Health services delivery reforms to improve health outcomes in Azerbaijan

Overview

Throughout the early 2000s, the largely vertical, disease-orientated arrangement of the health system in Azerbaijan posed a challenge to responding effectively to population health needs. Consequently, in 2006, a national health sector reform project was launched by the government in partnership with the World Bank, providing needed capital for systematic health services delivery reform. Under this project, the government developed a National Master Plan to guide reforms. Officially enacted in 2008, the Plan has served to guide capital investment in health infrastructure, the reorganization of health and human resources, the strengthening of the health information system and the development of a new national health insurance model. A basic package of health services – free at the point of use – has been defined and nearly 100 care guidelines developed to support services delivery. Primary health care has been strengthened by constructing primary care facilities and formalizing family medicine as a speciality; the number of primary care facilities has increased by 44% as a result.[1] The hospital system has been reformed; with hospital beds reduced by approximately 50% and underperforming hospitals closed, increasing hospital occupancy rates three-fold. Close attention was given to the development of the health information system. A national information centre was established to introduce e-health cards across the population. Several health registries have also been developed to support data collection for health system planning. The Ministry of Health has conducted several assessments examining population health outcomes and services delivered under the Plan, most significantly the demographic health survey and WHO STEPwise approach to surveillance (STEPS) assessment in 2011. Patient satisfaction with health services has also been assessed with surveys. As project funding came to a close in 2012, the Strategic Plan 2014–2020 was developed by the Ministry of Health to continue to build on health system improvements already achieved to further increase quality and accessibility of care and guide future reforms. New priorities include addressing noncommunicable disease, continuing work on maternal and child health, strengthening referral systems and improving monitoring and evaluation.

Problem definition

Between the mid-1990s and early 2000s, Azerbaijan observed fluctuations in basic population health outcomes. Life expectancy, for example, fell from 71.4 years in 1990 to 69.5 years in 1995; rising again by 2004 to 72.5, but remaining approximately two years below the WHO European Region average.[1,2] Challenges to optimally respond to population health pressures have largely been credited to the vertical, disease-orientated arrangement of the health system (Box 1). These system conditions resulted in weak gatekeeping mechanisms at the primary care level and the costly provision of largely reactive services concentrated in highly-specialized care settings. Moreover, due to limited capital resources within the health system, financial barriers limited patients' access to care and, for example, out-of-pocket payments in 2008 accounted for as much as 82% of total health expenditure. Furthermore, a generally low capacity for patient self-management, indicated by low patient compliance rates in treatment plans and inappropriate use of prescription medications, signalled limitations in services delivery to provide people-centred care.

Box 1
What problems did the initiative seek to address?

- Vertical, disease-orientated arrangement of health services delivery.
- Outdated health system infrastructure due to limited public investment.
- Inefficient use of health system resources and high out-of-pocket expenditures for patients.
- Inappropriate provision of care and weak gatekeeping at the primary level.
- Lack of patient inclusion in the care process and low population health literacy.

Table 1
What were the chronological milestones for the initiative?

Early 2000s	Outdated health infrastructure and a vertical, disease-orientated health system posed challenges to the efficient delivery of comprehensive, people-centred health services.
2006	Funding approved by the World Bank for a health sector reform project in Azerbaijan; Government of Azerbaijan, along with project partners, begins development of the National Master Plan to outline project goals.
2008	National Master Plan adopted by President and Cabinet of Ministers; Plan implementation begins in five districts and is gradually expanded across the country; Health Worker Planning and Human Resources Strategy developed and ratified.
2009	Family medicine introduced as a medical specialization for physicians and nurses.
2010	National health information system established; e-health cards distributed to population; data collection to build national disease registries begins.
2012	World Bank project funding ends with the majority of planned activities completed; financial reforms envisioned under the National Master Plan incomplete.
Late 2012	National development concept (Azerbaijan 2020) approved to define major priorities across government sectors.
2014	Strategic Plan 2014–2020 developed by Ministry of Health to guide future health reforms in line with Azerbaijan 2020.

Health services delivery transformations

Timeline of transformations

In 2006, understanding that the current orientation and availability of health services were not meeting population needs, a health sector reform project was launched by the Government of Azerbaijan with the financial and technical support of the World Bank (Table 1). In 2008, after a two-year planning period, a comprehensive National Master Plan for health sector reform was adopted by the President and Cabinet of Ministers of Azerbaijan. Over the following four years, a number of actions were taken to realize the Plan's goals. World Bank funding for the project ended in 2012 and, while not all objectives had been realized, significant progress was achieved by this date. In 2014, the Ministry of Health launched the Strategic Plan 2014–2020 to build on improvements and guide future reforms in line with the national development concept – Azerbaijan 2020.

Description of transformations

Selecting services. The government has defined a basic package of health services to be delivered free at the point of use. Importantly, this includes an emphasis on strengthening the scope and role of primary care. The planned implementation of mandatory national health insurance is expected to further increase the availability of health promotion and disease prevention services.

Designing care. Almost 100 new protocols addressing priority diseases for Azerbaijan were developed by the Ministry of Health. According to the Order of the Ministry of Health (Pricaz), each of these protocols is under revision for updating.

Organizing providers. Significant reorganization of health providers to strengthen primary care and gatekeeping was carried out and efforts to improve referral systems were made. Primary care polyclinics and medical points have been established across the country to increase access to providers, particularly in rural areas. Family medicine was also established as a new role at the primary care level. While minimum staffing requirements have been set for each medical point based on demographic criteria, equity in geographic distribution of providers remains to be fully achieved, particularly for specialist providers.

Table 2
How was the delivery of health services transformed through the initiative?

Before	After
Selecting services	
Limited health promotion; predominance of acute, disease-orientated services; most services have user charges at point of use.	Basic benefit package defined with services formally free at the point of use, however informal out-of-pocket payments remain high; planned implementation of national health insurance expected to increase health promotion and disease prevention services.
Designing care	
Guidelines and protocols for care outdated.	Updated clinical guidelines for over 90 diseases developed.
Organizing providers	
Shortage of primary care providers; providers concentrated in secondary care facilities as a result of the vertical, disease-orientated system; limited access to providers in rural areas; high levels of fragmentation across care levels and weak gatekeeping capacity of primary care.	Reorganization of providers to increase staffing in primary care facilities and improve access for rural areas; principles of family medicine introduced to primary care.
Managing services	
Most primary care facilities lack necessary equipment; many health facilities across care levels in need of modernization.	Primary care facilities constructed across the country, with special attention to rural areas; renovations carried out across facilities and underutilized hospitals closed; management over services still largely centralized, but expected to devolve pending introduction of mandatory health insurance.
Improving performance	
Set of national quality guidelines exists for health services.	Training on updated guidelines and protocols provided by the State Institute for Continuous Medical Education.

Managing services. Management over the health system remains centralized, with the Ministry of Health retaining responsibility for the implementation of government programmes and activities. Additionally, the Ministry has direct management over services in the capital, Baku. While devolution of responsibilities has not yet been achieved, it is expected that the introduction of mandatory national health insurance will lead to greater responsibility at the local level.[2]

Increased government health spending and World Bank funds supported capital investment in health infrastructure to enable improved services delivery. Investments focused on increasing the number of adequately-equipped primary care facilities. Additionally, two district hospitals, four village hospitals, eight primary care facilities and one maternity hospital were constructed. Underutilized secondary facilities were closed or converted to primary clinics. Work on modernization and reconstruction of facilities has been continued by the government beyond the project with approximately 500 medical facilities being renovated or built, predominantly in rural areas.

Improving performance. The Azerbaijan State Institute for Continuous Medical Education is responsible for improving and updating health professionals' skills and competencies. Physicians are now required to pass a written and oral certification every five years. The Institute has also provided training for over 260 health professionals on updated protocols and clinical guidelines.

Engaging and empowering people, families and communities

Efforts to strengthen population health literacy and position patients to take a greater role in their care

are ongoing. In 2010, as part of the government programme Electronic Azerbaijan, e-health cards were introduced, with the aim of providing patients with access to their own health information. The Ministry of Health has also made information publicly available on their website concerning health services delivery, available benefits, health data and the newest developments in health policies. Public health campaigns are being led by the Centre for Public Health and Reform – the agency responsible for patient education – and include education on healthy lifestyle choices, chronic diseases and health risk factors. National surveys have also been conducted to identify unmet patient needs.

Health system enabling factors

Efforts have been made to enhance the Ministry of Health's ability to steer the health system by improving health information systems, establishing monitoring and evaluation mechanisms and strengthening quality assurance and accreditation systems (Table 3). Implementation of the National Master Plan project and the development of the Strategic Plan 2014–2020 have helped establish an institutional framework for services delivery reforms. These documents have served to guide efforts towards achieving goals and have demanded sufficient supervision over ongoing reforms.

A national information centre has been established to oversee health data collection and coordinate the flow of information between the Ministry of Health, Centre for Public Health and Reform and health providers. The introduction of e-health cards, as the start of a broader e-health strategy, is facilitating improved health data collection and monitoring moving forward. Additionally, a patient discharge form has been successfully introduced to allow the government to track and compare health facilities in terms of quality and efficiency. Efforts to strengthen disease registries have been introduced to collect data on epidemiological trends, with registries helping to inform the future planning of human resources and capital investments. To help meet the minimum staffing requirements that have been set for primary care facilities and ensure providers are being trained with the necessary skills to work within the new system, departments of family medicine have been developed across all medical universities in the country.

Financial reform within the health system was also envisioned under the National Master Plan. In 2008, in an attempt to reduce high out-of-pocket expenditures, formal user charges were prohibited in public facilities. Furthermore, a detailed plan for the implementation of a mandatory national health insurance model was developed, although its implementation is still to be realized. It is hoped that once the new insurance model goes into effect, along with anticipated new payment mechanisms which incorporate payment-for-performance elements, health providers will be incentivized to deliver higher quality and more efficient care.

Table 3
How has the health system supported transformations in health services delivery?

System enablers	Example
Accountability	• Ministries of Health and Finance responsible for health system planning. • National Master Plan officialized by President and Cabinet of Ministers in 2008. • Strategic Plan 2014–2020 adopted to build on National Master Plan and set priorities for future reforms.
Incentives	• Implementation of national health insurance planned; government will act as a single purchaser of health services. • Planned financial reforms include payment-for-performance elements.
Competencies	• Health Worker Planning and Human Resources Strategy developed. • New training programmes in family medicine established across medical universities.
Information	• National centre for health information oversees data collection and makes information available to relevant parties. • Data collection strengthened by the introduction of e-health cards for the population. • Patient discharge form introduced to allow government to track and compare performance of health facilities. • Disease registries strengthened to collect national-level data on priority diseases.

Outcomes

Investments in health infrastructure and technology are expected to increase the quality of services over the long term. However, reforms are an ongoing process and the improvements made require time to become observable. Notable outcomes as a result of the National Master Plan, as identified through an evaluation conducted by the World Bank, include increased access to primary care, improved delivery of care at the appropriate level and small improvements in out-of-pocket expenditures for patients (Box 2).

Box 2

What were the main outcomes of the initiative?

- Public health expenditures increased from 162 million Azerbaijani manats in 2005 to 609 million manats in 2012;[1] this amount further increased to 725 million manats in 2014.
- The number of primary care facilities increased from 543 to 782; the number of secondary care facilities decreased from 444 to 214.[1]
- The number of hospital beds decreased by approximately 50%; hospital occupancy rates increased three-fold to more optimal levels.[1]
- A slight decrease was observed in out-of-pocket expenditures as a result of free access to the essential package of health services; however, out-of-pocket payments remain high.

Change management

Key actors

The World Bank, along with international partners including WHO and USAID, worked closely with the Government of Azerbaijan to design the reform project (Box 3). Ensuring government ownership over reforms was important for securing continued political commitment to health, while collaboration with international agencies was essential for providing technical expertise. Implementation of the initiative was steered by the Ministry of Health, in partnership with the Ministry of Finance and international actors, with top-down leadership supporting the realization of far-reaching health system reforms. Since the project's completion, the Ministry of Health has continued to build on reforms achieved and guide further health system improvements.

Box 3

Who were the key actors and what were their defining roles?

- **Ministry of Health.** Worked with the World Bank, other government ministries and international agencies to develop the National Master Plan; strengthened stewardship capacities; continues to lead health system improvements under the Strategic Plan 2014–2020.
- **Ministry of Finance.** Controls health system funds; has significant control over health system planning.
- **World Bank.** Financed the health sector reform project in Azerbaijan; worked with the government to develop National Master Plan.

Initiating change

Coupled with growing recognition of the need to update and reform the health system in Azerbaijan in response to observed health challenges, in 2006 the appointment of a new Minister of Health created a window of opportunity for the World Bank to work with the Government of Azerbaijan on a project for health system reform. Funding from the World Bank made the required investment in infrastructure possible and, after two years of project planning, the National Master Plan was approved at the highest levels of government.

Implementation

Implementation of reforms was gradually phased-in after testing in five pilot districts; slow and stable implementation was required to harmonize with the cultural context. While physical infrastructure changes were implemented relatively easily, organizational and cultural changes were slower to develop and fragmentation across government ministries and care levels continues to exist. Furthermore, despite a detailed plan being developed and approved for the implementation of mandatory national health insurance under the project, execution of this has not been achieved to date.

Moving forward

There remains a need to ensure coordination between activities as "there are many different things happening in parallel, but there is no overarching strategy or vision guiding these initiatives." The Strategic Plan 2014–2020 has helped set the priorities for the health system moving forward, with the focus being on strengthening intersectoral collaboration, improving communication and orientating care to better address emerging noncommunicable disease challenges. The planned implementation of mandatory national health insurance is expected to drive health system improvements, control health care costs and support better population health outcomes.

Highlights

- A strong understanding of the historical political context and current environment proved important in determining an acceptable pace for proposed health reforms.
- Donor funding enabled investment in necessary health infrastructure with which to realize health system reforms.
- Top-down leadership from the Ministry of Health ensured national ownership over internationally-supported reforms; stewardship capacity of the Ministry was strengthened throughout the project.
- Investment in human resources, including formalizing medical training and developing new specializations in partnership with medical schools, was critical to driving sustainable reform.

1 World Bank. (2014). *Azerbaijan : Health Reform Project*. Washington, DC: World Bank

2 Ibrahimov, F., Ibrahimova, A., Kehler, J., & Richardson, E. (2010). Azerbaijan: *Health System Review. Health Systems in Transition.*

3 National Statistical Committee. (2015). Retrieved from www.stat.gov.az