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An Assessment of Healthcare Reforms in Kazakhstan

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Abstract
This paper examines the state of healthcare development in Kazakhstan since it gained independence from the Soviet Union in 1991.The paper uses secondary sources to investigate various healthcare reforms instituted by the Kazakh government. The paper identifies four aspects in the health reform initiatives (funding, quality, human resources, and partnerships) and their impacts on the country's healthcare system. In light of the healthcare reform efforts, this study finds that the four aspects of the reforms examined have been helpful towards the country's health system's modernization efforts. While progress has been made in Kazakhstan's health system since its independence, this study observes that healthcare reform is a continuous process, especially for a country undergoing transitional challenges. The paper sheds light on the issue of health reform and its impacts on healthcare outcomes, especially in Central Asia.
Keywords: healthcare reform, healthcare systems, Central Asia, Kazakhstan

1. Introduction

Kazakhstan (see Table 1 for selected basic information) is located in central Asian and obtained its independence from the Soviet Union in December 1991. The country adopted its first post-Soviet constitution in 1993, with a unitary form of government (Wilson *et al.,* 2002; Makhmutova 2001). The fall of the Soviet Union led to political and economic transition challenges (government restructuring, policy changes and funding restrictions), and the healthcare system was characterized by its oversized health facilities and a reduction in financing. The result was a health system synonymous with poor quality, inefficient health services, uneven distribution of healthcare workers between urban and rural areas, and inequities in funding between rural regions and large cities and towns. From its inception, the government of Kazakhstan recognized healthcare as one of the country's major priorities, and a prerequisite for sustainable socioeconomic development. With market liberalization, declining revenues, and declining healthcare indicators for the population in its nascent years of democratic governance, Kazakhstan had no choice but to embark on reforms efforts to modernize its health system. As a consequence, a number of health reform initiatives were undertaken, aided by improved economic conditions and international assistance. The purpose of this paper is to examine Kazakhstan's healthcare reform programs, and assess if the reforms have aided the country's healthcare modernization efforts.

2. Literature Review

Efforts to improve healthcare outcomes have been undertaken by many governments around the world, and several studies have investigated the issue of healthcare reforms and their impacts on the populations of different countries.

Analoui (2009) reviewed a number of studies that addressed the challenges faced by governments when initiating, implementing and evaluating the results of healthcare reforms. The review found similarities in challenges faced by both developed and developing countries in managing the reforms. These include the need to have appropriate structure for policy implementation, relevant skills and competencies, legislative support, appropriate behavior and attitudes, and visionary leadership. Essen (2009) conducted a study on the different hospital payment systems in Germany, The Netherlands and England. The study found that differences in the medical strategies in the three countries point towards the importance of institutional and interest configurations. While the Dutch corporate medical body was willing to resolve conflicts, the German and English corporate medical bodies seemed to be more confrontational in their approach. Mosebach (2009) investigated the impacts of market-led reforms on quality and equality of access in the German hospital system.

Table 1: Kazakhstan: Selected recent basic information

Language:	Kazakh is the state language. Russian is commonly spoken
Independence:	December 16, 1991 (from the Soviet Union)
National legislature:	Bicameral: 77 seats lower house (*Majilis*) 39 seats upper house (Senate)
Administrative divisions:	14 provinces (*Oblasts)* and 2 cities (Almaty and Astana)
Geography:	Astana
Population:	17.5 million (2012 estimate)
Population growth rate:	1.235% (2012 estimate)
Unemployment rate:	5.3% (2012 estimate)
Literacy (% of population Age 15+):	100 (2009)
Poverty (% of population below national poverty line):	8.2 (2009 estimate)
GDP:	232.3 billion US$ (2012 estimate)
GDP growth rate:	5.5% (2012 estimate)
Corruption perception index (CPI):	28 (2012)
Human development index (HDI):	0.761 (2012)
Press Freedom Score:	81 (2012)
Rank of the Failed State:	105 (2009)
Telephones:	4.266 million (2011 main lines in use)
Telephones (mobile cellular):	25.24 million (2011)
Internet hosts:	67,464 (2012)
Internet users:	5.299 million (2009)
Under-5 mortality rate (per 1,000 live births):	33 (2010)
Under-1 mortality rate (per 1,000 live births):	29 (2010)
Maternal mortality rate (per 100,000 live births):	51(2010)
Life expectancy at birth (years):	69.63 (2012)
I-year old children immunization rate:	98 percent
Mortality rate (per 1000)	8.52 (2012)
Health expenditures (percent of GDP):	4.3 (2010)
Hospital bed density (per 1,000 population):	7.6 (2009)

Sources: CIA-The World Factbook, *Kazakhstan,* (www.cia.gov); UNDP, 2012; unicef (www.unicef.org); Transparency International, 2012; The Failed States Index Scores for 2009 are from the Fund for Peace website (www.fundforpeace.org). A higher score indicates a more viable state. Press Freedom Scores (for 2012) are from Freedom House (www.freedomhouse.org). The CPI is interpreted as a ranking of countries with scores ranging from 0 (highly corrupt) to 100 (highly clean).
Note: Number in parenthesis indicates year.

The study found that while there are signs that the German hospital sector was commercialized on a regulatory basis, there was insufficient evidence to prove any negative impact on quality and equality of care provision.

Using the United States as a case study, Kellis & Rumberhger (2010) examined healthcare reforms and found that majority of the reforms focused on reforming the private healthcare insurance industry, and contained provisions that begin to address the cost and quality issues plaguing the United States health system. The study notes that while the recently adopted health reform legislation enacted by the Obama administration significantly expands access to healthcare, it does not address the market failures in the healthcare system. The study also found that in order to significantly address the problems of healthcare in the United States, there should be a single universal standard coverage for Americans; accountable health system leadership; leverage of information and resources to make utilization decisions and evaluate performance; alignment of physician, hospital, and payer incentives to focus on care outcomes rather than profit maximization; and the use of "quasi competition" to allow for consumer choice.

Sammon & Adam 2008) investigated the impacts of the Enterprise Resource Planning (ERP) system in the implementation of Ireland's National Health Strategy. The ERP was designed to administer human resources and payroll issues in a way that gives more visibility on the hiring and allocation of staff in the national healthcare

system. The study found that the ERP project was a failure because of lack of understanding of what ERP involves, and a failure to adequately prepare for its implementation.

With regards to developing economies, Ibrahim *et al.* (2011) compared the outcomes of healthcare reforms in Nigeria and Malaysia. Results of the study found that reforms helped improve healthcare outcomes in both countries. However, while there were more access to healthcare affordability and efficiency in healthcare delivery in both countries, the results indicated greater magnitude of these positive outcomes in Malaysia than in Nigeria. Also in Africa, Sakyi *et al.* (2011) examined the barriers to implementation of healthcare decentralization reform of a district in Ghana. Using data from survey results of interviews from health officials, the study found that while health officials involved in the implementation of the reforms were knowledgeable about the objectives of the decentralization process, there were major factors militating against effective decentralization in the district. These factors include lack of adequate funding, lack of qualified staff, inadequate logistics and equipment, lack of transparency and a good operational system, political interference, poor infrastructure and high rate of illiteracy.

Similar studies have been conducted on some Central Asian countries. Mirzoev *et al.* (2007) investigated the progress made in health reform in Tajikistan. The study found that progress in Tajikistan's health system through the reforms includes a comprehensive health financing strategy, and improved coordination among the various agencies. However, the study found that there was a need for the Tajikistan's health system to focus on strategic issues (such as, formulating an explicit privatization policy, and improving the coordination of external aid). In a follow-up study, Habibov (2009) examined the impact of socio-economic characteristics on out-of-pocket expenditures for prescribed medications in Tajikistan. The study found that economic status, disability, number of small children, inadequate supply of necessary drugs, and cardiac and acute illnesses were the strongest determinants of spending for prescribed medications in the country. Finally, Ismailova *et al.* (2010) reviewed the *National Health Reform and Development Program* of Kazakhstan. The study found that there need to be a protocol on rates charged for medical services in order to provide a unified and optimized rates of medical services throughout the country. Such optimized rates would deliver high quality medical services cost-effectively, and enhance the rational planning of the national healthcare budget.

3. A Review of Kazakhstan's Health System

Kazakhstan inherited the Soviet-era health system and began the 1990s with a fully government-funded healthcare system. The health system was inefficient because of high centralization and lack of incentives to reduce costs. The fiscal crisis in the early 1990s also led to a decline in government revenues, which negatively affected healthcare funding. Thus, it is not surprising that after independence Kazakhstan experienced a number of negative health outcomes. During the first ten years following independence there was a dramatic increase in mortality rate, from 7.7 per 1,000 people in 1990 to 10.1 per 1,000 people in 2001 (Kulzhanov & Rechel 2007). Infant mortality rate and maternal mortality rate also increased. Furthermore, the healthcare infrastructure was deteriorating, there was an overemphasis on hospital care, and the public was dissatisfied with the healthcare system. These factors led to calls for reform of the health sector. There were also calls for reforms by external donors and agencies, who wanted to see improved quality and access in the health system to justify their funding. According to the Ministry of Health, by the end of 2011, Kazakhstan had 1064 hospitals and 3,720 short-stay clinics. Authorities estimate the hospital accommodation capacity to be 120,000. The government owns 80 percent of medical institutions and thus the government plays a key role in medical issues. According to 2010 data, under-5 infant mortality rate is 33 per 1000 live births. Life expectancy is 69.65 years and maternal mortality is 8.52 as at 2012 (Table 1). The latest figures from the Ministry of Health website show that fertility rate (i.e. births per 1,000 people) has improved from 21.5 in 1991 to 22.5 in 2010 (Aringazina *et al*. 2012; www.mz.gov.kz). These improvements are a result of several reform initiatives undertaken by the government since its independence.

4. Health Reform Efforts

The healthcare system in Kazakhstan has evolved progressively since its independence. The first health reform in post-independent Kazakhstan was in 1992 when Parliament enacted the *Law on the Protection of the Population's Health,* and the Ministry of Health produced *The Concept of Health Care Reform* (a document which called for a number of reforms). These reforms include: establishment of a health insurance scheme; decentralization of health administration; reduction of hospital beds; priority for primary healthcare; the right to private practice for healthcare professionals; patient's right to choose a doctor; and improved training for healthcare professionals (Ministry of Health 2004). In 1994, the Ministry of Health developed a strategic vision for the health system, with an action plan in five major areas: improving the organization and management of healthcare and its human resources; restructuring health financing; improving quality of care; reforming and

privatizing medical supply and pharmaceuticals; and increasing scientific research capacity (Ministry of Health 2004). In 1996 a Mandatory Health Insurance Fund was introduced but abandoned in 1998.

The President declared an initiative, known as *Kazakhstan 2030* in 1997. The initiative outlines a range of social policy agenda for the country, including health policy goals (President of Kazakhstan 1997). The health policy component of the initiative contains such elements as, the development of a healthy lifestyle, and other areas of health promotion and disease prevention. In line with the *Kazakhstan 2030* agenda, the *National Center for Healthy Lifestyles* was established in 1998. A Presidential Decree (No. 3956), known as *The Health of the Nation* provided a detailed overview of health issues in the country. The decree also identifies the main priorities in the health system. In 1999, the *Decree on Measures for Improving Primary Heath Care for the Rural Population* established minimum standards for the public provision of rural health services (Ministry of Health 2002; www.astanazdorovie.kz). Since 1999, the national budget has been the single major public source of healthcare financing in the country.

In 2004, a comprehensive healthcare reform act (*National Health Reform and Development Program for 2005-2010)* was enacted. The provisions in the reform were rolled out in phases between 2005 and 2010. The *National Health Reform and Development Program* was developed as part of a broad national development strategy called *"Towards A Competitive Kazakhstan, A Competitive Economy and A Competitive Nation"*. The *National Health Reform and Development Program* identified the following priority tasks: a shift towards primary healthcare and from inpatient to outpatient care; achievement of international standards, and use of new technologies; advanced treatment methods and medical services; strengthening of maternal and child health; training of health professionals and health managers; prevention, diagnosis and treatment of "socially significant diseases"; and improving buildings and equipment of health facilities (Ministry of Health 2004).

The *National Health Reform and Development Program* also introduced a state-guaranteed basic benefits package of services provided free of charge, which covers specified health services. This includes emergency care, outpatient care, inpatient care, and medical assistance to people with "socially significant" diseases. User fees paid for services included in the basic benefits package are illegal, and are only allowed for services outside the basic benefits package. Additionally, the reform introduced a new outpatient pharmaceutical benefit system, with children, adolescents and women of reproductive age entitled to pharmaceuticals free of charge. Health services which are not included in the basic benefits package could be paid from out-of-pocket; voluntary health insurance (VHI); employers; or other sources. While inpatients have their pharmaceuticals covered by the hospitals, ambulatory care patients (except "socially vulnerable groups" and certain diagnostic groups, such as cancer patients) must buy their own medication.

In 2010, the *State Health Development Program* (also called *Salamatty*) was introduced. The *Salamatty* program is to be implemented in phases from 2011 to 2015. The program emphasizes healthy lifestyles for the population, and the development of a quality domestic pharmaceutical industry. It also focuses on a number of intervention and prevention areas; mother and child health services; vaccination and infection control; incentives for young medical professionals to practice in rural areas; the creation of Family Health Centers in policlinics; mobile ambulance, as well as increased air ambulance (www.pm.kz). The *Salamatty* initiative has ambitious targeted outcomes, such as: increasing life expectancy to 69.5 years by 2013 and 70 years by 2015; decreasing total mortality to 8.14 per 1000 by 2013 and 7.62 per 1000 by 2015; decreasing maternal mortality rate to 28.1 per 100,000 by 2013 and 24.5 per 100,000 by 2015; and decreasing infant mortality rate to 14.1 per 1000 by 2013 and 12.3 per 1000 by 2015 (www.mz.gov.kz; http://globserver.cn/en...).

5. Features of Reforms

The various reforms in the Kazakh health system consist of some underlying features which are essential for the success of the country's healthcare modernization efforts. These features (funding, quality, human resources, and partnerships) are necessary for improving the country's health outcomes.

5.1 Funding

Healthcare funding in Kazakhstan was very poor during the 1990s and early 2000s, mainly because of poor revenues, and the fact that the country was trying to adapt to the process of transition. The lowest share of GDP allocated to healthcare was recorded in 2002 at 1.93 percent, however, healthcare spending as a share of GDP has increased to 4.3 percent in 2010 (www.investkz.com; http://globserver.cn/en...). The government is also putting more emphasis on primary healthcare in terms of funding. For example, in 2005 primary healthcare received 28 percent of the total health budget compared to 10 percent in the mid-1990s. This figure increased to 40 percent in 2010 (Aringazina *et al.* 2012; www.mz.gov.kz).

Reforms in the healthcare sector have led to decentralization of funding mechanisms, even though the central government has retained considerable authority. This decentralization effort has been mostly achieved through the devolution of administrative and financial responsibilities from national level to *oblast* (regional) and

sometimes *rayon* (district) levels (Ministry of Health 2004). The devolution of responsibilities was first enshrined in the 1995 *Law on Local Self-government*, which delegates health management and financing functions to the *oblast* level (Makhmutova, 2001). This allows the *oblast akim* (governor) to determine the level of budget consolidation. This means that the 14 *oblast* and Almaty and Astana city health departments are the key bodies in administering healthcare, and are responsible for most of the hospitals and polyclinics at the local level. The decentralization of funding provision was further reinforced in the *National Health Care Reform and Development Program* because prior to 2005, there was lack of uniformity in implementing the provision across all the regions in the country (Ismailova *et al*. 2010; Aringazina *et a*l. 2012).

Thus, the reforms ensure that the core element of the health financing system is budget consolidation at the *oblast* level, whereby the *oblast* health department serves as the single health purchaser or single payer for all state health funds. The national government strives to decrease regional differences in health financing and gives priority in terms of health financing to: primary healthcare services; construction and reconstruction of primary healthcare facilities and mother and child health facilities; procurement of medical equipment and means of transportation to primary healthcare, childbirth and emergency care services, according to specified minimum standards; patients referred for inpatient services by primary healthcare providers; health services to patients suffering from "socially significant and hazardous diseases"; provision of pharmaceuticals to specified population and disease categories; and provision of health services in disasters (Kulzhanov & Rechel 2007). To further improve efficiency in health financing, the government made a number of additional provisions, including: a methodology for the reimbursement of providers for the provision of the state-guaranteed package of services; suggestions for different labor remunerations for healthcare professionals based on performance; rules and regulations for the provision of a fee-for-service scheme in publicly owned health facilities; suggestions for alternative financing mechanisms for tertiary care providers; and a new system for reimbursement of primary care providers that takes into account expenditures on facility management and renewal of assets (Ministry of Health 2004).

5.2 Quality

Kazakhstan's health reforms' agenda is focused mainly on improving quality and efficiency in the health system. While the *National Health Care Reform and Development Program* established new rules for quality control of services provided by health facilities, the *Salamatty* program emphasizes the importance of efficiency and quality in achieving the ambitious health outcomes the country has set for itself by 2015. These reforms give the Ministry of Health the responsibility for: developing national policies on quality assurance and accreditation; developing the legislative basis for the accreditation of health organizations; and quality control of health services, including intra-hospital management and efficiency of health organizations. To this effect, Kazakhstan has devised mechanisms to reduce duplication of activities and functions, and the inefficient use of resources available for the health sector. This means reducing the over-reliance on inpatient care which has led to substantial excess capacity in the hospital sector. In addition, the country has introduced: a quality management system for all levels of health care; a system of licensing and accreditation of health facilities; training and retraining of health care workers (including the introduction of courses on evidence based medicine); a single health information system; a differentiated payment system that takes account of the quality of services provided; and publication of ratings of healthcare providers in the mass media. Primary healthcare services is also being improved by upgrading of physician and staff; material and technical improvements of health facilities; and specifying the guaranteed benefits package for inpatient care. In addition, the reforms aim to advance the development of telemedicine and the use of aviation to improve health services in remote and inaccessible areas of the country (Almagambetova 2011; Kulzhanov and Rechel 2007).

To ensure that health quality is in line with international standards, the government has introduced a number of additional initiatives. This includes adoption of quality indicators that incorporate elements of the UK's comprehensive performance assessment (CPA) framework to report on the quality of services performance data (Knox 2008). The government has established the *Committee for Health Services Quality Control* at the national level to consider complaints on quality of health services provided, while *oblast* health departments are responsible for the protection of patient rights at *oblast* level. Finally, to reduce time-consuming paperwork, streamline the work of doctors, and give patients easier access to their records, the government has established the Unified Health Management Information System (UHMIS) which stores medical information online in a unified database (Pavlovskay 2013). The main features of UHMIS consist of: generating a medical electronic passport for patients with all medical information and medical history; sanitary-epidemiological monitoring system that addresses problems related to collection and analysis of epidemiological information; a medication supply management system that controls the production, distribution, and use of pharmaceuticals in the country; and a medical service quality management system which allows authorities to use objective criteria to monitor medical centers and their staff.

5.3 Human Resources

The health reform programs are aimed to improve the training of health managers and the coordination of health delivery functions (Ministry of Health 2004). The responsibility for developing and enhancing the competence of health workers in Kazakhstan is divided between the Ministry of Health and *oblast* administrators. The reform programs provide for the introduction of a comprehensive system of human resource planning in the health sector by ensuring that medical universities and training institutes are in line with world standards and best practices. According to the 2003 *Law on the Health System,* the Ministry of Health is charged with: developing an overall human resources policy in the health sector; approving forms and training programs for medical specialties; developing and approving staffing standards of health organizations; conducting the revalidation of managers of health organizations and health departments; and defining standards for the training of specialists with higher and postgraduate education. *Oblast* health departments are responsible for: ensuring the provision of human resources in health organizations and assessing the expertise of health workers; and ensuring the continuous education and retraining of medical and pharmaceutical specialists (Ministry of Health 2004; www.pm.kz). Kazakhstan has six public medical universities, two private medical universities, 29 public nursing schools and 31 private nursing schools (www.mz.gov.kz). Continuous medical education is conducted by the Almaty Postgraduate Medical Institute and the School of Public Health. In 2011, Kazakhstan had 60,000 medical doctors and 139,000 medical personnel (www.egov.kz). Thus far, the reforms have been helpful in training and retraining of physicians to become general practitioners; implementing the training of professional managers and health economists; and strengthening the material and technical basis of educational institutions for medical education. The reforms have also introduced the regular testing of medical teaching staff every five years, and have provided a means to allocate funds from local budgets for retraining and continuous education courses for staff in rural areas.

5.4 Partnerships

Kazakhstan's healthcare reforms encourage collaborations between the government, civil society groups, the private sector, and international organizations. In Kazakhstan, civil society's engagement in the health sector involves collaborating with the Ministry of Health. The reforms empower the Ministry of Health to involve NGO representatives intensively in the process of professional revalidation of health workers, and the independent quality control of healthcare (Ministry of Health 2004). Three most active NGOs collaborating with the Kazakh government in the health sphere are the Diabetes Association of the Republic of Kazakhstan (DARK), the Kazakhstan Association of Family Physicians (KAFP), and the Family Group Practitioners Association (FGPAs) which serves as an intermediary between sector health agencies and family group practices (FGPs). The health reforms have given FGPAs new roles and responsibilities in setting quality-of-care standards, monitoring performance and accrediting healthcare providers (www.mz.gov.kz; Almagambetova 2011).

The government is also engaging with the private sector in the form of public-private partnerships (PPP). In the healthcare context, PPP is regarded as a valuable tool in providing a wide array of services, from social infrastructure to hospitals, hospices, home care, laboratories, diagnostic centers, development of medical and pharmaceutical industry, supply of medical and nonmedical equipments, etc. A key requirement in this arrangement is to transfer adequate risk from public to private sector for the provision of high quality and cost-effective services. The first round table on PPP on healthcare in Kazakhstan was held in Astana on May 2011 (www.pm.kz). The round table was organized by the Ministry of Health and the World Bank to provide insights into how PPP can help enhance healthcare investment projects in the country. The government plans to build 131 hospitals through PPP by 2016 (www.investkz.com).

To further facilitate health infrastructural development and the provision of essential health services, the health reforms encourage the Kazakh government to collaborate with international agencies and organizations. These include the World Bank, World Health Organization (WHO), the United States Agency for International Development (USAID), the United Nations Development Program (UNDP), the Asian Development Bank, the European Union, the Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM), the International Red Cross, the United Kingdom Department for International Development (DFID) and so on. A number of donor-supported initiatives have been undertaken, among which is the World Bank support for the "Health Sector Technology Transfer and Institutional Reform" project at a cost of $ 296 million. The program aims to accelerate implementation of key health reforms by bringing international best practices, and building up the capacity of specialists in health financing, healthcare quality, information systems, and public health (World Bank 2010). UNICEF supported the creation of a National Program on Improvement of Peri-natal Care, and in 2009, the Kazakh Ministry of Health and the USAID signed a Memorandum of Understanding on healthcare cooperation through 2013. Under the agreement, the U.S Government will provide assistance to help the government of Kazakhstan meet its healthcare goals, including healthcare reform and improvements in the quality of medical services (www.centralasia.usaid.gov).

6. Future Prospects

Since its independence in 1991, the Kazakh government has progressively made efforts to reform and modernize its health system. Starting from its first healthcare law (the *Law on the Protection of the Population's Health*) in 1992, to the *Salamatty* program enacted in 2010, the aim has been to make gradual reforms that could be adequately managed and delivered, and upon which further reform efforts can be built. *Salamatty*, which implementation is to be completed in 2015 sets some ambitious goals (such as, increasing life expectancy from the current 65 years to 70 years by 2015 and decreasing mortality rate from the current 10.1 per 1,000 people to 7.62 per 1,000 people by 2015). Between 2009 and 2011, a hundred new medical facilities were built. This is in line with the President's 2008 program of "*Building a Hundred Medical Facilities on the Basis of State-Private Partnership"*. Kazakhstan is making all efforts to ensure brighter future for its economy and its health system. The country joined the World Trade Organization (WTO) in 2012, and has already signed bilateral trade agreements with 24 countries. Efforts are underway by Kazakh authorities to revise its current state investment program in order to attract foreign investment in key industries, including pharmaceutical. Such measures would include the promotion of Free Economic Zones, and freedom from VAT and other taxes. Thus, based on its recent history of health reforms and modernization, it is expected that such efforts would continue in the future to ensure that the Kazakh health system meets international standards of efficiency, access, and quality.

7. Conclusion

This paper presents an assessment of healthcare reforms in Kazakhstan since its independence. Seeking to bring about major improvements in the health system, the reform measures have altered the institutional and procedural aspects of healthcare delivery. Conclusively, health reform in Kazakhstan is an ongoing process. While the most recent health reform programs (*Salamatty* and UHMIS) are be implemented through 2015 and 2020 respectively, it is expected that subsequent health reform and modernization efforts will follow. Considerable efforts have been made by the Kazakh government to improve access to basic healthcare through the guaranteed basic benefits package, while continuous improvement efforts are in place to bring the Kazakh health system in line with international standards. The trajectory of health improvement indicators seems encouraging. Already, life expectancy has increased to 69.63 years in 2012 (see Table 1) surpassing the 69.5 years which the *Salamatty* program aimed to achieve by end of 2013. In 2012, Kazakhstan ranks 69 out of 187 countries with a score of 0.755, a high list in the "Human Development Index" (HDI). The index is a composite of indicators developed by the United Nations Development Program (UNDP), with the purpose of analyzing the level of development across the world. It is composite of three variables: life expectancy, education and average incomes. Compared to 2009, the Kazakhstan has moved up 15 positions (UNDP 2012). Thus, it is expected that as the reforms are implemented, the various indicators of health outcomes will continue to improve.

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