



# Navigating the Complex Terrain of Cardiovascular Care in Azerbaijan: Challenges and Uncharted Opportunities

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This editorial aims to examine the complex topic of cardiovascular treatment in Azerbaijan. By assessing the strengths and weaknesses of present strategies, this article aims to walk readers through the existing challenges and unexploited opportunities in this vital field of medicine.

The healthcare ecosystem in Azerbaijan is a comprehensive network (Figure 1) that integrates public, "semipublic," and private entities to provide a wide range of health services. The State Agency for Mandatory Health Insurance is critical to the system, providing essential funding for healthcare services and ensuring universal coverage. The ecosystem includes public hospitals with administrative autonomy, public polyclinics that serve as primary care facilities, and private healthcare providers that offer specialized services. Furthermore, the system is supported by a network of research hospitals and universities, which help to expand medical knowledge and train healthcare professionals. This framework is controlled and regulated by the Ministry of Health,<sup>1</sup> establishing healthcare policies and standards to balance accessibility, quality, and sustainability throughout the country. The adoption of mandatory health insurance was a fundamental phase in Azerbaijan's healthcare transformation<sup>2</sup> to ensure universal access to various healthcare services, including

those for cardiovascular disease (CVD). The mandatory health insurance program has undoubtedly expanded coverage and reduced out-of-pocket expenses, improving the population's capacity to seek prompt and adequate cardiovascular treatment. However, differences in service quality between urban and rural areas and varying levels of healthcare provider expertise continue to pose significant challenges. One of the key advantages of Azerbaijan's approach to cardiovascular treatment is the absence of copayments for insured patients in public and private healthcare institutions. This concept reduces financial barriers, allowing equitable access to important healthcare services. The importance of this approach cannot be overstated in the context of CVDs, where prompt diagnosis and treatment are often vital to patient outcomes. By removing direct patient costs at the point of care, Azerbaijan has significantly contributed to reducing the economic burden of CVDs on its society. Universal healthcare coverage means that the great majority of the population, regardless of socioeconomic status, has access to necessary cardiovascular services, which range from preventive screenings to complex surgical interventions.

The challenges and threats to Azerbaijan's cardiovascular care system are multifaceted, with extensive implications for the quality and sustainability of healthcare services. The fee-for-service reimbursement approach, which is transactional in nature, favors the quantity of healthcare services over the quality. This approach can result in unnecessary medical procedures and tests, raising healthcare costs without improving patient outcomes. In the context of cardiovascular care, this model may encourage excessive use of particular interventions, potentially compromising the overall standard of care for these life-saving treatments and limiting patient access to comprehensive care. Geographic or "postcode" disparities significantly impact the accessibility of cardiovascular services, with rural areas being underserved. This is worsened by a lack of adequate human resources in rural healthcare settings, aggravating regional health disparities. The absence of a gatekeeping mechanism in the healthcare system causes specialists to be overburdened with work that may be handled by primary care physicians. Another issue

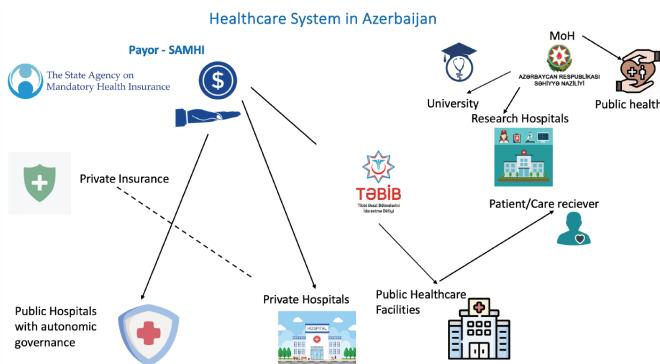


FIG. 1. The healthcare ecosystem in Azerbaijan.



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is that there are no established quality metrics (key performance indicators) for cardiovascular care, making it difficult to assess and improve the effectiveness and efficiency of provided services. Without these metrics, it is challenging to evaluate the quality of care, identify areas for improvement, and implement targeted interventions to improve patient outcomes.

The healthcare system's emphasis on treatment rather than prevention shows a reactive approach to cardiovascular health, neglecting the potential benefits of preventive measures and early intervention.<sup>3</sup> This disparity highlights the need for a more proactive strategy that stresses continuity of treatment across various healthcare settings and disease stages. This can be achieved by using digital tools to track patients and their health data, gathering information from wearable devices to continuously monitor high-risk patients, linking them with remote patient management platforms, and allowing interoperability between providers and systems throughout the patients' journey across the country. This is consistent with the Healthcare Digitalization Strategy of our Ministry of Health and TABIB's initiatives to increase accessibility and improve chronic condition treatment. Our brotherly country, Türkiye, has previously completed these processes, and our healthcare system might greatly benefit from their experience.<sup>4</sup> Another issue our healthcare providers face is the lack of risk adjustment procedures, which can lead to "cherry-picking," in which doctors prefer treating patients with less complex diseases to maximize financial returns and performance metrics. This practice may disadvantage patients with more severe or complicated health concerns, who may necessitate more resource-intensive treatment. Another issue is a lack of high-quality, reliable data, which makes it challenging to measure outcomes, evaluate the effectiveness of interventions, and make informed decisions. The adage "we cannot manage what we cannot measure" is particularly relevant here. Ambiguous or inadequate data can lead to poor policy decisions and impede the development of targeted strategies to improve cardiovascular care. That is why our National Society of Cardiology

has set the primary aim of establishing national registry programs for the most common cardiovascular disorders, such as acute coronary syndromes, hypertension, and heart failure.

Azerbaijan's healthcare system may need to explore several strategic interventions to address these issues and reduce potential threats. Transitioning from a fee-for-service model to a value-based reimbursement model helps align incentives around patient outcomes and quality of care rather than the service volume. Another task is to incorporate risk adjustment into reimbursement models, which can prevent cherry-picking and ensure that providers are fairly compensated for treating patients with complex health needs. Investing in robust health information systems and analytics skills may improve data quality and availability, allowing for better decision-making and outcome tracking. Strengthening regulatory frameworks and monitoring can help prevent fraudulent activities and ensure that healthcare providers follow high standards of care and ethical behavior.

To address these challenges, stakeholders across the healthcare ecosystem must work together, from policymakers and providers to patients and professional groups. By addressing these issues head-on, Azerbaijan can improve the quality, accessibility, and sustainability of cardiovascular care for its society.

**Conflict of Interest:** No conflict of interest was declared by the author.

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