An Overview of Turkish Healthcare System after Health Transformation Program: Main Successes, Performance Assessment, Further Challenges, and Policy Options

Sağlıkta Dönüşüm Programı Sonrası Türk Sağlık Sistemine Genel Bir Bakış: Başarılar, Performans Değerlendirmesi, Muhtemel Zorluklar ve Çözüm Önerileri

Kadir GÜRSOY[1]

ABSTRACT

Turkish healthcare system has been stated to show significant improvements regarding wider access to healthcare facilities, and the quality and efficiency through the introduction of Health Transformation Program launched in 2003. While the old system relied on differing provisions and financing and lacked behind many developed nations in terms of health outcomes, the new system achieved nearly universal coverage and many health outcomes enhanced significantly. Health expenditures rose to 5.4% of GDP in 2013 from 4.8% in 1998. Furthermore, Turkey provided both better financial protection for the poor against high health expenditures, and equity in access to health care across the population. However, Turkey still faces new challenges to catch other developed countries to have better health and further improve financial sustainability. To reach these targets, Turkey needs to further implement new policy options for reform such as combating informal economy, allocating more on health resources, designing incentive-based payment methods, adopting gate keeping system and referral chain, developing capacity to deploy health technology assessments in reimbursement decisions, and ensuring the hospital autonomy.

Keywords: Turkish healthcare system, health transformation program, sustainability, universal health insurance, performance assessment

1 Sosyal Güvenlik Uzmanı, Genel Sağlık Sigortası Genel Müdürlüğü İlaç ve Eczacılık Daire Başkanlığı, Ziyabey Cad. No: 6 Ankara, eposta:kgursoy@sgk.gov.tr Tel: 0 312 207 8730

ÖZET

Türk sağlık sisteminin 2003 yılında hayata geçirilen Sağlıkta Dönüşüm Programı ile birlikte sağlık hizmetlerine erişim, kalite ve etkililik açışından büyük bir ilerleme gösterdiği belirtilmektedir. Eski sistem, farklı yapıdaki provizyon ve finansmana dayanmakta ve temel sağlık göstergeleri birçok gelişmiş ülkenin çok arkasında kalır iken, yeni sistem hem birçok sağlık göstergesini yukarı çekmiş hem de neredeyse tüm nüfusu şemsiye altına almıştır. 1998 yılında gayri safi yurt içi hasılanın %4,8'i olan toplam sağlık harcamaları, 2013 yılında %5,4'e yükselmiştir. Ayrıca, finansal koruma bakımından da büyük bir başarı kaydedilmiştir. Ama, Türkiye, önemli sağlık göstergelerinde gelişmiş ülkeleri yakalamak ve sistemin finansal sürdürülebilirliğini sağlamak için yeni sorunlarla baş etmek zorundadır. Bu hedeflere ulaşmak için, kayıtdışı ekonomi ile mücadele etmek, teşvike dayalı geri ödemeleri sistemlerinin tasarlanması, geri ödeme kararlarında sağlık teknolojileri değerlendirmesi yönteminin uygulanması için kapasite geliştirilmesi, sevk sisteminin kurulması, kamu hastanelerinin özerkleştirilmesi gibi yeni politika seçeneklerin uygulamaya konması önem arz etmektedir.

Anahtar Kelimeler: Türk sağlık sistemi, sağlıkta dönüşüm programı, sürdürülebilirlik, genel sağlık sigortası, performans değerlendirmesi

INTRODUCTION

Over the last decade Turkish healthcare system has undergone significant changes with the introduction of Health Transformation Program (HTP) launched in 2003 [1-8]. The HTP was designed to advance main health outcomes lagged behind comparable countries, improve the quality and efficiency of the healthcare system, enhance equal access to healthcare facilities, and achieve universal coverage [9]. Before 2003, Turkey had a fragmented health system in terms of provision and financing and health insurance was provided by five separate public schemes, each with its own provider network and differing benefit packages bringing huge disparities in quality and access to health services. Conversely, after 2003 Turkey enlarged the scope of financial protection to the population through expansions in the breadth and depth of health insurance coverage combined with service delivery reforms to improve equity in access to health services [5]. Health expenditures in 2013 have increased to 5.4% of Gross Domestic Product (GDP) from 4.8% in 1999 with a reduction in out-of-pocket

payments of 5 percentage points over 10 years [10]. Moreover, the health status of the Turkish population, health resources, utilization, and patient satisfaction has improved significantly. There has been a continuous increase in the numbers of nurses, health officer, physicians, and healthcare providers for the last ten years, yet Turkey still lags behind many of the OECD countries [11]. Turkey also yielded one of the greatest gains in life expectancy between 1960 and 2012, with an overall increase in longevity of 25 years, but still needs to close the gap compared to OECD average [12]. In addition, infant mortality rate in Turkey has fallen dramatically over the past few decades and Turkey did quite well tackling communicable diseases [12]. Finally, Turkey succeeded in lowering waiting times and increasing consultation times which resulted in improving patient satisfaction [13-14].

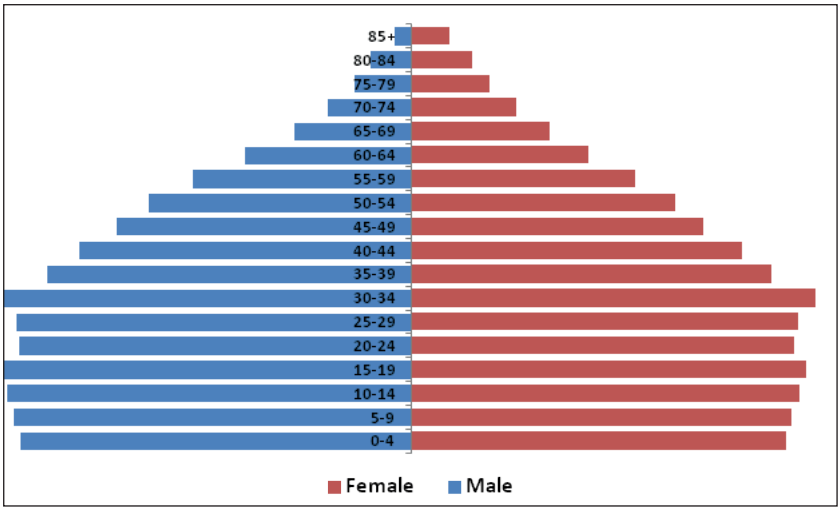
However, Turkey is in a transition period for reforming its healthcare system and there are some areas where additional policies may be needed to strengthen the system and achieve financial sustainability [5-6]. The system still faces new challenges in further enhancing the efficiency and hence catching other developed countries to have better health outcomes, as well as ensure sustainability with aging population and extensive benefit package.

This paper aims to evaluate the performance of the Turkish healthcare system soon after the introduction of HTP in terms of health spending, healthcare resources, health status, utilization, and patient satisfaction and then recommends some policy options to better strengthen and improve the system according to the three fundamentals of the healthcare system: quality, access, and cost. It first provides a brief background of Turkish healthcare system by clarifying the main financing methods, provision of healthcare services, payment mechanisms in the healthcare delivery pre and post the reform. Secondly, the overall performance of the healthcare system is assessed in terms of health spending, health resources, health outcomes, utilization, and patient satisfaction by comparing some parameters with OECD countries. Afterwards, main challenges of the system are addressed; some policy options for reform are listed to improve quality and efficiency. Finally main conclusions are presented.

I. Background of Turkish Healthcare System: Before and After HTP

Turkey's population is roughly 76.7 million in 2013, nearly 9 out of 10 people live in towns and cities (91.3%), and annual population growth rate in 2013 is 14 in thousands [15]. Turkish population is quite young compared to other nations with median age of 30.4. People within 15–64 age group constitute 67.7% of the total population; 0–14 age group corresponds to 24.6%; while senior citizens aged 65 years or older make up 7.7% (Figure 1). One important point here is that Turkey is aging rapidly. While the share for 65+ aged was 5.7% in 2000, it reached to 7.7% in 2013. Life expectancy stands at 72 years for men and 77.2 years for women, with an overall average of 74.6 years, 2.7 years increase over a decade [12].

Figure 1. Population pyramid in Turkey, 2013



Source: TurkStat, 2014.

Many actors take part in the process of healthcare system development in Turkey. The state fulfills its general responsibilities for planning, coordination, and financing. The development of health system institutions is mainly undertaken by the Ministry of Health (MoH), military institutions, parliamentarian commissions, the Ministry of Labor and Social Security, the Ministry of Finance (MoF), the Council of Higher Education, the Ministry of Development, the Social Security Institution (SSI), and other relevant organizations [16]. Additionally, other

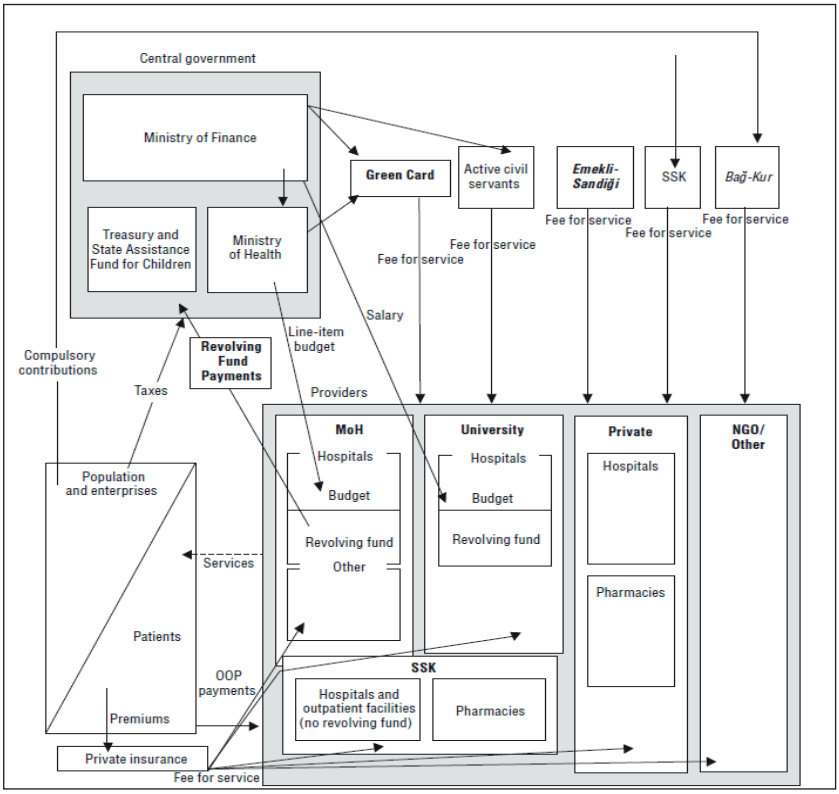
non-governmental organizations such as Turkish Medical and Pharmacists' Associations, chambers of doctors, associations representing pharmaceutical industry, private hospitals association, and international organizations such as World Bank (WB), OECD, International Monetary Fund, and World Health Organization (WHO) all figure in the policy-making process.

Turkish healthcare system has been witnessing great transformation since 2003 with the main purpose of achieving better healthcare outcomes and wider access to health services by the gradual introduction of universal health insurance through organizing, providing, financing for, and delivering health services in an effective, productive, and equitable way under the HTP [9].

a. Before HTP

Prior to 2003, three separated health insurance schemes - namely SSK (covering blue and white-collar workers in the public and private sectors and their dependents), Bag-Kur (covering merchants, artisans and self-employed and their dependents), and Emekli Sandigi (covering retired civil servants and their dependents)- operated with widely differing benefits, regulations, and contribution levels. Moreover, active civil servants' health expenditures were financed through allocations from the government budget to institutions through general revenues. Finally, Green Card program, introduced by the government in 1992 as a social assistance mechanism to cover poor people earning less than one-third of the minimum wage, was financed from the MoH budget via general revenues. While public spending on health was composed of the expenditures incurred by MoH, universities, other ministries and agencies, local governments, state enterprises, and social security schemes; private spending involved out-of-pocket payments and private health insurance reimbursements. As seen in Figure 2, healthcare system in Turkey had a scattered and complex structure.

Figure 2. Flows of funds in Turkish health system up to 2003



Source: WB, 2008

Benefit packages among the health insurance schemes varied widely. SSK members could only receive health services through SSK hospitals and pharmacies unless they were referred to private and university hospitals whereas Bag-Kur enrollees were allowed to have medical examinations, laboratory tests, and inpatient and outpatient services from a wide range of providers. Green Card holders provided limited health services in only MoH and university hospitals. However, Emekli Sandigi beneficaries and civil servants had the most extensive benefits package including medical and non-medical services and access to all types of public and private facilities. All those groups paid copayments and coinsurance depending on the benefit as a cost sharing mechanism.

Contribution rates levied on payroll wages also differed among each health insurance scheme. For instance, in SSK employees paid 5% of their gross salaries and employers contributed an additional 6% as a health insurance premium. Emekli Sandigi did not separate the contribution revenues as health or pension revenue, however 20% was the state share as employer; 16% was the participant share. It did not cover the health spending of civil servants, instead they were financed from the general taxes. In Bag-Kur, the contribution was collected from the 20% of the revenues of the enrolles based on bracket system.

In 2003, the supply side of the healthcare system was a mix of public and private actors and had a four-tiered health delivery system: the MoH, SSK, university hospitals, and the private sector. SSK was running its own hospitals and pharmacies. MoH was the major provider of primary and secondary healthcare and was essentially the only provider of preventive health services, as well as tertiary care in reseach and training hospitals. University hospitals provided a full range of hospital services (outpatient, inpatient and tertiary care). Private hospitals were providing health services through hospitals, clinics and polyclinics, doctors' offices, pharmacies, laboratories, and the production of medical instruments and medication and tended to be concentrated in larger cities [17]. MoH and university hospitals were funded through two sources; line-item budget financed by MoF to cover base salaries of employees, operating costs, and investment spendings, and revolving funds financed from services rendered to social security schemes and Green Card holders and fees paid by private patients.

b. After HTP

With the launch of the HTP, Turkey has experienced many alterations in the healthcare system. In 2004, in order to improve performance of MoH hospitals, individual performance based supplementary payment system was implemented in MoH hospitals. A reimbursement commission in charge of setting prices for health services and pharmaceuticals reimbursed by SSI, as well as making changes to the SSI benefits package was established in 2004. In February 2005, SSK hospitals were transferred to MoH to ensure uniformity among public health service providers in terms of the quality of services and SSK pharmacies were closed. Then SSK beneficiaries had the right to access all public hospitals and pharmacies. Moreover, Green Card holders were given access to outpatient care and pharmaceuticals to enhance financial

protection. In 2006, global budget was implemented for MoH hospitals. In 2006, the pharmaceutical positive list across all the health insurance schemes was integrated and reference pricing was established. The centrepieces of the reformed system were the Universal Health Insurance (UHI) Scheme, a single system combining all existing schemes under one umbrella, and the SSI, a single-payer insurance agency founded with the enactment of the law 5502 in 2006. In 2007, Health Implementation Practice (SUT) was introduced to harmonise and equalize the benefits across the formal health insurance schemes of SSK, Bag-Kur, and Emekli Sandigi and referral requirement for accessing secondary and tertiary care was removed. In 2007, a unified claim and utilization management system called MEDULA was established to standardize the submission of claims across all the health insurance funds.

Social Insurance and UHI Law was adopted in 2008 to provide the Turkish population with access to a wide range of health services and ensure unity, equity, and efficiency in the delivery of the services. Besides, UHI is obligatory and has universal coverage. The system includes all Turkish citizens, refugees and foreigners who have resided legally in Turkey for more than one year and do not have health insurance coverage from another country.[2] The benefit package covers primary care and preventive care, including personal preventive care and protective care for drug addiction; ambulatory and inpatient care benefits, laboratory services, patient follow-up, rehabilitation services, emergency health services, organ, tissue and stem cell transplantation and curative services; maternal benefits as well as in vitro fertilization treatment. Cosmetic services and cosmetic orthodontic treatment, health services that are not authorized by the MoH, and services that are not accepted as health services by the MoH are excluded from the benefit package.

The new system relies on social insurance contributions and the redistributive effect of general taxation. Social insurance contribution is based on payroll income. The contribution rate is set at 12.5% of a person's gross earnings, divided between the employee (5%) and employer (7.5%). Moreover, the government pays premiums on behalf of the poor people earning less than one-third of the minimum wage. UHI contribution for individuals subject to only UHI is 12% of their earnings. The state contributes to the system at a rate of one fourth of universal health insurance contribution collected by SSI per month.

2 Social Insurance and Universal Health Insurance Act, article 60. 2008.

Turkey became a 100% smoke-free country on 19 July 2009 – smoking is no longer permitted in indoor public places including the hospitality sector. In 2010, all civil servants were included to SSI and at the beginning of 2012 Green Card holders were brought under SSI. The implementation of family medicine began with a pilot practice in Duzce in 2006 and since 2011 it has been effectively implemented all over the country. However, Turkey has not established a referral system yet.

SSI, as the single purchaser in the health sector, is responsible for purchasing healthcare services from healthcare providers on behalf of the insured population. Health services are provided through contracts made between the SSI and healthcare providers. SSI pays MoH hospitals based on global budget determined each year. University and private hospitals are paid based on fee for service and some bundled services. There was a global budget negotiated with the representatives of pharmaceutical industry for pharmaceutical spending between 2010 and 2012 for three years to curb pharmaceutical spending and if the budget was exceeded, SSI could rise public rebates of drugs in the positive list. In order to share cost with the patients, SSI introduced new copayments for outpatient visits and prescriptions written.

II. Performance Assessment of Turkish Health System

The health of the population is always a national priority. Government responsibility is continuous and permanent. How well a health system performs depends on how well it achieves its goals. Therefore, assessing the performance of the health system is of great importance. In this section, performance of Turkish health system is investigated in terms of health spending, healthcare resources, health status, utilization and patient satisfaction.

a. Health spending and financial protection

Total health spending accounted for 5.4% of GDP in Turkey in 2012 with roughly more than fourfold increase in nominal terms compared to 2002 [10]. With the implementation of cost-containment measures to curb pharmaceutical spending after 2009[3], total health spending as a percentage of GDP dropped by 0.7 percentage points in 2012 compared to 2009 which was 6.1% in 2009. Health expenditure per capita, which was USD $188 in 2002, was raised to USD $566 in 2012 (Table 1).

3 Based on a study conducted by SSI staff, it is estimated that all those cost-containment measures reduced total spending by 0.5 percentage points of GDP on average.

Table 1. Indicators of health expenditures, 2002-2012

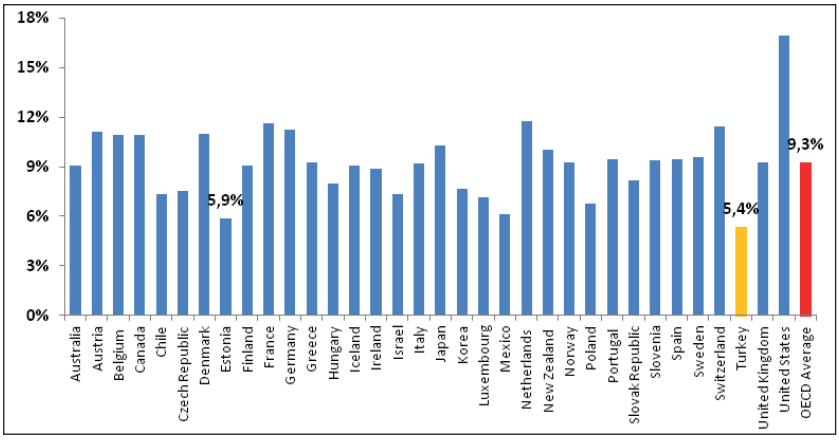
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total health expenditure (Million TL)	18774	24279	30021	35359	44069	50904	57740	57911	61678	68607	76358
Health expenditure per capita											
Turkish Liras (TL)	284	363	443	516	635	725	812	804	845	928	1020
USA Dollars (USD)	188	242	310	382	441	553	624	521	563	553	566
Health expenditure to GDP	5,4	5,3	5,4	5,4	5,8	6,0	6,1	6,1	5,6	5,3	5,4

Source: TurkStat, 2013

Compared to OECD countries as seen in Figure 3, excluding Turkey the lowest health expenditure figure in 2012 belongs to Estonia with 5.9%, whereas US ranks first spending 16.9% of GDP on health [12]. Based on a study conducted by SSI staff, if Turkish demographic structure were such as the same as in OECD countries, Turkey would approximately spend 9% of its GDP on health in 2008 (still below the average of 9.3% across OECD countries in 2012) signaling a budget constraint on the finances in the future. Moreover, in 2012 77% of total spending was funded by public sources, rising 7 percentage points compared to 2002 and out-of-pocket payments only constituted 15% of total spending, decreasing from 20% in 2002 [10]. Besides, while an average household spent 2.3% of his/her income on health in 2002, the figure drops to 1.8% in 2012 and rose to 2.1% in 2013 (Figure 4) [18]. Moreover, with UHI nearly all population is covered with health insurance. All those clearly show Turkey improved both financial protection against high health expenditures, and equity in access to health care across the population with the introduction of UHI. The parallel result is also confirmed by Figure 5, indicating that change in out-of-pocket spending as a share of total health spending decreased 12.3 percentage points between 2000 and 2012, the highest reduction among OECD countries.

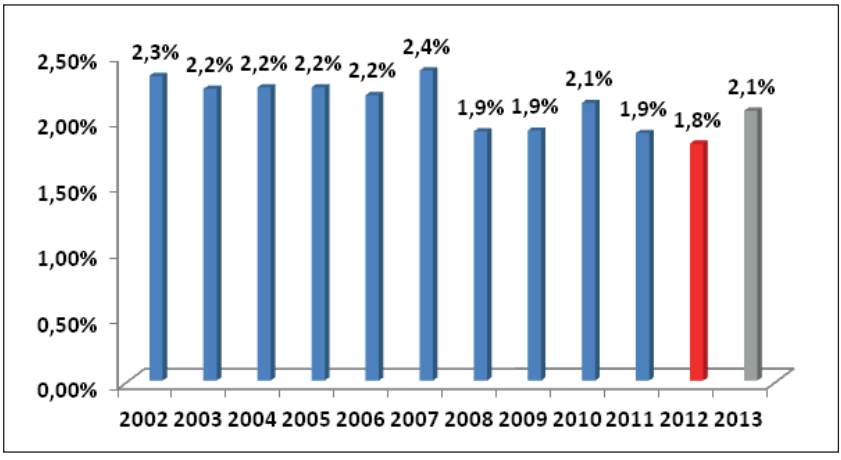
Consequently, Figure 6 exhibits that in Turkey richer households allocated more of their household spending to health expenditure than poorer households both in relative and absolute terms [19]. Institutional and organizational reforms explained in the previous section contributed to eliminate fragmentation and duplication in the health financing and delivery systems and assure universal access to health insurance and health services, hence strengthened financial protection.

Figure 3. Health expenditure in OECD countries in 2012



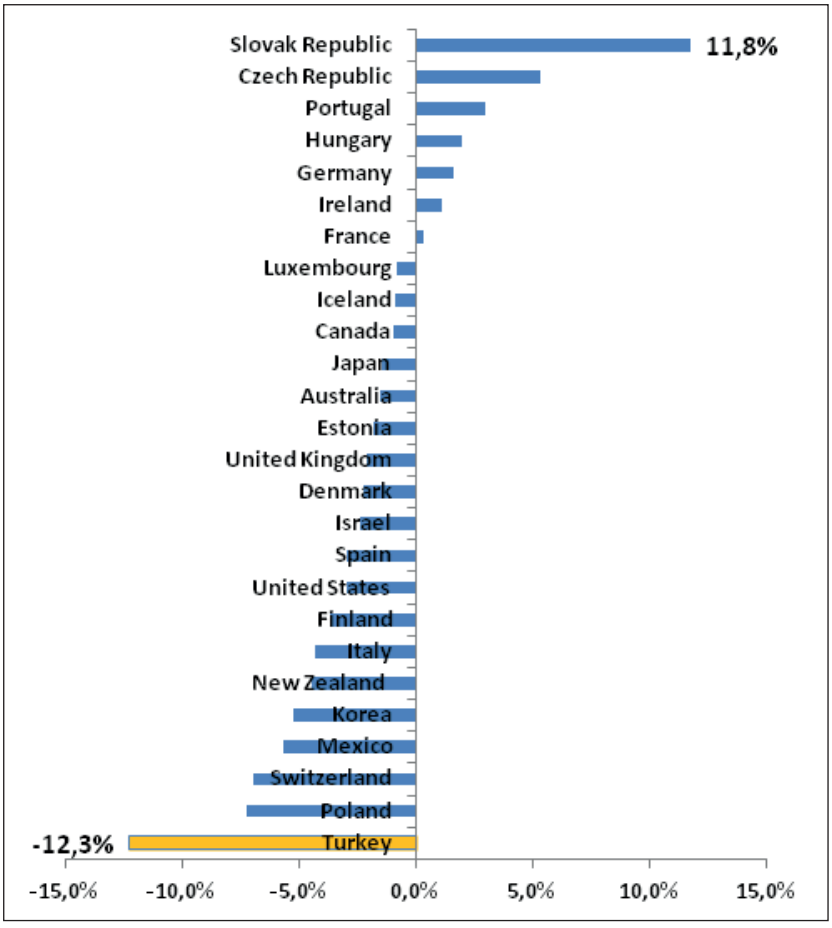
Source: OECD Health Data 2014

Figure 4. Distribution of health expenditures on overall household consumption



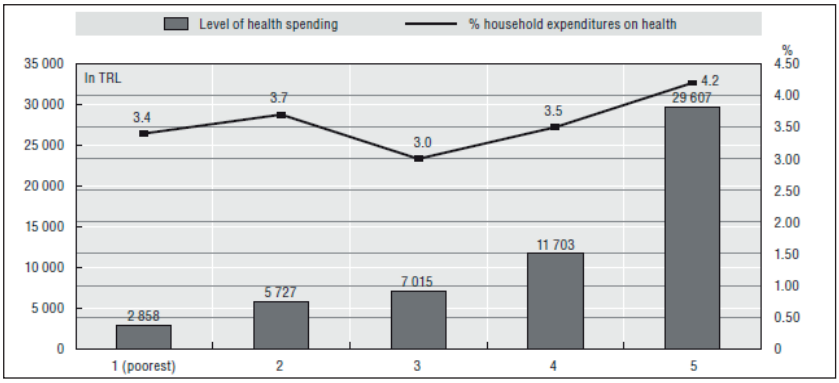
Source: Household Budget Survey, TurkStat

Figure 5. Change in out-of-pocket spending as a share of total health spending, 2000-12 (or nearest year)



Source: OECD Health Data 2014

Figure 6. Out-of-pocket (OOP) health spending and its share in household expenditures



Source: Aran-Kazanci M. and Hentschel J. 2008

b. Healthcare resources

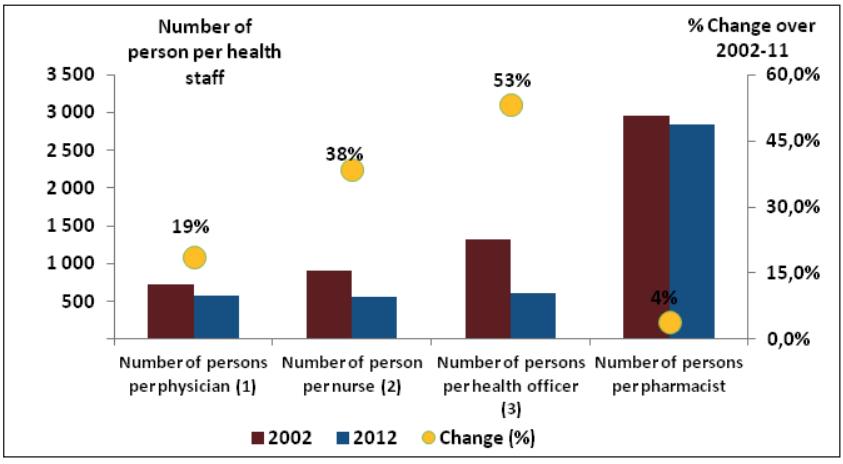
Healthcare resources are one of the important indicators figuring the performance of a healthcare system. Sufficient health staff and providers let patient access easily to health services and receive good healthcare. In addition, higher number of providers presents more choice for patients and choice improves quality since providers struggle with other providers to have more patients.

A continuous increase is seen in the numbers of nurses, health officer, and physicians for the last ten years. Based on MoH figures, number of persons per physician, nurse, health officer went up by 19%, 38%, and 53% respectively from 2002 to 2012. There has not been significant change in number of persons per pharmacist over 9 years, only 4% rise. In accordance with the government's objective of increasing the number of nurses and physicians by 2023, there has been an increase in the number of nursing schools and medical schools and the number of students graduating from these schools. Furthermore, government passed a law allowing hiring foreign physician to close the health staff gap. These publicly proposed objectives show that this problem should be resolved in the medium term. Nevertheless, this is an issue that needs to be taken into account in the short term. When it comes to compare Turkish health staff data with other countries' data, Turkey ranks last in physician density per 1000 population data, nearly half of OECD average (Figure 8) [12]. In terms of nurse density,

Turkey has the lowest figure with 1.8 nurses per 1000 population and is far below OECD average (Figure 9) [12]. In terms of recent medical and nursing graduates, Turkey is still lagging far behind OECD average in 2012 [12].

Similarly, the number of hospitals has grown over the past 10 years in line with the increase in healthcare spending. Number of healthcare providers almost tripled from 2002 to 2012 reaching nearly 30.000 hospitals. The increase in the number of private hospitals is especially noteworthy when compared with a smaller change in the number of MoH-operated hospitals. The main reason for this increase in private hospitals stems from the increase in public health insurance coverage and extensive benefit package; and private sector has taken advantage of this transformation, investing on health services. However, during the same period, number of hospital beds per 1000 population only rose slightly, only 18%, indicating that many newly opened hospitals do not offer inpatient services. The OECD average number of hospital beds per 1000 people is 4.8 [12]. In the US, which is the world's largest health market, the number is 3.1 and in Japan, another major health market, it is 13.4. Turkey lags behind the world and OECD averages, with 2.7 beds per 1000 people [12].

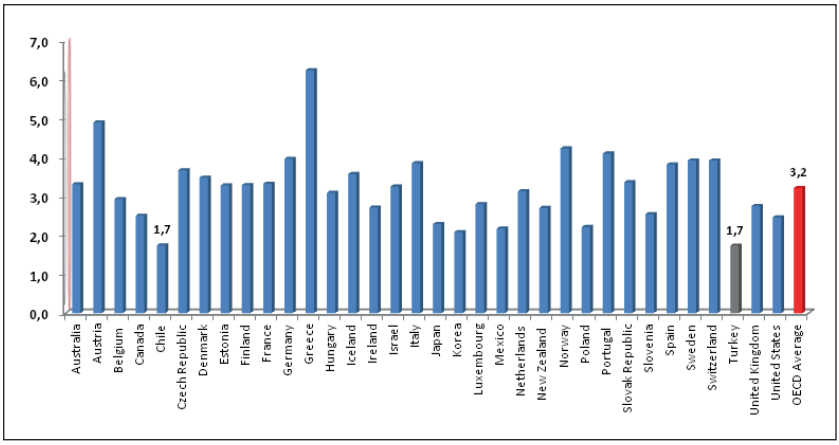
Figure 7: Number of person per health staff change 2002-12



Note: (1) Total of specialists, practitioners and assistant doctors, (2) Also covers nurses graduated from a school of nursing and assistant nurses, (3) Covers those who have graduated from health colleges, public health high schools and health departments of village schools.

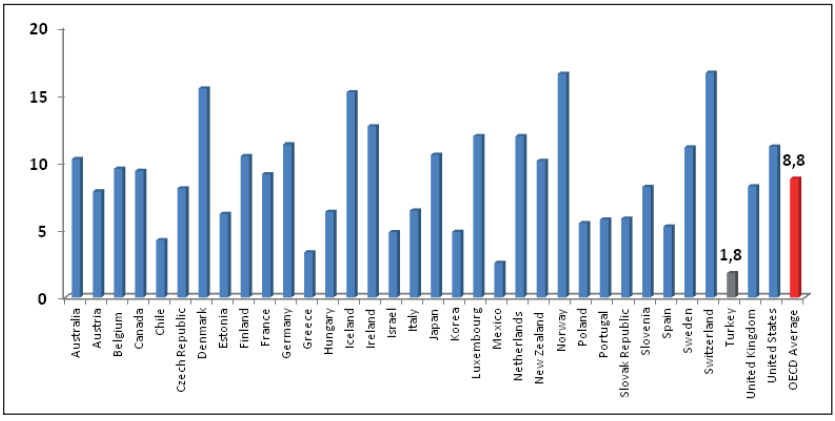
Source: Ministry of Health

Figure 8: Physicians, Density per 1 000 population , 2012 or nearest year in OECD countries



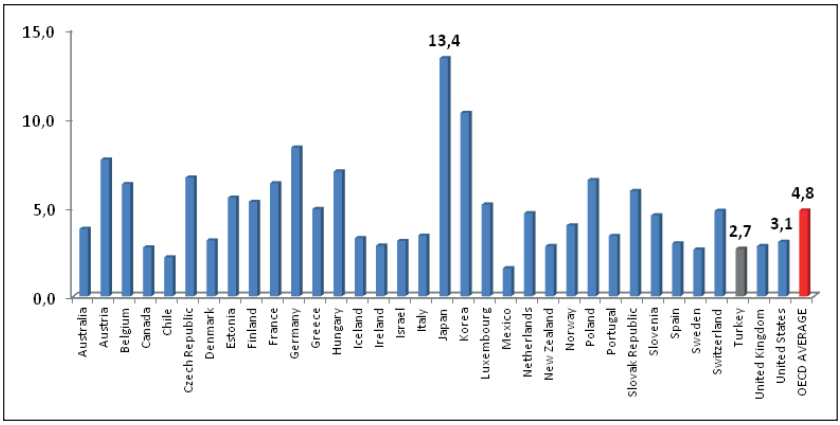
Source: OECD Health Data 2014

Figure 9: Nurses, Density per 1 000 population , 2012 or nearest year in OECD countries



Source: OECD Health Data 2014

Figure 10: Total hospital beds, per 1 000 population, 2012 or nearest year in OECD countries



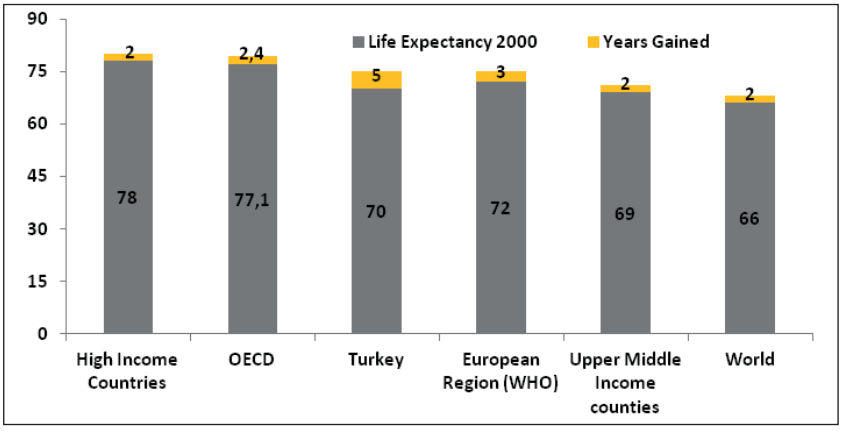
Source: OECD Health Data 2014

c. Health status

The health status of the Turkish population has improved significantly over the last decade. Among OECD countries, Turkey yielded one of the greatest gains in life expectancy between 1960 and 2009, with an overall increase in longevity of 25 years. While life expectancy in Turkey was 20 years below the OECD average in 1960, it was less than 6 years lower by 2012 [12]. A parallel result can also be seen with the years gained between 2000 and 2009. While Turkey enjoys a life expectancy of 70 years in 2000, 7 years lower than OECD averages, in 2009 the figure rose to 75 and the gap between OECD and Turkey shrank to 4.5 years [20].

A positive relationship is seen between increasing health expenditure and life expectancy when comparing average life expectancies and per-capita healthcare expenditure across OECD countries. Given this, increases in spending should be considered as completely natural in those countries that aim to increase lifespan. We see in Turkey both lower average life expectancies and lower per-capita healthcare spending compared with OECD countries and Turkey is below the regression line (Figure 12) indicating that given per capita health spending Turkey should produce higher average expectancy compared to its realized life expectancy.

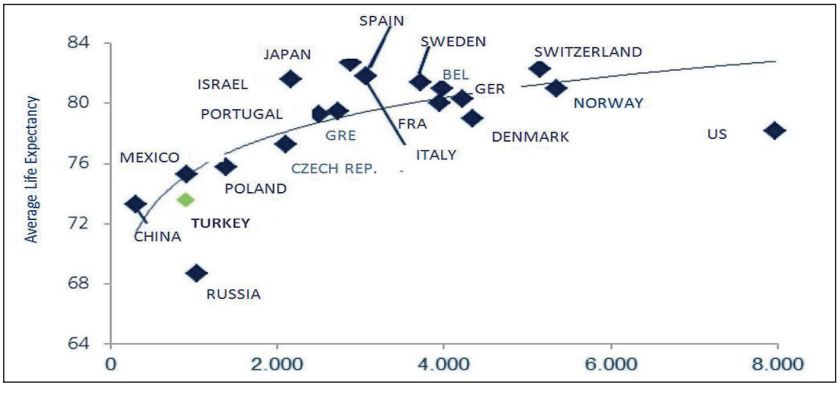
Figure 11: Life expectancy at birth, 2000-9 comparison



Source: OECD Health Data July 2012, World Health Organization World Health Statistics 2011

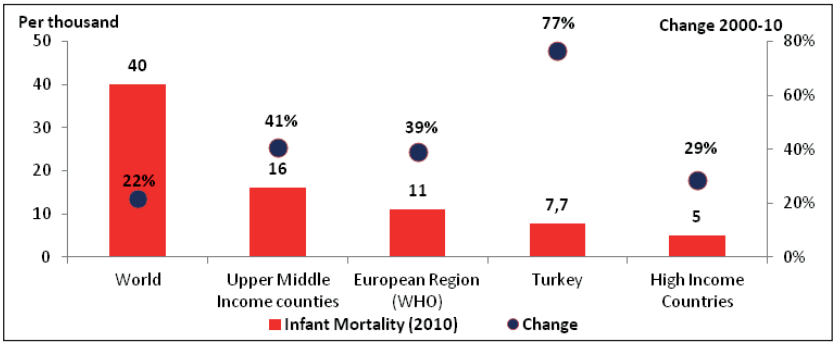
Similarly, infant mortality rate in Turkey has fallen dramatically over the past few decades, down from 190 deaths per 1,000 live births in 1960 to 13.1 and 7.7 deaths in 2009 and 2011 respectively, yet still roughly two times higher than the OECD average (OECD average is 4.1) [12,21]. However, Turkey showed the greatest improvement by reducing infant mortality, 77% reduction over 10 years, but there is still room for improvement to catch high income countries.

Figure 12: Average life expectancy and per capita health spending



Source: OECD

Figure 13: Infant mortality rates, 2000-10 comparison



Note: Turkey data belongs to year 2011.

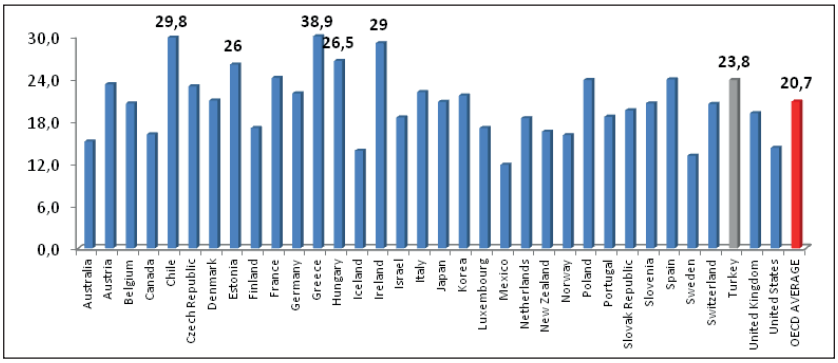
Source: World Health Organization, World Health Statistics 2012, Survey on infant and under 5 year child mortality in Turkey in 2012

A report written by Rifat Atun has found that improved access to healthcare for expectant mothers has helped to reduce infant and neonatal deaths in Turkey by more than 50% over the last decade. The reduction in infant mortality rates in Turkey is a direct result of the introduction of HTP by the Turkish government aiming at regions with the highest poverty rates. According to the same report, the program has rapidly expanded access to health-care services for all citizens, especially benefitting the poorest people in the country.

Turkey took important steps to tackle communicable disease burden. There has been great progress towards the elimination of malaria, with no case fatalities from 2006 to 2011. The treatment success rate among newly detected laboratory-confirmed cases of tuberculosis increased from 73% in 2000 to 92% in 2008 [22]. Within the national immunization program there is high coverage of infants and children with vaccines including 11 antigens. This has contributed Turkey to have surpassed the average performance in the European region. Since 2006 there has been significant success in expanding the immunization program by adding four new antigens, and in decreasing inequalities in immunization coverage by increasing the proportion of provinces having more than 90% coverage with third dose of diphtheria, pertussis, tetanus vaccines to 97% in 2010 [23]. The combined effect of the extensive measles immunization campaigns in 2003 and 2005 and routine immunization and strengthened surveillance for measles and rubella have brought the country to incidence levels close to elimination in 2009; observed cases are of foreign origin in since 2010 [23].

The impact of anti-tobacco measures is very well illustrated in Turkey with the implementation of smoking ban in indoor public places. Indeed, the percentage of the Turkish population aged 15 years or above who smoke daily (current daily smokers) has declined from 47% in the mid-1980s to 27.4% in 2008 and 23.8% in 2012 [12]. This represents a significant decrease, the largest in all OECD countries. However, Turkey continued to have one of the highest smoking rates in the OECD in 2012 (Figure 14).

Figure 14: Tobacco consumption, % of population 15+ who are daily smokers, 2012 or nearest year in OECD countries



Source: OECD Health Data 2014

d. Access, utilization and patient satisfaction

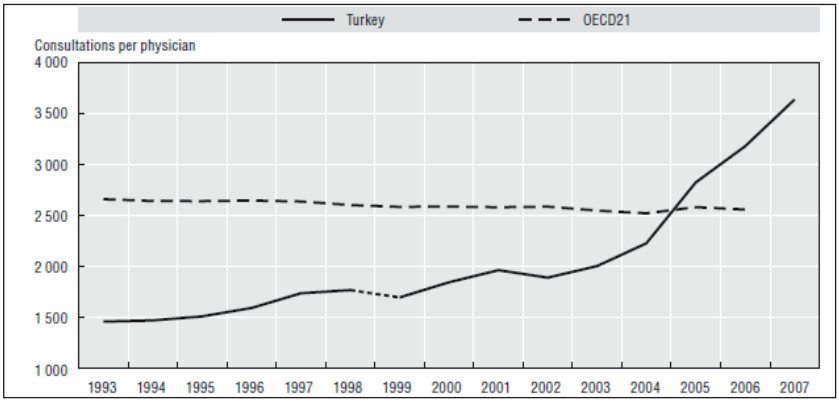
Inequalities in access to health care have improved somewhat since the implementation of recent reform measures. The population under 18 years of age is entitled to free access to health care services under the UHI, regardless of whether they are formally covered in their own right or as dependents. Adults over 18 and who are under the poverty line can apply for the Green Card Scheme, which provides free health care services.

Following the introduction of the HTP, there were reports of shorter waiting times, longer consultation times, and steeply rising overall satisfaction with the quality of both primary health care and health care in public hospitals. Average consultation times per patient more than doubled from 2002 to 2012 reaching to 9.5 in 2012 in public hospitals, but it is still low compared to other countries. To further increase consultation times Turkey should invest on more health staff for sure.

2008 EUROPEP Survey investigating patient satisfaction with primary care services concluded that Turkish patients seemed to be particularly pleased with their new family practitioner services and satisfaction level was as high as average levels in Europe, in fact even higher [5]. Overall satisfaction with health services among Turkish citizens rose from 39.5% in 2003, just before the beginning of the HTP, to 55.2% in 2005 and to 66.5% in 2007 [24] and according to latest Life Satisfaction Survey conducted by TurkStat, nearly 75% of the population is satisfied with the health services they received in 2013 where patient satisfaction in Europe in 2011 is only 62% [14,25]. Finally, life satisfaction survey in 2009 stated that the percentage of individuals reporting difficulty in meeting pharmaceutical and curative health expenditure was 50% in 2003 but decreased to 19% in 2008 [26].

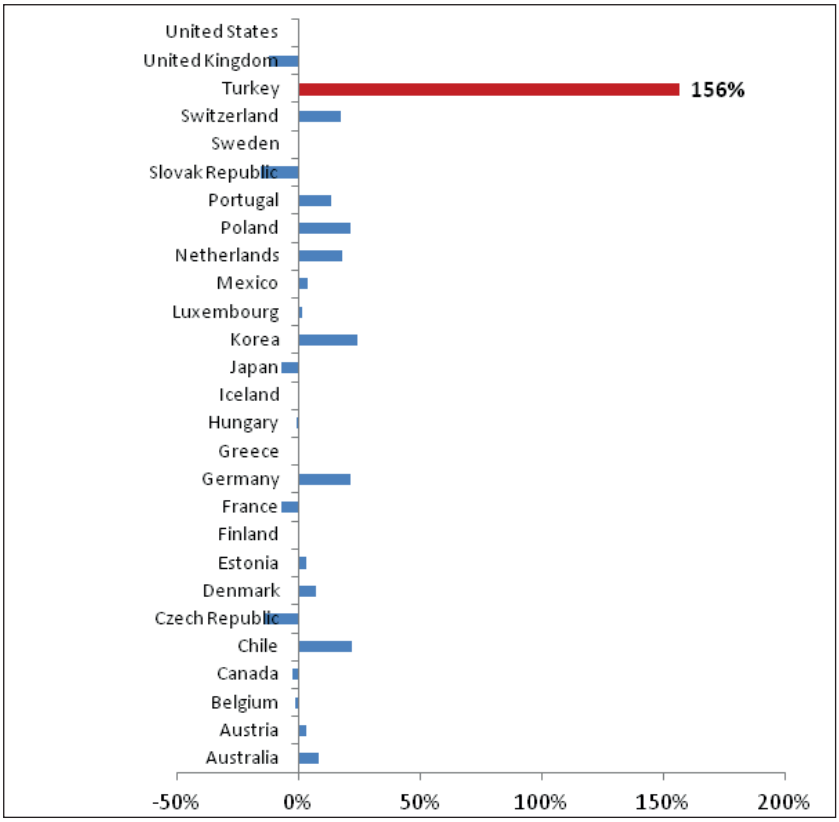
Since the introduction of performance-related payment to MoH employees, there seem to have been large increases in the volume of activity and in physician productivity. Figure 15 shows consultations per physician rose steeply in Turkey from 2004 and that they exceeded the OECD average in 2005. Number of visits to the healthcare facilities per person was 1.5 in 1993, 3.2 in 2003, and rose to 8.2 in 2012. Each person goes to family physician 3.2 times in 2012 and 5 times to the hospitals. Over the last ten years from 2002 to 2012, average doctor consultation in Turkey increased by 156%, the highest increase among all OECD countries (Figure 16) [12]. All those clearly points out that Turkey performing well in terms of patients accessing to health services and they enjoy quality of services.

Figure 15. Consultations per physician, OECD and Turkey comparison, 1993-2007



Source: OECD Health Data 2008 and School of Public Health, Turkey.

Figure 16. Doctors consultations, Number per capita, % change over 2002-12



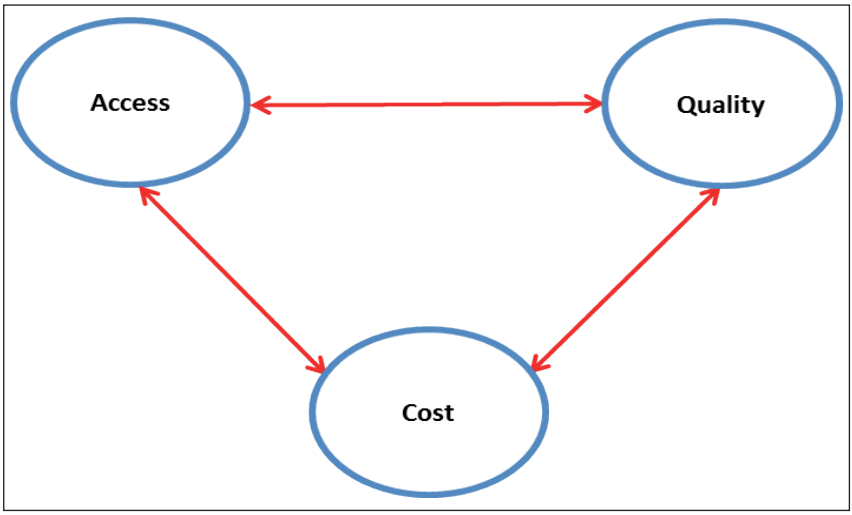
Source: OECD Health Data 2014

III. Main Challenges and Policy Recommendations

A healthcare system needs to have three fundamental features: quality, cost and access. Ideally, these features are equally important and they target the creation of the best-possible healthcare system. Cost and access are both generally driven by public policy and impact quality at the end. That's why; an ideal healthcare system is one that provides individuals utilizing the system with the highest-quality healthcare services at the lowest cost ensuring unlimited access. However, in practice limited resources means guaranteeing these fundamentals simultaneously is impossible. As a result, managing a healthcare system's limited allocated resources in order to supply services in the

most effective way appears to be a difficult as well as a critical process. Given the current changing demographic and economic indicators, sustainability and quality have become essential for the operation of a cost-oriented system.

Figure 17. Three fundamentals of a healthcare system



As explained in the previous section, Turkey has achieved considerable success in expanding health insurance coverage for its population, improving access to health services, improving health outcomes, and building institutional capacity to sustain the health system strengthening reforms. However, Turkey faces new challenges in further enhancing the efficiency and quality of the system and improving the health status of the population while maintaining the sustainability of public spending on health at the same time [5-6,27-28].

Due to the comprehensive scope of Turkey's UHI, changing demographics and various economic indicators, maintaining sustainability of the healthcare system has become difficult and places a strain on the government's finances. Therefore, funding and cost-containment measures are the two key issues maintaining sustainability, the first challenge. Turkey either needs to allocate more funds or reduce cost for ensuring sustainability. Raising more resources in terms of premium collection is critical. Informal economy is a significant problem most countries face. Informal-sector workers account for some 22% of

employment and 25% of the workforce does not report income for tax purposes in Turkey [29] and this results in narrowing tax base and hence fall in the health premiums and finally less revenue to be allocated to health spending. According to TurkStat Household Labour Force Survey, June 2014, unregistered people in the labor force are more than 9.6 million consisting of 36.4% of total employment [30]. In Turkey, UHI provides health benefit not only to the contributor (the person paying premiums to the system) but also to the dependents such as spouse, children even parents under some conditions. Even though those people are unregistered and do not contribute to the system, they somehow benefit from the health package over their spouse or child as a dependent. Then covering those unregistered people as contributor has great importance in terms of building additional funds. Assuming that counting only half of that population in (reducing informality by 50%) and they contribute to the system over minimum wage (as of July 2014, minimum wage is 1134 TL), premium collection would rise by 10.2 billion TL (0.6% of GDP) in 2014. In short, reducing informality by 1 percentage points creates 0.54 billion TL additional funding to the public healthcare system on average. As a solution, one way to mitigate informality is to decrease tax burden and since 2008 government has been subsidizing 5% of the social security contributions of employers. In addition, new measures such as rising penalties for informality and underreporting, introducing risk oriented inspection methods, coordinating with other government and non-government organizations can contribute to combat informality.

Another way to maintain sustainability is to adopt new measures to stabilize health spending and curb costs. The benefit package covered by SSI is very extensive. On one hand extensive benefit package is good for improving health outcomes, ensuring financial protection, and increasing consumer satisfaction; on the other hand it poses an obstacle on maintaining sustainability of the system. It also creates moral hazard problem if cost sharing mechanisms such as copayments and coinsurance are not established. Besides, the system lacks incentive-based payment mechanisms to enhance efficiency and control costs. Turkey must shift to incentive-based payment mechanism such as diagnostic related groups (DRG) and other bundled payment systems for monitoring the cost and quality of the services [5-6]. With the aging of the population and improvements in medical technology, it will be inevitable to set rules for covering new technologies to withs-

tand future cost pressures and implement cost-effectiveness methods while expanding or narrowing the benefit package. Finally, the related stakeholders in the public such as MoH, SSI, MoF must monitor spending and revenues to confer and assure sustainability and value for money.

Consequently, health technology assessment (HTA) plays a crucial role here. The recent guideline for reimbursement applications has made pharmacoeconomic analysis compulsory. The implicit criterion at present is the budget impact of inclusion/exclusion of a procedure/technology from the positive list. HTA is at its infancy in Turkey; there is not yet sufficient capacity to undertake or evaluate HTA principles and methodologies. As the sustainability of the health system's financing will be a major challenge facing policy-makers in the years to come, particularly in light of improved access with higher demand for health care services, improved technology, and an ageing population, it is clear that the government will have to employ approaches such as HTA and health economics in order to improve efficient and effective use of resources. Hence, SSI needs to launch policies using HTA when deciding on whether new health technologies are reimbursed or not. Turkey should offer transparent and fair decisions on the reimbursement.

Moreover, pharmaceuticals account for about one-third of total health spending in Turkey [10]. Many steps were taken to reform pharmaceutical policies such as introducing reference pricing, unifying positive lists, implementing copayment for the prescription written. In 2010, with the introduction of copayments for prescriptions, the number of prescriptions decreased by 6% annually and public discounts together with copayments helped mitigate public pharmaceutical spending. However, other measures must be taken so as to control cost. For example, there are nearly 8000 drugs in the positive list and this number is increasing each year. Reimbursement commission must update this list based on cost-effectiveness criteria and therapeutical equivalence. They should alter generic pricing model and as new generics come to the market, the price of all competitors drop. Moreover, a new system to monitor physician's prescribing behavior was developed but needs to be improved so as to incentivize rational prescribing in qualitative and quantitative terms.

In Turkey, SSI determines the prices of procedures and operations. However, the pricing process does not incorporate the real costs of

procedures/operations and this creates problems in terms of quality and cost. Many providers tend to make the operations yielding the highest profit. Hence, SSI should revise the prices relying on cost data in order to improve quality. As one option, Turkey can implement pilot studies in some hospitals to measure cost and use them for real pricing of procedures.

Family medicine system has been effectively implemented in all over the country since 2011. Each person has his/her own general practitioners (GPs) and has the right to change his/her GP. However, one important characteristic of this practice is missing. The GPs do not have a gate keeping role. Based on SSI data, with the elimination of the referral system in 2007, number of claims and payments to hospital has increased drastically for the last four years (more than 10% each year).[4] Moreoever, only less than half of the prescriptions are written by GPs. Therefore, absence of referral system encouraged people routenely by-pass primary health care to seek services at higher levels of care and this increased not only the cost of health services (the cost of GP consultation is much lower than the cost of specialist consultation) but also waiting times, as well as avoided secondary and tertiary hospitals treat patients needing specialized care which led to lower quality of care. As a result, establishing mandatory referral system can lead to savings in pharmaceutical spending, as well as hospital spending, and hence serves as a cost containment mechanism and increases efficiency and quality. Furthermore, family practitioners are paid by MoH, in terms of cost-containment and quality, SSI must pay for the practitioner by offering incentives or penalties. For example, a GP having higher percentage of referral ratio can be penalized to strenghten gate keeping system or a GP prescribing lower- priced drugs or less antibiotics can be paid higher amount.

Turkey also needs to urgently pass the bill about public hospitals' autonomy, gradually giving public hospitals more freedom to act efficiently such as hiring and firing staff, deciding on managerial and financial issues, contracting with SSI. This autonomy will let hospitals compete effectively with private hospitals and realise the full potential for efficiency gains inherent in the new purchaser/provider split for hospital services in Turkey.

Finally, MoH increased investment on primary care but we need

4 Based on Social Security Institution MEDULA data.

to keep in mind that primary care is the backbone of healthcare system and preventing disease is much better than treating the disease in terms of health ourcomes and health spending. Therefore, allocating more resources to primary and preventive care must be one of the priorities.

CONCLUSION

Over the last decade Turkey has achieved compelling improvements in its healthcare system with the introduction of HTP launched in 2003. The HTP was designed to organize healthcare services in an effective, efficient and equal way. Turkey moved from a system of multiple insurance schemes covering only majority of the population to a single-payer system providing the whole population with access to a wide range of health services and ensuring unity, equity, and efficiency in the delivery of these services. Family medicine was adopted to the whole country and MoH allocated more and more resources on primary care

As a result, performance of Turkish health system improved in terms of health spending, healthcare resources, health status, utilization and patient satisfaction. Total health spending accounted for 5.4% of GDP in Turkey in 2013 with roughly more than fourfold increase in nominal terms compared to 2002 even though government introduced cost-containment measures to curb pharmaceutical spending since 2010. During the same period, share of the public health spending also rose by 7 percentage points and out-of-pocket payments only constituted 15% of total spending, decreasing from 20% in 2002. A continuous increase is seen in the numbers of nurses, health officer, and physicians for the last ten years and there has been an increase in the number of nursing schools and medical schools and the number of students graduating from these schools to increase health staff. Similarly, the number of hospitals has grown over the past 10 years in line with the increase in healthcare spending. However, when compared to OECD countries, Turkey still falls behind OECD averages. The health status of the Turkish population has improved significantly over the last decade. Among OECD countries, Turkey yielded one of the greatest gains in life expectancy between 1960 and 2009, with an overall increase in longevity of 25 years, but given per capita health spending Turkey should produce higher average life expectancy compared to its realized life expectancy. Turkey showed the greatest improvement by

reducing infant mortality, 77% reduction over 10 years, but there is still room for improvement and catch high income countries. Turkey also took important steps to tackle communicable disease burden. The impact of anti-tobacco measures is very well illustrated in Turkey with the implementation of smoking ban in indoor public places. HTP also contributed to shorter waiting times, longer consultation times, and steeply rising overall satisfaction with the quality of both primary health care and health care in public hospitals.

However, new actions have to be taken to further promote health to catch developed countries and enhance efficiency in the delivery of services while maintaining the sustainability of public spending on health at the same time. Turkey should mitigate informal economy to collect larger amount of health premiums and then have more funds to finance healthcare. In order to improve the quality of health services, Turkey should allocate more on health resources such as health staff and hospitals, introduce incentive-based payment mechanisms that monitor the cost and quality of the services, adopt gate keeping system to reduce waiting times, making public hospitals autonomous to stimulate competition. Then in order to tackle and completely solve the access problem Turkey needs to invest more money on rural areas and primary care, allocate more health resources to the system. Finally to stabilize cost and hence spending, Turkey should increase capacity for HTA and health economics during reimbursement decisions, narrow the extensive benefit package.

REFERENCES

[1] Yıldırım HH and Yıldırım T. (2011). Healthcare financing reform in Turkey: Context and salient features. Journal of European Social Policy 2011; 21 (2):178-193.

[2] Investment Support and Promotion Agency of Turkey (2010). Turkish Healthcare Industry Report.

[3] PM Group (2011). Country Report:Turkey. Pharmaceutical market Europe. May 2011.

[4] Sulke SN. (2011). The impacts of healthcare reforms on the efficiency of the Turkish public hospitals: Provincial Markets. MPRA Paper No:34643.

[5] OECD (2008). OECD Reviews of Health Systems: Turkey. OECD and IBRD/The World Bank.

[6] World Health Organization (2012). Turkey health system performance assessment 2011. Regional Office for Europe.

[7] Deloitte (2012). Turkey life science and healthcare report. Deloitte Turkey.

[8] Barış E, Mollahaliloğlu S., Aydın S. (2011). Healthcare in turkey: From a laggard to leader. British Medical Journal 2011;232:7456

[9] Ministry of Health Turkey (2003). Health Transformation Program. Ankara: Ministry of Health.

[10] TurkStat (2014). Health Expenditure Statistics 2013. Press release no 16161.

[11] TurkStat (2013). Basic health and social inclusion statistics.

[12] OECD (2014). OECD Health Data 2014.

[13] Ministry of Health (2013). 10th of the health transformation program. Budget presentation at the General Assembly.

[14] TurkStat (2014). Life Satisfaction Survey 2013. Press release no 16052. March 11, 2014.

[15] TurkStat (2014). Address-based population registration system results of 2013. Press release no 15974. January 29, 2014.

[16] Savas S., Karahan O. and Saka O. (2002). Health Care Systems in Transition: Turkey. 4(4): 1–108. Copenhagen: European Observatory on Health Care Systems.

[17] World Bank/State Institution of Statistics (2005). Turkey Joint Poverty Assessment Report. Volume I: Main Report. Washington DC: World Bank.

[18] TurkStat (2014). Household Budget Survey 2013. Press release no 16202. September 2, 2014.

[19] Aran-Kazanci M., J. Hentschel (2008). Household level health expenditures and health insurance coverage of the poor in Turkey. Human Development Sector Unit. Europe and Central Asia Department. World Bank: Ankara Turkey

[20] OECD (2011). Health at a glance: OECD indicators. OECD Publishing.

[21] WHO (2012). World health statistics 2011.

[22] European Centre for Disease Prevention and Control/WHO Regional Office for Europe (2011). Tuberculosis Surveillance in Europe 2009. Stockholm, European Centre for Disease Prevention and Control.

[23] Ministry of Health Turkey (2010). Health statistics yearbook 2010. Ankara, Ministry of Health, School of Public Health (TUSAK).

[24] Akdag R. (2008). Progress Report 2008 Health Transformation Program. Ministry of Health. Ankara.

[25] European Commission (2011). Social Climate Report 2011. Special Eurobarometer 370.

[26] TurkStat (2010). Life Satisfaction Survey 2009. Press release no 27. February 18, 2010.

[27] World Health Organization (2013). Country cooperation strategy at a glance:Turkey. Available from: http://www.who.int/countryfocus/cooperation_strategy/ccsbrief_tur_en.pdf [Accessed on September 14, 2014].

[28] Tatar M., Mollahaliloğlu S., Şahin B. et al (2011). Turkey: Health system review. Health system in transition. European Observatory on Health Systems and Policies. 13(6):1-186.

[29] OECD (2008). Declaring work or staying underground: Informal employment in seven OECD countries. Chapter 2. OECD Employment Outlook. OECD: Paris.

[30] TurkStat (2014). Household Labour Force Survey, July 2014. Press release no 16012. October 15, 2014.