, respectively. AVE values were 0.762, 0.703, and 0.802, supporting convergent validity. The exceptionally high reliability of the 20-item

improvement capability scale may also indicate item overlap or redundancy. Its content, however, spans leadership support, workforce competence, learning and measurement, improvement of culture, and structural integration. The scale was retained to preserve this intended breadth, but future validation should assess item redundancy and compare the overall reflective specification with a higher-order multidimensional model.

Table 3: Construct Reliability and Validity

	Loading	Cronbach's Alpha	Composite reliability	Average variance extracted (AVE)
LC1	0.780	0.971	0.975	0.762
LC10	0.907			
LC11	0.888			
LC12	0.917			
LC2	0.782			
LC3	0.838			
LC4	0.894			
LC5	0.860			
LC6	0.910			
LC7	0.916			
LC8	0.881			
LC9	0.887			
OP1	0.825	0.972	0.974	0.703
OP10	0.853			
OP11	0.858			
OP12	0.865			
OP13	0.841			
OP14	0.858			
OP15	0.853			
OP16	0.869			
OP2	0.831			
OP3	0.828			
OP4	0.801			
OP5	0.777			
OP6	0.809			
OP7	0.827			
OP8	0.836			
OP9	0.882			
QIC1	0.898	0.987	0.988	0.802
QIC10	0.894			
QIC11	0.913			
QIC12	0.895			
QIC13	0.919			
QIC14	0.892			
QIC15	0.891			
QIC16	0.887			
QIC17	0.922			

Table 4: Construct Reliability and Validity (cont...)

	Loading	Cronbach's Alpha	Composite reliability	Average variance extracted (AVE)
QIC18	0.919			
QIC19	0.898			
QIC2	0.887			
QIC20	0.914			
QIC3	0.906			
QIC4	0.928			
QIC5	0.790			
QIC6	0.871			
QIC7	0.901			
QIC8	0.889			
QIC9	0.887			

As shown in [Table 4](#), the HTMT values were 0.572 between leadership competency and organizational performance, 0.599 between leadership competency and quality improvement capability, and 0.922 between organizational performance and quality improvement capability. The first two values were below 0.85, whereas the organizational performance–quality improvement capability value exceeded both the conservative 0.85 criterion and the commonly used 0.90 criterion. Discriminant validity was therefore supported for leadership competency relative to the other constructs but failed between quality improvement capability and organizational performance. Their empirical proximity may reflect substantive overlap, common-source inflation, or both.

Table 5: The heterotrait-monotrait ratio of correlations (HTMT)

Construct	LC	OP	QIC
LC	—		
OP	0.572	—	
QIC	0.599	0.922	—

LC: Leadership Competency; QIC: Quality improvement capability; OP: Organizational performance

As presented in [Table 5](#), the square roots of AVE were 0.873 for leadership competency, 0.839 for organizational performance, and 0.895 for quality improvement capability. The leadership competency correlations with organizational performance (0.557) and quality improvement capability (0.586) were below the relevant diagonal values. However, the correlation between organizational performance and quality improvement capability was 0.905, exceeding the square root of AVE for both constructs. Thus, the Fornell–Larcker criterion corroborated the HTMT result: discriminant validity failed between organizational performance and quality improvement capability. All structural findings involving these constructs must therefore be interpreted cautiously.

Table 5: Latent Variable Correlations (Fornell–Larcker Criterion)

Construct	LC	OP	QIC
LC	0.873		
OP	0.557	0.839	
QIC	0.586	0.905	0.895

LC: Leadership Competency; QIC: Quality improvement capability; OP: Organizational performance

Figure 3 summarizes the structural-model results. Leadership competency was positively associated with quality improvement capability, and quality improvement capability was positively associated with organizational performance. The direct leadership competency–organizational performance association was weak and nonsignificant. Although this configuration is statistically consistent with an indirect pathway, the QIC–OP coefficient and the indirect effect may be inflated because QIC and OP were not adequately discriminated.

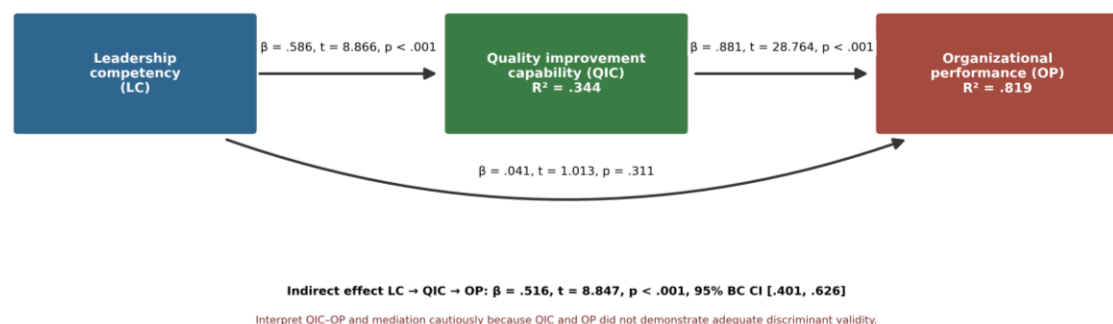


Figure 3: Path Model Significance Results

As presented in Table 6, the model yielded $R^2 = 0.819$ (adjusted $R^2 = 0.818$) for organizational performance and $R^2 = 0.344$ (adjusted $R^2 = 0.342$) for quality improvement capability. The value of 0.819 indicates high in-sample explained variance, but it should not be treated as evidence of predictive validity or causal explanation. In particular, the failed QIC–OP discriminant-validity assessment and the common-source diagnostics suggest that construct overlap, and method-related covariance may have inflated the apparent explanatory power. The QIC R^2 indicates moderate in-sample explanatory power.

Table 6: Coefficient of Determination (R^2)

Construct	R^2	Adjusted R^2
OP	0.819	0.818
QIC	0.344	0.342

QIC: Quality improvement capability; OP: Organizational performance

As presented in Table 7, leadership competency was not directly associated with organizational performance ($\beta = 0.041, SD = 0.040, t = 1.013, p = 0.311$; bias-corrected

95% CI [-0.034, 0.124]); therefore, H1 was not supported. Leadership competency was positively associated with quality improvement capability ($\beta = 0.586$, $SD = 0.066$, $t = 8.866$, $p < 0.001$; 95% CI [0.453, 0.709]), supporting H2. Quality improvement capability was positively associated with organizational performance ($\beta = 0.881$, $SD = 0.031$, $t = 28.764$, $p < 0.001$; 95% CI [0.816, 0.933]), supporting H3 statistically. Because QIC and OP failed discriminant-validity assessment and were measured from the same respondents, the magnitude of QIC→OP should be viewed as potentially inflated and not as an uncontaminated causal effect.

Table 7: Direct Hypotheses

Path	β	M	SD	t	p	Bias-corrected 95% CI	Decision
LC → OP	0.041	0.043	0.040	1.013	0.311	[-0.034, 0.124]	Not supported
LC → QIC	0.586	0.588	0.066	8.866	< .001	[0.453, 0.709]	Supported
QIC → OP	0.881	0.880	0.031	28.764	< .001	[0.816, 0.933]	Supported

LC: Leadership Competency; QIC: Quality improvement capability; OP: Organizational performance

As presented in Table 8, the indirect association of leadership competency with organizational performance through quality improvement capability was positive and statistically significant ($\beta = 0.516$, $SD = 0.058$, $t = 8.847$, $p < 0.001$; bias-corrected 95% CI [0.401, 0.626]). H4 was therefore supported statistically. Together with the nonsignificant direct path, this pattern is consistent with indirect-only mediation. Nevertheless, the cross-sectional design does not establish temporal mediation, and the failed QIC–OP discriminant validity means that the mediator and outcome were not empirically distinct. Combined with possible common-method variance, this limitation may inflate the indirect association. The result is therefore provisional evidence of an indirect statistical mechanism, not proof of causal mediation.

Table 8: Indirect Hypothesis

Path	β	M	SD	t	p	Bias-corrected 95% CI	Decision
LC → QIC → OP	0.516	0.517	0.058	8.847	< .001	[0.401, 0.626]	Supported

LC: Leadership Competency; QIC: Quality improvement capability; OP: Organizational performance

DISCUSSION

The results show that leadership competency was not directly associated with organizational performance but was positively associated with quality improvement capability, which in turn was strongly associated with organizational performance. The significant indirect effect and nonsignificant direct effect constitute indirect-only mediation. This pattern is the study's central contribution: leadership competency appears to operate as an enabling strategic resource whose performance value depends

on its conversion into organization-wide improvement routines, workforce practices, learning systems, measurement infrastructure, and improvement-oriented culture. The finding is consistent with evidence that leadership outcomes depend on the organizational conditions within which leadership is exercised (Shazwani Mohmad, 2024) and that high-performing healthcare organizations combine leadership with systems that sustain accountability, professionalism, and coordinated teamwork (Agris et al., 2025).

The unsupported direct hypothesis is theoretically informative. Emotional, social, and cognitive competencies reside at the individual level and are relatively distal from multidimensional organizational outcomes such as financial performance, stakeholder satisfaction, internal-process effectiveness, and organizational learning. Between the leader and these outcomes lie professional boundaries, distributed decision authority, resource constraints, multidisciplinary workflows, information systems, and implementation routines. These conditions can attenuate a direct association even when leadership competency remains valuable. Evidence indicates that leadership effects vary by organizational context, role authority, professional background, and the systems available for implementing decisions (Shazwani Mohmad, 2024), while senior leadership effects also differ across hospital performance dimensions (Zuchowski et al., 2025). H1's rejection therefore does not imply that leadership competency lacks value; it indicates that the resource requires an organizational capability through which it can be deployed.

The strong positive association between leadership competency and quality improvement capability indicates that competent leaders are key to providing the right environment for continuous improvement to occur. Competent leaders have the emotional competency to appropriately handle resistance and remain calm during times of operational pressure and promote positive responses to adverse situations. Their social competency promotes the trust, communication, and collaboration that engages staff. Their cognitive competency allows the leader to analyze performance data to determine root causes, to envision multiple solutions, and to relate improvement efforts to the organization's strategic priorities. The role of trust is especially important given that staff are more inclined to engage in quality improvement efforts, to identify and report concerns, and to disseminate ideas when they view leaders and the organization as trustworthy and as having their best interests in mind (Venla Karikumpu, 2024). Evidence-based leadership also enhances organizational improvement by advocating a use of research, active professional development, engagement of staff, and research-based management (Maritta Välimäki, 2024). Hence the current study asserts that leadership competency is a key contributor to quality improvement capability given that competent leaders provide the guidance, support, resources, and organizational climate needed to embed continuous improvement in routine healthcare operations.

The strong positive effect of quality improvement capability on organizational performance demonstrates that improvement capability is central to the achievement of healthcare organizational outcomes. Stronger leadership support for improvement, workforce competence, learning and measurement systems, improvement of cultures, and practices that are integrated in a structural sense all help a healthcare organization achieve better operational, stakeholder, financial, and learning outcomes. A healthcare organization that has quality improvement capability can recognize the gaps that exist, standardize processes, eliminate waiting times, and strengthen the safety of a patient, as well as use the performance information to adjust. Continuous improvement capability has been shown to depend largely on strategic leadership and empowered teams, on structured methods and on organizational learning, rather than on isolated short-term projects (Löfqvist, 2024). Practical evidence also shows that fast improvements in hospital quality indicators can be made if improvement teams are focused and well-coordinated and if the responsibility, the measurement, and the implementation processes are well defined (Sharieff & Uejo, 2024). Therefore, the positive association between quality improvement capability and organizational performance suggests the potential organizational value that comes from developing improvement capability at an organization-wide level rather than at a limited technical level.

The significant indirect effect is consistent with the proposition that quality improvement capability mediates the association between leadership competency and organizational performance. This pattern extends RBV by identifying a potential resource-to-capability-to-performance mechanism rather than treating leadership competency as sufficient. However, interpretation requires qualification because quality improvement capability and perceived organizational performance were not clearly discriminated against empirically, and common-source diagnostics indicated possible inflation. Improvement capability is multidimensional and depends on the interaction of leadership, culture, workforce competence, data, and infrastructure rather than the mere presence of a quality programme (Meurer & Escalante, 2024). From a complex-systems perspective, healthcare quality emerges through interactions among people, processes, technology, and governance arrangements (Geary, 2024). The results therefore provide provisional support for the RBV mechanism, which should be tested using temporally separated, multi-source, and objectively measured outcomes.

CONCLUSION

This study examined the association between leadership competency and organizational performance in UAE healthcare facilities through quality improvement capability. Leadership competency had no statistically significant direct association with organizational performance, but it was positively associated with quality improvement capability; quality improvement capability was strongly associated with organizational performance; and the indirect association was significant. This pattern is statistically

consistent with indirect-only mediation and an RBV resource-to-capability-to-performance sequence. Nevertheless, failed discriminant validity between quality improvement capability and organizational performance, together with possible common-source inflation, prevents strong claims about the magnitude, predictive value, or causality of these relationships. The evidence identifies a plausible mechanism for further testing with temporally separated, multi-source, and objective measures.

The findings also have implications for digitally enabled public healthcare management. Integrated healthcare information systems, electronic quality-monitoring platforms, digital performance dashboards, and analytics may help competent leaders convert judgment and strategic direction into timely measurement, coordinated improvement, organizational learning, and accountable action. This interpretation aligns the study with information-enabled public administration, but it must not be read as an empirically tested digital-transformation model because digitalization was not measured. Future research should directly test whether digital infrastructure strengthens or conditions the leadership competency–quality improvement capability–performance mechanism.

LIMITATIONS AND FUTURE RESEARCH

Several limitations qualify for the interpretation of the findings. First, the cross-sectional design does not establish temporal order or causality. Second, leadership competency, quality improvement capability, and organizational performance were self-reported by the same respondents at one point in time, creating potential common-source and common-method variance. Third, organizational performance was perceptual rather than based on audited clinical, operational, financial, or patient-outcome indicators. Fourth, individual leaders reported on organization-oriented constructs; consequently, their responses may not fully represent facility-level capabilities or performance. Fifth, the study was confined to Emirates Health Services, limiting generalizability to private providers, other UAE health authorities, and other national settings. Finally, modelling each variable as an overall construct may conceal dimension-specific relationships, and the very high reliability of the quality improvement capability scale warrants further assessment of item redundancy.

Future studies should use longitudinal or time-lagged designs, combine leadership surveys with objective and independently sourced performance indicators, aggregate multiple respondents within each facility, and test measurement invariance and multilevel effects. Comparative research across public and private providers and Gulf Cooperation Council countries would clarify generalizability. Future work should also compare overall and higher-order construct specifications, refine the quality improvement capability measure, and directly examine digital dashboards, integrated information systems, electronic quality reporting, and analytics as antecedents, moderators, or components of quality improvement capability.

REFERENCES

- Abdelalitem, S. M. F., & Zeid, M. A. G. A. (2023). The relationship between toxic leadership and organizational performance: The mediating effect of nurses' silence. *BMC Nursing*, 22(4). <https://doi.org/10.1186/s12912-022-01167-8>
- Abujaber, A., & Nashwan, A. J. (2022). Balanced scorecard-based hospital performance measurement framework: A performance construct development approach. *Cureus*, 14(5). <https://doi.org/10.7759/cureus.24866>
- Agris, J. L., Gelmon, S. B., Wynia, M. K., & Buder, B. (2025). How leaders at high-performing healthcare organizations think about organizational professionalism. *Journal of Law, Medicine & Ethics.*, 52(4), 922-935. <https://doi.org/10.1017/jme.2024.174>
- Aklilu Endalamaw, R. B. K., Tesfaye Setegn Mengistu, Daniel Erku, Eskinder Wolka, Anteneh Zewdie, Yibeltal Assefa (2024). A scoping review of continuous quality improvement in healthcare system: Conceptualization, models and tools, barriers and facilitators, and impact. . *BMC Health Services Research*, 24, 487. <https://doi.org/10.1186/s12913-024-10828-0>
- Alaa Mushtaha, K. A., Taoufik Zoubeydi. (2024). Critical success factors of effective implementation of balanced scorecard and organisational performance: Case of UAE private hospitals. *Journal for International Business and Entrepreneurship Development*, 16(3), 425-446. <https://doi.org/10.1504/JIBED.2024.142500>
- Aleix Fontanals-Jimenez, M. T.-B., Montserrat Gea-Sánchez, Esther Insa-Calderón. (2026). Redefining nursing leadership: A multilevel competency framework for future healthcare challenges. *Journal of Advanced Nursing*. <https://doi.org/10.1111/jan.70600>
- Alhosani, F. H., & Ahmad, S. Z. (2024). Role of human resource practices, leadership and intellectual capital in enhancing organisational performance: The mediating effect of organisational agility. *Journal of Intellectual Capital*, 25(4), 644-685. <https://doi.org/10.1108/JIC-08-2023-0183>
- Alice Bonini , C. P., Luca Caricati,Marco Giovanni Mariani. (2024). The relationship between leadership and adaptive performance: A systematic review and meta-analysis. . *PLOS ONE*. <https://doi.org/10.1371/journal.pone.0304720>
- Alshahrani, K., Alyousef, L., & Adewole, M. A. (2026). Impact of key performance indicator-driven leadership on the quality of care in a new secondary hospital: A qualitative study. . *Saudi Journal of Health Systems Research*. <https://doi.org/10.1159/000553225>
- Badakhshana, A., Heidari, A., Khatirnamani, Z., Kazemi, S. B., Gholipour, M., Kermani, B., Zargarani, M. M., & Fazel, A. (2025). The role of managers' leadership competencies in hospital performance: Evidence from a developing country. *Hospital Topics*. . <https://doi.org/10.1080/00185868.2025.2490103>
- Benlahcene, A., Saoula, O., Jaganathan, M., & Ramdani, A. (2022). The dark side of leadership: How ineffective training and poor ethics education trigger unethical

- behavior? *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1063735>
- Boyatzis, R. E. (2008). Competencies in the 21st century. . *Journal of Management Development*, 27(2), 5-12. <https://doi.org/10.1108/02621710810840730>
- Boyatzis, R. E. (2011). Managerial and leadership competencies: A behavioral approach to emotional, social, and cognitive intelligence. . *Vision: The Journal of Business Perspective*, 15(2), 91-100. <https://doi.org/10.1177/097226291101500202>
- Cheah, J.-H., Nitzl, C., Roldán, J. L., Cepeda-Carrion, G. A., & Gudergan, S. S. (2021). A primer on the conditional mediation analysis in PLS-SEM. *The DATA BASE for Advances in Information Systems*, 52(1), 43-100. <https://doi.org/10.1145/3505639.3505645>
- Cheung, G. W., Cooper-Thomas, H., Lau, R. S., & Wang, L. C. (2024). Reporting reliability, convergent and discriminant validity with structural equation modeling: A review and best-practice recommendations. *Asia Pacific Journal of Management*, 41(2), 745-783. <https://doi.org/10.1007/s10490-023-09871-y>
- Fareed, M., Mohd Isa, M. F., & Wan Mohd Noor, W. S. (2016). Human resource professionals' effectiveness, organizational culture and high performance work system link: evidence from Pakistan. *International Review of Management and Marketing*, 6(s7), 335-344.
- Gagnon, J., Breton, M., & Gaboury, I. (2024). Decision-maker roles in healthcare quality improvement projects: A scoping review. . *BMJ Open Quality*, 13(1). <https://doi.org/10.1136/bmjog-2023-002522>
- Geary, U. (2024). Healthcare quality improvement: It is time to update the Donabedian approach with a complex systems perspective. . *The International Journal of Health Planning and Management*, 39(5), 1669-1672. <https://doi.org/10.1002/hpm.3830>
- Guo, F., Huang, Y. S., & Nemoto, M. (2024). Reimagining hospital management: The balanced scorecard as a catalyst for employee retention and organizational excellence. . *Frontiers in Public Health*, 12. <https://doi.org/10.3389/fpubh.2024.1485683>
- Heng Xiea, X. W., Xianghui Peng, Victor Prybutok. (2024). Relationship between quality management and organizational performance in the healthcare industry. *International Journal of Production Research*, 62(23), 8518–8536. <https://doi.org/10.1080/00207543.2024.2344657>
- Kees de Kok, W. v. d. S., Corry Ketelaars, Ian Leistikow (2023). Organizational attributes that contribute to the learning and improvement capabilities of healthcare organizations: A scoping review. *BMC Health Services Research*, 23, 585. <https://doi.org/10.1186/s12913-023-09562-w>
- Lighterness, A., Adcock, M., Scanlon, L. A., & Price, G. (2024). Data quality–driven improvement in health care: Systematic literature review. *Journal of Medical Internet Research*, 26. <https://doi.org/10.2196/57615>

- Löfqvist, N. (2024). Enhancing capability for continuous organisational improvement and learning in healthcare organisations: A systematic review of the literature 2013–2022. *BMJ Open Quality*, 13, 2. <https://doi.org/10.1136/bmjoq-2023-002566>
- Maritta Välimäki, S. H., Tella Lantta, Kirsi Hipp, Jaakko Varpula, Jiarui Chen, Gaoming Liu, Yao Tang, Wenjun Chen, Xianhong Li. (2024). The impact of evidence-based nursing leadership in healthcare settings: A mixed methods systematic review. *BMC Nursing*, 23, 452. <https://doi.org/10.1186/s12912-024-02096-4>
- Marja Hult, A. T.-M., Pirjo Kaakinen, Suyen Karki, Anu Nurmeksela, Mira Palonen, Laura-Maria Peltonen, Arja Häggman-Laitila. (2023). Relationships between nursing leadership and organizational, staff and patient outcomes: A systematic review of reviews. *Nursing Open*, 10(9), 5920–5936. <https://doi.org/10.1002/nop2.1876>
- Marko Sarstedt, C. M. R., Joseph F. Hair (2021). Partial least squares structural equation modeling. In C. Homburg, M. Klarmann, & A. Vomberg (Eds.), *Handbook of market research*. Springer, 587–632. https://doi.org/10.1007/978-3-319-57413-4_15
- Meurer, S., & Escalante, S. (2024). Measuring improvement capabilities in a health system: Findings from a content validity study. *American Journal of Medical Quality*, 39(6), 261-266. <https://doi.org/10.1097/JMQ.000000000000208>
- Mourajid, Y., Chahboune, M., Ifleh, A., Wachami, N. A., Arraji, M., Boumendil, K., Iderdar, Y., Bouchachi, F. Z., & Hilali, A. (2024). Governance of healthcare quality: Exploring the relationships between hospital board performance and healthcare quality outcomes. . *International Journal of Health Care Quality Assurance*, 37, 25-41. <https://doi.org/10.1108/IJHCQA-09-2023-0065>
- Ndayishimiye, C., Dubas-Jakóbczyk, K., Holubenko, A., & Domagała, A. (2023). Competencies of hospital managers: A systematic scoping review. *Frontiers in Public Health*, 11. <https://doi.org/10.3389/fpubh.2023.1130136>
- Paul Bate, P. M., Glenn Robert. (2008). Organizing for quality: The improvement journeys of leading hospitals in Europe and the United States. . Radcliffe Publishing. <https://doi.org/10.1201/b20730>
- Rawan Ibrahim, J. C., Mohamad Majed, Omar Ayaad. (2025). Physician leadership competency: A quantitative study of challenges, barriers and development models. . *British Journal of Healthcare Management*, 31(10), 1–12. <https://doi.org/10.12968/bjhc.2024.0101>
- Robert S. Kaplan, D. P. N. (1996). The balanced scorecard: Translating strategy into action. . Harvard Business School Press. <https://www.oreilly.com/library/view/the-balanced-scorecard/9781422148167>
- S M Shortell, C. L. B., G R Byck. (1998). Assessing the impact of continuous quality improvement on clinical practice: What it will take to accelerate progress. *The Milbank Quarterly*, 76(4), 593–624. <https://doi.org/10.1111/1468-0009.00107>

- Samantha Spanos, E. L., Romika Patel, Michael Datyner, Erwin Loh, Jeffrey Braithwaite (2024). Healthcare leaders navigating complexity: A scoping review of key trends in future roles and competencies. *BMC Medical Education*, 24, 720. <https://doi.org/10.1186/s12909-024-05689-4>
- Saoula, O., & Johari, H. B. (2016). The mediating effect of organizational citizenship behaviour on the relationship between perceived organizational support and turnover intention: A proposed framework. *International Review of Management and Marketing*, 6(S7), 345-354. <https://www.researchgate.net/publication/319078885>
- Sharieff, G. Q., & Uejo, C. (2024). Sprint team approach yields rapid improvement in Leapfrog quality indicators. *Journal of Healthcare Management*, 69(2), 156–163. <https://doi.org/10.1097/JHM-D-22-00223>
- Shazwani Mohmad, K. Y. L., Pangie Bakit. (2024). Do health-care institutions perform better under leaders with medical or non-medical backgrounds? A scoping review. . *Leadership in Health Services*, 37(5), 142–156. <https://doi.org/10.1108/LHS-11-2023-0084>
- Sloth, C. F. H., Mose, L. S., Knudsen, T., Andersen, P. T., & Overgaard, C. (2026). Organizational culture and quality improvement in healthcare: A qualitative case study using the competing values framework. . *Quality Management Journal*, 33(2), 121-139. <https://doi.org/10.1080/10686967.2025.2578504>
- Venla Karikumpu, A. H.-L., Johanna Romppanen, Mari Kangasniemi, Anja Terkamo-Moisio. (2024). Trust in the leader and trust in the organization in healthcare: A concept analysis based on a systematic review. *Journal of Nursing Management*,. <https://doi.org/10.1155/2024/8776286>
- ZA, H., & EM, H. (2023). The effect of transformational, transactional, and laissez-faire leadership styles on employees' level of performance: The case of a hospital in Oromia Region, Ethiopia. *Journal of Healthcare Leadership*, 16, 67–82. <https://doi.org/10.2147/JHL.S450077>
- Zuchowski, M. L., Henzler, D., Alscher, M. D., & Nagel, E. (2025). The impact of C-level positions on hospital performance: A scoping review of top management team outcomes. *Health Policy*, 157. <https://doi.org/10.1016/j.healthpol.2025.105346>