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TURKEY ON THE WAY OF UNIVERSAL HEALTH COVERAGE THROUGH THE HEALTH TRANSFORMATION PROGRAM (2003-13)

DISCUSSION PAPER

SEPTEMBER 2014

Meltem Aran
Claudia Rokx



WORLD BANK GROUP
Health, Nutrition & Population

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Health, Nutrition, and Population (HNP) Discussion Paper

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Health, Nutrition, and Population (HNP) Discussion Paper

Turkey on the Way of Universal Health Coverage through the Health Transformation Program (2003–13)

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Abstract: Beginning in 2003, Turkey initiated a series of reforms under the Health Transformation Program (HTP) that over the past decade have led to the achievement of universal health coverage (UHC). The progress of Turkey's health system has few — if any — parallels in scope and speed. Before the reforms, Turkey's aggregate health indicators lagged behind those of OECD member states and other middle-income countries. The health financing system was fragmented, with four separate insurance schemes and a "Green Card" program for the poor, each with distinct benefits packages and access rules. Both the Ministry of Labor and Social Security and Ministry of Health (MoH) were providers and financiers of the health system, and four different ministries were directly involved in public health care delivery. Turkey's reform efforts have impacted virtually all aspects of the country's health system and have resulted in the rapid expansion of the proportion of the population covered and of the services to which they are entitled. At the same time, financial protection has improved. For example, (i) insurance coverage increased from 64 to 98 percent between 2002 and 2012; (ii) the share of pregnant women having four antenatal care visits increased from 54 to 82 percent between 2003 and 2010; and (iii) citizen satisfaction with health services increased from 39.5 to 75.9 percent between 2003 and 2011. Despite dramatic improvements there is still space for Turkey to continue to improve its citizens' health outcomes, and challenges lie ahead for improving services beyond primary care. The main criticism to reform has so far come from health sector workers; the future sustainability of reform will rely not only on continued fiscal support to the health sector but also the maintenance of service provider satisfaction.

Keywords: Universal health coverage, Turkey, health finance, human resources for health, political economy

Disclaimer: The findings, interpretations, and conclusions expressed in the paper are entirely those of the authors, and do not represent the views of the World Bank, its Executive Directors, or the countries they represent.

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PREFACE

In 2011, Japan celebrated the 50th anniversary of achieving universal health coverage (UHC). To mark the occasion, the government of Japan and the World Bank conceived the idea of undertaking a multicountry study to respond to the growing demand for UHC by sharing rich and varied experiences from countries at different stages of adopting and implementing strategies for UHC, including from Japan itself.

This led to the formation of a joint Japan–World Bank research team under the Japan–World Bank Partnership Program for Universal Health Coverage. The program was set up as a two-year multicountry study to help fill the gap in knowledge about the policy decisions and implementation processes that countries undertake when they adopt the UHC goals. The program was funded through the generous support of the government of Japan.

This country report on Turkey is one of the 11 country studies on UHC that was commissioned under the program. The other participating countries are Bangladesh, Brazil, Ethiopia, France, Ghana, Indonesia, Japan, Peru, Thailand, and Vietnam. These country reports are synthesized in the publication “Universal Health Coverage for Inclusive and Sustainable Development: A Synthesis of 11 Country Case Studies,” available at <http://www.worldbank.org/en/topic/health/brief/uhc-japan>.

These reports are intended to provide an overview of the country experiences and some key lessons that may be shared with other countries aspiring to adopt, achieve, and sustain UHC. The goals of UHC are to ensure that all people can access quality health services; to safeguard all people from public health risks; and to protect all people from impoverishment due to illness, whether from out-of-pocket payments or loss of income when a household member falls sick. Although the path to UHC is specific to each country, it is hoped that countries can benefit from the experiences of others in learning about different approaches and avoiding potential risks.

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INTRODUCTION

Beginning in 2003, Turkey initiated a series of reforms under the Health Transformation Program (HTP) that over the past decade has led to the achievement of universal health coverage (UHC). The progress of Turkey's health system has few — if any — parallels in scope and speed. Before the reforms, Turkey's aggregate health indicators lagged behind those of Organisation for Economic Co-operation and Development (OECD) member states and other middle-income countries. Less than 70 percent of the population was insured, and even those with insurance did not have adequate access to timely health services (Akdağ 2011). The health financing system was fragmented, with four separate insurance schemes and a "Green Card" program for the poor, each with distinct benefits packages and access rules. Both the Ministry of Labor and Social Security and the Ministry of Health (MoH) were providers and financiers of the health system, and four different ministries were directly involved in public health care delivery.

Turkey's reform efforts have impacted virtually all aspects of the country's health system and have resulted in rapid expansion of the proportion of the population covered and the services to which they are entitled. At the same time, financial protection has improved. A recent *Lancet* article by Atun, Akdağ et al. (2013) reports many positive effects of the HTP. For example, (i) insurance coverage increased from 64 to 98 percent between 2002 and 2012; (ii) the share of pregnant women having four antenatal care visits increased from 54 to 82 percent between 2003 and 2010; and (iii) citizen satisfaction with health services increased from 39.5 to 75.9 percent between 2003 and 2011 (Akdağ 2011; Atun, Akdağ et al. 2013). This summary paper focuses on three main aspects of reform in Turkey: (i) health financing, (ii) human resource (HR) policies, and (iii) the political economy of reform, to highlight the process and means through which this successful reform package was implemented.

PART 1: HEALTH FINANCING

1.1 CHANGES IN THE HEALTH FINANCING SYSTEM IN TURKEY

Prior to the implementation of the Health Transformation Program, both the organization and the financing of health care services in Turkey were highly fragmented. There were different providers and financing schemes for different segments of the population with varying service quality and benefits packages. To understand the changes made to the system under the HTP, we present a brief background on the prereform health system and then describe the current health financing dynamics after the implementation of HTP.

Prereform Health Financing System

Turkey's health financing system has developed and evolved since the founding of the Turkish Republic in 1923. The development of the prereform health system in Turkey can be briefly categorized into three periods. First, between 1923 and 1960 the government focused on ways to overcome both financial and manpower shortages, and to establish health care units to treat patients and fight communicable diseases. Second, the period between 1960 and 1983 saw the emergence of a fragmented health financing and delivery system with the reorganization of the Social Insurance Organization (Sosyal Sigortalar Kurumu, SSK) for blue collar workers; the establishment of the Social Insurance Agency for Merchants, Artisans, and the Self-Employed (Bağ-Kur); and the Government Employees Retirement Fund (GERF). Third, in the period after 1983 and through the 1990s changes to the health system reflected the general social paradigm shift toward liberalism and new public management.

Prior to HTP, the Ministry of Health was the major provider of primary, secondary, and tertiary care with a network of health posts, health centers, and hospitals. In 2002, the Ministry of Health owned 64.3 percent of hospital beds, and universities and the private sector owned 16.5 percent and 7.8 percent, respectively (Turkey, Ministry of Health 2011). The SSK was the second largest provider of both secondary and tertiary care and had its own health care facilities and staff. SSK members had to visit their own facilities, and could go to a Ministry of Health or university facility after receiving a referral, or to private facilities for specific services, such as dialysis. While the private sector comprised a relatively small share of the market, it played an important role because of the common practice of public sector physicians working part time in the private sectors.

This fragmented organizational delivery system was mirrored by the fragmented financing system. There were three main sources of financing:

- General government budget funded by tax revenues and allocated primarily to the Ministry of Health (for provision of health care services and Green Card expenditures), the Ministry of Defense, university hospitals, and other public agencies providing health care services, and to the health expenditures of active civil servants
- Social security funds from the SSK, Bağ-Kur, and GERF
- Out-of-pocket (OOP) payments

Health care was predominantly financed by the public sector; 63 percent of total health expenditure (THE) came from the public sector, of which 28 percent was from social security schemes, and 28 percent was from other government spending sources (Berman and Tatar 2003). OOP payments represented 27.6 percent of THE, and private insurance and corporations played a minimal role in health financing (4.4 percent and 3.6 percent THE, respectively) (Berman and Tatar 2003; Liu et al. 2005).

The population was divided into five subgroups in terms of financial protection: active civil servants, retired civil servants (GERF), SSK members, Bağ-Kur members, and the Green Card holders. The different benefit schemes and facility options created an inequitable system. Active and retired civil servants and their dependents were seen to have the most generous benefits package and could seek care in public Ministry of Health facilities only. SSK, comprising approximately half of the Turkish population, was financed by premium contributions from both employees and employers, with considerable government subsidies to cover expenditure shortfalls. Bağ-Kur was financed by the premiums of its beneficiaries; its deficits were covered by the government. In addition to these formal social security schemes, the Green Card Program covered inpatient expenditures for the poor. The

scheme was started in 1992; members had to have a monthly income of less than one-third of the minimum wage to be eligible for benefits.

The fragmented nature of the system led to complexities in terms of flow of funds to providers, causing unnecessary inefficiencies. There was widespread dissatisfaction with the health system across provider types, government entities, and Turkish citizens. Health status was also suffering in 2002, with an infant mortality rate of 26.1 per 1,000 live births and an average life expectancy of 71 years (World Development Indicators 2014).

Changes to the Health Financing System through the HTP (2003–13)

The Urgent Action Plan released by the newly elected AK Party government laid out the goals of the HTP to improve the effectiveness, efficiency, and equity of the health system (Turkey, Ministry of Health 2002). Emphasis was placed on preventive care services, decreasing maternal and child mortality, decreasing morbidity, and increasing life expectancy. Both technical and allocative efficiency were stressed as ways to maximize benefits. These initial policy documents provided the foundation for the HTP and the series of reforms that took place between 2003 and 2013 to transform the Turkish health system, creating equity of access to health care services.

On the service provision side, the transfer of SSK facilities to the Ministry of Health in 2005 was a momentous and long-awaited step toward establishing a purchaser-provider split. This transfer had been attempted by previous coalition governments, but had failed to gain traction because the Ministry of Health and the Ministry of Labor and Social Security were governed by different parties.

Under this new system, the Ministry of Health became the main provider of health care services, and the Social Security Institution (SSI) became the main purchaser of health care services in both the public and private sectors. However, the adoption of the global budget approach for payments from SSI to the Ministry of Health facilities in 2006 raised the question of the purchaser-provider split once again. The Ministry of Health started to distribute the global budget among its hospitals based on services provided and hence became the institution arranging financing issues for its own facilities as well.

The importance of primary care and prevention was emphasized from the outset. To improve accessibility and the quality of services, and reduce visits to secondary and tertiary hospitals, a family practitioner scheme was rolled out between 2004 and 2010. In 2006, all primary care services were made free regardless of social security status.

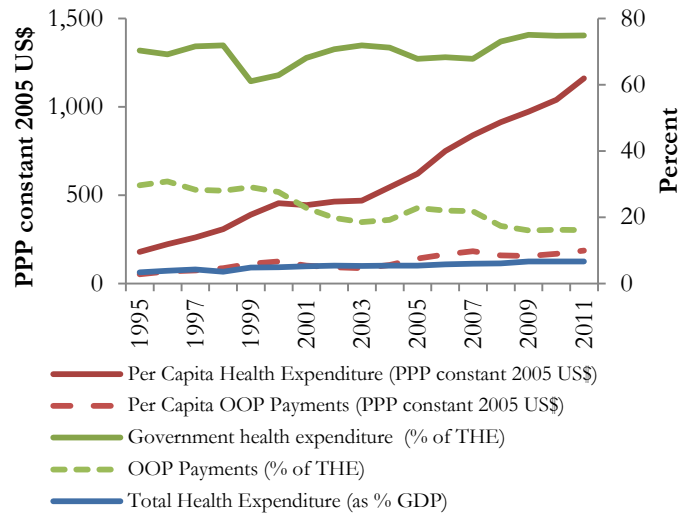
Through a series of progressive steps, service utilization rules and benefits packages were equalized so that all social security members, including Green Card beneficiaries, could access the same facilities. This entailed entering into contracting relationships with private providers. Important steps were taken to increase benefits for Green Card holders — coverage was begun for outpatient services in 2004, and for prescription drugs in 2005. Initially, there was no copayment for prescription drugs, but due to an unforeseen increase in pharmaceutical charges, a 20 percent copay was introduced. As of 2005, SSK members were allowed to purchase their prescriptions from private pharmacies. And in 2008, all health care services for the population under 18 years old were made free regardless of the social security status of parents.

In 2012, the structure of the Ministry of Health was altered to meet the changing administrative and managerial systems of the new health care system. The ultimate aim of the Ministry of Health was set as becoming “a policy making and supervisory” body. In the new structure, administrative units compatible with the old system, such as past vertical programs, were abolished and new directorates were established. Two autonomous directorates, Public Hospitals Institution and the Turkish Pharmaceutical and Medical Device Agency needed special consideration. The former was established for the new reorganized structure of public hospitals. Implementation of the Public Hospital Associations Law began in 2013. The law introduced financial and managerial autonomy to the Turkish hospitals in exchange for financial accountability. The Pharmaceutical and Medical Device Agency, on the other hand, was established to regulate these markets. The reform process briefly outlined in this section has summarized the major transformation issues that have an impact on utilization, provision, and financing of health services.

1.2 HEALTH EXPENDITURE TRENDS IN TURKEY AND IN BENCHMARK COUNTRIES

The remarkable transformation of Turkey's health system over the past 10 years entailed the allocation of additional resources for the health sector. To realize these increases, the government relied on favorable economic conditions, as well as the prioritization of health within the overall government budget. Figure 1.1 shows the increased focus on health spending both as a share of GDP and as a share of the overall government budget. Total health expenditure (THE) as a share of GDP increased from 5.3 percent of GDP in 2003 to 6.7 percent of GDP in 2011. Government health expenditure as a share of total government expenditure increased from 71.9 percent in 2003 to 74.9 percent in 2011. This prioritization translated into an increase in total per capita health expenditure in constant purchasing power parity (PPP) from US\$469 in 2003 to US\$1,161 in 2011. And while the level of per capita OOP expenditure increased between 2003 and 2011, OOP payments as a share of THE declined from 18.5 percent in 2003 to 16.1 percent in 2011.

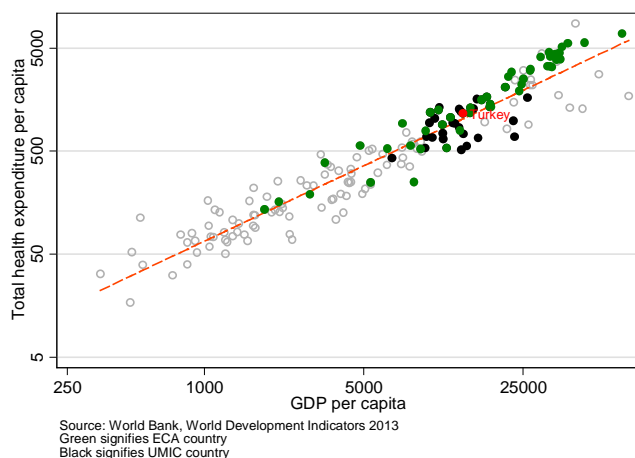
Figure 1.1 Government Health Expenditures Increased While the OOP Payments as a Percent of Total Health Expenditures Declined in Turkey through the HTP



Source: Tatar et al. 2013.

Turkey's overall health expenditures and shares financed by government sources are either average or above average given its income level in 2011 (figure 1.2). Despite the dramatic increases in overall and per capita health expenditures in Turkey in recent years, health spending per capita remains relatively low compared to other OECD benchmark countries used in this analysis. Total health expenditure as share of GDP in Turkey is also in the average range given its income level and geographic location. Additionally, Turkey's total health expenditure as a share of GDP is comparable to that of countries with similar human development index (HDI) levels. However, relative to the OECD average of 12.1 percent of GDP in 2011, Turkey's share of GDP dedicated to health is low at 6.7 percent.

Figure 1.2 Total Health Expenditure per capita versus GDP per capita, 2011 (PPP in constant international \$)

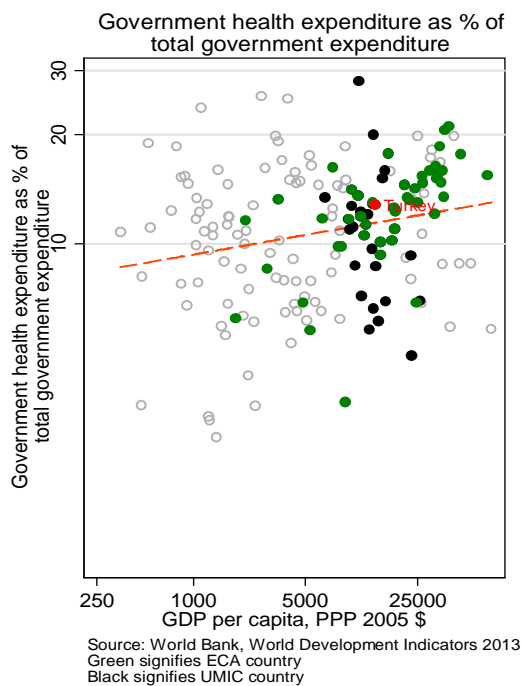
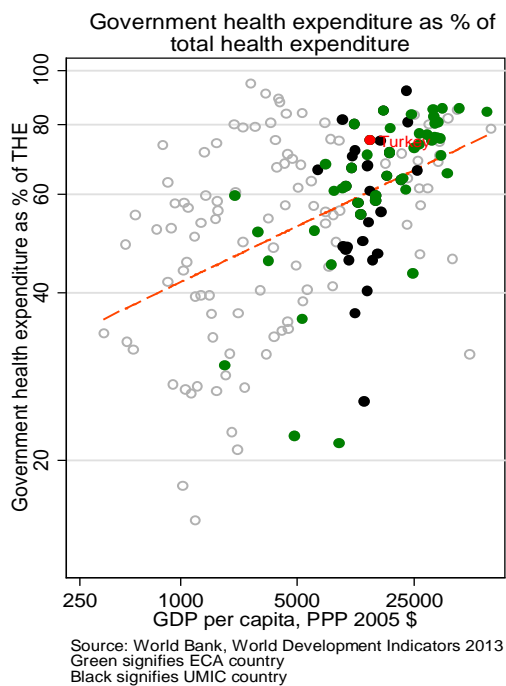


Turkey's THE per capita in 2011 is slightly above average given its income level. Additionally, Turkey's per capita THE is aligned with that of other Europe and Central Asian (ECA) countries and with upper-middle-income countries (UMICs). Despite this average level of health spending given Turkey's income level, per capita health expenditure remains relatively low compared to other OECD member countries and well below the average for all OECD member countries.

The government of Turkey has been committed to increasing its role in financing the health sector. These increases are reflected in Turkey's above-average share of THE from government sources. In general, the government's share of THE tends to

grow as countries' economies grow (see figure 1.3). The Turkish government was well-above this general trend though. Government health expenditure as a share of total government expenditure is also slightly above average given Turkey's income level. The figures display the active role the government sector plays in the financing of health care in Turkey. As compared to OECD countries, the government sector also plays an above-average role in the financing of total health expenditure. In 2011, government health expenditure as a share of THE was 74.9 percent for Turkey and 61.3 percent on average for all OECD member countries.

Figure 1.3 Government Expenditure on Health, 2011

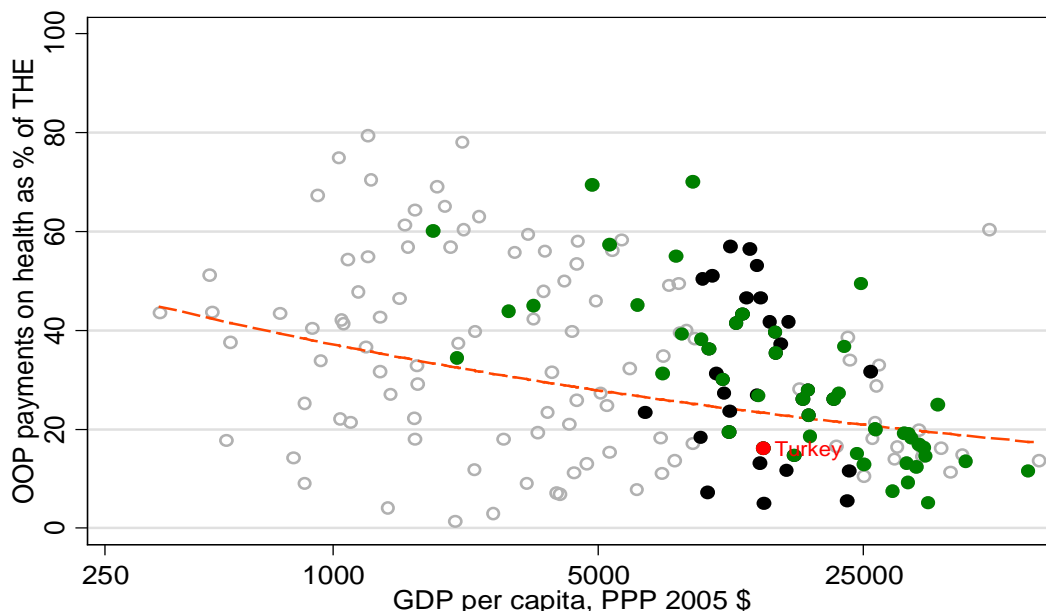


OOP payments comprise the largest share of private expenditures on health. In 2011, private expenditure on health as a share of total health expenditure was 25.1 percent, and of that amount 64.4 came from OOP payments (WHO 2013). Turkey's efforts to reduce OOP payments on health and increase financial protection by extending coverage have been successful. As shown in figure 1.4, OOP payments on health in Turkey in 2011 were below average given Turkey's income level. According to the 2013 World Development Indicators, average OOP payments on health as a share of total health expenditure were 32.4 percent for all ECA countries and 16.1 percent for all UMICs. Therefore, Turkey's OOP payments as a share of THE are well-below average for its geographic location and exactly average for its income-level status. Improvements can be made in this regard by

continuing to focus on reducing OOP payments for health and channeling the majority of health expenditures through prepayment or government revenue sources. For example, in 2011 average OOP payments for health were 13.9 percent for all OECD members and 16.1 percent for Turkey.

While the share of OOP payments in total health expenditure for Turkey have declined, their share as a percentage of household nonfood and total spending have slightly increased through the Health Transformation Program. The reason for this increase in health expenditures as a share of household expenditures is the increase in utilization that accompanies higher health expenditures by the household (Aran and Hentschel 2012).

Figure 1.4 OOP Payments as Share of Total Health Expenditure versus GDP per capita, 2011



Source: World Bank, World Development Indicators 2013
 x-scale log
 Green signifies ECA country
 Black signifies UMIC country

The government in this period, changed how pharmaceuticals were approved, priced, and reimbursed. Despite aggregate increases in overall expenditures, the concerted efforts of the Ministry of Health and SSI have focused on increasing the importance of treatment in health financing and reducing the burden of pharmaceutical expenditures. Turkey has implemented various policies such as external and internal reference pricing, public discounts, global budgeting, and health technology assessment to decrease the share of pharmaceutical expenditures in total health care expenditures. Due to high and increasing pharmaceutical expenditures, the government first introduced external and internal reference pricing to curb costs. A reference price is set as the cheapest of five countries (France, Greece, Italy, Portugal, and Spain) and generics are determined as a percentage of the reference price. As a result of this system, the price of generics fell from 80 percent of the reference price to 66 percent (Tatar et al. 2011). To further control costs, SSI introduced public discounts, a Health Technology Assessment process, and international reference pricing system for reimbursing

pharmaceuticals. As a result of these policies, pharmaceutical expenditures have been brought under control in recent years.

Nonetheless, pharmaceutical expenditures still comprise a large — but decreasing — share of total SSI expenditures. In 2012, 32.4 percent of all SSI expenditures was dedicated to pharmaceuticals, down from 56.4 percent in 2002. According to the SSI, 27.4 percent of THE in Turkey is dedicated to pharmaceutical expenditures as compared to the OECD average of 16.4 percent. Despite these steps, pharmaceutical expenditures continued to increase from TL 14.6 billion in 2010 to 16.7 billion in 2012. The successful efforts to reduce the share of THE dedicated to pharmaceuticals should be continued.

To sum up, health expenditures have grown dramatically over the past ten years in Turkey. These growth trends are all the more impressive if compared to the growth in health expenditures in comparator countries. Since 2002, Turkey has increased its per capita health expenditure at the fastest rate among OECD comparators. Between 2002 and 2011, health expenditure per capita grew by 150 percent in Turkey and by 62 percent on average for all OECD member countries. This same pattern holds for all other comparators used in this analysis, including countries with similar HDIs and regional averages. Health expenditure growth in Turkey has far surpassed that of any other comparator country or regional average. As Turkey's economy continues to grow and develop, additional resources will be needed to keep pace with health spending levels of other OECD member countries. Between 2000 and 2009, THE growth was sixth highest of all OECD member countries, highlighting Turkey's commitment to increasing spending on health in recent years. These increases have been focused particularly in the public sector as government spending on health has increased at a faster pace than OOP payments.

PART 2: HUMAN RESOURCE POLICIES

Turkey has completed impressive health reforms since 2003, achieving among other objectives a rapid transformation in the human resources for health (HRH) situation, ensuring increased health professional density toward levels in other OECD countries, and a redistribution of staff toward remote and underserved areas. According to *The Lancet*, the number of health staff almost doubled with the Health Transformation Program, which enabled the expansion of health system capacity. Among the reforms that have helped achieve these outcomes are the following: (i) contract-based employment, (ii) mandatory service law, (iii) performance-based pay, (iv) full-day law, and (v) the family medicine model. These policies have been largely successful at increasing the availability of health staff at public facilities, and redistributing human resources to regions with previously lower access; however, the implemented HR policies have also generated a certain level of criticism and resentment on the part of health staff, which will also be covered in this section.

2.1 CONTRACT-BASED EMPLOYMENT

One of the priorities of the Health Transformation Program was to alleviate regional differences in personnel distribution by setting standards based on titles in personnel employment to establish a system ensuring objectivity and equity in assignment and transfer of personnel (Turkey, Ministry of Health 2009¹). To encourage personnel to work in priority development regions, Law no. 4924 was put into effect in 2003,² enabling the Ministry of Health to hire contractual health workers for employment in remote regions with lower socioeconomic development, particularly in eastern and southeastern regions. Besides this new law, the model of contracted employment under article 4/b of the Law on Civil Servants (which was previously rarely used) was operationalized by the Ministry of Health to allocate personnel to deprived regions and facilities.

The introduction of contract-based employment for nurses and other health professionals in underserved areas helped to distribute more equitably health human resources across the country. These contractual assignments did not provide for the full rights associated with civil service-based employment and in particular do not allow employees to transfer from one post to another. This new contractual work model was used to employ personnel on a voluntary basis, and personnel, upon their consent, were covered by this law and gained higher financial benefits than other personnel in equal positions. Health and socioeconomic indicators were classified at the district level according to State Planning Organization's rankings, and the ministry was given a quota of 22,000 contractual staff to be allocated to remote areas (of these allocations a maximum of 5 percent were allowed to be in urban centers in the eastern and southeastern regions). In this way, 65,000 health personnel were contracted under article 4/b, and 19,755 were contracted under Law no. 4924; they were appointed by the ministry, particularly to the fourth, fifth and sixth service regions regarded as deprived regions.³ According to the Ministry of Health, the balance across regions in terms of number of health staff was achieved using the formulas for compensation stated in table 1.1 — whereby salary premiums were provided to staff allocated to regions 4, 5, and 6.

1. Turkey, Ministry of Health 2009.

2. <http://www.tkhk.gov.tr/Eklenti/840,4924-sayili-kanunpdf.pdf?0>.

3. Turkey, Ministry of Health 2010.

Table 1.1 Share of Staff Employed on Contracts and Salary Premiums, by Region

	Share of All Staff Employed on Contracts (%)				Salary Premium (% of government salary)		
	Specialist physicians	General practitioners	Nurses	Midwives	Specialist physicians	General practitioners	Nurses
Region 1	0.0	1.1	30.7	14.0			
Region 2	0.2	3.0	17.1	7.9			
Region 3	0.5	6.1	16.8	10.7			
Region 4	3.0	9.8	21.6	21.7	109	109	108
Region 5	9.4	16.1	33.0	28.8	128	112	111
Region 6	28.3	28.7	40.2	45.8	67	111	117
TOTAL	2.9	6.7	25.8	16.2			

Source: World Bank 2009.

Contracting methods for increasing the number of health personnel in deprived regions worked partially in the first years of the Health Transformation Program. Through increased rates of payment, the program was successful in achieving higher recruitment of nurses and midwives in deprived areas: however, it was not successful in achieving new recruitment of general practitioners (GPs) and specialists.

2.2 MANDATORY SERVICE LAW

Mandatory service had been in effect in Turkey between 1981 and 1995. In the first years of the HTP (between 2003 and 2005), compulsory service for health staff was annulled and replaced by contractual payments in underserved areas. However, given that the policy was not very successful in attracting generalist and specialized doctors to eastern and southeastern regions, the compulsory public service law was reimplemented under the HTP in 2005 (Mollahaliloglu 2008). This new law envisaged compulsory public service for new graduates of public medical schools and for new graduates of medical specialty education for a period varying between 300 and 600 days depending on the residential area to which they were appointed (Ibid.). Upon graduation and before receiving their diploma, all medical, dental, and pharmacy graduates are allocated a period and location of mandatory service. All physicians trained in the public sector in Turkey are required to complete mandatory service in the public sector.⁴ The length of mandatory service can range from one to two years according to the socioeconomic ranking or composition of the region. For specialized physicians (who have received an additional four to six years of schooling), the length of the mandatory service varies between two to four years. If a physician chooses not to complete mandatory service, he or she is not allowed to practice medicine in Turkey. Diplomas are only awarded on completion of the period of mandatory service.

Graduates are assigned to different provinces based on staffing needs and a lottery system. The lottery is overseen by a notary public. A doctor assigned to a province with lower socioeconomic development is expected to serve a shortened period of mandatory service. The 81 provinces of Turkey are categorized according to a grid with four categories of HRH density, and six categories of socioeconomic status. This grid is used to allocate credit points, so that health workers serving in areas of low health worker density and lower socioeconomic status earn higher numbers of credit points; the grid also allocates minimum periods of service under the mandatory service. Credit points are applied when a candidate seeks his or her next post: the candidate applying for a post with the most credit points is allocated that post. All vacant posts are advertised three times per year. Once

4. Most doctors and nurses are primarily trained in the public sector in Turkey; private medical schools have emerged only in recent years (Erus and Bilir 2007).

the vacancies are established, recent medical school graduates submit their top five posting preferences; their destinations are determined by the lottery, which takes place six times a year.

2.3 PERFORMANCE-BASED PAY

In 2003, the Ministry of Health began implementing a performance-based payment system in its facilities. The goal of this scheme was to motivate individual health care providers to increase services. Staff was awarded additional pay according to their contribution to measured units of activity. An institutional performance component was later added to the system. Currently, a complex formula integrates the provider's personal performance and the performance of the health care facility. The bonus payment for a health worker in the performance-based pay system is determined through a combination of institutional and individual performance criteria. The following factors determine how much health personnel will receive as performance-based payments:

Institutional rating: The total amount that health facilities can allocate to performance-based payments is capped at 40 percent of total revenues of the facility. Hospital management is ultimately responsible for deciding how much will be allocated for performance-based payments within the limits defined by the Ministry of Health. Individual bonuses are also capped at a certain multiple of basic salary, such that, for instance, a specialist earning TL 1,000 per month in basic salary cannot earn more than a TL 7,000 bonus (World Bank 2009). Secondly, the total capped amount is adjusted based on institutional performance of the health center or hospital. Based on institutional performance, every health center or hospital gets a score between 0 and 1, which is multiplied by the total percent of revenue the hospital can allocate to staff bonuses.⁵ The Ministry of Health uses five categories of indicators to measure institutional success; these include the following: (i) access to examination rooms, (ii) hospital infrastructure and process, (iii) patient and caregiver satisfaction, (iv) institutional productivity, and (v) institutional service targets.

Individual rating: After adjusting the total capped amount that can be allocated to staff bonuses with the institutional score, each staff member also receives an individual score depending on the number of procedures performed by that staff member and his or her job title. Each clinical procedure carries a particular point level determined by the Ministry of Health. The total points score for a physician is then adjusted by the job title coefficient. The score is also adjusted by the number of days the person has worked in the year, and whether employment is full- or part-time in the health facility. For full-time practice the coefficient was 1.0 when the performance pay system was implemented; it was 0.4 for part-time practice to encourage full-time presence of doctors in public health facilities and discourage "moonlighting" (World Bank 2009).

The pay-for-performance system in Turkey has been criticized for (i) providing incentives for unnecessary health care procedures, and (ii) downgrading the safety of the overall health system by reducing the time allocated per patient during visits to health centers. Although there is currently no scientific evidence or study supporting these claims; these are valid and plausible concerns given the incentives introduced by the new system.

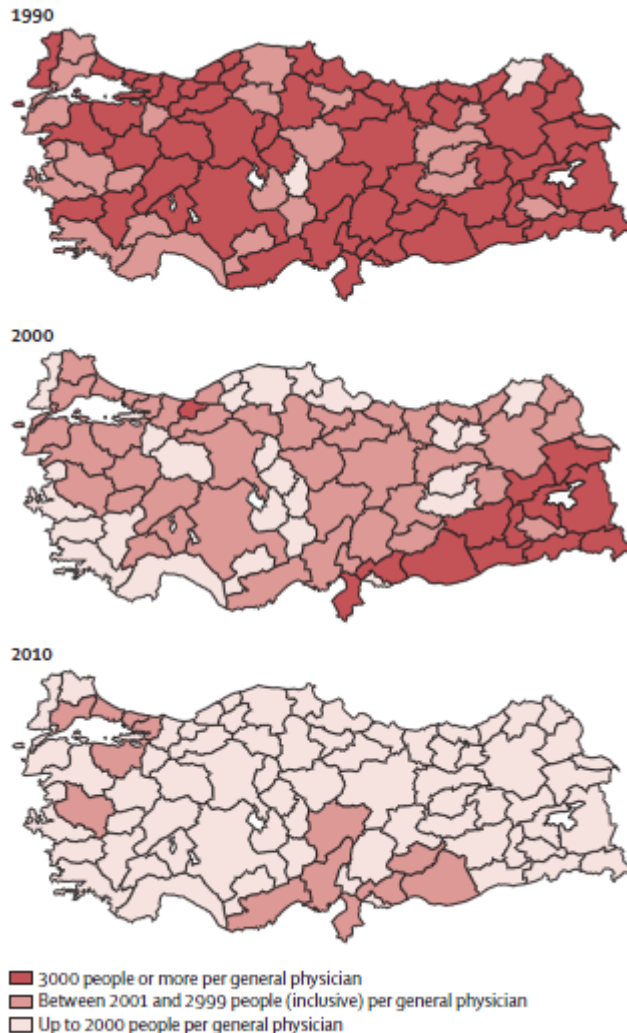
2.4 FULL-DAY LAW

Before 2010, physicians could work on a part-time basis in both the public and the private sectors, and there were a significant percentage of doctors that had dual practices. The implementation of performance-based-pay in public health facilities caused a significant reduction in the percentage of doctors engaging in dual practice and moonlighting. According to figures reported by the Ministry of Health General Directorate of Personnel, the number of part-time practicing physicians decreased from 89 percent in 2002 to 8 percent in 2010 (Tatar et al. 2011). The full-day law was passed in 2010, requiring that those working in the public sector should be full-time staff, thus revoking the ability of health sector workers to engage in parallel private practice. After July 2010, new arrangements were made to require only Ministry of Health doctors to practice exclusively in the public sector, while university-based doctors could still practice in both sectors as long as their daily public sector commitments were fully met (Ibid.). In international practice, we have not been able to

5. For instance, if a hospital allocates 40 percent of revenue to staff bonuses, and if their institutional score is 0.8, the maximum amount they can allocate for performance-based pay to staff is 32 percent (World Bank 2009).

identify any other countries that have attempted such banning of dual practice, and the sustainability of this strict enforcement — and its implications on research and teaching capacities of public universities — will become apparent in the near future.

Figure 1.5 Population Covered per General Physician by Province in 1990, 2000, and 2010



Source: Atun, Akdağ et al. 2013.

2.5 THE FAMILY MEDICINE MODEL

To strengthen primary health care and emphasize preventive health services in Turkey, the family medicine program was adopted and rolled out starting in 2004. Doctors who have graduated but have not undertaken further specialist training are known as general practitioners (GPs). A program of in-service training orients them toward family medicine; the program increases the length and depth of training toward establishing family medicine as a speciality area in its own right. Under this model, salaried GPs working at the primary or secondary care level were given the option to take a leave of absence from their public sector jobs and take up positions as contractual independent family doctors. These doctors had the right to return to their original public sector jobs at any time (World Bank 2009). In Turkey, traditionally family medicine training was carried out through specialty training programs just like other medical specialties. With this switch that enabled GPs to be trained through a short program as family doctors, the Ministry of Health was able to create new positions in a relatively short time. The targeted family doctor-to-patient ratio was 1:3,400; this translated into a national

requirement of 20,000 family doctors (World Bank 2009). By 2010, almost 20,000 family medicine teams were established to scale up family medicine–centered primary health care in all 81 provinces of Turkey (Atun et al. 2013).

The human resources reforms have been successful in reshaping the numbers, distribution, and availability of professional health staff throughout Turkey (figure 1.5). Patient and population satisfaction levels with health services and the health system are unprecedentedly high. However, there are concerns that health staff themselves are dissatisfied with some aspects of the terms and conditions of employment.

A key concern about Turkish health reforms is the response of health staff to the changes in human resource policies in the health sector. Dissatisfaction among staff may affect their commitment, motivation levels, and ultimately the performance and sustainability of the reform. A recent qualitative study looking at health worker satisfaction in Turkey has set up 13 focus group discussions with 114 participant health staff from different cadres, who work in central as well as remote regions of the country (Şimşek et al. 2013). The objective of the qualitative surveys and focus group discussions was to identify staff perceptions about the HTP. The focus group discussions indicate that health staff have concerns particularly about (i) the performance-based pay system, which is intended to increase the number of daily patient visits to physicians but may in the medium term reduce the quality and safety of health care provided; and that (ii) the complaints mechanism put in place by the HTP and the malpractice law against physicians in Turkey reduce the incentives to take on more risky operations even when necessary. Overall, doctors and health staff are discontent with regard to the Health Transformation Program in that they believe their status as health staff has been undermined through the program.

Despite these concerns — and at a time when medical school quotas have more than doubled since 2003 — medical schools in the country continue to set the most competitive university entrance examinations and require the most competitive university entrance scores, with many young college entrants preferring the medical sector. This suggests that the labor market is either slow to adjust to the changes in perceptions of the health staff, or that the concerns of the existing stock of doctors and health paramedics are exaggerated and do not reflect the actual constraints of the labor market.

PART 3: POLITICAL ECONOMY OF REFORMS

Health reform is a complex process that is influenced by contextual factors, including history, politics, economics, and the characteristics of the population that is served by the health system. These factors were important in bringing health reform to the policy agenda in Turkey, and were helpful in sustaining the reform during adoption and implementation.

3.1 FAVORABLE CONTEXT OF REFORM

The Ministry of Health and State Planning Organization began to release plans to reform the health sector in the 1989 Health Sector Master Plan and the 1993 National Health Policy. Both reports called for a **purchaser-provider split, universal health coverage through a general health insurance scheme, hospital autonomy, and strengthened primary care with a family practitioner scheme**. However, the 1990s were a period of political turmoil followed by economic instability in Turkey. Attempts to enact a general health insurance and a family practitioner scheme failed due to weak support from coalition governments.

The historic, political, and demographic context in Turkey between 2002 and 2012 provided a favorable environment for the health reform to take place.

- *Existing health sector reform plans:* In 2003 the MoH was able to begin reforms quickly because most components of the reform had already been developed, dating back at least to World Bank–supported planning in the early 1990s. The AK Party acted quickly on health reform to capitalize on the popular support it enjoyed following the 2002 elections. The MoH reduced the time needed to develop its policies by drawing largely from health reform plans that had been carefully devised and analyzed throughout the 1990s. Beginning with the 1990 Health Sector Plan, the MoH and the State Planning Organization proposed a health system model based on the following: (i) purchaser-provider split, (ii) universal health insurance, (iii) a rational policy for human resources and payment on the basis of performance, and (iv) the establishment of a family practitioner model (Tatar et al. 2011; Yasar 2011). These reform proposals had not been fully adopted under earlier coalition governments. However, these remained on the government’s agenda and became the cornerstone for the AK Party’s health reform plans upon coming into office in November 2002.
- *Strong political commitment and consistency of reform team:* The 2002 parliamentary elections delivered a legislative majority for the AK Party, ending decades of coalition governance. Between 2002 and 2007 the AK Party controlled 66 percent of seats⁶ in the parliament, giving them an overwhelming majority of the votes in legislature. This majority was important because it limited the ability of other parties to question or slow down the process, which may have had a negative impact on Turkish democratic institutions but was favorable from the point of view of health reform. The same health reform team was in place from 2003 to 2013, and worked closely with Minister Akdağ on all aspects of the design, adoption, and implementation of the reform (Atun, Aydın et al. 2013). According to interviews with current and former senior officials closely involved with the process, the reform team drew on the technical expertise of those who had devised these reforms, and in parallel developed a politically viable communications strategy to present and promote the HTP.
- *Economic growth and increased fiscal space for health:* Favorable economic conditions increased the availability of resources for the health sector, which the AK Party used to fund and implement the HTP. Enabling much of this expansion of fiscal space for health was strong overall economic growth that increased real GDP per capita by 70 percent, from US\$5,952 to US\$8,493 between 2002 and 2011 (figure 1.1) (World Bank 2012). As the economy grew overall, the government also increased the share of GDP spent on health, from 5.4 to 6.7 percent between 2002 and 2011 (WHO 2013).

6. In the 2002 elections, AK Party won 34.2 percent of effective votes, which, as smaller parties with less than 10 percent of votes did not make the parliamentary threshold, translated to 363 parliamentary seats out of 550. ([http://en.wikipedia.org/wiki/Justice_and_Development_Party_\(Turkey\)](http://en.wikipedia.org/wiki/Justice_and_Development_Party_(Turkey))).

- *Young population and low expectations of the health system:* Turkey had a relatively young population with low expectations of the health sector. This meant the primary demand was for fewer and lower-cost interventions than would be needed for an older population, and that positive impressions of the reform were easier to create than would have been the case in a population with high expectations. The young Turkish population required relatively basic, primary care services as compared to expensive, hospital-based treatments for older populations.⁷ In addition to these favorable demographics, after years of failed attempts to reform the public health system, Turkish citizens had low expectations for the delivery of even these basic services. In 2003, only 39.5 percent of the population indicated that they were satisfied with the quality of care (OECD et al. 2008; Bleich et al. 2009). This scenario gave the MoH an opportunity to make quick gains in patient satisfaction with relatively small improvements to the system.

3.2 POLITICAL ECONOMY CHALLENGES AND HOW THEY WERE ADDRESSED

Health reform is generally a politically charged process because it involves the reallocation of resources and responsibilities. Common goals of health reform are to increase equity, improve access for the poor, and establish some minimum basket of services for all citizens. These goals all require the redistribution of resources, which raises the prospect that the process will generate winners and losers. Typically, groups that are well-off before the reform perceive discussions of policy change as potential threats to their benefits. In the subsection below, we discuss three political economy challenges faced in the Turkish case and the way in which they were addressed.

Challenge # 1: Engaging the Beneficiaries of Reform with Quick Wins

The basic political economy of reform favors opponents rather than potential beneficiaries because the costs tend to be concentrated on well-organized groups with high access to political and economic resources, which they can use to impede, dilute, or otherwise influence the process in their favor. By contrast, although potential beneficiaries tend to be far more numerous, they have few economic or political resources and are not likely to be engaged or organized in support of reforms.

An important aspect of MoH's overall strategy was to quickly build support among the intended beneficiaries of reform, whose large numbers could potentially create an enormously powerful political force if organized behind the HTP. Those with no or limited access to health insurance were estimated at about 24.8 million people, approximately 36 percent of the population in 2003 — representing a large portion of Turkey's citizens (Aran and Hentschel 2012). Their support was important to the AK Party in general and would be required for more difficult aspects of the reform, which urban elites and organized interest groups would oppose, according to political analysis commissioned by the MoH (Rossetti 2004).

The MoH built public support for reform very quickly by focusing its early efforts on highly visible changes to the existing health system, acting first in the areas with the least services. Many interviewees with experience in the reform noted this emphasis on immediate and noticeable improvements, which served the dual purpose of improving service delivery and patient satisfaction, while bolstering the political viability of the HTP. Some of the first changes to the system were the following:

- Abolishment of the unpopular practice of holding patients in facilities until their bills were paid.
- Reorganizing primary health care facilities so that more rooms were available for patient care (and fewer rooms were allocated for leisure use by health staff)
- Expansion of emergency transport services, increasing the number of ambulances (and aircraft emergency vehicles) while extending the system's reach and visibility⁸

7. In 2002, 30 percent of Turkey's population was under 15 years of age, and only 6 percent was over 65 years of age (World Bank 2012).

8. These enhancements led to a three- to five-fold increase in the number of emergency transport vehicles in the country over the first 10 years of reform.

These relatively simple changes improved public support for the reform and helped create the political momentum for more difficult, large-scale changes to the system planned for future years. Rapid and publicly visible changes for improved accessibility are reflected in the percentage of people reporting problems in seeking appointments for an examination or analysis, which dropped from 59.59 percent in 2003 to 29.30 percent in 2005 (Turkish Statistical Institute [TÜİK] 2003–12). Over the same period — the first two years of the HTP — citizen satisfaction with health services overall rose from 46.17 percent to 55.27 percent. These satisfaction rates were reflected in electoral support for the AK Party in both the 2007 and the 2010 parliamentary elections. In these elections, the AK Party continued to build on its electoral majority by placing its health reform achievements as a centerpiece of the party platform (Bryant 2010).

Challenge # 2: Managing the Influence of Opposing Interest Groups

In the initial stages of the HTP, the Minister of Health and his senior leadership team identified groups important to the reform and developed strategies to persuade or overcome those expected to oppose it. A stakeholder analysis was commissioned in 2003 to provide a roadmap to the politics of the reform in Turkey and a guide to dealing with opposition. Plans to manage opposition to the reform were then incorporated into the strategy. The report identified public providers, members of the social security institutions, and the central government bureaucracy and civil servants as key actors potentially opposed to the HTP. By understanding the influence opponents were expected to have and the reasons for their positions, the government could plan how to manage the politics of policy adoption and implementation.

Three main groups were identified as potentially opposed to the reform in Turkey:

Trade Unions: Trade unions were one of the most influential beneficiary groups opposed to reforms. Senior MoH staff held a long series of meetings with union representatives to discuss how the reforms would affect the benefits of their membership. The MoH prepared numerous analyses to forecast benefits under various assumptions to reassure representatives that in no case would benefits decrease under the HTP, and that in most cases benefits would increase. Several informants involved in designing the reform reported that the interministerial working group had initially planned a basic benefits package with options for supplementary care. However, as the group continued its discussions, equity emerged as an increasingly important consideration. In its final form, the reform's long-term objective was to provide all citizens with the same benefits as retired civil servants, who had the most generous of all prereform packages. This strategy dramatically increased the resources required for reform, but it helped ensure that most organized beneficiary groups would not oppose the reform.

1. **White Collar Civil Servants:** A second influential opposition group was white collar civil servants, who opposed the reform for two general reasons. First, as the beneficiaries of the most generous entitlement package, they feared reform would diminish their benefits. Second, most of these old-time civil servants tended to oppose the AK Party politically. They were also concerned about the implications of the concurrent social security reform, particularly for the retirement age, which stood at age 48 for women and 52 for men. The MoH leadership first deployed a persuasion strategy to convince white collar civil servants that their benefits would not decrease. But the attempts were not successful, and elite civil servants appealed to block the reform. To overcome their opposition, the MoH and Ministry of Labor and Social Security decided to exempt all existing civil servants from changes to their health benefits, and agreed to apply new rules only to those hired in the future.
2. **Health Workers:** The participation of health workers in the planned reforms was essential to improving service delivery, since health workers are the ones who actually deliver the services. But one of the biggest problems in increasing delivery was a shortage of trained professionals; for instance, Turkey's ratio of physicians per population was only about one-third the EU average when the HTP began (Tatar et al. 2011). For the reform to succeed, the workforce would have to operate at higher capacity. The MoH provided incentives for health workers to deliver more services by linking pay with the quantity of services provided and with patient satisfaction through the pay-for-performance system. This system dramatically increased the salaries of physicians providing services in the public sector. The pay-for-performance scheme was used to allocate additional pay to physicians and nurses, and had

the additional advantage of avoiding the cumbersome bureaucracy associated with adjusting pay under the formal civil service regulations.

The pay-for-performance system was popular with physicians primarily engaged in public service delivery, but it did not temper the opposition of other physicians and health workers, including members of the Turkish Medical Association (TMA), the Turkish Nurses Association, and YÖK (the higher education council). The government accomplished the reform without the support of these powerful groups by fracturing their membership and swaying popular opinion against their leadership. Although the membership of the TMA was unified in opposition at the beginning of the reform, many members were primarily engaged in service delivery and became supportive because of the incentives available under pay-for-performance. The organization's leadership, those in specialized roles, and members of the academic elite remained opposed, but were relatively few in number. A senior TMA official observed that the 30,000 specialists in staunch opposition had had little influence on the reforms, citing vast public support for the ministry's plans and publicity campaigns against the medical elite. Interviews with senior officials at these organizations and in academic medicine revealed intense dissatisfaction with the reform and a deep distrust of the MoH leadership. As the pay-for-performance system does not include allowances for teaching or research, those interested in these activities felt penalized.

Health workers expressed dissatisfaction with personnel allocation policies, as well. After graduating from medical school, all new physicians perform two years of public service. Before the reforms, the best students with academic interests were assigned to leading medical schools as assistant professors. But under the reforms, nearly all graduates are now assigned to public facility roles, to MoH hospitals, or to new medical schools closely allied to the MoH. As a result, there are few younger faculty trained in what were formerly the most prestigious institutions. Specialist physicians interviewed for the study expressed discontent over a long list of issues. Because of MoH cost controls, they reported they were not always able to procure the necessary supplies to serve patients. Because the MoH scheduling system allocated 15-minute-long appointments, there was also too little time to adequately diagnose problems or provide suitable guidance. Because of these and other problems, many faculty left the public health system — some for private practice, some for other countries, and some to retirement. Additionally, the capacity to perform complex procedures at leading medical centers has been severely reduced. Health staff also expressed concerns for the quality of care under the HTP because quality assurance rests on patient satisfaction, but patients were not well informed about appropriate care. As complaints from patients to the MoH constitute a serious issue for providers, the physicians expressed concerns for the loss of autonomy and a compromised doctor-patient relationship.⁹

To neutralize the threat to the reforms posed by opposition groups, the AK Party created a new union of health workers to draw supporters away from existing professional associations and undermine their support base. By creating factions among health workers, the AK Party reduced the power of the Turkish Medical Association and the Turkish Nurses Association to act as a united voice for all providers. A similar strategy was employed to counter resistance from YÖK — the organization responsible for supervising all Turkish universities, and which at the beginning of the HTP was still controlled by appointees of previous governments and hence distrusted the AK Party. Resources were channeled away from elite university hospitals, and efforts were made to delegitimize YÖK's leadership. The government worked around this opposition until 2008, when the newly elected AK Party—siding President Gül appointed a new head of YÖK. These tactics allowed the MoH and AK Party to overcome resistance from previously strong interest groups that remained opposed to the reform.

9. While these are legitimate concerns on the part of health staff, to date there are neither studies nor evidence to prove that pay-for-performance has been detrimental to health care and safety or that patient perceptions of health staff have changed. Further studies focusing on doctor-patient relations and changes to quality of care in the pay-for-performance system would be suitable contributions to the literature.

Challenge # 3: Unifying Benefit Systems and Covering the Poor through an Incremental Approach

Many countries have attempted to create UHC systems by expanding entitlement programs for low-income groups, but in recent years only Turkey has succeeded in integrating the entitlement programs into a unified system covering all citizens. Ghana, Mexico, and Thailand, for instance, have all undertaken reforms to move toward UHC. These countries have all been successful in expanding coverage, particularly for the poor. But merging the subsidized programs for low-income households with existing schemes for formal sector workers has remained elusive (Hughes and Leethongdee 2007; Agyepong and Adjei 2008; Knaul et al. 2012). Combining coverage plans for the poor with those for formal sector employees is very difficult because it represents an enormous challenge of political economy. Formal sector workers tend to be well organized and politically influential, and usually enjoy the most comprehensive benefits package, at least in part because they tend to contribute the most resources to the system. Formal sector workers therefore enjoy more economic and political power. Reform threatens their interests because the redistribution required to cover low-income groups implies a potential reduction in their own benefits and the use of some of their contributions for others.

To expand coverage and move toward a unified UHC system, the Turkish MoH worked around potential opposition. We highlight three important steps. First, the MoH decided to use the existing Green Card Program as its primary vehicle for scaling up coverage for low-income households as modifying a program did not require parliamentary approval (whereas starting a new program would have). The MoH simply adapted the Green Card Program to fit the policy objectives of the HTP under its own authority. Second, the minister of health and his senior leadership team brought the Green Card Program under the Ministry's auspices to be able to control it completely. Third, they stimulated demand for the Green Card Program by expanding the benefits package, increasing the number of Green Cards in circulation, and making concurrent supply-side improvements.

Step 1: Use of the Green Card Program: Before the HTP, the Green Card Program had significant limitations. For low-income households it only provided coverage for inpatient expenses incurred in public facilities, and was widely regarded as unsuccessful because of corrupt enrollment procedures, a limited benefits package, and poor public service quality (Karadeniz 2012; Menon et al. 2013). Estimates based on the 2003 Household Budget Survey show that there were only 2.5 million beneficiaries, and of those households enrolled, only 31 percent were in the poorest decile (Aran and Hentschel 2012). Still, despite these problems, the Green Card Program did exist in law and did operate, albeit imperfectly, which gave the minister of health and his leadership team an avenue for delivering services, expanding entitlements, advancing policy goals, and generating public support without having to enter the parliamentary process.

Step 2: Bringing the Green Card Program under MoH Control: Prior to the reforms, Social Solidarity Foundations under the Prime Minister's Office ran the Green Card Program. In 2004, the MoH requested direct control of the program so it could oversee its expansion efforts and work to address bottlenecks in implementation without needing approval from other ministerial entities. Because the Social Solidarity Foundations were under the Prime Minister's control, he was able to easily transfer the Green Card Program to the MoH based on the Minister's request. Interviewees involved in this process reported that a first step in gaining administrative control of the Green Card Program was to replace the Green Cards with new green booklets as a mechanism to make all enrollees report to local authorities so they could be counted.

Once the administrative arrangements for Green Card reform were in place, the MoH worked to increase demand for the program by expanding the benefits package and improving the public sector delivery system. The MoH expanded the benefits package, adding coverage for outpatient services in 2004 and coverage for outpatient medicines in 2005 (Menon et al. 2013). The MoH needed to increase demand for the Green Card Program to power the enrollment required to raise coverage rates and ultimately to secure the requisite electoral support for the reforms from low-income households residing in rural areas. Many key informants described an explicit MoH policy to distribute as many Green Cards as possible to bring more people into the health system. This was both technically and politically expedient as it provided more benefits to citizens, empowered local committees to facilitate the process, and increased the electoral support for the AK Party among its base. Their efforts to stimulate demand proved successful as the number of Green Card holders increased from 2.5 million in 2003 to 9.1 million in 2011 (Aran and Hentschel 2012).

These expansion efforts required additional funding. A member of the senior leadership team reported that by gradually expanding both the benefits and beneficiaries of the Green Card Program, the MoH was able to desensitize those within the government responsible for financing the reform. But viewed over several years, expenditure on the Green Card Program increased dramatically — from 3.8 percent of public health expenditures in 2003 to 10.8 percent in 2007 and 8.4 percent in 2009. Green Card expenditures as a percent of total public expenditures increased from 0.4 percent in 2003 to 1.0 percent in 2009, and from 0.2 percent of GDP in 2003 to 0.4 percent of GDP in 2009 (Menon et al. 2013).

Alongside efforts to maximize Green Card enrollment, the MoH also invested in improvements to the public health delivery system. It focused its efforts on rural and poorer areas of the country, where Green Card-eligible individuals resided. In an interview, Minister Akdağ explained that providing financial protection for poor households was not enough, and that the MoH also had to ensure their access to health services (Baris et al. 2011; Johansen and Guisset 2012). The family medicine program, conditional cash transfers for maternal health services, pay-for-performance scheme, and merging of the SSK hospitals into the MoH system were all reforms that directly benefitted Green Card enrollees. These supply-side efforts, combined with the expanded benefits package, were used as enticements to increase demand for the Green Card Program.

By the time actual integration of Green Card holders into the General Health Insurance System commenced in January 2012, the hard work of increasing benefits, expanding coverage, and standardizing enrollment systems had already been done. On January 1, 2012, the newly formed Ministry of Family and Social Policy assumed responsibility from the MoH for determining eligibility for premium support (Menon et al. 2013). Green Card beneficiaries had 12 months to reapply to receive premium support; this process led to the official abolishment of the Green Card Program. In the first year of the new system, 7.5 million people were eligible for full premium support, and an additional 4.5 million were eligible for reduced premium payments (Ministry of Family and Social Policy 2013). Under this new system, the Ministry of Family and Social Policy determines eligibility, the Ministry of Finance pays the premiums for beneficiaries directly to the Social Security Institution, the Social Security Institution pays for the health services, and the MoH delivers the health services to the beneficiaries.

This incremental approach to expanding coverage and unifying all health coverage schemes allowed the MoH to provide benefits and gain the support of low-income households for the health reform without stirring up opposition from financing agents about the program's fiscal implications. As we discuss under contextual factors (part 3), it certainly helped that the Turkish economy grew during the reforms. Exempting the highest entitlement group from reform neutralized their opposition; adding the poor to the unified system through a separate "Green Card" tier, and then gradually narrowing the differences in the benefits packages, eliminated resistance from high-benefit groups.

CONCLUSION

This paper has focused on three aspects of expanding universal health coverage in Turkey: health financing, human resource policies, and the political economy of reform. As a result of the Health Transformation Program and the policies outlined in this chapter, Turkey underwent significant improvements in the supply and demand for health services, which were reflected in health care supply, utilization rate, and health outcomes.

HEALTH CARE SUPPLY

Increases in health expenditures have been mirrored by increases in the supply of health care services in Turkey over the past ten years. Between 2002 and 2012, the overall health workforce¹⁰ increased by 36 percent, growing from 294,587 to 460,966 (TÜİK 2013). Despite these increases, Turkey remains below average in the ratio of its health workforce to its population in comparison to other OECD countries, and to ECA countries and UMICs. Increasing the number of health workers in the country takes time as well as training initiatives in the education sector. To train and recruit more health workers, the government has increased the quota for medical school entrance from 4,450 students in 2003 to 11,037 students in 2013, according to the Ankara Association of Doctors (Ankara Tabipler Birliği) (2013). Despite efforts to train and recruit more health workers, the possibility to expand the supply of health workers in a dramatic way — holding quality constant — remains difficult in the short run.

Similarly, the number of hospitals, hospital beds, primary care units, and other health infrastructure has increased under the HTP. Despite these improvements, the number of hospital beds per population remains below that of all comparator countries. Among OECD member countries, only Chile had a lower number of hospital beds per 1,000 people (2.2) than Turkey (2.5) in 2011 (OECD 2013). There is a decreasing trend in the number of hospital beds in OECD countries on average, which may also alter the incentives for Turkish policy makers to continue to increase their numbers in the future.

The HTP emphasized increasing the availability of scarce technology. Between 2002 and 2011, the number of MRI machines increased from 58 to 781, the number of CT scanners increased from 323 to 1,088, and the number of ultrasound machines increased from 1,005 to 3,775 (Turkey, MoH 2012). Once again, these are remarkable increases; however, the number of MRI, CT scan, and ultrasound machines per population continues to remain below the levels of comparison countries. The Turkish government is now investigating ways to use health technologies more efficiently due to their relatively low levels and their increased application and accessibility.

HEALTH UTILIZATION

The increase in utilization of health care services is the most explicit indicator to assess the impact of reforms on demand. Physician visits per capita have more than doubled in the last decade — growing from 3.2 in 2002 to 8.2 in 2011 (Turkey, MoH 2012). Currently, per capita visits are above the OECD average. This is a reflection of a number of factors, but policies to improve the accessibility of the health care system have induced demand. Both physical and financial accessibility have improved in Turkey. The unmet medical need of the prereform period should also be taken into account in interpreting this outcome.

HEALTH OUTCOMES

Prior to HTP reforms Turkey's life expectancy was worse than average relative to its income level, and slightly better than average relative to its health spending level. By 2011, increases in life expectancy had aligned Turkey with the average level relative to both its income and health spending per capita

- *Life expectancy:* An average Turkish newborn born in 2011 has a chance to live an additional 3.5 years than one born in 2002 (World Development Indicators 2014). Between 2002 and 2011, life expectancy grew from an average of 71.0 years to 74. years. Relative to the selected comparator countries, Turkey's life expectancy remains below average. However, of the comparator countries only Korea had a larger increase in years gained over the same

10. Includes physicians, nurses, midwives, pharmacists, dentists, and health officers.

time period, with the country's life expectancy growing by four years. Under the HTP Turkey is decreasing the gap in average life expectancy at birth.

- *Infant mortality*: Turkey has made remarkable progress in reducing its infant mortality rate under the HTP. According to the World Development Indicators, infant mortality per 1,000 live births decreased from 26.1 in 2002 to 12.2 in 2012 (Ministry of Health estimates infant mortality per 1,000 live births at 7.7 in 2011) (Turkey, MoH 2012; World Bank 2013b). This rate of decrease is impressive relative to all other comparator countries. Between 2002 and 2012, infant mortality was more than halved in Turkey, while globally, infant mortality decreased by approximately one-third.
- *Under-five mortality*: Under-five mortality has also decreased significantly since 2002. According to the World Development Indicators, under-five mortality decreased by 55 percent, falling from 31.5 deaths per 1,000 live births to 14.2 deaths per 1,000 live births. Again, this decrease is far larger than any experienced in any of the comparator countries or country groupings.

The comparison of key health status indicators highlights the impressive improvements in the health of Turkey's population since 2002. The dramatic increases in health spending and reforms undertaken as part of the HTP have had clear positive impacts on life expectancy, infant mortality, and under-five mortality. These findings are aligned with those highlighted in the recent *Lancet* article by Atun, Akdağ et al. (2013), which showed that health outcomes improved for the most disadvantaged groups as a result of HTP reforms. There was certainly room for improvement in all these indicators given their poor performing levels prior to the reforms. Thus, although it has made dramatic advances, Turkey must continue to improve its citizens' health outcomes. As for Turkey's health expenditures, these have increased at a faster rate than in comparator countries, as have its health status indicators. This result is particularly interesting given the lagging progress made in increasing the number of health workers and other health supply indicators. These basic comparisons indicate that while Turkey has spent relatively more on its health care sector compared to other countries, the benefits it has gained from these resources largely justify the increased investment.

REFERENCES

- Abihiro, G. A., and D. McIntyre. 2013. "Universal Financial Protection through National Health Insurance: A Stakeholder Analysis of the Proposed One-Time Premium Payment Policy in Ghana." *Health Policy Plan* 28 (3): 263–78.
- Agyepong, I., and S. Adjei. 2008. "Public Social Policy Development and Implementation: A Case Study of the Ghana National Health Insurance Scheme." *Health Policy and Planning* 23: 150–60.
- Akdağ, R. 2011. *Turkey Health Transformation Program Evaluation Report 2003–2010*. Turkey, Ministry of Health, Ankara.
- Akinci, F., S. Mollahaliloglu, H. Gursoz, and F. Ogucu. 2012. "Assessment of the Turkish Health Care System Reforms: A Stakeholder Analysis." *Health Policy* 107 (1): 21–30.
- Akyüz, Y., and K. Boratav. 2003. "The Making of the Turkish Financial Crisis." *World Development* 31 (9): 1549–66.
- Alper, C. E., and Z. Ö. Alper. 2003. "Emerging Market Crises and the IMF: Rethinking the Role of the IMF in Light of Turkey's 2000–2001 Financial Crisis." *Canadian Journal of Development Studies/Revue Canadienne d'Études du Développement* 24 (2): 267–84.
- Ankara Association of Doctors (Ankara Tabipler Birliği). 2013. "Quota for Medical Schools More Than Doubled." <http://www.hekimpostasi.org.tr/2013/10/10/kontenjanlar-iki-katini-asti/>. Accessed January 15, 2013.
- Aran, M. A., and J. S. Hentschel. 2012. Protection in Good and Bad Times? The Turkish Green Card Health Program. Policy Research Working Paper 6178, World Bank, Washington, DC.
- Atun, R., S. Aydın, S. Chakraborty, S. Sümer, M. Aran, I. Gürol, S. Nazlıoğlu, Ş. Özgülcü, Ü. Aydoğan, B. Ayar, U. Dilmen and R. Akdağ. (2013). "Universal health coverage Coverage in Turkey: enhancement of equity." *The Lancet* 382 (9886): 65–99.
- Baicker, K., and D. Goldman. 2011. "Patient Cost-Sharing and Healthcare Spending Growth." *J Econ Perspect* 25 (2): 47–68.
- Baris, E., S. Mollahaliloglu, and S. Aydın. 2011. "Healthcare in Turkey: From Laggard to Leader." *BMJ* 342.
- Berman, P., and M. Tatar. 2003. *Turkey National Health Accounts 1999, 2000*. Ministry of Health Ankara. www.hm.saglik.gov.tr
- Bleich, S. N., E. Özaltın, and C. J. L. Murray. 2009. "How Does Satisfaction with the Health-Care System Relate to Patient Experience?" *Bulletin of the World Health Organization* 87 (4): 271–78.
- Boulton, L., and M. Wolf. 2002. Turkey's Ailment: The Country's Chances of Controlling Public Debt and Securing Economic Recovery Could Be Jeopardised by the Ill-Health of the Prime Minister. *Financial Times*.
- Brugha, R., and Z. Varvasovszky. 2000. "Stakeholder Analysis: A Review." *Health Policy Plan* 15 (3): 239–46.
- Bryant, S. 2010. "Erdogan Seeks Re-Elections as Turkish Healthcare Plan Trumps Headscarves." *Bloomberg News*.
- Bump, J. B., M. R. Reich, and A. M. Johnson. 2012. "Diarrhoeal Diseases and the Global Health Agenda: Measuring and Changing Priority." *Health Policy Plan* 28 (8):799–808.
- Bump, J. B., and S. P. Sparkes. (Unpublished). "A Political Economy Analysis of Turkey's Health Transformation Program." Background paper, World Bank, Washington, DC.

- Chisolm, D., and D. B. Evans. 2010. "Improving Health System Efficiency as a Means of Moving towards Universal Coverage." World Health Report Background Paper 28. Geneva: World Health Organization.
- Damrongplisit, K., and G. A. Melnick. 2009. "Early Results from Thailand's 30 Baht Health Reform: Something to Smile about." *Health Affairs* 28 (3): w457–66.
- Docteur, Elizabeth. 2013 (Unpublished). "Hospital Sector Reform in Turkey 2003–2012: An Assessment of Changes in Governance, Administration and Financing. Background paper, World Bank, Washington, DC.
- Ekman, B., N. T. Liem, H. A. Duc, and H. Axelson. 2008. "Health Insurance Reform in Vietnam: A Review of Recent Developments and Future Challenges." *Health Policy Plan*. 23 (4): 252–63.
- Ertugrul, A., and F. Selcuk. 2001. "A Brief Account of the Turkish Economy, 1980--2000." *Russian & East European Finance & Trade* 37 (6): 6.
- Fisher, E. S., J. P. Bynum, and J. S. Skinner. 2009. "Slowing the Growth of Health Care Costs — Lessons from Regional Variation." *N Engl J Med* 360 (9): 849–52.
- Frenk, J., O. Gómez-Dantés, and F. M. Knaul. 2009. "The Democratization of Health in Mexico: Financial Innovations for Universal Coverage." *Bull World Health Organ* 87 (7): 542–48.
- Gil, A., O. Polikina, N. Koroleva, D. A. Leon, and M. McKee. 2010. "Alcohol Policy in a Russian Region: A Stakeholder Analysis." *Eur J Public Health* 20 (5): 588–94.
- Gilson, L., E. Erasmus, J. Borghi, J. Macha, P. Kamuzora and G. Mtei. 2012. "Using Stakeholder Analysis to Support Moves towards Universal Coverage: Lessons from the SHIELD Project." *Health Policy Plan* 27 Suppl 1: i64–76.
- Hacker, J. S. 1998. "The Historical Logic of National Health Insurance: Structure and Sequence in the Development of British, Canadian, and U.S. Medical Policy." *Studies in American Political Development* 12 (01): 57–130.
- Heper, M. 2003. "The Victory of the Justice and Development Party in Turkey." *Mediterranean Politics* 8 (1): 127–34.
- Hu, S. 2008. "Universal Coverage and Health Financing from China's Perspective." *Bulletin of the World Health Organization* 86 (11): 819.
- Hughes, D., and S. Leethongdee. 2007. "Universal Coverage In the Land of Smiles: Lessons from Thailand's 30 Baht Health Reforms." *Health Affairs* 26 (4): 999–1008.
- Hurriyet Daily News. 2010. "Turkey to Halve Number of Green Card Holders by 2012." *Hurriyet Daily News*.
- Immergut, E. M. 1990. "Institutions, Veto Points, and Policy Results: A Comparative Analysis of Health Care." *Journal of Public Policy* 10 (4): 391–416.
- . 1992. *Health Politics: Interests and Institutions in Western Europe*. Cambridge, UK; New York: Cambridge University Press.
- International Monetary Fund (IMF). 2002a. Turkey Article IV Consultation. Washington, DC.
- . 2002b. "Turkey: Request for Standby Agreement." IMF Country Report no. 02/136, Washington, DC.
- Johansen, A., and A.-L. Guisset. 2012. *Successful Health Systems Reforms: The Case of Turkey*. World Health Organization Europe, Copenhagen.
- Karadeniz, O. 2012. "Extension of Health Services Coverage for Needy in Turkey: From Social Assistance to General Health Insurance." *Journal of Social Security* 2: 103–23.
- Knaul, F. M., E. González-Pier, O. Gómez-Dantés, D. García-Junco, H. Arreola-Ornelas, M. Barraza-Lloréns, R. Sandoval, F. Caballero, M. Hernández-Avila, M. Juan, D. Kershenobich, G. Nigenda, E. Ruelas, J. Sepúlveda, R. Tapia, G. Soberón, S. Chertorivski, and J. Frenk. 2012. "The Quest for Universal Health Coverage: Achieving Social Protection for All in Mexico." *The Lancet* 380 (9849): 1259–79.
- Lakin, J. 2010. "The End of Insurance: Mexico's Seguro Popular, 2001–2007." *Journal of Health*

- Liu, Y., Y. Çelik, and B. Sahin. 2005. "Health and Pharmaceutical Expenditures in Turkey." Sağlıkta Umud Vakfı, Ankara.
- Logie, D. E., M. Rowson, and F. Ndagije. 2008. "Innovations in Rwanda's Health System: Looking to the Future." *The Lancet* 372 (9634): 256–61.
- Menon, R., S. Mollahaliloglu, and I. Postolovska. 2013. "Towards Universal Coverage: Turkey's Green Card Program for the Poor," World Bank, Washington, DC.
- Miake N., N. Ikegami, Y. Tagawa, and K. Uno. Forthcoming. National Hospital Reform Results and Challenges: Lessons for Low and Medium-Income Countries, World Bank, Washington, DC.
- Mollahaliloglu, S., Kosdak, M. Eryılmaz, Z. "Health Statistics Yearbook 2008" Ankara 2010
- Namazzi, G., N. Kiwanuka, P. Waiswa, J. Bua, O. Okui, K. Allen, A. Hyder, and K. Ekirapa. 2013. "Stakeholder Analysis for a Maternal and Newborn Health Project in Eastern Uganda." *BMC Pregnancy and Childbirth* 13 (1): 58.
- OECD (Organisation for Economic Co-operation and Development). 2010a. *Value for Money in Health Spending*, OECD Health Policy Studies, Paris.
- . 2013. *OECD Health Data 2013*. Paris.
- OECD, WHO, and World Bank. 2008. *OECD Reviews of Health Systems: Turkey*. Paris.
- Olson, M. 1971. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge, MA: Harvard University Press.
- Özbudun, E. 2006. "From Political Islam to Conservative Democracy: The Case of the Justice and Development Party in Turkey." *South European Society and Politics* 11 (3–4): 543–57.
- Paim, J., C. Travassos, C. Almeida, L. Bahia, and J. Macinko. 2011. "The Brazilian Health System: History, Advances, and Challenges." *The Lancet* 377 (9779): 1778–97.
- Pannarunothai, S., D. Patmasiriwat, and S. Srithamrongsawat. 2004. "Universal Health Coverage in Thailand: Ideas for Reform and Policy Struggling." *Health Policy* 68 (1): 17–30.
- Porter, M. E. 2010. "What Is Value in Health Care?" *N Engl J Med* 363 (26): 2477–81.
- Reich, M. R. 1995. "The Politics of Health Sector Reform in Developing Countries: Three Cases of Pharmaceutical Policy." *Health Policy* 32 (1–3): 47–77.
- Republic of Turkey and the International Bank for Reconstruction and Development. 2004. Loan Agreement: Health Transition Project. Loan number 4737 TU.
- Roberts, M., W. Hsiao, P. Berman, and M. R. Reich. 2003. *Getting Health Reform Right: A Guide to Improving Performance and Equity*. New York: Oxford University Press.
- Rossetti, A. G. 2004. "Republic of Turkey Health Transformation Program: Strategic Options for the Implementation of the Health Sector Transformation in Turkey." Turkey, Ministry of Health and the World Bank, Ankara.
- Sarr, F. 2010. "Efficiency of Immunization Service in the Gambia: Results of a Stakeholder Analysis." *East Afr J Public Health* 7 (1): 68–73.
- Şimşek, B., H. Ergül, Ş. Ince, and A. Budak. 2013 (Unpublished). "Survey on Health Transformation Program from the Perspective of Health Staff." Background paper, World Bank, Washington, DC.
- [Social Security Institution. 2013. http://www.sgk.gov.tr.](http://www.sgk.gov.tr)
- Tangcharoensathien, V., W. Patcharanarumol, P. Ir, S. M. Aljunid, A. G. Mukti, K. Akkhavong, E. Banzon, D. B. Huong, H. Thabrany, and A. Mills. 2011. "Health-Financing Reforms in Southeast Asia: Challenges in Achieving Universal Coverage." *The Lancet* 377 (9768): 863–73.
- Tanik, F. A., E. Bilaloğlu, Z. Özçelik, and U. Okman. 2013. "The Greatest Motivation: Assurance of

- Practicing the Profession with Dignity. Motivational State of Physicians in Turkey." *World Medical Journal* 59 (3).
- Tatar, M., S. Mollahaliloglu, B. Sahin, S. Aydın, A. Maresso, and C. Hernández-Quevedo. 2011. "Turkey Health System Review." *Health Systems in Transition* (13) 6. European Observatory on Health Systems and Policy, Brussels.
- Tatar, Mehtap, and Yusuf Çelik. 2013 (Unpublished). "Health Financing in Turkey: An Overview and Value for Money Analysis." Background paper, World Bank, Washington, DC.
- TÜİK (Turkish Statistical Institute). 2003–12. "Life Satisfaction Survey." Ankara.
- Turkey, Ministry of Family and Social Policy. 2013. *Premium Support Eligibility 2012 and 2013* (May). Ankara.
- Turkey, Ministry of Health. 2002. *Health Transformation Programme*. Ankara.
- . 2003. *Transformation in Health*. Ankara.
- . 2009. *Health Reform Progress Report*. Ankara.
- . 2010. "Health Transformation Program in Turkey Progress Report". Ankara.
- Turkey, [Ministry-Of-Development. 2013a. http://www.kalkinma.gov.tr](http://www.kalkinma.gov.tr).
- Turkey, [Ministry-Of-Development. 2013b. http://www.kalkinma.gov.tr](http://www.kalkinma.gov.tr).
- Varvasovszky, Z., and R. Brugha. 2000. "A Stakeholder Analysis." *Health Policy Plan* 15 (3): 338–45.
- WHO (World Health Organization). 2000. *The World Health Report 2000 — Health Systems: Improving Performance*. Geneva.
- . 2013. *Turkey National Health Accounts — Health Expenditure Series*. Geneva.
- World Bank. 2003. *Turkey: Reforming the Health Sector for Improved Access and Efficiency*. Washington, DC.
- . 2006. *Turkey Public Expenditure Review*. Washington, DC. Report no. 36764-TR.
- . 2009. "Health Workforce Policy in Turkey: Recent Reforms and Issues for the Future." Washington, DC.
- . 2012. "World Development Indicators." Washington, DC.
- . 2014. "World Development Indicators." Washington, DC.
- . 2013a. *Turkey — Performance Based Contracting Scheme in Family Medicine: Design and Achievements*. World Bank: Washington, DC.
- . 2013b. "World Development Indicators." Washington, DC.
- Yasar, G. Y. 2011. "'Health Transformation Programme' in Turkey: An Assessment." *The International Journal of Health Planning and Management* 26 (2): 110–33.

In 2003 Turkey initiated a series of reforms under the Health Transformation Program (HTP) that over the past decade have led to the achievement of universal health coverage (UHC). The progress of Turkey's health system has few — if any — parallels in scope and speed. Before the reforms, Turkey's aggregate health indicators lagged behind those of OECD member states and other middle-income countries. The health financing system was fragmented, with four separate insurance schemes and a "Green Card" program for the poor, each with distinct benefits packages and access rules. Both the Ministry of Labor and Social Security and Ministry of Health (MoH) were providers and financiers of the health system, and four different ministries were directly involved in public health care delivery. Turkey's reform have resulted in the rapid expansion of the proportion of the population covered and of the services to which they are entitled. At the same time, financial protection has improved. For example, (i) insurance coverage increased from 64 to 98 percent between 2002 and 2012; (ii) the share of pregnant women having four antenatal care visits increased from 54 to 82 percent between 2003 and 2010; and (iii) citizen satisfaction with health services increased from 39.5 to 75.9 percent between 2003 and 2011. Despite dramatic improvements there is still space for Turkey to continue to improve its citizens' health outcomes, and challenges lie ahead for improving services beyond primary care.

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