Beyond promise: What successful AI looks like in the Gulf Cooperation Council

Insights from the Middle East Elsevier Advisory Board

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Executive summary

Healthcare systems across the Gulf Cooperation Council (GCC) are under pressure from rising patient demand, growing clinical complexity and workforce strain. Across the GCC, AI is already being applied in real clinical environments — from point of care consultations to multidisciplinary critical care settings. Experience shows that impact depends less on the technology itself and more on responsible implementation. To deliver value, AI must be evidence based, embedded into clinical workflows and supported by strong governance and human oversight.

Findings from Elsevier's **Clinician of the Future Report 2025** show that 71% of clinicians expect workloads to increase, while 69% view AI as essential to managing complexity and improving efficiency.

Drawing on insights from the Middle East Elsevier Advisory Board and frontline clinical leaders, this paper explores what successful AI adoption looks like in practice. It highlights real GCC use cases, outlines key considerations for scale and offers guidance for healthcare organizations seeking to turn AI promise into trusted clinical impact.

Introduction

Healthcare leaders across the GCC are navigating a period of accelerated change. Patient volumes are rising, cases are becoming more complex, and expectations for digital transformation continue to grow. According to Elsevier's **Clinician of the Future Report 2025**, more than 70% of physicians in the Middle East expect workload pressures to keep increasing, and nearly three quarters believe digital tools will be critical to managing future demand.

Because of these challenges, AI is emerging as a practical ally for clinical teams. When implemented effectively, it can reduce administrative burden, surface relevant insights and allow clinicians to focus more fully on patient care. Yet technology alone does not guarantee progress. Solutions must fit seamlessly into everyday clinical practice, align with local priorities and earn the trust of those who rely on them.

Introducing practical use cases

AI adoption is already beginning to reshape clinical practice across the GCC. Experiences from point-of-care and critical care environments illustrate both the value AI can deliver and the conditions required for responsible implementation.

Use case 1: The next-generation consult room

The clinical consultation remains the foundation of patient care. Across the region, clinicians are piloting AI-enabled tools that bring together the patient's narrative, clinical context and trusted medical evidence within a single, uninterrupted workflow.

At a new, state-of-the-art 100-bed facility in Dubai, more than 50 physicians are piloting next-generation solutions, such as ClinicalKey AI, paired with real-time documentation and clinical insights to support more efficient and patient-centered care. Ambient listening and clinical documentation tools capture the patient narrative in real time, significantly reducingdocumentation burden.

> *"We're seeing the real promise of AI when it helps us combine the patient's story with clinical evidence in one conversation. This makes it easier to personalize care, improve outcomes and enhance trust with every interaction."*
>
> **Dr. Ellie McCarthy**
> Deputy Chief Medical Officer, Consultant Family Medicine, King's College Hospital

When paired with conversational, evidence-based AI search (ClinicalKey AI), clinicians can surface insights that support more personalized, evidence informed treatment decisions — tailored to individual patient needs — without disrupting the consult or replacing clinical judgment.

Use case 2: Critical care integration

Multidisciplinary ICU teams must interpret vast amounts of rapidly changing clinical data, often under significant time pressure. Critical care environments highlight both the promise and the responsibility of AI adoption.

As described by Dr. Reda Sherif, Consultant in Critical Care Medicine at Kuwait Hospital Sharjah, AI is being explored as a supportive partner during multidisciplinary team (MDT) discussions. By aggregating and synthesizing data from laboratory results, physiological monitoring, imaging and electronic medical records, AI tools can surface early warning signs and emerging trends that support timely, informed interventions.

Crucially, these systems are designed to complement — not replace — clinical expertise. Their safety and effectiveness depend on transparent workflows, explainable outputs and strong governance that ensures clinicians retain full authority over decisions.

"Within the ICU, where decisions must be made rapidly and with precision, AI has the potential to act as a powerful clinical ally. By synthesizing complex, real-time data, it helps multidisciplinary teams identify early warning signs and emerging trends — ultimately supporting more timely, informed interventions while preserving full clinician oversight."

Dr. Zyad M. Saeed
Consultant and Head of Department,
Critical Care, Mediclinic City Hospital, Dubai

Use case 3: The Kingdom of Saudi Arabia approach to AI in clinical practice

For healthcare leaders, trust is the defining factor in AI adoption. Confidence depends on demonstrable safety, accountability and fairness.

Responsible AI implementation starts with human-centered design. While AI can process information at speed, clinicians must maintain clear visibility into how recommendations are generated and retain authority over final decisions. Seamless integration into existing workflows is essential; technology should support clinical routines, not disrupt them.

Across the GCC, regulatory frameworks are evolving to emphasize transparency, explainability and equity. Healthcare organizations are establishing governance structures to validate, monitor and scale AI solutions responsibly, supported by multidisciplinary oversight and continuous feedback from frontline users.

By prioritizing governance, explainability and clinician oversight, healthcare systems can build confidence and ensure AI delivers sustainable value.

"Trust is not a given when it comes to new technology; it has to be earned through transparency, sound governance and ongoing human oversight."

Dr. Tamara Sunbul, Group Chief Information Officer, Fakeeh Care Group

Partnering for responsible AI

Advancing AI in clinical practice is a shared effort. Progress depends on collaboration among clinicians, healthcare leaders, policymakers and technology partners.

Elsevier supports healthcare organizations across the GCC by enabling evidence-based, workflow-aligned clinical decision support. Through continued engagement with the Middle East Elsevier Advisory Board and regional healthcare leaders, Elsevier helps shape solutions that reflect real clinical needs and local priorities.

Whether supporting adoption strategies, co-designing solutions, or providing practical implementation guidance, the focus remains on responsible AI — grounded in evidence, aligned with workflows and centered on patient safety and clinician trust.

Elsevier stands ready to support this journey, partnering with organizations across the region to help turn AI promise into practical, trusted impact.

"As a practicing clinician, I see AI in clinical practice as a true partnership between clinicians, healthcare leaders, and technology providers. At Elsevier, we work alongside partners across the GCC to co-develop trusted, evidence-based and explainable tools that responsibly integrate into clinical workflows, reduce friction for clinicians, and deliver safer, trusted outcomes for patients."

Dr. Rahul Goyal
Lead Clinical Executive, Clinical Solutions, Elsevier

From policy to practice: A dialogue on responsible AI adoption

The panel concluded that realizing the transformative potential of AI in healthcare requires deliberate, evidence-based implementation strategies that prioritize patient safety, regulatory compliance and organizational readiness. This approach enables healthcare organizations to gain competitive advantage while safeguarding against unintended harm. They summarized this with a comprehensive framework for responsible AI in healthcare that must integrate the following four domains:

1. **Organizational foundations**
   Safe AI deployment depends on strong organizational culture, effective communication, leadership support and staff engagement. Poor baseline safety performance can amplify risks when deploying sophisticated algorithms.

2. **Human factors**
   AI systems influence clinician reasoning and decision-making. The panel discussed the importance of designing interfaces that reduce automation bias and algorithmic aversion, ensuring that AI supports, rather than replaces, professional judgment.

3. **Technical safeguards**
   Explainability, systematic validation and continuous monitoring are critical. Panelists noted that pre-deployment validation is necessary, but not sufficient. Ongoing oversight is required to detect and address emerging safety issues.

4. **Regulatory and governance requirements**
   The GCC countries were highlighted as global leaders in establishing enforceable AI healthcare regulations. These frameworks mandate human oversight, data governance, lifecycle management and post-market surveillance, often exceeding international standards. Compliance with these regulations is a foundational requirement, not an afterthought.

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