
From Stability to Distinction: A Strategic Roadmap for Elevating Dow University of Health Sciences into the Top 300 Global Medical Universities

A Five-Year Institutional Analysis and Strategic Framework, 2026-2030

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ABSTRACT:

Background: Dow University of Health Sciences (DUHS) achieved its highest-ever position in the QS World University Rankings by Subject 2026, entering the #501-550 band for Medicine, representing the first sustained upward movement in the institution's six-year QS ranking history. This advancement in the ranking of nearly 850 universities in Medicine is a strategic inflection point for institutional analysis and planning.

Objective: This manuscript presents a data-driven strategic analysis of DUHS's current QS ranking position, indicator-level scorecard, domestic and regional competitive landscape, and a structured five-year strategic framework for advancing toward the QS Top 300 in Medicine by 2030.

Methods: A systematic review of QS World University Rankings by Subject data (2021-2026) was conducted to characterize DUHS's ranking trajectory and indicator-level profile. Domestic and regional peer benchmarking was conducted using QS Medicine subject-ranking data for Pakistani and South Asian institutions. A six-pillar strategic framework was developed through structured analysis of indicator-specific growth levers, literature on university ranking determinants, and implementation precedents from comparable institutions.

Results: DUHS's QS indicator profile reveals a pronounced asymmetry: Citations per Paper (64.3) and Employer Reputation (57.9) represent competitive strengths, while Academic Reputation (43.9) and International Research Network (40.9) are the primary constraints on overall ranking advancement. The gap between the strongest and weakest indicators is 23.4 points. DUHS is the only Pakistani public medical institution with a confirmed QS Medicine subject ranking, positioned approximately 250-300 bands below the only domestic peer with a stronger position, Aga Khan University (#201-250). Six strategic pillars are identified for targeted investment: global research partnerships, publication quality and citation strategy, signature research programs, faculty visibility and academic reputation, international research network expansion, and employer and alumni reputation development.

Conclusions: The 2026 QS result confirms that DUHS's academic outputs are generating measurable global recognition. A sustained, focused five-year strategy targeting Academic Reputation and International Research Network scores represents the highest-return pathway to advancement into the Top 300.

Implementation requires institutional infrastructure investment, leadership continuity, and a culture of structured international academic engagement.

KEYWORDS: *University Rankings; QS World University Rankings; Medical Education; Academic Reputation; Research Productivity; Pakistan; Global Health; Institutional Strategy; International Research Network; Citation Impact*

INTRODUCTION:

The global landscape of medical education has undergone a profound transformation over the past two decades, with university ranking systems emerging as influential mechanisms for benchmarking institutional performance, guiding resource allocation, and shaping international academic reputation (Hazelkorn, 2015; Marginson, 2014). Among these systems, the QS World University Rankings by Subject represent one of the most widely referenced instruments in academic planning, particularly for institutions in low- and middle-income countries seeking to establish international visibility (Muller & Schmid, 2021; QS Quacquarelli Symonds, 2026a).

For institutions in resource-constrained settings, ranking performance reflects not only academic output but also the quality of institutional governance, research infrastructure, and the density of international scholarly networks (Altbach & Salmi, 2011; Kehm & Stensaker, 2009). Pakistan's higher education system, which encompasses more than 170 recognized medical colleges, has historically had limited representation in global subject rankings, reflecting systemic challenges in research productivity, international collaboration, and academic visibility (Pakistan Higher Education Commission, 2025; Rana & Bhutta, 2018).

Dow University of Health Sciences (DUHS), Pakistan's largest public-sector medical university by enrollment, has been ranked in the QS Medicine subject rankings since 2021, a distinction shared by only one other Pakistani medical institution, Aga Khan University (AKU). In the QS World University Rankings by Subject 2026, released on March 25, 2026, DUHS achieved its highest-ever

position: the #501-550 band for Medicine, representing the institution's first entry into a ranking band not previously occupied and its first clear break from a multi-year pattern of oscillation between the #551-600 and #601-650 bands (QS Quacquarelli Symonds, 2026b).

This advancement occurs in an increasingly competitive global context. The 2026 QS Medicine subject rankings included nearly 850 universities, the most widely ranked subject globally, making upward movement particularly significant given the density and quality of the competitive field (QS Quacquarelli Symonds, 2026a). Understanding the determinants of this improvement, the indicator-level profile of DUHS's current performance, and the strategic interventions most likely to sustain and accelerate the upward trajectory is, therefore, a matter of institutional priority.

This manuscript presents a structured institutional analysis and a five-year strategic framework for DUHS, organized around the QS ranking indicator scorecard and grounded in evidence from the international literature on academic reputation-building, research productivity enhancement, and university ranking strategy. The objective is to provide institutional leadership with a data-driven foundation for strategic planning, resource allocation, and governance decisions through 2030.

This manuscript draws upon the DUHS Strategic Plan 2024-2030, titled "Pioneering Excellence: Inspiring Innovation," as a foundational reference for understanding the institutional investments and programmatic decisions that underlie the 2026 QS ranking improvement. The Strategic Plan, developed through an inclusive, participatory process led by the

Executive Strategic Planning Workgroup and overseen by the independent Office of Strategic Development and Implementation, articulates eight strategic goals directly relevant to the ranking indicators examined in this analysis (Dow University of Health Sciences, 2025). Specifically, Strategic Goal II: enhancing research capacity and dissemination of new knowledge; Strategic Goal V: workforce development and faculty recruitment; and Strategic Goal VIII: the integration of emerging technologies identify the programmatic pillars that QS ranking data confirm are generating measurable international academic impact.

METHODS:

Data Sources and Ranking Analysis

QS World University Rankings by Subject data for the Medicine discipline were extracted from the QS Top Universities institutional profile for Dow University of Health Sciences and from the publicly released QS Subject Rankings 2026 dataset (QS Quacquarelli Symonds, 2026b). Historical ranking data for DUHS covering the period 2021 through 2026 were obtained from the same profile page. Indicator-level scores, including Academic Reputation, Citations per Paper, Employer Reputation, H-index Citations, and International Research Network, were recorded for the 2026 assessment cycle and are presented in Table 1.

QS ranking methodology for the Medicine subject employs five weighted indicators: Academic Reputation (survey-derived, carrying the highest weight), Citations per Paper (Scopus bibliometric), H-index Citations (Scopus bibliometric), Employer Reputation (survey-derived), and International Research Network (co-authorship breadth). The specific weights applied to each indicator in the 2026 methodology are proprietary to QS, but the Academic Reputation indicator is consistently identified as the most heavily weighted component across QS subject rankings (QS Quacquarelli Symonds, 2025; Muller & Schmid, 2021).

Table 1: DUHS QS Indicator Scorecard with Strategic Interpretation, 2026 (QS Quacquarelli Symonds, 2026b)

QS Indicator	Score (2026)	Performance Level	Strategic Interpretation
Citations per Paper	64.3	High	Dominant strength; reflects impact per publication. Priority: increase high-citation publication volume.
Employer Reputation	57.9	Moderate-High	Reflects strong domestic placement. Requires international employer engagement and alumni outcome tracking.
H-index Citations	49.1	Moderate	Indicates moderate sustained productivity. Mid-career faculty development and consistent publication pipelines needed.
Academic Reputation	43.9	Moderate	Highest-weight indicator; derived from global scholar survey. Requires faculty editorial board presence and international conference engagement.
International Research Network	40.9	Low-Moderate	Lowest score; most actionable lever. Measures international co-authorship breadth. Structured repeat partnerships can move this materially within 2-3 years.

Note. Scores are QS indicator-level values on a 0-100 scale. Performance levels are the authors' interpretive classifications for strategic planning purposes. H-index Citations reflects accumulated citation impact over the institution's publication history. International Research Network reflects the breadth of international co-authorship in Scopus-indexed publications.

Benchmarking and Comparative Analysis

Domestic benchmarking was conducted using QS Medicine subject-ranking data for Pakistani universities that appeared in the 2026 QS Subject Rankings. Regional benchmarking was conducted against South Asian peer institutions with confirmed presence in the QS Medicine subject rankings,

including Aga Khan University (Pakistan), All India Institute of Medical Sciences, New Delhi (India), and Christian Medical College, Vellore (India). Comparative analyses are presented in Tables 2 and 3 and described in the narrative in the Results section.

Table 2: DUHS QS Medicine Subject Ranking Trajectory, 2021–2026 (QS Quacquarelli Symonds, 2026b)

Year	QS Medicine Band	Trajectory Note
2021	#601-650	—
2022	#551-600	↑ Improvement
2023	#601-650	↓ Regression
2024	#551-600	↑ Recovery
2025	#551-600	→ Stable
2026	#501-550	↑ New Institutional High

Note. ↑ = upward movement; ↓ = downward movement; → = stable. Ranking bands reflect QS World University Rankings by Subject 2026, Medicine subject.

This analysis is descriptive and strategic in orientation. No primary data collection was conducted, and no human subjects were involved. The analysis is based entirely on publicly available institutional performance data and peer-reviewed literature on determinants of university rankings.

Strategic Framework Development

The six-pillar strategic framework presented in this manuscript was developed through structured analysis of three evidence streams: (1) DUHS's indicator-level QS scorecard, which identifies specific performance gaps and growth opportunities; (2) the peer-reviewed literature on determinants of academic reputation, research productivity, and international collaboration in medical schools; and (3) implementation precedents from comparable institutions in low- and middle-income country settings that have achieved meaningful ranking improvement within defined timeframes (Hazelkorn, 2015; Teichler, 2011; Usher & Savino,

2007). The three-phase implementation roadmap and performance target framework presented in Tables 4 and 5 were derived from these evidence streams and calibrated to DUHS's current institutional capacity and resource constraints.

RESULTS

Ranking Trajectory (2021–2026)

Table 2 presents the six-year QS Medicine ranking trajectory for DUHS. Between 2021 and 2025, the institution oscillated between the #551-600 and #601-650 bands without achieving sustained directional improvement. The 2026 result entry into the #501-550 band represents the institution's first occupancy of a ranking band not previously attained and the first clear break from the oscillation pattern observed across the preceding five cycles (QS Quacquarelli Symonds, 2026b). This trajectory is consistent with a pattern described in the literature on improving institutional rankings, in which prolonged stability is typically followed by a step change in performance when targeted investments in specific ranking determinants begin to yield measurable outcomes (Hazelkorn, 2015; Salmi, 2009).

QS Indicator Scorecard

Table 1 presents the full QS indicator scorecard for DUHS in 2026 with a strategic interpretation of each indicator. The scorecard reveals a pronounced performance asymmetry. Citations per Paper (64.3) is the institution's strongest indicator and reflects genuine research impact when DUHS faculty publish: their work is cited by the international scientific community at rates comparable to those of institutions ranked substantially higher overall (QS Quacquarelli Symonds, 2026b; Hirsch, 2005). Employer Reputation (57.9) reflects a strong domestic placement record, consistent with DUHS's role as Pakistan's largest public medical university.

In contrast, Academic Reputation (43.9) and International Research Network (40.9) represent the

institution's most significant constraints. Academic Reputation, the highest-weighted indicator in QS subject methodology, is derived from a global survey of scholars and reflects the breadth and depth of DUHS's visibility within the international academic community, a dimension that is structurally limited by the institution's historically low levels of international co-authorship and faculty representation on global academic platforms (Marginson, 2014; Muller & Schmid, 2021). International Research Network (40.9), which specifically measures international co-authorship breadth, is DUHS's lowest indicator and is directly addressable through structured partnership development. The gap between the highest (64.3) and lowest (40.9) indicator scores is 23.4 points, a spread that, if narrowed on the two lowest-scoring indicators by as few as 10-12 points each, would produce a transformative effect on overall ranking position (QS Quacquarelli Symonds, 2025).

Strategic Plan Antecedents of the 2026 Ranking Improvement

The 2026 QS ranking improvement does not occur in an institutional vacuum. DUHS's Strategic Plan 2024-2030 identifies several programmatic investments directly traceable to the observed indicator movements. The Vice Chancellor's Seed Funding Initiative (VCSFI), launched in 2019 as a mechanism to support early-stage research by faculty and students, has disbursed over PKR 35 million across four funding cycles (Dow University of Health Sciences, 2025). This initiative directly supports the Citations per Paper and H-index indicators by generating preliminary research outputs that feed into the publication pipeline, a function that the literature identifies as critical for sustaining per-paper citation rates in resource-constrained institutional settings (Ware & Mabe, 2015; Khor *et al.*, 2022).

The institution's publication record reflects the cumulative impact of these investments. DUHS's annual scientific output increased from 667 publications in 2018-19 to 1,299 publications in

2023-24, a near-doubling of total output over five years (Dow University of Health Sciences, 2025). Critically, the proportion of publications appearing in impact factor journals has remained consistently near 50% across the most recent cycles (49% in 2022-23 and 2023-24), suggesting that volume expansion has not come at the cost of quality a pattern consistent with the citation quality reflected in the QS Citations per Paper score of 64.3 (QS Quacquarelli Symonds, 2026b). This bibliometric trajectory is the most direct institutional antecedent of DUHS's strongest performance on the QS indicators.

The Strategic Plan identifies ten formally designated Signature Research Programs as areas of concentrated institutional investment: Cancer; Infectious Diseases, Immunity and Inflammation; Precision Medicine, Genomics, and Informatics; Cardiovascular and Metabolic Diseases; Neurosciences; Genomics and Genetics; Regenerative Medicine, Stem Cells, and Transplants; Biotechnology; Applied Public Health; and Data Sciences (Dow University of Health Sciences, 2025). These designations are consequential for ranking performance because thematic concentration, rather than diffuse research activity, is the primary mechanism by which institutions accumulate the citation density and academic recognition that QS indicators measure (Hazelkorn, 2015; Salmi, 2009). The institution's Citations per Paper score of 64.3 is plausibly attributable in part to the focus that signature program designations impose on publication targeting and collaborative study design.

The Directorate of Global Engagement established as a permanent administrative unit within the DUHS organizational structure and the formally designated Directorate of Information and Communication Technology, Office of Research Innovation and Commercialization (ORIC), and Office of Strategic Development and Implementation (OSDI) collectively constitute the governance infrastructure that the Strategic Plan identifies as prerequisites for sustained ranking improvement (Dow University of

Health Sciences, 2025). The existence of these permanent offices is directly relevant to the International Research Network indicator (40.9), which reflects the institutionalization of international collaboration rather than ad hoc faculty-level engagement. The Strategic Plan’s explicit commitment to “sustaining existing and continuing to explore the establishment of new joint degree programs with reputable national and international institutions of higher education” and to “establishing mutually productive affiliations with national and international pharmaceutical and device manufacturers to initiate translational and clinical research” identifies the partnership architecture that the current indicator score confirms remains underdeveloped relative to DUHS’s citation performance (Dow University of Health Sciences, 2025).

The Strategic Plan’s measurable outcome targets provide an independent baseline against which the 2026 QS result can be assessed. The plan set a target of publishing over 1,000 manuscripts per year in high-impact international journals, a target that the 2023-24 total output of 1,299 publications approaches, though the proportion reaching high-impact journals remains a strategic priority (Dow University of Health Sciences, 2025). The plan also targets a position among the top 500 universities in the Times Higher Education World University Rankings and the top-ranked medical university in Pakistan according to the Pakistan Higher Education Commission criteria. The QS 2026 result, entering the #501-550 band for Medicine, is consistent with the trajectory implied by these targets and confirms that institutional investments are producing outcomes aligned with the plan’s ambitions.

The integration of Strategic Goal VIII, the adoption of artificial intelligence, machine learning, and emerging technologies across education, research, and clinical care by 2027, is particularly relevant to the Academic Reputation indicator (43.9). The establishment of a College of Healthcare Innovation and Emerging Technologies and the formal integration of AI-driven personalized learning and

diagnostic applications into the institutional research agenda position DUHS in a rapidly growing area of international academic interest (Dow University of Health Sciences, 2025). Research output in AI and digital health from low- and middle-income country institutions has attracted disproportionate international citation and collaboration interest, given the global relevance of these applications in resource-constrained settings, a dynamic that DUHS is positioned to leverage through its Signature Research designations in Precision Medicine, Data Sciences, and Applied Public Health (Topol, 2019; Obermeyer & Emanuel, 2016).

Table 3: Pakistani Medical Institution Landscape in QS World University Rankings by Subject 2026, Medicine (QS Quacquarelli Symonds, 2026a)

Institution	QS Medicine (2026)	Comparative Notes
Aga Khan University (AKU)	#201-250	Highest-ranked Pakistani medical school. Decades of structured international research collaboration, strong global employer brand, and sustained external partnerships. Gap of ~250-300 ranking positions above DUHS.
Dow University of Health Sciences (DUHS)	#501-550 ↑	Second-ranked Pakistani medical school in QS Medicine. New institutional high in 2026. Strong Citations per Paper (64.3); International Research Network (40.9) is primary growth lever.
University of Health Sciences, Lahore (UHS)	Not ranked	Major national role in postgraduate examinations and governance; limited international research visibility in QS ranking terms.
University of Karachi (KU)	#301-400 (Life Sciences)	Appears in broader life sciences and chemistry rankings; does not hold a distinct QS Medicine subject ranking.
King Edward Medical University (KEMU)	Not ranked	One of Pakistan's oldest medical colleges with strong domestic reputation; insufficient international research output for QS subject ranking inclusion.
Ziauddin University	Not ranked	Private institution in Karachi with growing clinical research activity; not yet at QS subject ranking threshold.

Note. Ranking data from QS World University Rankings by Subject 2026, accessed March 27, 2026. Institutions listed as 'Not ranked' do not appear in the QS Medicine subject rankings for 2026. The University of Karachi appears in the Life Sciences/Chemistry ranking but not in the Medicine-specific ranking.

Domestic Competitive Landscape

Table 3 presents the domestic competitive landscape for Pakistani medical institutions in the QS Medicine subject rankings. DUHS is one of only two Pakistani institutions to appear in the QS Medicine subject rankings, a distinction shared with Aga Khan University (AKU, #201-250). The remaining landscape, including the University of Health Sciences Lahore, King Edward Medical University, and Ziauddin University, does not meet the minimum QS threshold for Medicine subject ranking inclusion, reflecting insufficient international research output, Scopus-indexed publication density, or global academic survey recognition (Pakistan Higher Education Commission, 2025; QS Quacquarelli Symonds, 2026a).

The gap between DUHS (#501-550) and AKU (#201-250) is approximately 250-300 ranking positions. This gap is not primarily attributable to differences in institutional age or clinical volume; it reflects AKU's decades of structured international research engagement, sustained co-publication with North American, European, and East African institutions, and a global brand that has been cultivated through consistent faculty visibility and program excellence (Jafarey *et al.*, 2014; Rana & Bhutta, 2018). The AKU model provides both a benchmark and a developmental trajectory for DUHS: international engagement, when pursued systematically and over sustained periods, produces the reputation effects that rankings measure.

Regional Peer Benchmarking

Regional benchmarking against South Asian peer institutions reveals that DUHS's citation impact (64.3) already competes favorably with institutions ranked substantially higher overall. The primary differentiating factor separating DUHS from higher-ranked regional peers, including AKU, AIIMS New Delhi, and CMC Vellore, is not research quality per publication but research volume and international co-authorship density (Altbach & Salmi, 2011; Salmi, 2009). AIIMS New Delhi's global position

reflects the gravitational effect of India's broader medical research ecosystem and substantial government investment in academic research infrastructure. CMC Vellore's reputation was built through sustained commitment to clinical excellence and community health, pursued with sufficient consistency to generate organic international recognition, a pattern that underscores the reputational value of institutional mission authenticity when combined with adequate research output (Supe & Burdick, 2006).

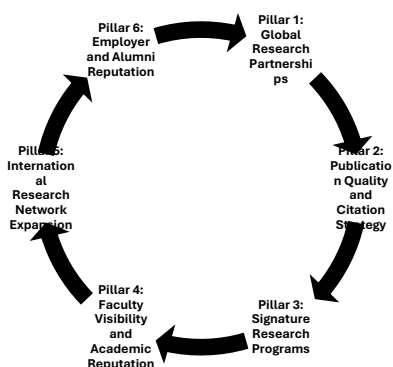
The central implication of regional benchmarking for DUHS is that its existing academic capacity is underrepresented internationally relative to its actual research impact. The conversion of existing research quality into internationally visible output through structured partnerships, faculty representation on global academic platforms, and signature research branding represents the primary strategic opportunity for ranking advancement (Hazelkorn, 2015; Marginson, 2014).

DISCUSSION:

The Six Strategic Pillars

The results of the indicator analysis suggest a clear strategic priority structure. The two indicators with the greatest gaps relative to competitive benchmarks, International Research Network (40.9) and Academic Reputation (43.9), are also the most amenable to deliberate institutional intervention. The six strategic pillars described below and in Figure 1 are ordered by their alignment with these priority gaps, consistent with the evidence base on ranking determinants in medical education contexts (Muller & Schmid, 2021; Teichler, 2011).

Figure 1: The Research Excellence Cycle: Six Interconnected Drivers of Institutional Advancement



Pillar 1 - Global Research Partnerships: The international research network indicator rewards co-authorship with scholars at institutions in other countries, measured at the publication level. Structured, repeat co-authorship partnerships rather than symbolic memoranda of understanding without measurable output represent the highest-return intervention for this indicator (Khor *et al.*, 2022; Wagner, 2018). Each partnership should be structured around measurable annual deliverables: joint publications, co-supervised graduate students, shared grant applications, and visiting scholar placements. Partners should be selected based on complementary research strengths and demonstrated interest in South Asian health challenges, including infectious disease epidemiology, health systems research in resource-constrained settings, and artificial intelligence applications in diagnostic medicine.

Pillar 2 - Publication Quality and Citation Strategy: DUHS's Citations per Paper score (64.3) confirms that the institution's research output is generating impact. The strategic challenge is to increase the volume of high-citation publications that appear in journals with above-median impact factors within their disciplines, without diluting per-paper citation rates. The establishment of a Research Support Office that provides study design consultation, biostatistical review, language editing,

journal targeting, and grant development assistance represents the highest-return infrastructure investment for this pillar (Ware & Mabe, 2015). Systematic identification and conversion of under-published datasets and conference presentations into manuscripts constitutes an immediately actionable strategy for increasing high-quality output volume.

Pillar 3 - Signature Research Programs: Institutional recognition in global academic surveys is not distributed uniformly across subject areas; it tends to concentrate on institutions known for something specific (Hazelkorn, 2015). DUHS's clinical scale and geographic context provide unique research substrates in several high-priority areas: artificial intelligence in diagnostic medicine in low- and middle-income settings; urban epidemiology and environmental health (for which Karachi's demographic complexity constitutes a natural research laboratory); antimicrobial resistance and emerging pathogen surveillance; and transplantation and precision medicine. Formally designating 3-5 signature research themes with named directors, dedicated budget lines, protected faculty research time, and publication targets constitutes the structural mechanism for converting research activity into international recognition (Salmi, 2009).

Pillar 4 - Faculty Visibility and Academic Reputation: Academic Reputation is derived from a global survey of scholars; improving this score requires that DUHS faculty are known to and respected by international academic peers. Faculty service on editorial boards, participation in international guideline development, presentations at flagship conferences, and leadership of multicenter research initiatives are the primary mechanisms by which institutional academic reputation is conveyed (Marginson, 2014). Diaspora engagement, activating DUHS graduates and affiliated scholars established at institutions in North America, Europe, and the Middle East through adjunct appointments, joint supervision, and annual academic convenings, represents a high-leverage, relatively low-cost strategy for expanding global faculty network visibility (Ratha *et al.*, 2011).

Pillar 5 - International Research Network Expansion:

Embedding international collaboration into the structural design of research programs, rather than treating it as an add-on, is the most durable approach to improving the International Research Network indicator. This means designing studies with international co-investigators from the outset, negotiating data-sharing agreements for joint analysis, and creating postdoctoral and visiting-fellow pathways that regularly bring international researchers to DUHS (Khor *et al.*, 2022; Wagner, 2018). The goal is to increase the proportion of DUHS publications with at least one international co-author through repeat, durable collaborations rather than opportunistic single-project engagements.

Pillar 6 - Employer and Alumni Reputation:

DUHS's Employer Reputation score (57.9) reflects a strong domestic placement record. Advancing this indicator requires extending employer recognition into international markets through systematic tracking of alumni, documentation of postgraduate international placements and leadership roles, and formal engagement with hospital systems, government health agencies, and international health organizations (Teichler, 2011). The curation and communication of graduate outcome narratives as evidence of institutional impact, rather than marketing, constitutes an underutilized reputational asset.

Implementation Roadmap

Table 4 presents the three-phase implementation roadmap. The phased structure reflects the evidence on organizational change in academic institutions: institutional infrastructure (Phase I) must precede accelerated output (Phase II), which in turn precedes durable reputation effects (Phase III). Skipping the infrastructure phase, a common failure mode in institutional ranking strategies, typically results in uncoordinated activity that does not produce the density of outputs required for indicator movement (Hazelkorn, 2015; Kehm & Stensaker, 2009).

Table 4: Three-Phase Implementation Roadmap for DUHS QS Ranking Strategy, 2026–2030

Phase	Emphasis	Key Actions
Phase I Foundations (Year 1)	Institutional Infrastructure	Establish cross-functional ranking task force; launch Research Support Office with pilot services in 2-3 departments; map and initiate priority international partnerships; define 3-5 signature research themes through faculty consultation; launch comprehensive alumni tracking data infrastructure.
Phase II Acceleration (Years 2-3)	Research Output and Visibility	Activate international partnerships with funded joint projects and visiting scholar exchanges; implement journal targeting strategy via Research Support Office; host at least one annual international conference in a signature research area; recruit diaspora scholars into adjunct and visiting roles; launch co-supervised graduate programs with partner institutions.
Phase III Consolidation (Years 4-5)	Reputation and Scale	Scale proven partnerships into multi-year, multi-site research programs; convert mature signature themes into formally designated Centers of Excellence with external advisory boards; strengthen global branding through strategic communications and institutional positioning at international medical education forums.

Note. Phased milestones are approximate and subject to institutional capacity and resource allocation decisions. Phase boundaries may overlap depending on the implementation pace.

Performance Targets

Table 5 presents the five-year performance targets calibrated to the 2026 QS indicator baseline. The targets for Academic Reputation (≥ 55.0) and International Research Network (≥ 55.0) represent the priority investment areas, reflecting both the size of the gap from competitive benchmarks and the responsiveness of these indicators to the strategic interventions described above. The targets for Citations per Paper (maintain ≥ 60.0) and Employer Reputation (≥ 65.0) reflect maintenance and

incremental improvement of existing strengths. H-index Citations (≥ 55.0) reflects the expected impact of sustained mid-career faculty publication programs over a five-year period.

Table 5: DUHS QS Ranking Performance Targets: 2026 Baseline and 2030 Ambitions

Performance Indicator	2026 Baseline	2030 Target
QS Medicine Band	#501-550	Sustained trajectory toward Top 300 (Top 400 as interim milestone)
Academic Reputation Score	43.9	≥ 55.0 through editorial board representation, international conference presence, and diaspora faculty engagement
International Research Network	40.9	≥ 55.0 through structured repeat co-authorship partnerships and visiting scholar programs
Citations per Paper	64.3 (Strength)	Maintain ≥ 60.0 ; increase volume of publications in journals with above-median impact factors
H-index Citations	49.1	≥ 55.0 through sustained mid-career faculty publication pipelines
Employer Reputation	57.9	≥ 65.0 through alumni outcome tracking, international placement documentation, and employer outreach programs
Signature Research Themes	Fragmented (no formal designation)	3-5 formally designated, internationally recognized research themes with named directors and publication targets
Domestic Gap with AKU	~250-300 ranking positions	Meaningful narrowing; entry into #401-450 band or higher by 2030

Note. All indicator targets are on the QS 0–100 scale. 2026 baseline values are from QS Quacquarelli Symonds (2026b). Targets represent strategic planning ambitions, not contractual commitments. The QS Medicine Band target reflects a sustained directional trajectory; the exact band cannot be predicted due to changes in the competitive field.

Risks and Limiting Factors

Three primary risks to strategic plan execution are identified. First, the risk of strategic dispersal: institutions in early-stage ranking advancement often distribute effort too broadly, resulting in insufficient output density in any single area to drive indicator movement (Salmi, 2009). Concentration of investment in fewer, deeper initiatives is more

effective than broad, shallow coverage. Second, the risk of metric fixation: optimizing for ranking position without strengthening the underlying academic system that produces it constitutes institutional fragility (Hazelkorn, 2015; Marginson, 2014). The 2026 improvement to #501-550 appears to reflect genuine academic progress; sustaining this quality orientation is essential. Third, the risk of leadership discontinuity: a five-year plan that is not embedded in institutional governance structures through formal task force mandates, board-level reporting, and permanent office ownership is vulnerable to administrative turnover and will not survive the three-phase timeline required for reputation effects to materialize (Kehm & Stensaker, 2009).

Limitations

Several limitations of this analysis warrant acknowledgment. QS indicator scores are reported in bands rather than at precise numerical positions for institutions ranked below #100 in many subjects, which limits the precision of trend analysis. The QS survey-based indicators, Academic Reputation and Employer Reputation, are subject to response bias and do not capture the full range of factors that influence institutional reputation (Muller & Schmid, 2021; Usher & Savino, 2007). The strategic framework presented here is necessarily general in its structure; operationalization will require institution-specific adaptation based on departmental capacity assessments, resource availability, and partnership development outcomes that cannot be anticipated at the planning stage. Finally, ranking position is influenced by competitive field dynamics. The entry of additional institutions into the QS Medicine rankings, or improvements by peer institutions, may affect DUHS's band position independently of its own performance improvements.

The DUHS Strategic Plan 2024-2030 provides the institutional governance context within which the six-pillar framework described above should be operationalized. The plan's identification of

permanent administrative offices, OSDI, ORIC, and the Directorate of Global Engagement as infrastructure investments signals leadership's recognition that ranking-relevant outputs require institutional systems rather than individual champions (Dow University of Health Sciences, 2025). The plan's explicit measurable outcome targets, including publication volume thresholds, external funding targets, and ranking position ambitions, provide the accountability framework within which the five-year targets proposed in Table 4 should be embedded. The convergence between the Strategic Plan's programmatic logic and the QS indicator scorecard's diagnostic findings is substantive: both identify research capacity, international partnerships, and publication quality as the primary levers for institutional advancement (Dow University of Health Sciences, 2025; QS Quacquarelli Symonds, 2026b).

CONCLUSIONS:

The 2026 QS World University Rankings by Subject results confirm that Dow University of Health Sciences has achieved a measurable, meaningful upward movement in global medical education rankings, the first in its tracked history. The institutional indicator profile that underlies this result reveals both significant existing strengths and precisely identified growth opportunities. Citations per Paper (64.3) and Employer Reputation (57.9) establish a credible competitive foundation. Academic Reputation (43.9) and International Research Network (40.9) define the primary strategic agenda for the next five years.

The six-pillar strategic framework presented in this manuscript, anchored in global research partnerships, publication-quality enhancement, signature research program development, faculty visibility investment, international network expansion, and alumni reputation cultivation, is directly calibrated to address the specific indicator gaps that constrain DUHS's overall ranking. The three-phase implementation roadmap provides the institutional sequencing required to convert strategic

intent into measurable outputs and, ultimately, into durable reputation effects recognized in global academic surveys.

The Top 300 ambition for 2030 is demanding but not arbitrary. It is grounded in the institution's existing citation strength, its unique position as Pakistan's only public-sector medical university with a confirmed QS Medicine subject ranking, and the clear responsiveness of its weakest indicators to the proposed interventions. More fundamentally, pursuing this ambition, with focus, continuity, and institutional integrity, will produce an academic culture and research infrastructure that serve DUHS's mission and its communities, regardless of any specific ranking outcome.

The 2026 result is a proof of concept. The question before institutional leadership is whether DUHS will sustain the focused, structured effort required to convert that proof of concept into a durable new institutional trajectory.

STATEMENT ABOUT USE OF ARTIFICIAL INTELLIGENCE:

The authors used an artificial intelligence–assisted writing tool to improve grammar, clarity, and readability. No AI tool was used to generate scientific conclusions, analyze data, or replace author judgment. All final content was reviewed and approved by the authors

CONFLICT OF INTEREST STATEMENT:

The author declares no conflict of interest with respect to the research, authorship, or publication of this manuscript. The views expressed herein are those of the author and do not represent the official position of any institution, organization, or funding body with which the author is or has been affiliated.

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