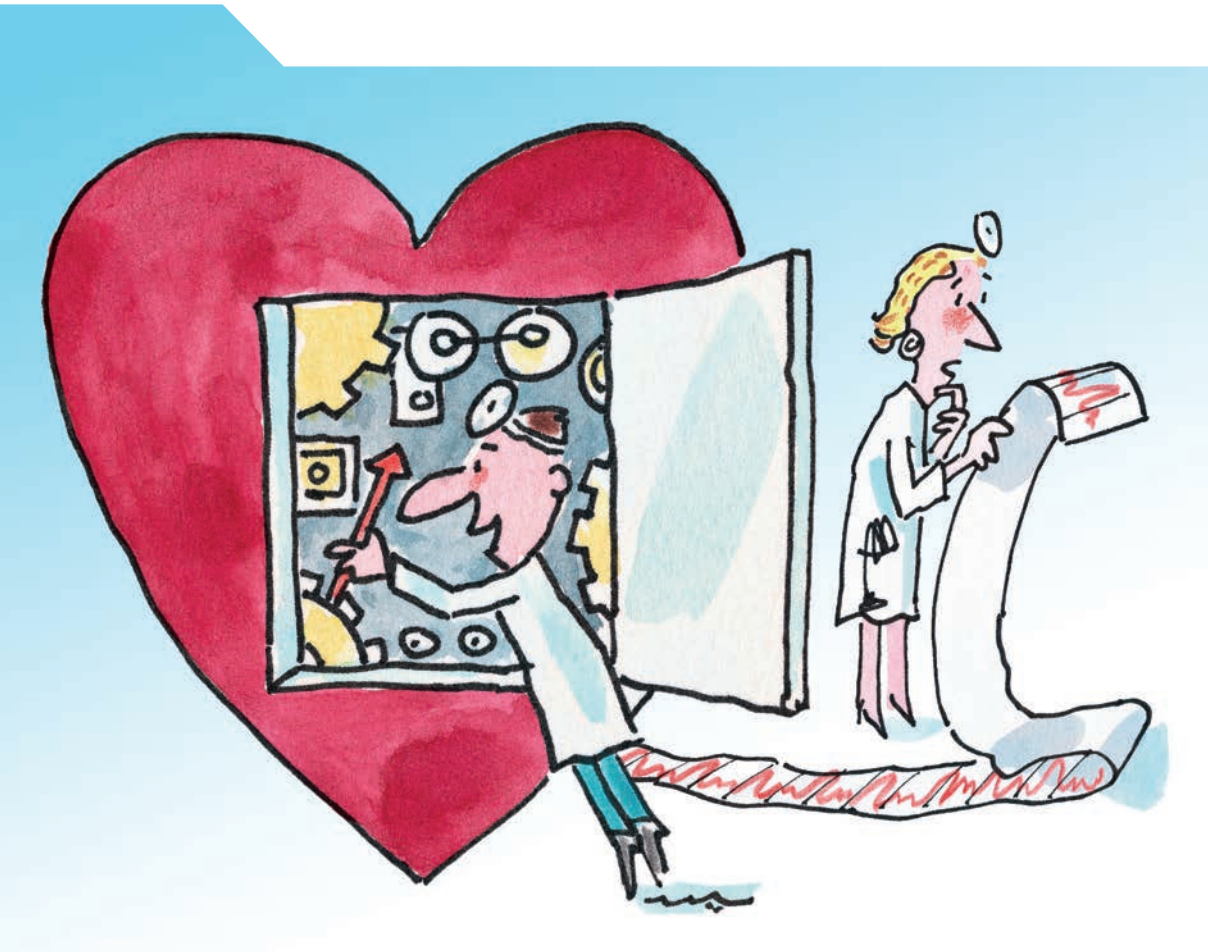
OECD Reviews of Health Care Quality

TURKEY

RAISING STANDARDS



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OECD Reviews of Health Care Quality: Turkey 2014

RAISING STANDARDS

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Foreword

This report is the sixth of a series of publications reviewing the quality of health care across selected OECD countries. As health costs continue to climb, policy makers increasingly face the challenge of ensuring that substantial spending on health is delivering value for money. At the same time, concerns about patients occasionally receiving poor quality health care led to demands for greater transparency and accountability. Despite this, there is still considerable uncertainty over which policies work best in delivering health care that is safe, effective and provides a good patient experience, and which quality-improvement strategies can help deliver the best care at the least cost. *OECD Reviews of Health Care Quality* seek to highlight and support the development of better policies to improve quality in health care, to help ensure that the substantial resources devoted to health are being used effectively in supporting people to live healthier lives.

Turkey's Health Transformation Programme, which began in 2003, has rightly been commended for extending health insurance, increasing the supply of primary care (particularly for maternal and child health) and increasing access to hospital care. These were undoubtedly the right early priorities to choose. Now, however, a new focus is needed on the quality of health care. Increasing the amount and impact of quality-related data will be essential to this, both at service level and nationally, making data publicly available so that comparison with peers can be the basis for constant quality assurance and improvement. Payments to hospitals should be refined to better reflect the complexity of individual cases and limit a tendency to over-supply, especially where the same care could be better provided in primary or community care. The new specialty of family medicine, responsible for delivering primary care, could also be strengthened through a number of initiatives, such as patient registers, more extensive indicators of care and its outcomes, and clinical guidelines – particularly for long-term conditions such as heart disease or diabetes.

A corrigendum has been issued for this page. See http://www.oecd.org/about/publishing/Corrigendum-ReviewsHealthCareQuality-Turkey.pdf

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Acronyms and abbreviations

AHRQ	Agency for Healthcare Research and Quality
AMI	Acute myocardial infarction
CHD	Coronary heart disease
CME	Continuous Medical Education
COPD	Chronic obstructive pulmonary disease (chronic bronchitis and emphysema)
CPD	Continuing professional development
CT	Computed tomography
DALY	Disability-adjusted life year
DRG	Diagnostic-Related Group
EFQM	European Foundation of Quality Management
FM	Family medicine
FP	Family physician
GDP	Gross domestic product
GHIS	*Genel Sağlık Sigortası* (General Health Insurance Scheme)
GP	General practitioner
HAS	*Haute Autorité de Santé*
HCQI	OECD Health Care Quality Indicator Programme
HTP	Health Transformation Programme
ISQua	International Society for Quality in Health Care
IT	Information technology
KETEM	Cancer Early Diagnosis Screening and Training Centres
LTC	Long-term care
MCH	Maternal and child health
MDT	Multi-disciplinary team
MRI	Magnetic resonance imaging
NCD	Non-communicable disease

NCHOD	National Centre for Health Outcome Development
NHS	National Health System
NICE	National Institute for Clinical Excellence
NSQHS	National Safety and Quality Health Service Standards
PCP	Primary care physician
PTCA	Percutaneous transluminal coronary angioplasty
QICH	Quality Indicators in Community Healthcare
RHA	Regional Hospitalisation Agency
SSI	*Sosyal Güvenlik Kurumu* (Social Security Institution)
TAHUD	*Türkiye Aile Hekimleri Uzmanlık Derneği* (Turkish Association of Family Physicians)
TRL	Turkish lira
TUIK	Turkish Statistical Institute
TURDEP	Turkish Diabetes Epidemiological

Executive summary

Over the past decade, *Turkey has implemented remarkable health-care reforms*, achieving universal health coverage in 2003, and dramatically expanding access to care for the population. Accompanied by significant investment in the hospital sector and the establishment of a family physician system, the Health Transformation Programme (HTP) has delivered a high level of activity in the health system. The reforms benefitted from ambitious leadership and a clear set of priorities (focused on expanding health insurance and improving access and, in the clinical domain, on maternal and child health). An evaluation culture built in from the beginning and a willingness to open up the reform process to external scrutiny were also fundamental elements. Centralisation and rationalisation of the health system's governance was critical in achieving recent health-care successes. A maturing system, however, might now benefit from a less directive approach. Indeed, the centre should now feel confident enough to relax control, and instead set out the broad ambitions and get the right incentives in place, focussing on a quality governance role. The Ministry of Health is, it should be noted, taking some steps to devolve responsibility for providing hospital services and focus instead on its regulatory, oversight, and quality governance functions.

Routinely published data in the Turkish health system largely focuses on supply and activity, hence there is great scope to *increase the role of quality-related data* in steering Turkey's health system. Data on health sector activity and outcomes also need to be made more available and more usable for individual patients and clinicians. Open comparison of service-level data should be promoted, with the expectation that it will function as a highly effective tool to drive up quality standards and reduce variation. Strengthening of the involvement of all stakeholders in the standard setting process and increased transparency on the process of evaluation and scoring can help to further increase the acceptability and impact of the reforms. National statistics must also start collecting the right data in the right format to allow Turkey to participate in international benchmarking activities, such as the OECD's health care quality indicators. Continued work on specific registries, whilst optimising the use of routine administrative data in

tracking and improving the quality of services, is also needed. A coherent policy on strengthening the Turkey's health information infrastructure to facilitate the use of quality indicators is needed.

Whilst focussing on coverage, access and activity were undoubtedly the right priorities in the first decade of the HTP, Turkey's health system must now focus on quality and outcomes. A clear example of the risks of not doing so comes from the *hospital sector*. With a high propensity for visiting emergency hospital services even for minor ailments, payment incentives that encourage volumes of in-patient care, and initiatives to improve clinical quality of care in early stages, there is a risk that a focus on quantity and productivity enhancement might come at the expense of ensuring that care is delivered in the most appropriate care settings. In parallel, the *primary care* sector, having achieved of widely hailed improvements in access, must now adopt *quality* as the focus of on-going reform. Turkey has a number of initiatives in place with the potential to be effective tools for quality assurance and improvement, but each must be developed further before their full utility can be exploited. Current quality assurance activities tend to focus on minimum standards, and limited information is available in the public domain. To build a quality culture, the focus of on-going reform should move from one of control and penalising bad performers to one of encouraging continuous improvement.

Payments to hospitals – particularly public hospitals – have undergone a major transformation over the course of the past decade, but remain activity-focused and poorly linked to outcomes. The quality component that does exist in hospital reimbursement is weak (and self-assessed). Furthermore, there is little incentive for public hospitals to contain costs, since overspends are met with increases in the global budget the following year. Neither is there any differentiation in reimbursement between tertiary centres taking the most complex cases and general hospitals. This situation could be addressed through the gradual shift from package-fees to a case-mix adjusted payment. Turkey already has the data infrastructure and coding processes in place in that would facilitate the shift to case-mix adjustment relatively rapidly. Public hospitals pay staff through one of the largest pay for performance schemes among OECD countries, although the majority of these are indicators of productivity measured by health outputs. Similarly, in primary care, the quality component of physicians' pay is, in fact, activity based.

Turkey's success at improving health-care coverage and system performance has been impressive, and key areas of the reform are reflected in the significant improvements across indicators such as maternal mortality, and infant mortality. Although maternal and child health were undoubtedly the right investments to have made in the early years of Turkey's HTP,

Turkey's maturing health system must anticipate the inevitable shifting of the national disease burden toward the *chronic morbidities* associated with increasing years and, in some cases, unhealthy lifestyles. This transition, coupled with increasing patient expectations around more convenient and better co-ordinated care, ought to renew the focus on primary care.

Assessment and recommendations

Driven by clear vision and strong leadership, the first ten years of Turkey's Health Transformation Programme have dramatically expanded access to health care. Accompanied by significant investment in the hospital sector, the establishment of a family physician system and payment reforms, the Health Transformation Programme (HTP) has delivered better access and a high level of activity in the health system. To build on its success, it is time for Turkey to shift the emphasis from encouraging high volume of care to delivering high-quality health services.

The Turkish HTP demonstrates how a country can, in a relatively short period of time, successfully deliver universal health coverage. The reform consolidated multiple coverage schemes that had diverse entitlement rules into a single Social Security Institution (SSI), improving pooling and redistribution. The Green Card programme for the poor, the main social protection programme of the Turkish Government, was the last to be added to the Social Security Institution in 2012. Expansion in coverage was accompanied by health spending growth well above other OECD countries, averaging 7.7% since 2002. As a share of GDP, health spending in Turkey went from 5.4% in 2002 to 6.1% in 2008.

Re-building a primary care system to maintain and improve population health – with clearly assigned responsibilities for service delivery and nationally consistent payment methods – has been a central ambition of the reform. The training of new physicians as family physicians and retraining of existing GPs into the speciality have been national priorities. The introduction of a pay penalty for doctors not delivering a basic set of child and maternal health services led to remarkable improvements in the delivery of these services. Major investments in hospital capacity across the public (Ministry of Health) and the private sector, and the introduction of payment reforms that linked the remuneration of specialists in public hospitals to the volume of services delivered, have also increased service delivery in secondary care. The private sector has developed rapidly over the past decade, including in less developed regions of Turkey, and now represent 36% of hospitals and nearly 18% of all hospitals beds.

In a sector where reforms are difficult to design and even harder to deliver, the Turkish Government deserves praise for the way in which the health care reform agenda has progressed. Central governance and ambitious leadership have been instrumental to the implementation of this reform programme. The HTP also benefitted from a clear set of priorities – focused on expanding health insurance and improving access and, in the clinical domain, on maternal and child health – as well as external advice and support from international agencies. Particularly important was a willingness to open up the reform process to external scrutiny from outside the country.

While still too early to be fully evaluated, the reforms have undoubtedly been a success in several respects. The health of the Turkish population has improved impressively over the past ten years as illustrated by statistics on life expectancy at birth, neonatal mortality, maternal mortality and infant mortality. For example, life expectancy at birth has reached 74 years, recording the second largest gain in the OECD – 25 years since 1960. Similarly, Turkey has achieved the highest average reduction of 6.9% per year in infant mortality between 1970 and 2011, followed in the OECD by Korea (6.4% per year) and Portugal (6.8% per year). Financial protection has also greatly improved. Public health spending now accounts for 73% of total health expenditure, slightly above the OECD average of 72%. Over the past decade, out-of-pocket spending by families has shown the second fastest reduction after Korea, and reported figures are now the lowest in the OECD as a share of household consumption (1.5%). Likewise health-care facilities and infrastructure have expanded, coming closer to OECD averages.

The reform agenda is not over yet. Although capacity in the Turkish hospital sector has been growing fast, there are still major plans for building new and modernising existing hospital facilities in the Ministry of Health sector. There are also ambitions to continue expanding the primary care workforce and achieve by 2023, in time for the centenary celebrations of the founding of the Turkish Republic, a doctor to population ratio that matches the norm amongst OECD countries.

However, despite universal health coverage, health indicators still remain among the lowest in the OECD, and a number of challenges remain in the Turkish health system:

- Having placed much emphasis on improving productivity in health care, the system should now fully embrace quality and outcome improvement as the next overarching priority.
- Overly centralised governance of the health system could stifle local-level initiative and flexibility. Although instrumental to delivering the significant reforms Turkey has pursued in the past decade, there is a risk that heavy centralisation could discourage constructive involvement and initiatives from providers, in a country whose geography, epidemiology of disease and ethnicity are highly diverse.
- Few indicators of quality are collected, and those that exist, point to poor quality of care by OECD standards. For example, mortality within 30 days of hospital admission for acute myocardial infarction in Turkey – 10.7 per 100 patients – is 35% higher than the OECD average of 7.9. Similarly for stroke, case fatality within 30 days of hospital admission is the third highest in the OECD (11.8 per 100 patients), following Mexico and Slovenia. These data signal the need for prioritising monitoring and improvement initiatives. There is still insufficient collection and public reporting of quality measures, including from the private sector.
- Dialogue between key stakeholders has not always been constructive, while professional efforts to pursue modern form of continuous medical education are still in their infancy. This might mitigate efforts to further drive quality gains in health-care services.
- Payment systems have rewarded structure and activity very well; however the link between increased activity and quality of care can in no way be assumed, and there is a risk that productivity might lead to higher cost without necessarily improving outcomes. The dependency of public hospitals for funding from the Ministry of Health risks central government taking more interest in the operations of its own facilities rather than in assuring quality for the system as a whole.
- Emerging new health care needs will challenge the health system in its current configuration. While maternal and child health have rightly been the priorities for the Turkish health system in the past decade, fast economic growth and reductions in premature mortality mean that Turkey will face a demographic and epidemiological shift at a much faster speed than most OECD countries. Chronic diseases such as diabetes and risk factors such as obesity must urgently become a focus of policy makers and clinicians' attention.

Having demonstrated remarkable confidence in pushing reform, the Turkish health-care system is very well placed to address the challenges highlighted above, maturing into a system that is adaptable and ready to address emerging health needs. Whilst focussing on coverage, access and activity were undoubtedly the right priorities in the first decade of the HTP, Turkey's health system must now focus on quality and outcomes. There are several opportunities for doing so, each implying further reforms, as set out in the text that follows.

Further efforts are needed to place focus of health policy on outcomes and quality

The focus of on-going reform should move from quantity to quality assurance

Compared to other OECD countries, there is less evidence of a quality culture in Turkish health care than elsewhere. Thus far, reforms have had a near-exclusive focus on inputs and activity, with a view to increasing the volumes of both.

These, however, are only a part of what guarantees quality in health care, and the Turkish authorities and health professionals need to start focusing on outcomes. The current bias toward supply and activity, and relatively weak quality culture that ensues as consequence, is evident in several examples:

- In primary care, services are inspected against standards that focus almost exclusively on the physical fabric of the building and availability of clinical equipment and emergency drugs. A random sample of 10% patient records is examined regularly. A limited number of activity-related standards are included, which focus on maternal and child health. These are binary measures whether all babies, for example, have had a new-born hearing test. No standards relate to outcomes.
- In the hospital sector, patients' propensity for visiting emergency hospital services even for minor ailments and payment incentives that encourage volumes of in-patient care create the risk that patient safety and care effectiveness are not prioritised enough.
- Although an adverse event reporting system for public hospitals has been established, reporting is currently voluntary. The extent to which such a system can support hospitals to identify common adverse events and learn means to avoid them is therefore limited.

- The narrative of co-ordination and integration, which is an increasing priority in many OECD health systems, is nearly absent in Turkey. However, some progress has been made in this direction through improving health information systems to foster communication between health sectors.

…and to building professional interest in quality as well as a culture of quality improvement

Whilst Turkey has successfully expanded the number of health professionals and improved their distribution, the country still has fewer doctors relative to its population (1.7 per 1 000 population) than other OECD countries (3.2 per 1 000 population, on average across the OECD). Furthermore, the focus thus far has been on numbers – attention to quality has been allowed to lapse. In the case of family medicine, the original two-year retraining programme for the cohort of pre-HTP primary care physicians is often curtailed in an effort to get as many to qualify in the new speciality as possible. Apart from the new speciality of family physicians (described in Chapter 2), Turkey currently has no formal guidance, or requirements at national level on continuing professional development. Some local initiatives are conducted by the Ministry of Health or professional associations, including conferences, symposiums and post-graduate courses to train physicians, nurses, technicians and other health-care workers. Turkey needs a balanced system of self-regulation and accountability of the clinical professions in order to assure quality of care as in most other OECD countries.

To build a quality culture, the focus of on-going reform should move from one of control and penalising bad performers to one of encouraging continuous improvement. Clinicians and service managers should be encouraged to change practice towards better and safer care through a mix of educational measures, data collection and disclosure requirements with feedback on performance provided back to clinicians, managers and users. The celebration of good practices or encouragement of hospital and clinician "champion roles" will also contribute to a quality improvement culture.

There is also a need to monitor the outcomes of recent reforms that regulate the extent of private practice of hospital physicians. Whilst this reform is likely to have protected patients from being referred unnecessarily to physicians' private practice, or from being seen by exclusively by junior doctors in public hospitals, there are reports that it has led to some clinicians dropping part-time practice in public hospitals. A review of quality and access indicators before and after the reform should be undertaken.

Information can be better exploited to steer improvement in Turkey's health system

Data systems on quality of care are still under development in Turkey. Although a growing amount of data is becoming available that can be used to monitor quality of care, present quality assurance activities are rather control-oriented and the available information is not exploited to its full potential. Very limited information on quality is available in the public domain and focuses on supply and activity – such as consultation numbers, hospital discharge rates and lengths of stay and staff remuneration. Clinical outcomes of care – apart from very broad societal measures such as life expectancy – are not routinely reported. Furthermore, what data is viewable to service providers or users is presented at a high aggregate level, which can confound local efforts to benchmark and monitor quality improvement.

Among the priorities for improving the information system on quality for Turkey, the following seem appropriate:

- Although a growing amount of data is available to monitor quality of care in public hospitals, further development is needed over the coming years to strengthen the collection and reporting of a broad set of quality indicators, particularly in areas beyond maternal and child health, such as non-communicable diseases or mental health.
- Performance measurement efforts developed by the Ministry of Health for public hospitals can be furthered. In particular, strengthening of the involvement of all stakeholders in the standard-setting process and transparency on the process of evaluation and scoring can help to further increase the acceptability and impact of the programme.
- A coherent policy on how to strengthen the Turkish information infrastructure to facilitate the use of quality indicators, addressing topics such as data-linkage, secondary use of data from Electronic Health Records and assurance of privacy and data-security is advisable. Turkey could look at the experience of other OECD countries that have made significant progress on these issues, such as South Korea, Finland, Sweden and the United Kingdom.
- Further work on specific registries should be encouraged as well as better use of administrative data available through organisations such as the Social Security Institute. A national cancer registry, for example, would be a natural evolution of the network of KETEMs, or early diagnosis centres, that Turkey has established and allow the patterns and outcomes of cancer care to be more closely scrutinised and opportunities for improvement identified. This data

development work can be linked to developing a more sophisticated set of standards, focussing on the processes and outcomes of clinical care.

- Data on health sector activity and outcomes needs to be made more available and usable for patients and clinicians. From the user perspective, steps have been taken to strengthen the position of patients around complaint handling. It is advisable now to have more information on performance of health-care services in the public domain. Capturing the experiences of health-care users systematically could be more broadly embedded. Open comparison of service-level data across different provinces as in Sweden should be promoted, with the expectation that it would function as a highly effective tool to drive up quality standards and reduce variation across regions and providers.
- National statistics must start collecting the right data in the right format to allow Turkey to participate in international benchmarking activities, such as the OECD Health Care Quality Indicators project, including systematic measurement of patients' experiences of using the health-care system. It is expected that these statistics such as five-year survival rates for cancer, 30-day case fatality rates for patients admitted for AMI and stroke and hospital admission rates for quality of ambulatory care sensitive conditions such as diabetes, chronic heart failure and COPD will become available over the coming years. But significant extra investment is needed to ensure that these are robust enough to submit for international comparison.

Centralisation of the health system's governance has been a critical element in achieving success but should now be relaxed

Centralisation is a dominant feature of the Turkish governance model, both geographically (there is limited local autonomy) and functionally (through managing delivery of key health system activities from within the Ministry of Health). One of the benefits of such strong centralisation has been the ability to prioritise and rapidly roll-out key health system functions that were previously weak or variable, for example in the primary care sector and on payment arrangements.

However, the heavy centralisation of power which has characterised the first decade of Turkey's HTP engenders a number of trade-offs, such as a lack of innovation and diffusion of knowledge in the hospital sector and few local-level incentives or opportunities for workforce development. Limited flexibility in per capita payments to doctors, which are fixed centrally, has also created challenges in supporting doctors who wish to employ other

health professionals and deliver team-based care. Family physicians, for example, have no budgetary oversight over the nurses working under their supervision.

Another important consequence has been conflict with professional bodies. Whilst strongly divergent views between government and professional groups are not unique to Turkey, consensus has had a notably minor role in steering reform in Turkey. The Turkish Medical Association remains opposed to the HTP, especially as payment arrangements place considerable pressure on doctors to deliver higher volumes of services. Although some elementary self-regulation of the medical profession is in place, strong disagreements exist between the profession (as represented by the Turkish Medical Association, Turkish Nurses' Association and Turkish Midwives' Association) and the government on mutual roles and responsibilities.

Having achieved impressive reforms, the central government authorities should now feel confident enough to relax functional and operational control. While the Ministry of Health is taking some such steps to devolve responsibility, for example by devolving the responsibility for delivering hospital services, progress on shifting focus to its regulatory, oversight, and quality governance functions, has been rather slow. To respond to the challenges that Turkey is now facing, government authorities might more usefully redefine its function as one of setting the broad goals for the system and ensuring that the right incentives are in place. Releasing responsibility for operations will also free central government authorities to focus on a quality governance role.

Reforms in the primary health care represent an excellent platform for further quality improvement efforts

One of the Health Transformation Programme's central ambitions was to rebuild primary care

Whereas prior to 2003 arrangements for primary care were only loosely defined, with a doctor and/or ancillary staff such as nurses and midwives offering a variable range of services to a locality, often dependent on individual initiative, the HTP established a family medicine system in 2005 to bring consistency and structure to the sector. The core team was defined as a family physician and a nurse and made responsible for a core set of tasks, focussed around maternal and child health. Original plans envisaged that existing GPs would progressively gain recognition as family physicians provided they completed ten days' of preliminary orientation, followed by a two-year programme of specialist training.

The efforts have borne fruit. Both the absolute numbers of primary care physicians and their distribution has dramatically improved since the implementation of the HTP. Between 2000 and 2008, the primary care workforce expanded from 41.1 doctors per 100 000 to 52.6, and the ratio between the best and least-served areas improved from 8.3:1 to 2.8:1. Turkey's primary care/generalist workforce now comprises 33% of all doctors, in line with the OECD average of 30%.

Discrete incentivised activities can be linked to better outcomes, but the broader picture of primary care quality is much less clear

An important aspect of the reform has been the change in payment mechanisms. Family physicians are reimbursed by prorated capitation payments alongside fees-for-service. To encourage delivery of some of the key antenatal and postnatal care, the payment system embeds an element of performance-related pay, by applying a penalty of around USD 220 to physicians failing to offer, for example, breastfeeding and contraceptive advice, or growth and development monitoring and immunisation for children up to two years of age. The programme has been successful in improving maternal and child health, perhaps the central aim of the HTP. Besides the already mentioned data on child mortality and vaccination, the proportion of women who have attended at least four prenatal visits rose from 53.9% in 2003 to 73.7% in 2008 and the proportion of births attended by skilled health staff rose from 83% to 91.3% over the same period, in line with the anticipated effects of the incentive schemes.

Yet, beyond maternal and child health, the quality of primary care (whether measured in terms of activity or outcomes) is much less clear. For example:

- Cancer screening rates, a core primary care activity, are low. In 2011, only 15.5% of Turkish women aged 20-69 were screened for cervical cancer, compared to an OECD average of 59.6%. 27.3% of women aged 50-69 were screened for breast cancer (OECD average 61.5%) and 3.2% of adults aged 50-74 were screened for colorectal cancer (EU15 average 12.7%).
- Important measures of quality of primary care that are collected by other OECD counties are not available for Turkey as yet, although work is underway to develop them. This is the case for example for rates of hospital admission for chronic conditions deemed fully manageable within primary care, such as asthma, chronic obstructive pulmonary disease (COPD) or diabetes. Other relevant measures, such as the rate of lower limb amputation or frequency of annual retinal exam in diabetics, are not available either.

Towards quality assurance and quality improvement in primary care

Having achieved widely hailed improvements in access to family medicine, and with a programme in place for its continued expansion, the *quality* of primary care must now become the focus of on-going reform. Three main priorities stand out.

The first will be to strengthen indicators of primary care activity and outcomes, and, especially the feedback loop back to professionals. Currently, family physicians are required to return data on maternal and child health to the Health Information Systems Directorate at the Health Ministry, through the *Sağlık Net* platform ("Health Net"). Some prescribing data is also routinely collected. Activity across antenatal care, and childhood vaccination is visible to the Health Information Directorate at regional, institutional and individual-practitioner level, but that fact that this is not returned to the institution or practitioner with relevant peer-comparisons is a missed opportunity for quality improvement. Turkey could look at other OECD countries experiences that have introduced system of annual appraisal and feedback to clinicians, such as the United Kingdom, and developed sophisticated monitoring of quality in primary care, such as Israel.

The second priority concerns standards. As mentioned earlier, a limited number of activity-related standards on maternal and child health are collected. What needs to be developed is a more sophisticated set of standards focussing on the processes and outcomes of clinical care. Turkey has embarked on an ambitious programme to translate an extensive set of clinical guidelines written by the Finnish Medical Society but the difficulties of embedding a large number of guidelines at once, and in particular of changing practice through guidelines with little sense of local ownership or participation during development, should not be underestimated. It may be more effective and instructive for Turkish stakeholders to choose a priority clinical area – cardiovascular disease or diabetes would be obvious choices – and develop home-grown management guidelines for local implementation.

Third, thought should be given to future expansion of the role of primary care, particularly in anticipation of an epidemiological shift and rising burden of long-term conditions and multi-morbidity. Although maternal and child health were undoubtedly the right initial investments to have made in the early years of Turkey's HTP, a mature primary care service needs to make a comprehensive offer and be the trusted first point of contact for the vast majority of health needs, irrespective of age or gender. In particular, Turkey's maturing health system must anticipate the inevitable shifting of the national disease burden toward the chronic morbidities associated with increasing years and, in some cases, unhealthy life styles.

This transition, coupled with increasing patient expectations around more convenient and better co-ordinated care, will require increasing the robustness of Turkey's information systems, as well as reinforcing the hierarchy between levels of care, to avoid unnecessary use of secondary care.

Delivering quality gains from growth in hospital capacity and utilisation

Fast growth in hospital capacity and activity could raise questions about quality

Contrary to efforts in most OECD countries to downsize the hospital sector, capacity in the Turkish hospital sector has been growing fast. The increase in the number of hospital beds since 2000 has been second only to that of Korea. The number of hospitals in Turkey has increased from 1 153 in 2002 to 1 453 in 2011. There are major plans for building new and modernising existing hospital facilities in the Ministry of Health sector, and incentives have stimulated the development of a significant private hospital sector, which have helped to fill in gaps in capacity in several regions.

Nevertheless, some statistics suggest that the way the hospital sector has been developed might pose challenges in the absence of an appropriate quality governance framework. For example:

- Bed occupancy rate in Turkish hospitals is only 64.9%, the third lowest in the OECD after the Netherlands and the United States, and it is only just above 50% in the private hospital sector. These figures might indicate either low demand, or capacity in excess of need. The number of hospital discharges, while still lower than in two-thirds of OECD countries, has doubled since 2000, the second fastest rate of growth in Europe. Although there is a lack of data around unnecessary hospitalisations, this increase is probably due to better access to care but could also be related to unnecessary hospitalisation.
- While few data on procedures are available, data on the number of caesarean sections in Turkey are the highest in the OECD. Between 2006 and 2011 the number of caesarean sections increased from 297 to 462 per 1 000 live births, which is the highest rate of growth in the OECD. A high rate of caesarean section can increase the risk of mortality and morbidities for both the mother and the child, or lead to risk of complications for future deliveries.

- The few data collected on acute care – such as mortality after 30 days of hospitalisation for acute myocardial infarction or for ischemic stroke – point to rates well above the OECD average.

Although some Turkish hospitals have started to reduce the number of beds, and the private sector is not permitted to increase its bed capacity, these data suggest that Turkey might need to monitor its hospital sector more closely. In particular, there is a need to understand whether and how current trajectories of activity and capacity are leading to improvement in quality of care. Data infrastructure and monitoring of quality of care in all of Turkey's hospitals also needs to be strengthened and the underpinning data infrastructure developed across the public and private sector. Currently, while private hospitals claim that they collect already some quality indicators, few of these are made available either to the Ministry of Health or to patients.

Strengthening quality governance must occur uniformly across the whole secondary care system

Turkey should look to strengthen quality governance (standards, monitoring and transparency) in the hospital system as a whole, holding both private and public sector hospitals to the same high standards of delivering effective, safe and patient-centered care. Experience from other OECD countries (Australia, United States, France, England) shows how governments have a key role to play in creating an even playing field across different hospital sectors through, for example, introducing third-party accreditation in addition to government accreditation of hospitals and specifying minimum standards across the public and private sectors.

An impressive number of initiatives has been taken by the Department of Health Care Quality and Accreditation, (2 226 institutions were evaluated for their quality in 2012). However, focus has been so far on structural and organisational components of hospitals. Broadening the programme towards clinical outcomes of health-care services is advisable to make the model more useful for formative functions such as quality improvement initiatives.

University hospitals report that they have been struggling with the impact of the HTP. Despite receiving higher payments from the Social Security Institution, they claim that special functions, most notably care for the most complex or demanding cases, are not adequately remunerated. Compounding the challenge, the regulation forbidding clinicians from working part-time across different sectors (public, private and hospitals) has meant university hospitals are conscious of the risk of losing staff (generally the most qualified doctors in the country) to the private or the Ministry of Health sector, both of which are perceived to offer better remuneration for

the case load undertaken. Other OECD countries have specific payment arrangements for university hospitals to ensure maintenance of certain public health functions. For example, France makes extra payments for teaching, research and innovation, emergencies, psychiatry, and certain rehabilitation services, while Germany has refined the structure of case-based payments to reward these functions.

Despite significant progress, challenges remain with regards to aligning public hospital and public health system governance on local and provincial levels

The Ministry of Health is pursuing efforts to devolve responsibility for providing hospital services and focus instead on its regulatory, oversight, and quality governance functions. While recent reforms to the ministry structure have set the ground for this change in functions, certain system characteristics make it more difficult for the government to take on its quality governance function. Some have already been mentioned – such as culture of centralised decision making, limited professional interest in taking on strong responsibility for quality assurance, strong financial dependency of public hospitals for funding from the ministry and insufficient public reporting of quality measures.

The governance of public hospitals, via 87 Hospital Unions, run separately from the regional population-based public health governance, may pose challenges to the co-ordination of care between the primary and secondary care sector. Care should be taken to ensure that effective dialogue takes place to ensure that secondary care services are matched to local population health needs. Furthermore, in addition to recently created affiliated agencies – such as the Public Health Institution of Turkey or the Public Hospital Institution of Turkey – it might be considered to position functions such as accreditation and health technology assessment more distant from the Ministry of Health as is the case in many other OECD countries. This is especially the case when quality governance activities apply to public health-care services as well as private health-care services.

Last, there is a strong argument to shift the locus of governance away from the central government to closer to where care is provided. Greater autonomy should be granted to provincial governments, the recently created hospital unions, and hospitals themselves to manage secondary care services.

Developing payment systems that drive higher quality care

Turkey has used payment reforms as a key instrument to achieve several of its reform targets. Both in the primary care and in the hospital sector, clear incentives for delivering more services have been built into the remuneration of providers. The remarkable results that this has delivered signal how Turkey could use payment incentives very effectively to deliver quality-related goals.

Payment systems in primary care could be better designed to reward quality

In the primary care sector, financing is in the process of shifting from funding community-based clinics to funding a new workforce of family physicians on a per capita basis. Under the system, each family medicine specialist in Turkey is paid:

- A risk-adjusted per capita payment (on average around TRL 5 600 a month or EUR 2 445), which can vary by a factor of up to 50% reflecting age, pregnant women, prisoners and other socio-economic indicators.
- 20% of monthly payment can be deducted from the per capita payment, should the family physicians fail to offer a basic set of antenatal, baby and child health services and vaccinations to at least 90% of the new children within their population.

While the quality component family physicians' pay is activity-based, there is potential for Turkey to use the structures already in place to reward clinical outcomes. OECD primary care systems are becoming increasingly ambitious and sophisticated in designing primary care payment systems around this principle, and Turkey is in a good position with its nascent and evolving speciality of family medicine to devise some locally appropriate outcome-based incentives. Thought should also be given to expanding the current penalties to delivery of care of non-communicable diseases, for example to ensure that family physicians monitor HbA1C levels in diabetic patients.

Remaining to be addressed, however, is a concern that the payment system might, in a context of shortage of physicians, divert doctors action away from quality. Per capita payments are currently based on a catchment population of some 3 500 to 4 000 patients per doctor. This is a very large ratio of patients to doctors and may divert activities towards registration and child and maternal health care at the expense of care co-ordination, life style modification and other basic health care that can effectively be delivered in primary care. The latter services are remunerated through modest fee-for-

service payments relative to the potential for large losses in per capita base salaries. Efforts are being made, however, to increase the number of primary care doctors and reduce the list size for each doctor from current levels.

In the hospital sector, current payment and incentive structures reward neither quality nor cost-control

Payments to public hospitals have undergone a major transformation over the course of the past decade. Each public hospital service is paid by "package rates" that bundle prices for outpatient and inpatient services established by the Social Security Institute, within a global budget that is negotiated between the Social Security Institution (SSI) and the Ministry of Health. The payment of staff involves a salary and a performance-based component. Specifically, the ministry is able to distribute up to 40% of its annual budget to its medical staff in the form of performance-based payments, adjusted on the basis of a hospital specific performance score. As a result, hospital staff have a personal incentive linked to contributing to a high institutional score. This score is calculated on some 49 indicators of clinical activity, clinical processes and institutional characteristics, such as the number of invasive procedures per physician, cleanliness of hospitals, bed occupancy, average length of stay, and the share of doctors working full time. Most of these are measures of supply and activity, hence hospital incentives are poorly linked to quality outcomes (patient satisfaction rates and hospital infection rates are exceptions). As to private hospitals, they only receive a flat fee from the Social Security Institution for every patient they see and are free to charge patients additional costs, up to a ceiling fixed at 90% more than the public hospital price.

There is, in theory, an opportunity for quality-related competition amongst multiple secondary care providers in the Turkish health-care system. This is dampened, however, by the fact that providers have little incentive to offer the full range of secondary care, particularly complex packages of care for patients with the greatest need, since the current set of reimbursement codes do not reflect case severity. Furthermore, there is little incentive for public hospitals to contain costs, since overspends due to unbudgeted activity may, in some cases, be compensated with funds from other public hospitals in surplus. Prices paid by the Social Security Institution, however, are well controlled and show no evidence of inflation. As to private hospitals, publicly funded patients accessing care in private hospitals must make significant out-of-pocket contributions to meet the costs not covered by public insurance. Hence, while in theory all Turkish people are able to visit a private hospital for a service covered in the health insurance benefit package, in practice, access to private hospitals and full

exploitation of user choice is still the domain of those who can afford to pay significant out-of-pocket costs.

This situation should be addressed through the gradual shift from package fees to a case-mix adjusted payment, as most other OECD countries do. Turkey has an opportunity to use the rich data infrastructure and coding processes already in place to shift to case-mix adjustment relatively rapidly, thereby appropriately remunerating complexity of care. This should be accompanied by monitoring of quality of care for example to ensure that any expansion in numbers treated is clinically appropriate and to reduce unwarranted variation in medical practice across providers or geographical regions. This would have the further advantage of helping the Ministry of Health move fully and expeditiously in the aspired direction of focusing on quality governance of the health system and relinquishing responsibility over operations.

Policy recommendations for improving the quality of the health-care system in Turkey

Turkey Health Transformation Programme has driven groundbreaking improvement in the delivery of maternal and child health, the development of capacity and the expansion of health coverage and services. The challenge now for the Turkish health-care system will be to make quality and outcome monitoring and improvement the next overarching priority for health policy. This will require reforms to:

1. Shift the focus of on-going reform to quality assurance of health service

- Continue efforts to routinely collect and report information on the quality of care (for example in primary care, non-communicable diseases and mental health) and develop the data infrastructure for quality (for example, cancer registries and secondary use of data from electronic health records); furthermore, provide health professionals with feedback on quality measures at regional and provider level, with a view to encourage self-assessment and continuous improvement.
- Strengthen providers focus on safety and effectiveness of care for example by pursuing efforts to develop standards and requirements for continuing professional education, retraining existing primary care doctors into family physicians, and encouraging modern forms of professional self-regulation alongside accountability of the medical profession.
- Advance efforts to devolve responsibility for operations to arm's length institutions such as the newly created Hospital Agency, the Public Health Institution of Turkey and the Pharmaceutical and Medical Devises Institution of Turkey.
- Strengthening the patient perspective by encouraging a comprehensive national adverse events reporting system and encouraging gradual diffusion of information on quality among in the public.

Policy recommendations for improving the quality of the health-care system in Turkey *(cont.)*

2. Encourage quality improvement efforts in the primary care sector

- Strengthen indicators on primary care outcomes that relate to the quality of primary care beyond maternal and child health care (for example on avoidable hospital admissions), and provide family physicians with access to information from the *Sağlik Net* platform, with relevant peer information to facilitate performance improvement.
- Pursue efforts to develop standards in primary health care related to outcomes and clinical quality of care, and focus the development of clinical guidelines on key priority areas such has cardiovascular diseases or diabetes.
- Encouraging health professionals, trough payment systems, educational measures or other means, to shift focus from maternal and child health solely to chronic diseases such as diabetes and cancer, and risk factors such as obesity.

3. Harness quality from the hospital sector

- Further efforts to collect data on safety and care effectiveness in the hospital sector (e.g., outcomes, readmission rates, complication rates) in order to monitor that expansion in hospital capacity and activity is accompanied by improvement in quality, and continue to pursue initiatives to strengthen the robustness of these data for international comparisons.
- Strengthen quality governance for the hospital system as a whole (including the private hospital sector), by extending standards developed in public hospitals to measures of hospital safety and effectiveness of care, encouraging the development of minimum standards across the public and private sector as well as third-party accreditation of hospitals.
- Grant greater autonomy to provincial governments, the recently created hospital unions, and hospitals themselves to manage secondary care services.

4. Using payments systems to encourage quality

- Further reforms in hospital payment mechanism to incentivise outcomes by introducing case-based payments in the hospital sector coupled with better monitoring of variation in clinical practice across reigns; special attention should go to ensuring that high volumes of hospital care do not endanger safety and effectiveness of care.
- Consider expanding the performance-based component of family physician remuneration to chronic care conditions such as diabetes, for example by introducing penalties for failure to monitor HbA1C levels in diabetic patients, and consider using payment to encourage activities such as care co-ordination, life style modification and other public health activities.

Chapter 1

Quality of care in Turkey's health system

This chapter provides an overview of policies and strategies to improve the quality of care in Turkey's health system. It seeks to profile key quality of care policies and benchmark the extent to which policies to monitor and improve quality in the Turkish health system are being employed. In describing the quality governance structure and the role of the Ministry of Health and affiliated organisations, the chapter highlights how Turkey needs to continue steps towards more devolved governance, and work to align public hospital and public health system governance. Addressing the quality of inputs into the health system, the chapter recommends that Turkey continue the impressive work begun on quality standards and accreditation while working to build good patient safety and quality assurance systems. The chapter concludes with a recommendation that Turkey develop a coherent policy on how to strengthen the Turkish information infrastructure to facilitate the use of quality indicators.

1.1. Introduction

As a result of the 2003 Health Transformation Programme, access to health care in Turkey has greatly increased, and health outcomes have also improved. There is now a need to focus on the quality of services. Turkey needs to develop robust systems to standardise and monitor the quality of care, encourage continuous professional development and incorporate patient views.

Turkey's progress over the last decade has been significant and impressive, but compared with other OECD countries Turkey still falls behind in terms of health-care quality. This chapter will explore how Turkey can build on the progress it has made – which includes steps towards devolved governance, an impressive number of initiatives to build quality standards and accreditation, and improving data systems – and make a number of recommendations on how Turkey can improve quality management and quality improvement for the health system as a whole.

The description and profiling of quality of care policies in this chapter are structured according to a framework that is detailed in Table 1.1. After providing some contextual information, this chapter will address:

- the legislative framework and governance (national and local/regional) for quality of care in Turkey
- the quality assurance of respective inputs (health-care professionals, technologies and physical infrastructure), and the strengthening of the involvement of all relevant stakeholders
- policies for assuring the quality of care delivered by medical professionals
- the need to develop of a broad set of quality indicators available across the whole country and various services, and the importance of data-sharing and linkage, and secondary use of data.

A short description of the Turkish health-care system is provided in Box 1.1. For more detailed information on the Turkish health system, the European Observatory's *Health Systems in Transition* report on Turkey offers a useful source of information (Tatar et al., 2011).

Box 1.1. Overview of the Turkish health system

As a result of the Health Transformation Programme (HTP), access to health care in Turkey has greatly increased. Since its start in 2003, the Health Transformation Programme has brought significant changes to the way health care in Turkey is provided and organised. Perhaps most significantly the HTP reforms introduced a provider (Ministry of Health and private providers) – purchaser (the Social Security Institution) split, and a consolidation of the five main social security funds into a unified social security system, the General Health Insurance Scheme (GHIS – *Genel Sağlık Sigortası*), which now covers the majority of the population, and services are provided by a mix of public and private sector facilities (Tatar et al., 2011). The Social Security Institution (SSI – *Sosyal Güvenlik Kurumu*) has become the single-purchaser of health-care services, funded by contributions from employers, employees and government contributions in cases of budget deficit. The Ministry of Finance finances the small numbers of "Green Card" holders, the scheme covering the health expenditures of the poor at all levels of care, and active civil servants. In addition a market of private health insurers is developing.

Total expenditure on health as a proportion of gross domestic product (GDP) has risen from 2.4% in 1980, to 5.3% in 2003 to 6.1% of GDP in 2008, still lower than the OECD average of 9.3% of GDP (OECD, 2013). Expenditure per capita (purchasing power parity) rose from USD 446.8 in 2003 to USD 906 in 2008 (OECD, 2013). 72.7% of health financing was from public sources in 2011, with the remaining proportion split between private out-of-pocket payments (19.2 %) and spending by corporations other than health insurance (8.1%).

The key legislation governing the Turkish health system is the 2006 Social Insurance and General Health Insurance Law, which outlines social security rules in general, and the regulation of the General Health Insurance scheme.

Source: *OECD Health Data 2013*, www.oecd.org/health/healthdata; Tatar, M., S. Mollahaliloglu, B. Sahin, S. Aydin, A. Maresso, C. Hernández-Quevedo (2011), "Turkey: Health System Review", *Health Systems in Transition*, Vol. 13, No. 6, pp. 1-186.

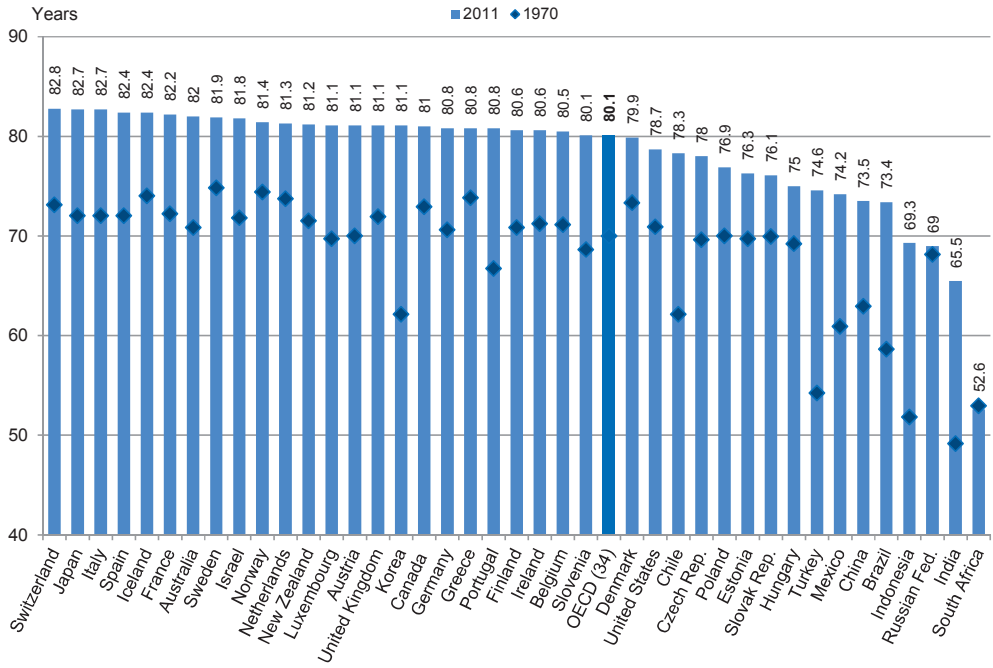
1.2. Context

Turks are getting healthier, health-care facilities and infrastructure are expanding, but is the quality of health care also getting better?

Over the past ten years the health of the Turkish population has improved impressively, as illustrated by statistics on life expectancy at birth (see Figure 1.1), neonatal mortality (which has fallen from 16.6 per 1 000 live births in 2002, to 4.6 per 1 000 live births in 2011), maternal mortality (which has fallen from 64 per 100 000 live births in 2002, to 15.5 per 100 000 live births in 2011) and infant mortality (which has fallen from 31.5 per 1 000 live births in 2002, to 7.7 per 1 000 live births in 2011) (Turkish Statistical Institute, 2011), likewise health-care facilities and

infrastructure have expanded towards total numbers coming closer to OECD averages. Although (as elsewhere in the OECD) increase in life expectancy and improvements in infant mortality and under 5 mortality is associated with overall improvement of the economy and living conditions, the improvements in Turkey run in parallel with a deliberately designed and executed Health Transformation Programme. WHO has called this programme an 'example of successful health system reform' (WHO, 2012).

Figure 1.1. Life expectancy at birth, 1970 and 2011 (or nearest year)



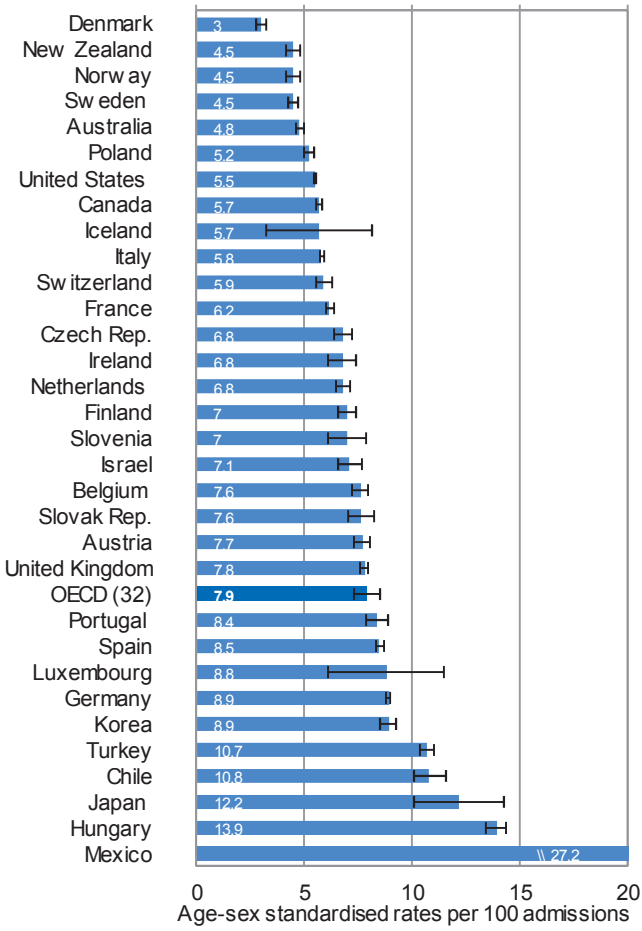
Source: *OECD Health Statistics 2013,* http://dx.doi.org/10.1787/health-data-en; World Bank for non-OECD countries.

There are some challenges around data availability in Turkey, while available data on Health Care Quality Indicators show that ongoing commitment is needed

In its *Health Statistics Yearbook 2011*, the Ministry of Health of Turkey provides a range of information, including trends and international benchmarking, on a number of relevant domains such as demography, mortality, morbidity, risk factors, prevention of diseases and protection of health, health-care facilities and infrastructures, utilisation of health-care services and human resources for health. At the time of this review information on some of the quality indicators as collected by the OECD's Health Care Quality Indicator programme became available for the first time. Some preliminary information can therefore be gleaned from reporting on 30 day case fatality rate of persons admitted to the hospital with AMI or stroke (see Figures 1.2 and 1.3).

Figure 1.2, showing admission-based AMI 30 day in-hospital mortality, places Turkey above the OECD average, with an AMI 30 day in-hospital mortality rate similar to that of Germany, Chile, Korea and Japan. For admission-based ischemic stroke 30 day in-hospital mortality, shown in Figure 1.3, Turkey is again above the OECD average, with only Slovenia and Mexico reporting higher rates for this indicator. Work on other indicators, including information on five-year survival rates for cancer (breast cancer, cervical cancer, and/or colon cancer), on the magnitude of hospital admissions for conditions that are sensitive to the quality of care provided in ambulatory settings and primary care such as diabetes, and on COPD and chronic heart failure, is ongoing. Data received on cancer survival rates is particularly promising, and will be a valuable resource in the near future. Preliminary data on primary care (hospital admission rates for patients with chronic diseases) show the potential for improvements in primary care (see Chapter 2). Many data systems are presently under development in Turkey and it is foreseeable that increasing volumes of important statistics on quality of care will continue to become available in the near future.

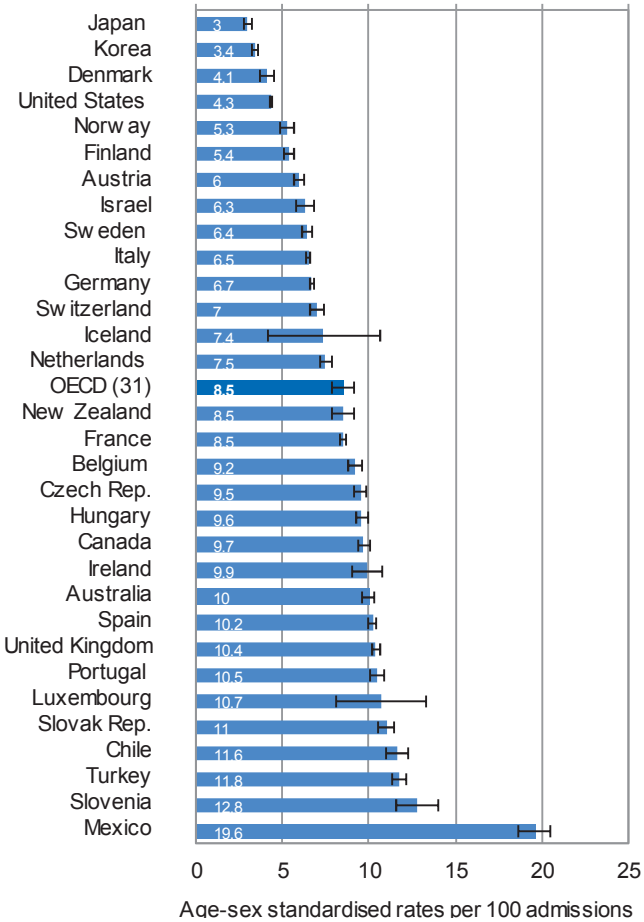
Figure 1.2. Case-fatality in adults aged 45 and over within 30 days after admission for AMI (admission-based), 2011 (or nearest year)



Note: 95% confidence intervals represented by H.

Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

Figure 1.3. Case-fatality in adults aged 45 and over within 30 days after admission for ischemic stroke (admission-based), 2011 (or nearest year)



Note: 95% confidence intervals represented by H.

Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

It is evident that in the past decade emphasis has been on increasing the volume of professionals, services and productivity as well as assuring universal access. This growth can be documented clearly with the available statistics. Whilst recent evidence finds that social inequalities in health or health-care access have been reduced following the introduction of universal health coverage, it will be important to ensure that monitoring disparities in health continues on a systematic basis.

1.3. Profiling policies on quality of health care and their impact

Quality issues have gained importance across OECD countries in recent years as governments and the public increasingly focus on what is being delivered in exchange for major public investments in health care. Policies to address quality of care can not only help improve patient outcomes, but can often do so at similar levels of investment. This chapter seeks to profile the key policies and strategies that Turkey has used to encourage improvements in the quality of health care. Please see also Table 1.1.

Table 1.1. A typology of health-care policies that influence health-care quality

Policy	Examples
Health system design	Accountability of actors, allocation of responsibilities, legislation
Health system input (professionals, organisations, technologies)	Professional licensing, accreditation of health care organisations, quality assurance of drugs and medical devices
Health system monitoring and standardisation of practice	Measurement of quality of care, national standards and guidelines, national audit studies and reports on performance
Improvement (national programmes, hospital programmes and incentives)	National programmes on quality and safety, pay for performance in hospital care, examples of improvement programmes within institutions

1.4. Health system design

Centralisation is a dominant feature of the Turkish governance model towards quality of care, both geographically (limited local autonomy) and functional (keeping control tasks within the Ministry of Health). The Ministry of Health is the main actor in health system governance, planning and supervision, and has been covering primary, secondary and tertiary facilities (Tatar et al., 2011). Universities are key providers of tertiary care. Administratively, Turkey is divided administratively into 81 provinces based on geographic areas, economic conditions and public service

requirements, which are further divided into districts, and villages (Tatar et al., 2011). Local administration is expected to be undertaken in the provinces. Some administrative authority is given to local ministries, and a provincial government represents the government at a provincial level. There are two forms of local government, municipal authorities and private provincial organisations, which generate income through private enterprises, which is then spent on activities within the province. Decentralisation has been a focus since the start of the HTP. More generally, the governance of the hospital sector has been devolved to 87 Hospital Unions as part of the newly established Public Hospital Institute, which is affiliated to the Ministry of Health.

Towards a more devolved model of quality governance

In the present governance model on quality of care the Turkish Ministry of Health plays a central role. Centralisation has been a dominant philosophy within Turkey, both geographically (provincial governance is universally weak) and in terms of function, with running and oversight both kept within the ministry. The Turkish Ministry of Health does not restrict itself to a supporting role, providing oversight, but rather takes on many key tasks that are in other OECD countries explicitly independent from the ministry, including the running of hospitals, monitoring and accreditation, and Health Technology Assessment, all of which are within the Ministry of Health structure.

In other OECD countries such as Canada, the United States, Italy, Germany, Denmark and Sweden there is a vivid debate on the quality governance role of different geographical levels of government (federal, provincial, regional local). Similarly, discussions take place on whether and how to separate government functions such as the setting of standards, the monitoring of compliance with standards, inspection and/or accreditation. Discussions are taking place on the complementarity of running a national health service versus the governmental responsibility to assure the quality and safety of all services, including the ones offered by private providers and the positioning of bodies that provide expert advice on health technology assessment. Although different modalities exist many countries tend to separate the running of public health services (such as a national health system) from the population-based governance responsibility for all services provided in the country. Likewise, many countries have organised quality governance functions such as standard-setting and guideline development, inspection and or accreditation, health technology assessment and evaluation of individual professional performance in separate agencies or institutions. These agencies and institutions have their own mandate and can operate with a certain level of independence from the national ministry.

These distinctions in geographical levels of governance and separation of quality functions are made to make the governance model more balanced, assure responsiveness to local needs and increase transparency in roles and responsibilities.

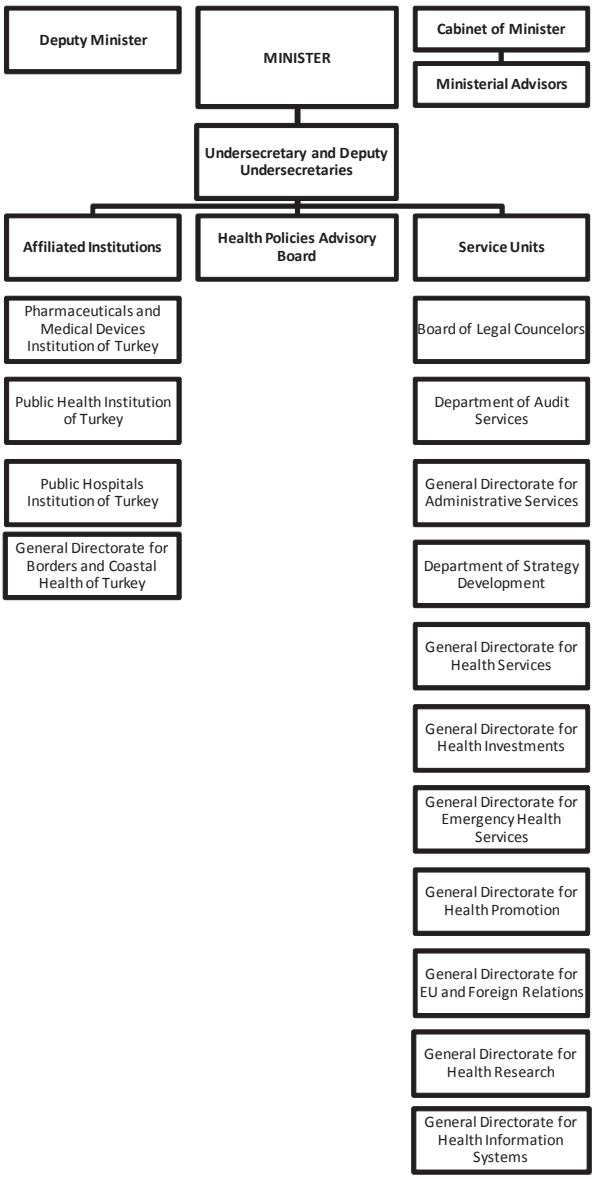
In the Turkish Ministry of Health important steps has been taken through its re-organisation into four affiliated institutions – covering Medicines and Devices, Public Health, Public Hospitals, Borders and Coastal Agencies – and eleven service unities within the department (see Figure 1.4). The general intention is that these four affiliated agencies will move towards fuller independence from central governance, but it is important to note that inspection and Health Technology Assessment functions are within the central ministerial units, which are not expected to move to fuller independence. Three of the newly created affiliated agencies fulfill the following functions: to assure the quality and safety of drugs and medical devices, monitoring and promotion of public health and the management of the public hospitals in Turkey.

Pharmaceutical and Medical Devices Institute

The Turkish Medicines and Medical Devices Agency was set up in March 2012 to replace the General Directorate of Pharmaceuticals and Pharmacy under the Ministry of Health. The Agency is responsible for the regulation of four key areas: pharmaceuticals (licensing, risk assessment, pharmacovigilence, pricing, ensuring rational drug use and access to drugs), medical devices, cosmetics and laboratory services. The Agency was established following the 27th Article of Decree Law No. 663, stating its purpose as: "determining the rules and standards for the licensing, manufacturing, storage, sale, import, export, supply, distribution, put into service, seizure and use of products, … , licensing, auditing and imposing sanctions when necessary".

Activities include, for example, the "Pharmaceutical Track and Trace System" (ITS), set up on 1 January 2010, to assure "patient safety" and to guarantee that patients have a reliable access to safe drugs. It also aims to prevent fraud, smuggled, counterfeit drugs. A similar track and trace system is being implemented for medical devices which track the location of every medical device (i.e. of each patient) and its outcomes. The Agency also aims to provide product safety, as well as audits, in relation to the promotion and advertising activities associated with pharmaceuticals and medical devices, namely through the "Regulation on Promotion Activities of Medicinal Products for Human Use". The standardisation of medical devices sales locations and promotion is also planned through the "Medical Device Sales Warehouse and Retail Centers Legislation" regulation.

Figure 1.4. Structure of the Ministry of Health following the 2011 re-organisation



Source: Adapted from World Health Organization (2012), *Successful Health System Reforms: The Case of Turkey*, WHO Europe, Copenhagen.

Public Health Institute of Turkey/Turkish Public Health Association

The Turkish Public Health Association is responsible for carrying out primary health-care services. The Public Health Association has oversight over general practitioners and family physicians, over environmental health, pre-marriage counseling, pregnancy, elderly and home care, including developing relevant quality and standards for these areas, over developing quality service standards (at present limited to physical facilities and staffing levels, rather than addressing clinical activity and outcomes), and some primary care guidelines. Provincial health directorates have the ability under law, and the responsibility, to drive co-ordination between primary care, public health and hospitals. The Public Health Association is also involved with running pilots for a primary care national information system and a pilot programme to train GPs and integrate them into a "family medicine" system.

Under the Public Health Association, and following the entry into force of the Family Medicine Implementation Law No. 5258 which was published in Official Journal No. 25665 of 24 November 2004, family medicine implementation with which the Association is charged, has been initiated with the aim of improving primary health care, concentrating on preventive health-care services in line with the individual's requirements, keeping personal health records and equal access to the above mentioned services. In the scope of family medicine implementation, the service unit is defined as family medicine unit in which a family physician and family health personnel act in co-ordination.

At present the Public Health Institute does not have an established referral chain, and so direct communication – for example between doctors and/or regions and the Institute – may suffer limitations. However, the reporting system does provide data by province, which can be accessed by frontline workers in provinces, and as well as at ministry level.

Public Hospitals Institute of Turkey

The Public Hospitals Institute of Turkey is responsible for the running of hospitals, and covers inpatient institutions that provide care services, with its primary activities including a clinical quality indicator programme, data collection on quality including on quality indicators, quality improvement, hospital staff payment, and patient safety in hospitals. The Institute has recently started a clinical quality programme, which has started work by verifying indicators across 50 procedures, including caesarean section, total knee replacement, percutaneous transluminal coronary angioplasty/coronary artery bypass surgery (PTCA), and neurosurgery. Reporting on indicators is being validated through retrospective case note review. The Institute is also

working on emergency care quality, especially around algorithms for emergency care.

Decree 663 mandated that each hospital has a quality rating and productivity grade, which is required for each hospital manager to stay in post, and the Public Hospitals Institute is involved in establishing these quality ratings. At present, monitoring of hospitals is restricted to structure and process elements, although this will be extended to monitoring outcomes, and pay-for-performance systems will be based on monitoring indicators and outcomes. In addition, an average of 52% of physicians' incomes is currently based on pay-for-performance, but this scheme is constructed so as that it is based on payment for procedures and interventions – fee for service – rather than for outcomes. Hospital rates and rewards for physicians under the existing "pay-for-performance" payment system are set centrally, although there is some scope for hospital managers to vary pay-for-performance within their institution. Overall autonomy of individual hospital managers to reward employees is limited. The Institute is also currently reviewing the payment of hospital practitioners, and looking to move towards a more outcome-based payment system. Before this shift is made there is a need for infrastructure changes, including better data.

Initially, the focus of the Public Hospitals Institute was on access, with relatively little attention paid to the quality of hospital care. This is changing with, for example, creation of a mechanism for reporting of serious untoward events (SUI) within the public hospital system. It will be important to ensure that this systems moves on from being a passive reporting system to an active learning mechanisms both within hospitals and nationally.

Patient safety appears in the 19 hospital clinical "quality standards in health", and includes asking hospitals to verify that they have policies in place for medication safety, transfusion safety, etc. However, hospitals' data returns on patient safety have yet to be verified to audit the quality of data returns and to identify areas that may require improvement.

Other agencies in the organisation and governance of the health system under the Ministry of Health

In addition to the work of the four affiliated agencies, there are eleven "Service Units" under the Ministry of Health, including activities relevant to quality governance take place at the General Directorate for Health Services (around monitoring, inspection, guidelines, quality and accreditation), the General Directorate for Health Research (Health Technology Assessment and guideline development) and the General Directorate for Health Information Systems. All of these departments perform roles that are complementary to the Ministry of Health, without having significant

autonomy. There are also six under-secretaries, working for the Minister of Health, who deal with technical matters.

There are also Public Hospital Unions which have principal responsibility for each of the 87 provincial hospitals, which are accountable to the Public Hospitals Institute for outcomes. This marks a change as, previously, the provincial government was also jointly responsible for hospitals. The move has been made as part of an effort to control hospital activity more closely, and to improve productivity.

Organisation of quality governance in comparison with other OECD countries

Comparing the organisation of quality governance with the set up in other OECD countries two observations can be made. Firstly, the management of the public hospitals (the national Public Hospitals Institute and 87 regional Public Hospital Unions) has been set up separately from the monitoring and organisation of broader public health services which fall under the responsibility of the provinces/regions and the Public Health Institute of Turkey. Secondly, in the coming decade the necessity to co-ordinate the care between services provided in hospitals, primary care and long-term care will only increase with an aging multi-morbid population. These developments will also have very local characteristics given the existing demographic differences between various parts of Turkey. It seems advisable to reflect on how to strengthen the governance model in such a way that integration and co-operation of hospital, primary care and long-term care services on local level is promoted. A further devolving of the model to regional health systems might be considered. Further strengthening of the information infrastructure with respect to quality indicators can help this process by making regional health-care systems accountable for their actual performance.

A big step has been taken by separating four affiliated institutions from the core ministry. Consideration should be given to also place quality functions such as development and evaluation of compliance with quality standards (accreditation) and health technology assessment in a more independent position towards the ministry. Positioning and functioning of organisations such as HAS (Haute Autorité de Santé) in France and NICE (National Institute for Clinical Excellence) in the United Kingdom could provide inspiration. The reconsideration of HTA is especially relevant in relation to the functioning of SSI and the Pharmaceuticals and Medical Devices Institute of Turkey when it comes to decisions on quality and safety of products and services related to access to the Turkish market and reimbursement via the health insurance funds.

1.5. Assuring the quality of inputs to the Turkish health-care system

Impressive performance model for hospitals linked to reimbursement that could be broadened toward clinical outcomes

Quality management systems such as ISO, accreditation and EFQM are not uncommon to the Turkish health-care system. For more than 20 years specific health-care services, often from private providers have been seeking ISO certification or accreditation by foreign accreditors in the health-care field such as the Joint Commission International, the international branch of the US Joint Commission for the Accreditation of Health-care services. The Baskent University Network is an example of a private entity that has been successful in the application of both ISO standards and JCI accreditation over a period of 20 years in what is now a network of 12 hospitals. But similar initiatives can be found with respect to ISO especially in laboratory and diagnostic services.

The EFQM (European Foundation of Quality Management model) had some applications in health care ten years ago but its use in the health-care sector is at present very limited. Partly because of the obligatory model more recently introduced by the Ministry of Health.

An accreditation model, based on EFQM, is reported to be in place in the educational field and is applied for assuring the quality of training in medical faculties. Interest in the JCI accreditation is still growing (at present around 50 Turkish hospitals are JCI accredited). One of the main incentives being that it opens up the possibility to treat foreign patients and get their costs reimbursed by foreign insurers that often require JCI status.

The Department of Health Care Quality and Accreditation

In the past years the Department of Health Care Quality and Accreditation within the Department of Health Services in the Ministry of Health has developed and executed an impressive programme of quality standards and the assessment of their compliance.

A series of 321 standards (covering 621 audit items) has been developed in consultation with various experts and after pilot testing in 24 hospitals these standards are presently used to assess the quality of health-care services (hospitals but also emergency services and dental practices). The standards are applied to public hospitals but also to private hospitals and university hospitals. All hospitals are evaluated once a year. This assessment, comprising information on infrastructure, access, productivity and patient satisfaction, results in a score which allows hospitals to be ranked into one of five categories as described more fully in Chapter 4.

In the year 2012 a total of 2 012 evaluations were performed, including on hospitals, 112 emergency centres, and dental centres. Each evaluation team consists of 4 people, a team leader, and at least one physician, who are drawn from a pool of 368 trained evaluators. Each standard, within the Health Care Quality Standards is evaluated as "Yes, No or Not applicable". According to their importance, standards are pre-weighted. Standards are point rated as 5, 10 and 20 and the institutions are given a certain score out of 100.

A strict pay for performance scheme is linked to the score for public hospitals and for private institutions SSI can consider the evaluation status of the hospital in pricing/reimbursement (for a further assessment of the pay-for-performance programme see Chapter 3). The programme is reported to have had a major impact on the volume and productivity of the hospitals. Although so far emphasis has been on structure and process criteria (qualifications, minimal quality requirements, available facilities, length of stay etc) interest exist to broaden the programme to the assessment of clinical outcomes.

Safety issues are addressed mainly via a workers patient safety programme that amongst its various activities also includes a 24/7 telephone line for health-care workers to report safety concerns such as violence.

International exposure is sought via seeking accreditation of the programme by ISQua (International Society for Quality in Health Care) which is seeking links with ISO, participation of a group of hospitals in the WHO/Euro PATH projects (focusing on developing a local set of indicators on various quality dimensions) and participation of 30 hospitals in the Duque project (an EU-funded 7th framework projects that seeks through extensive surveys and audit to understand the dynamics behind quality improvement in European hospitals). An information management system, including indicator information, has been developed. However detailed information of this system has not been assessed as part of this review.

Overall, the programme is impressive and has also, because of its link with financing, had an impact so far. For the future, broadening the programme to clinical outcomes should be considered. Data already collected and experience with the indicators in the PATH and Duque programme can help to institutionalise such an approach. It was reported that a pilot with more outcome-orientated indicators in 19 hospitals is presently underway. This would imply that an assessment/audit of medical records becomes part of the assessment procedure. This is presently not the case.

Also, further strengthening of the patient safety components seems worthwhile. Building on the initiatives around workers safety and assessment of the risk of falls, more actions such as the implementation of

WHO's safe surgery checklist and the calculation of patient safety indicators could be considered.

Although various training options exist and regular conferences are organised, it remains a challenge for the Turkish programme to balance its present rather control oriented managerial approach with more formative quality improvement efforts. Parallel initiatives on quality improvement such as a separate breakthrough on well-chosen themes with the involvement of a group of volunteer hospitals (emulating the model developed by the Institute for Healthcare Improvement in the United States) might be considered.

For an accreditation programme its credibility is key and this is often achieved through the involvement of stakeholders in the development of standards and transparency on the processes of assessment and scoring. Likewise, in many countries the independence of the programme is considered a key characteristic of an accreditation programme. The Turkish programme should keep on working on these elements to maintain and strengthen its position.

Aligning the roles and responsibilities of professionals and government towards quality of care

Professionals are a key factor for delivering quality care. Although the quality of initial training of physicians, nurses and other health-care professionals constitutes the basis for adequate care, a continuous renewal of professional knowledge and skills is necessary to assure high level performance. Given the pace with which new insights in medicine emerge and the changing challenges professionals are facing, quality assurance mechanisms have been created to assure maintenance and improvement of individual professional performance. Continuous Medical Education (CME) and continuous professional development are the most well-known mechanisms but OECD countries have also introduced different forms of professional assessment, peer review and re-licensing. The extent to which CME, CPD, peer review, professional assessment and relicensing are mandatory differs from country to country and varies from a mandatory amount of accredited CME courses over a certain period of time to a re-licensing system based on a thorough individual assessment of performance over, for example, the past four years. OECD countries also differ to the extent that these quality assurance mechanisms of professional performance are executed and controlled by professional groups (scientific societies, medical associations) or run by governments or government-related councils.

In Turkey these quality assurance mechanism for professional performance seem less developed compared with other countries. Standards for medical specialty training do not seem harmonised over the various specialties and CME structures are voluntary and differ between specialties.

The Turkish Medical Association

The Turkish Medical Association has 85 000 members out of the 120 000 registered doctors previously organised in 65 regional chambers. They have a mixed trade-union, professional rules of conduct and scientific development role. There are also 70 specialty/sub-specialty boards. The Association has cited concerns that recent reform efforts to achieve greater standardisation of health-care practice may limit professional autonomy. Recently the Ministry of Health has established a Professions Council that has been given the authority to deal with curriculum and complaints/malpractice issues.

The Turkish Nursing Association and the Turkish Midwives Association

The Turkish nursing association was founded in 1933. Out of the 124 000 nurses in Turkey around 10 000 are members. Although the nursing profession via its training has professionalised over the years they report to experience at present from the government a strong focus on the number of nurses and less on the professional profiles and the quality of nursing. They are looking forward to expanding the nursing role and increased responsibilities for nurses.

The Turkish midwives association was set up in 1953 and has 5 000 members out of the 51 000 registered midwives. Since 1999 midwifery has been a degree led profession with training offered at 33 universities. The board of the midwives association is happy with the reductions in perinatal death but also worried of the increasing rate of caesarean sections for deliveries. They feel the qualities of midwives are not properly used and increasingly midwives are positioned in a nursing role.

Amongst all three mentioned professional associations there is a keen interest in the quality of care agenda. However, the limited professional initiatives for self-regulation seem to be dominated by an overall concern about the possibilities for a constructive dialogue with the government on professional autonomy, self-regulation and accountability.

Quality of care as delivered by professionals goes to the core function of a profession. Both the sociological literature (Freidson, 1988, 2006; Abbott, 1988) and management literature (Mintzberg, 1992) underline the

importance of the balance between professional self-regulation and professional accountability for a good functioning health-care system.

It seems advisable that the present focus of government on numbers of professionals and professional control is complemented with a dialogue on quality of care in general, and mechanisms to assure the quality of professional performance in particular. In addition it also seems of interest to reflect on the needed mix of professional roles, skills and formal responsibilities to anticipate in work force planning on the changing demand for health-care professionals in the near future.

1.6. Patient safety policies

Turkey's public hospital service has developed a system of patient indicators but there is no systematic system for adverse event reporting in place. With respect to medical safety, however, several steps have been taken. All electronic medicine prescriptions have been logged into a central registry (Prescription Information System) since 2012, which has been compulsory since 2013, with indication. A pilot study in 32 cities looks at the extent to which PIS data can be used to audit physician prescribing and giving them feedback on their prescribing patterns vis-a-vis peers; it covers five acute and five chronic disease, and the pilot is being evaluated in conjunction with WHO, for example on the volumes of antibiotics prescribed. The next phase of PIS will be looking at co-prescribing of unsafe combinations, and at contraindications.

These initiatives are very much in line with the activities of the OECD's HCQI programme, and it is anticipated that Turkey will participate actively in this programme.

1.7. Health system monitoring: Building an information infrastructure for measuring quality

Strengthening the data- infrastructure to monitor quality of care

An adequate information infrastructure is key for being able to monitor quality of care with reliable and valid quality measures. This infrastructure has different components such as the mortality statistics, specific clinical registries such as the cancer registry, administrative data bases, both from the financier and the health-care provider, electronic health records and surveys both on the level of households and specific patient groups. These various data sources and their inter-linkages differ very much between OECD countries (OECD, 2013), an assessment of the suitability of the existing data sources for generating quality of care information and of the

potential of their inter linkage constitutes an important element of a country review on quality of care.

In Turkey a broad variety of data sources has been developed and improved over the past ten years. Nevertheless, the focus of most of these has been on monitoring trends in health needs and in health-care activities. Less focus has been on the suitability and use of the existing data bases for measuring quality of care. For example, limitations of the present mortality statistics have been reported (Sankaranarayanan, 2010). Both the SSI and the Ministry of Health have access to a huge amount of data, however, exploration of these data bases for quality of care purposes has only recently started. SSI for example is exploring in its data base on practice variations (transplantation, dialyses and caesarean sections). The Ministry of Health has many initiatives to study the data and the affiliated institutions for public hospitals, public health and drugs and devices have their own data sources. The public hospital institute is looking at the appropriateness of procedures (caesarean sections, knee, bypass, neurosurgical operations and coronary angiography). The Public Health Institute has, for example, specific projects on diabetes and knee replacement) and the agency on devices and drugs has different types of vigilance data and data on drug prescription. Also, various departments and institutes report to be involved in the collection of information on patient experiences via surveys.

It seems advisable to keep overview of the various data systems and ongoing projects. A policy to optimise the existing data bases for generating data for quality measures (standardised coding, present at admission codes, use of unique patient identifiers) seems warranted.

A special point of attention is the sharing of data between SSI and the Ministry of Health; this seems at present less optimal than desirable.

Enhancing transparency on quality of care

Increased transparency on the performance of health-care professionals, health-care services such as provided in primary care, ambulatory care and hospitals and transparency on the performance of health-care systems has become a key characteristic of health care in the 21st century. Through its Health System Performance Assessment report issued by the WHO in 2012 Turkey has demonstrated its commitment to this agenda. Also, through the ongoing accreditation activities in the private sector and the national programme on hospital evaluation that assesses the performance of all hospitals, Turkey is contributing to more transparency. One of the common goals OECD member states have in promoting transparency on health services performance is to maintain and increase the trust of the public in health care. Incidents involving unsafe practices or malpractice undermine

public trust in health care and transparency, through objective indicators on the actual effectiveness, safety and patient centeredness of care help to restore this. In addition OECD countries use performance data on quality of care to strengthen the position of health-care users (voice) or increase their possibilities in choosing between health-care providers (choice). In addition to or as alternative of the voice/choice goals many OECD countries also seek information on quality of health-care services to illustrate differences between geographical regions and/or health care provided to specific population groups (socio economic health-care differences, differences between minority groups). Hence transparency has also become a basic component of policies to reduce inequalities in health care.

Part of the quality information is for use by professionals (peer review, quality improvement, accountability), health-care managers (quality improvement/accountability), financiers (for example as input for pay for performance, see also Chapter 3) and government (accountability, strategy development). However, increasingly this type of information on quality of care is also made available to the public at large. In Turkey a legislative basis for patients' rights has been established, patient centeredness is mentioned as a core component of health-care policies and several initiatives have been taken to solicit input and opinions of citizens on health-care quality. One of these activities is a 24/7 central phone service where citizens can issue complaints or can get information. Furthermore, the use of questionnaires on patient satisfaction/experiences is mandatory as part of the hospital evaluation programme.

Despite all these efforts there are still many ways in which public reporting about health care to the public can be improved. When the agenda of measurement of especially health-care outcomes is expanded more information on performance could be made available to the public via websites, national and regional quality reports and the media. At present information made available on websites seems to be limited to information on structure (whether certain facilities are available) and less on process quality and outcomes.

To strengthen the transparency agenda towards the Turkish public more information on the performance of health-care professionals and services could be made available. Apart from information on effectiveness and safety of the provided health-care services information on patient experiences could also be made available in a systematic way. Validation of questionnaires used for this purpose and use of questions that have been tested for international comparison purposes, like the one on experienced access, communication and autonomy established in OECD's Health Care Quality Indicator project, could set the ground for comparing patient experiences in Turkey with patient experiences in other OECD countries.

Patient awareness and involvement can also be sought to improve patient safety (WHO/Regional Office for Europe, 2013 on patient safety and patient rights). When strengthening the structures for incident reporting, inspection and complaint handling, they should not be focused on punitive approaches towards individuals but rather focus on formative quality improvement efforts. Patient safety policies in other OECD countries have demonstrated the importance of addressing patient safety through the development of a safety culture within health-care services in which health-care workers feel safe to report errors and are using these as input for team-based quality improvement efforts. National patient safety programmes or national quality improvement programmes could be initiated with volunteering hospitals in Turkey to work on this further.

1.8. Conclusions

Improvements in the health of the Turkish population over the last ten years have been impressive, and are evident in the falling rates of neonatal mortality, maternal mortality and infant mortality, as well as rising life expectancy at birth. Turkey has recently submitted a range of data on quality of care to the OECD's Health Care Quality programme for the first time – Turkey is included in figures comparing 30 day in-hospital mortality for ischemic stroke and AMI at the beginning of this chapter – and it is hoped that these data will continue to be produced in coming years, and will be joined by data on other indicators. These statistics will also form the basis for efforts to improve health-care quality in Turkey, which have already been growing in recent years.

Whilst centralisation has been a dominant feature of the Turkish governance model towards quality of care, the recent re-organisation at the ministry level is a good step towards a more devolved governance model. Many OECD health systems separate responsibilities for running and monitoring health-care services quite definitely, and the creation of 4 affiliated agencies under the ministry is a sign that Turkey is seriously considering the benefits of greater devolution of responsibilities for the health system. In the future Turkey might consider putting greater distance between functions such as accreditation and health technology assessment and the central Ministry of Health, especially when quality governance activities apply to public health-care services as well as private health-care services.

However, challenges still lie ahead for aligning public hospital and public health system governance on local and provincial level. The governance of the public hospitals through 87 Hospital Unions run separately from the regional population-based public health governance

which is linked to the Central Agency of Public Health. These are new structures and it will be essential to ensure that effective dialogue between central and provincial public health agencies, hospitals and hospital unions occurs, to ensure that local health needs are met.

The Department of Healthcare Quality and Accreditation has taken impressive initiative in developing and implementing quality standards and accreditation – covering 2 226 institutions in 2012 – and in developing safety standards for patients and workers – including taking steps to improve medical safety – linking performance to payment mechanisms. However, there is at present no systematic adverse event reporting in place, which could be an area for future consideration. The focus so far has been on structural and organisational components of hospitals; broadening the programme towards clinical outcomes of health-care services seems advisable to make the model more useful for formative functions such as quality improvement initiatives within hospitals. Development of a reporting and learning system should be led by the Department of Health Care Quality and Accreditation and the Public Hospital Institute. Strengthening the involvement of all stakeholders in the standard setting process and increased transparency on the process of evaluation and scoring would also help to further increase the acceptability and impact of the programme.

Although elementary mechanisms for assurance of quality of care delivered by health professionals are in place through self-regulation of the medical profession, quality of professional care can only be assured through a balanced system of self-regulation and accountability of the (medical) profession. It is troubling that at present strong disagreements exist between the profession (Turkish Medical Association, Nurses Association, Midwives Association), and the government on mutual roles and responsibilities. To strengthen assurance for quality of care ongoing focus should not only be on the numbers of professionals, but also on their professional profiles and the quality of their performance in practice.

In general, current quality assurance activities are rather control oriented and only limited information is available in the public domain. Various steps have been taken to strengthen the position of citizens/patients with focus on complaint handling. It would be advisable for Turkey to have more information on performance of health-care services accessible in the public domain, and capturing the experiences of health-care users systematically could be more broadly embedded.

Data systems on quality of care are under development in Turkey, and although a growing amount of data is available to monitor quality of care – including indicators submitted to the OECD's Health Care Quality

project –further development is needed over the coming years to have a broad set of quality indicators available covering the whole country and various services. Further work on specific registries can be anticipated. Optimising the use of administrative data is a priority; particular attention is needed to enhance data-sharing between the Ministry of Health and SSI. A coherent policy on how to strengthen the Turkish information infrastructure to facilitate the use of quality indicators, addressing topics such as data-linkage, secondary use of data from Electronic Health Records and assurance of privacy and data security is advisable.

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Chapter 2

Primary care in Turkey

As a result of the Health Transformation Programme, supply and access to primary care services in Turkey have both greatly increased. Health outcomes have also improved, most notably around maternal and child health and infectious diseases. Whilst this should be celebrated, thus far relatively little policy attention is paid to some other primary care functions. Published national health outcomes, for example, neglect the real and pressing challenge of long-term conditions such as heart disease or diabetes. Now, there is a need to focus on the quality of services, particularly around the emerging challenge of non-communicable diseases.

Currently, Turkey's primary care sector is not fully integrated into the rest of the care system. Reinforcing the hierarchy between levels of care whilst strengthening primary care, and increasing the existing effectiveness and robustness of Turkey's information systems, will be central to meeting this challenge. Greater multi-disciplinary and intersectoral working, both centrally and at local level will also be needed to combat long-term conditions.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

2.1. The configuration of primary care in Turkey

Recent reforms have seen Turkey reinvigorate its lapsed ambition of creating a new medical speciality: family medicine

Although primary care has been a separately funded programme area in the Turkish Ministry of Health since the 1960s, failure to develop a distinct and successful first-contact tier of service – often due to poor central co-ordination – meant that Turkish citizens have historically made heavy use of hospital outpatient departments and private specialists for first-level care. General practice, in so far as it existed, was provided through health centres staffed by general practitioners, nurses, midwives and health officers serving localities with up to 10 000 inhabitants and offering a variable range of services, often dependent on individual initiative. All medical graduates were qualified to offer primary care services as general practitioners (GP) and without further specialist training (Tatar et al., 2011).

High rates of absenteeism in the general practice sector, low productivity and variable quality were cited as endemic, with inefficiently high rates of referral to hospital care (Baris et al., 2011). The more rural parts of the country, to the south and east, suffered shortages of workforce and facilities, a deficit reflected in some of worst health status figures of any OECD member state. In 2000, the infant mortality rate was 31.6 deaths per 1 000 live births, far higher than any other country and exceeding the next worst performer (Mexico, 19.4 deaths per 1 000 live births) by some margin; life expectancy at age 65 was 15.1 years for women, the lowest in the OECD, and 13.4 years for men, the fourth lowest (after the Slovak Republic, Hungary and Estonia) (OECD, 2011).

Hence, one of the Health Transformation Programme's (HTP) central ambitions[1] was to rebuild primary care. Its reforms sought to reinvigorate the speciality of family medicine (FM), which was first defined in 1983 but failed to embed itself extensively in primary care provision. The HTP 2005 reforms defined the FM core team as comprising a family physician (FP), nurses and professional assistants, to whom a list of named patients was assigned, and who were made responsible for a core set of tasks, focussed on maternal and child health. FPs across Turkey are required to deliver a defined set of services, to work to a standard set of norms and are paid according to national terms and conditions, in contrast to the more loosely defined GP which existed earlier. Nevertheless, although policies define norms and requirements for FPs, it is not necessarily the case that these norms are adhered to or penetrate far into routine practice, as specific examples throughout this chapter will show.

Turkey's transition towards a FP-led primary care service[2] is being pursued along two lines: direct training in the speciality for new medical graduates and retraining of existing GPs. Concerning the former, nearly all Turkish medical schools now have departments of family medicine which supervise speciality training over three years, largely in practice, leading to a post graduate diploma in FM. Regarding retraining of existing GPs, original plans envisaged that GPs would become recognised as FP if they completed ten days' of preliminary orientation, followed by a one-year programme of specialist training, achieved by distance-learning embedded alongside continuing daily practice. GPs can also be admitted to an FP training program at a medical school and pursue a six-year programme to qualify as an FP whilst working. FM is increasingly being seen as a viable and rewarding career option, on a par with the hospital-based specialities.

Assignation of named patients sought to formalise the continuous and comprehensive nature of the FP's responsibility in providing primary care, but inevitably implied some shift of orientation away from a diffuse community perspective, dominant in the previous GP model, to an individual- and family-focussed model. Community health centres were also established as part of the family medicine practice model. These centres are mainly staffed by public health doctors and other public health professionals; rather than providing direct clinical care to patients, their responsibilities cover community health including managing environmental and infectious disease issues, mother and child health, family planning, school health, health promotion campaigns and local screening programmes for cancer or inherited disorders. The community health centres are also responsible for arranging home care for those who are too frail to leave their usual place of residence for clinical assessment or those who require home treatment for tuberculosis (although FPs are also required to provide home care for those who need it). WHO Health for All data shows that primary health-care centres have expanded from 28.5 centres per 100 000 population in 1994 to 44.4 centres per 100 000 in 2006.

Other facilities delivering primary care functions include hostels near maternity units for expectant mothers from remote communities (to move into near their expected date of delivery) and a network of Cancer Early Diagnosis Screening and Training Centres (KETEMs) which co-ordinate and offer breast, cervical and colorectal cancer screening.

In terms of governance, the Public Health Agency of Turkey is responsible for strategic oversight and broad operations in the primary care sector. In each of the 81 provinces, the agency has a Public Healthcare Directorate responsible for operations at local level. FPs are state-employed. However, the development of a fully integrated FM model

into the other parts of the health-care system was partial. Some attempts were made during its development to systematise links to other care providers (most crucially hospital services) through the development of the health information system (such as the e-health project "Sağlık Net") enabling the sharing of patient registers between providers. The others initiatives consisted in encouraging or requiring co-located services, dually employed staff, improving care co-ordination or other initiatives to integrate care. The implications of this are discussed throughout the chapter.

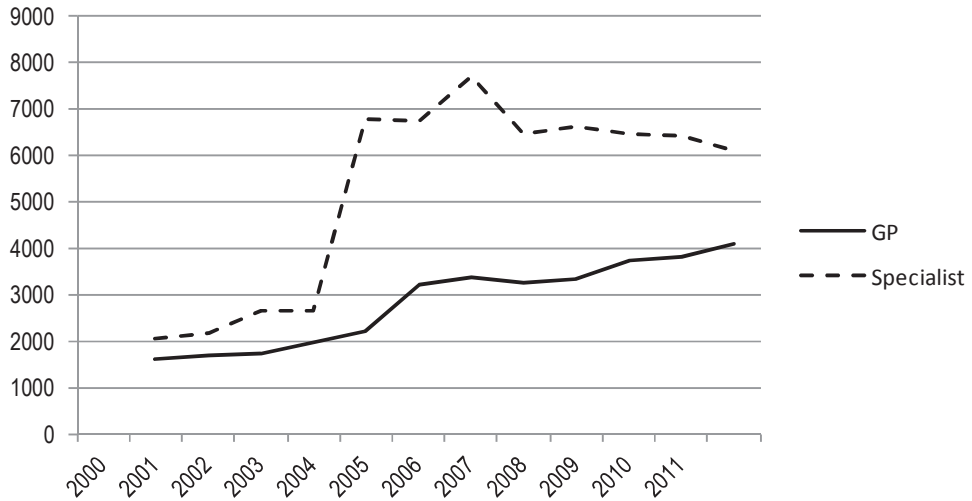
Performance-related pay is a key feature of Turkey's primary care reforms, but is focussed on activity

The income of primary care physicians has risen steadily over recent years, although remains around 70% of the income level of secondary care specialists (Figure 2.1). For family physicians, the introduction of family medicine significantly raised the income of physicians and nurses working in primary care. Family physicians are reimbursed predominantly via a prorated capitation payment. Payments are adjusted for local health needs, calculated on the basis of local pregnancy rates, elderly population, prison population and development index. Embedded within the capitation payments is an element of performance-related pay – one of FM's key reforms. FPs are required to offer defined programme of antenatal and postnatal care (including breastfeeding and contraceptive advice) and early years follow-up (including growth and development monitoring and immunisation). Failure to do so, and submit relevant documentation, triggers reduction in the performance-related payment of TRL 10 (USD 5) per capita, up to a maximum ceiling of TRL 990 (USD 510). Financial incentives also exist to encourage work in underserved or disadvantaged populations.

These supply-side incentives were coupled with a targeted programme of simultaneous demand-side incentives. In 2004, Turkey introduced a conditional cash transfer scheme, the *Social Risk Mitigation Project,* offering poor women (identified through proxy means testing) USD 13 per month during pregnancy and for two months thereafter, if they attended regular antenatal checks and a one-off payment of USD 41 for delivery at a health facility (Fiszbein and Schady, 2009). Since 2008, pregnant women living rurally have also been offered free accommodation close to a public hospital for up to one month before delivery, to assist them in complying with the project's requirements (Baris et al., 2011).

Figure 2.1. Physician salaries adjusted to 2011 price levels[1]

Turkish liras



1. Family physicians are included with specialists until 2010, and with general practitioners from 2011.

Source: Ministry of Health of Turkey, *Health Statistics Yearbook 2011*.

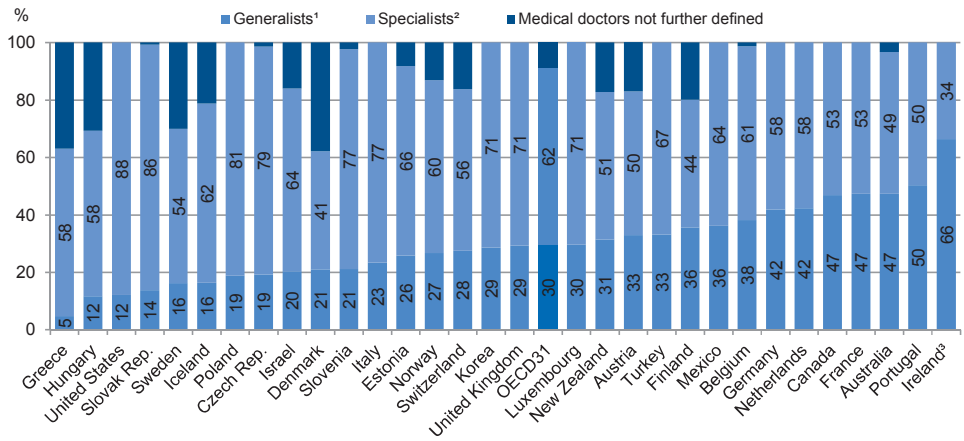
2.2. Outcomes associated with primary care

Increased access to primary care is one of the HTP's most important achievements

Both the absolute numbers of primary care physicians and their distribution has improved since implementation of the HTP. Ministry figures show that between 2002 and 2012, primary care consultations increased from 69 million to 254 million (with secondary care consultations increasing from 100 million to 192 million over the same period). Between 2000 and 2008, the primary care workforce expanded from 41.1 physicians per 100 000 to 52.6, and the ratio between the best and least-served areas improved from 8.3:1 to 2.8:1 (Baris et al., 2011). Turkey's primary care/generalist workforce now comprises 33% of all physicians, in line with the OECD average of 30% (Figure 2.2) and ministry figures estimate that at least 97% of the population are registered with a primary care physician (PCP). Only a minority of these – around 2 500 – are family physicians – around 10 000 GPs continue in service. Continued expansion of FP numbers is planned: by 2017 it is hoped that the primary care service will be entirely staffed by FPs and by 2023 (the

centenary of foundation of the Republic of Turkey), it is hoped to reduce the average list size to 2 000-2 500 patients per physician in line with OECD norms, from the current high levels of 3 500-4 000 patients per physician. The ministry admits, however, that there are difficulties in recruiting adequate numbers of FP.

Figure 2.2. Generalists and specialists as a share of all physicians, 2011 (or nearest year)



1. Generalists include general practitioners/family doctors and other generalist (non-specialist) medical practitioners.

2. Specialists include paediatricians, obstetricians/gynaecologists, psychiatrists, medical, surgical and other specialists.

3. In Ireland, most generalists are not GPs ("family doctors"), but rather non-specialist doctors working in hospitals or other settings.

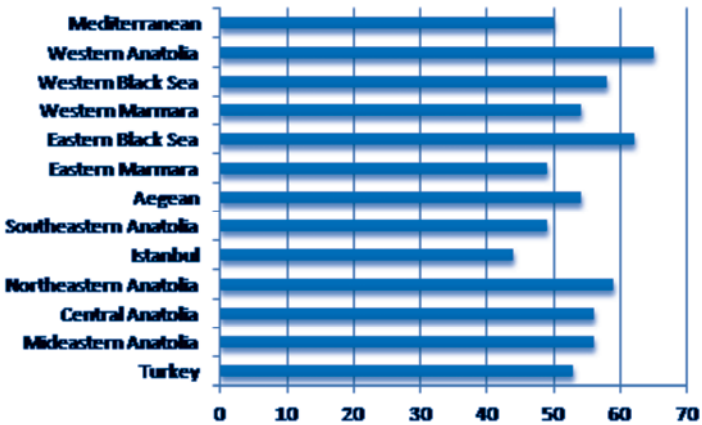
Source: OECD (2013), *Health at a Glance 2013 – OECD Indicators,* OECD Publishing, Paris, http://dx.doi.org/10.1787/health_glance-2013-en.

Although much improved, the distribution of primary care physicians across the country is still somewhat imbalanced, as Figure 2.3 shows. The low GP density seen in Istanbul is a long-standing feature. As well as the financial incentive to work in under-served areas, the ministry has funded a number of mobile health services to reach distant settlements and teams to meet the needs of distinct groups such as prisoners or children living in orphanages.

In a survey in two provinces five years ago, almost all patients reported that it was usually possible to see a physician on the same day, typically on a walk-in basis. Around four-fifths of patients could reach their FP within 20 minutes and few, around 10%, reported difficulty in accessing the FP or

getting medicines prescribed by the FP for financial reasons (WHO, 2008). Notably, patient satisfaction rates with primary care services appear high, having increased from 41% in 2000 to 71% in 2008 (Baris et al., 2011). A more recent survey found that 95% of patients were satisfied with the way they were treated by their FP, with similarly high numbers feeling that their FP listened and communicated well (WHO, 2008). Of some concern, however, only around 40% felt that the FP was abreast of their medical and social history. Despite the development of many initiatives to improve the health-care information system (such as the e-health project *Sağlık Net)*, this may relate to deficiencies in keeping consultation notes of individual doctor-patient encounters , discussed later in the chapter. The General Directorate of Health Research within the ministry also conducts regular patient satisfaction surveys. These all suggest very satisfactory levels of access.

Figure 2.3. Number of GPs per 1 000 population, 2002 and 2011



Source: Ministry of Health of Turkey, *Health Statistics Yearbook 2011*.

Discrete incentivised activities can be linked to better outcomes

As has been extensively documented elsewhere, Turkey has met with significant success in improving maternal and child health, perhaps the central aim of the HTP and remodelling of primary care. In line with the anticipated effects of the incentive schemes outlined earlier, the proportion of women who have at least four prenatal visits rose from 53.9% in 2003 to 73.7% in 2008 and the proportion of women who have at least one pregnancy follow-up is 94% in 2011. In a similar vein, the proportion of births attended by skilled health staff rose from 83% to 91.3% between 2003 and 2008 and the proportion of births in health-care institutions rose from 75% in 2002 to 97% in 2012 (Health Statistics Yearbook, 2012). As

Figure 2.4 shows, Turkey has achieved the highest average reduction of 6.9% per year in infant mortality between 1970 and 2011, followed by Portugal (6.8% per year) and Korea (6.4% per year).

Figure 2.4. Decline in infant mortality rates, 1970-2011 (or nearest year)

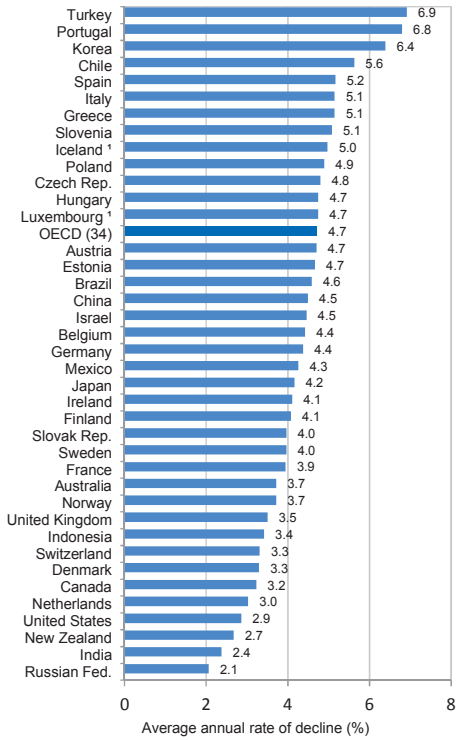
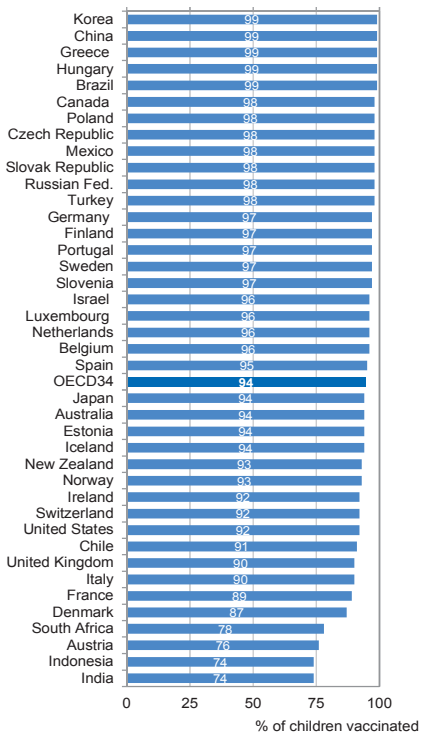


Figure 2.5. Vaccination rates for measles, children aged 1, 2011 (or nearest year)



1. Three-year average (2009-11).

Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en; World Bank for non-OECD countries.

OECD (2013), *Health at a Glance 2013 – OECD Indicators*, Figure 5.12.2, OECD Publishing, Paris, http://dx.doi.org/10.1787/health_glance-2013-en.

Under-5 and maternal mortality show similar profound reductions, and vaccination rates now exceed OECD averages (Figure 2.5; only measles is displayed, but the same applies to other antigens).

These improvements in basic health care, however, have not been enjoyed equally across all regions, with the large and sparsely populated eastern Anatolian regions still recording low levels of antenatal and early years care. As earlier, recent data also show that Istanbul scores poorly on

the average number of preventive health-care follow-ups that an infant receives after birth, which may be explained by its historically low density of GPs per head of population (Figures 2.6-2.9).

Figure 2.6. Trend in provision of minimum antenatal care (at least four checks), 2003-11

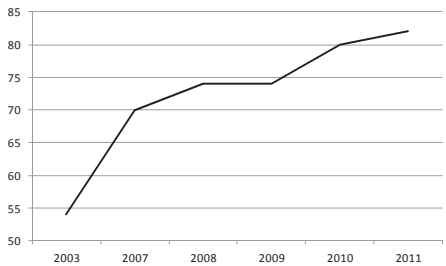
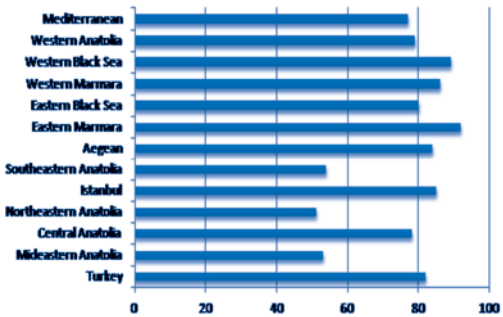


Figure 2.7. Distribution of provision of minimum antenatal care (at least four checks), 2011



Source: Ministry of Health of Turkey.

Figure 2.8. Trend in infant follow-up visits, 2000-11

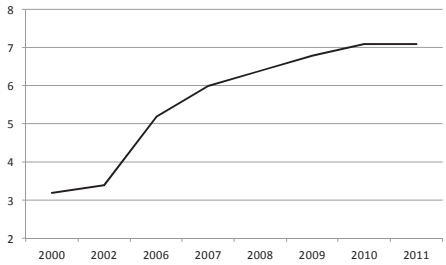
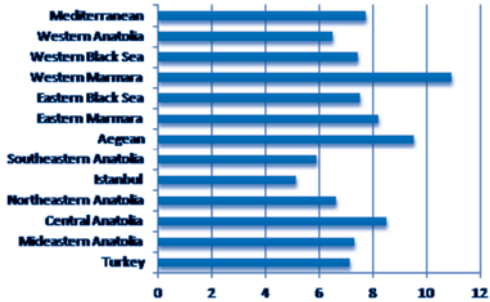


Figure 2.9. Distribution of infant follow-ups, 2011



Source: Ministry of Health of Turkey.

2.3. The emerging challenge of long-term conditions in Turkey

Whether measured in terms of activity or outcomes, the quality of primary care in areas other than maternal and child health is much less clear. Cancer screening rates for example, a core primary care activity, are low. In 2011, only 15.5% of Turkish women aged 20-69 were screened for cervical cancer (OECD average 59.6%), 27.3% women aged 50-69 were

screened for breast cancer (OECD average 61.5%) and 3.2% adults aged 50-74 were screened for colorectal cancer (EU15 average 12.7%). There are, however, a number of programmes to increase screening rates underway led by the KETEMs mentioned earlier, including mobile screening units, tele-radiology and integration of national databases to move toward systematic, population-based call and recall mechanisms which are not currently in place.

Quality programmes need to anticipate a rising burden of long-term conditions and multi-morbidity

Although maternal and child health were undoubtedly the right investments to make in the early years of Turkey's HTP, a mature primary care service needs to be the trusted first point of contact for the vast majority of health needs, irrespective of age or gender. In particular, Turkey's maturing health system must anticipate the inevitable shifting of the national disease burden toward the chronic morbidities associated with increasing age and, in some cases, unhealthy life styles.

Recent estimates from the WHO place the burden of non-communicable chronic diseases at 85% of all deaths in Turkey, over half or which is due to cardiovascular disease (excluding diabetes), with cancers and respiratory disease in second and third places (WHO, 2011). The same WHO estimates find that 32.8% of the Turkish population has raised blood pressure, 9% raised blood glucose and 38.3% raised cholesterol. Reported mortality from coronary heart disease (CHD) amongst Turkish women is the highest in Europe and the age standardised rate CHD death recorded for men was only surpassed by that for Russia and the Baltic countries (Onat, 2001). Although some important risk factors, such as high blood pressure and smoking rates, have shown a reassuring downward trend over recent years, other risks, such as obesity, continue to worsen. As Figures 2.10 and 2.11 show, Turkey has relatively high female obesity rates (21% vs. an OECD average of 17.9%) and male smoking rates (37.3% vs. an OECD average of 25.8%). As a result of high smoking rates, Turkey is already facing some of the highest rates of COPD in the region, as Figure 2.12 shows.

Figure 2.10. Prevalence of obesity among adults, 2011 (or nearest year)

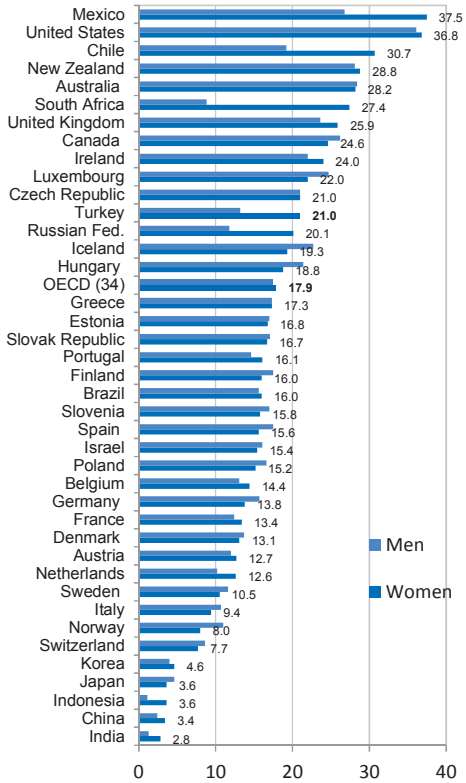
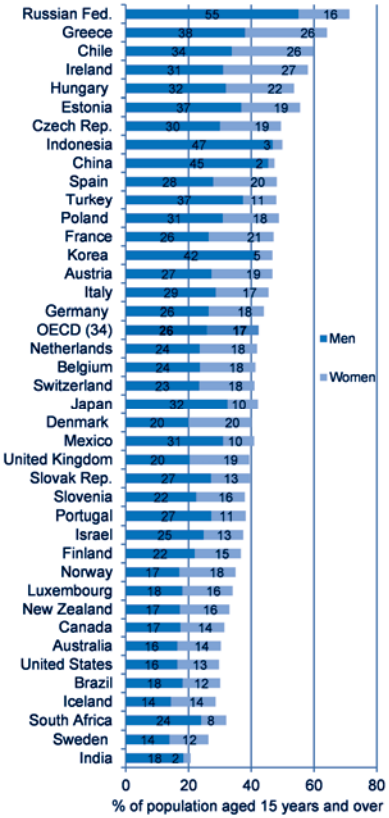


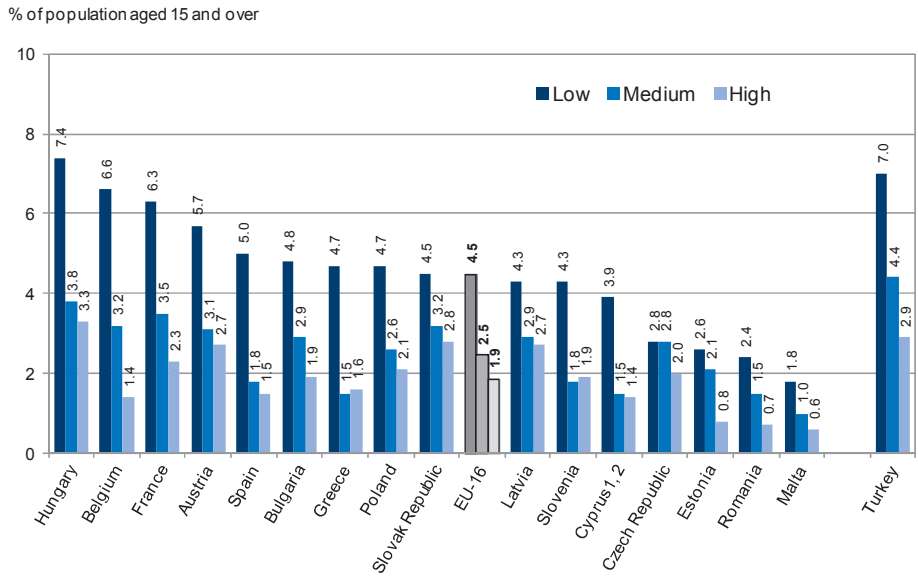
Figure 2.11. Prevalence of females and males smoking daily, 2011 (or nearest year)



Note: Countries are ranked in descending order of smoking rates for the whole population.

Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en; national sources for non-OECD countries.

Figure 2.12. Self-reported COPD by highest attained level of education, 2008 (or nearest year)



1. Footnote by Turkey:

The information in this document with reference to « Cyprus » relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

2. Footnote by all the European Union Member States of the OECD and the European Union:

The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus."

Source: OECD (2012), *Health at a Glance: Europe 2012*, Figure 1.16.3, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264183896-en.

It is estimated that around 6.5 million DALYs a year (disability adjusted life years) are currently being lost by men and women in Turkey due to NCDs, excluding neuropsychiatric conditions. Attributing a DALY value of USD 10 000 (the approximate Turkish per capita GDP) implies a current gross total value of life and ability foregone of USD 65 billion, rising to USD 80 billion if the burden of neuro-psychiatric disease is included, equivalent to 8-10% current GDP (Carter et al., 2012).

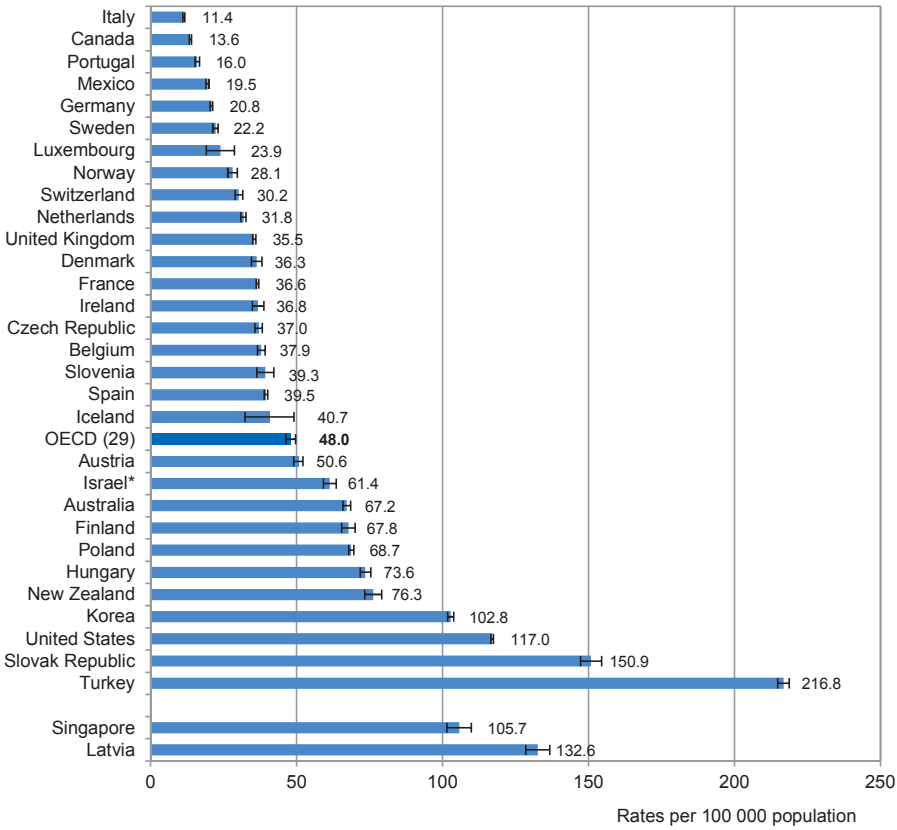
A relatively recent WHO study found that FPs in Turkey are increasingly involved in the management of long-term care and are now the usual physician consulted for chronic conditions such as COPD, heart failure or diabetes. This represents a marked improvement since the 1990s when primary care physicians in Turkey had the lowest likelihood to be consulted for these conditions, compared to 30 European countries (WHO, 2008). Nevertheless, a significant minority of patients, around 15-20%, bypass primary care and prefer to go directly to private specialists or hospital clinics for new health problems, despite incurring a co-payment. This may be because some first-line investigations, such X-rays, are not always easily accessible through primary care, or because of patient preferences.

Recent data strongly suggests that the quality of care for long-term conditions is worse in Turkey than in other OECD countries

Another internationally validated indicator of the quality of primary care, published by the OECD since 2005 and used by countries to benchmark their performance against peers, is the rate of hospital admission for chronic conditions deemed fully manageable within primary care, such as asthma, chronic obstructive pulmonary disease (COPD) or diabetes. These rates have been returned biannually from most OECD countries since 2005/06. As mentioned in Chapter 1, this year saw the first submission from Turkey for a number of the OECD's Health Care Quality Indicators, including hospital admission rates for asthma, COPD, hypertension, uncontrolled diabetes and long-term complications of diabetes. Placing these figures in an international context, Turkey reports higher admission rates for nearly all indicators; asthma is shown as an example (Figure 2.13).

Admission rates for other conditions appear to be marked outliers. Regarding COPD for example, the reported Turkish admission rate of 877.2 per 100 000 population is over four times in excess of the OECD average of 201.3, whilst the next highest admission rate is just under double the OECD average. The exception to this pattern is long-term complications of diabetes, where the Turkish reported admission rate of 76.3 per 100 000 population is just below the OECD average of 101.8. The various diabetes admission rates (for uncontrolled diabetes, long-term complications and short term complications) need to be seen and interpreted together, however; Turkey's relative modest admission rate for long-term complications may partly be due to differences in coding practice – the reported admission rate for uncontrolled diabetes (402.6 per 100 000 population) is a clear outlier at nearly ten times the OECD average of 47.3 (admission rates for short term complications were not submitted).

Figure 2.13. Asthma hospital admission rates, 2011 (or nearest year)



Source: OECD Health Data, www.oecd.org/health/healthdata, and General Directorate of Health Services, Ministry of Health of Turkey.

Such dissonant admission rates are likely to have a mix of causes: on the demand side, social preferences for hospital care; on the supply side, incentives to admit rather than manage chronic conditions in primary care; as well as possible biases or structural non-comparability (with respect to international benchmarking) in the data reporting system. What cannot be discounted, however, is that such reported high admission rates for chronic conditions may reflect a true and substantial deficit in the relative quality of primary care compared to other OECD countries.

At the same time, a large body of undiagnosed or undertreated chronic illness exists in the population. One relatively large survey of nearly 5 000 individuals living in 26 Turkish cities revealed that over 30% of the

participants had never had their blood pressure measured. Only 41% of those with clinically identified hypertension were aware of their diagnosis, and only 31% were taking any pharmaceutical treatment. Less than one person in every ten at risk had their blood pressure under satisfactory control (Altun et al., 2005). Likewise, the TURDEP (Turkish Diabetes Epidemiological) studies of 1998 and in 2010 find that Turkey's prevalence of diabetes almost doubled over that period and now stand at 16.5 % – a prevalence exceeding that seen in the United States and translating to 6.5 million adults with diabetes in Turkey (Satman et al., 2013). 45% of those diagnosed were unaware of having diabetes.

Taken together, these international comparisons strongly point to the fact that the burden of long-term conditions is growing in Turkey and, currently, is poorly managed. Across OECD countries it has been shown that the bulk of health care for long-term conditions is best delivered – for clinical, social and economic reasons – in primary care. Managing LTC in health-care systems based on a strong primary care sector have better health at lower costs, and show greater improvements in health following initiatives to strengthen primary care, such as increased supply of primary care practitioners and improvements in primary care practice. The unique features of primary care identified by Starfield include first contact access and use of primary care services; person rather than disease focused care over time; comprehensiveness of services provided within primary care; and care co-ordination. Growing pressures on the demand for and supply of health care require primary care to play an increasingly strong role in the health-care system.

2.4. Building the next phase of primary care reform: Quality assurance and improvement

Having achieved widely hailed improvements in access to family medicine, and with a programme in place for its continued expansion, the *quality* of primary care must now become the focus of on-going reform with a focus on long-term conditions. Turkey has a number of initiatives in place which have the potential to be effective tools for quality assurance and improvement, but each must be developed further to full meet the challenges of delivering a modern primary care service.

Turkish primary care benefits from having some basic quality elements in place

As well as the performance-related pay system described earlier, FM facilities undergo regular biannual inspection against a set of national standards. These focus mainly on the physical fabric of the building and

availability of clinical equipment and emergency drugs. In addition, a limited number of activity-related standards are included around maternal and child health; these are typically binary measures on whether all babies, for example, have had a newborn hearing test. Checks on secure storage of personal data are also made (again, binary measures). Inspection findings are not made publicly available. In contrast, there is no similarly systematic inspection system applicable to the wider set of GP facilities which have not made the transition to the FM practice.

FPs are required to return data on maternal and child health to the Health Information Systems Directorate at the ministry, through a platform known as *Sağlık Net* (Health Net); some prescribing data is also routinely collected. Activity across antenatal care and early years care, such as childhood vaccination, is visible to the Health Information Directorate at regional, institutional and individual practitioner level. Feedback to the individual practitioner is currently limited however; they are able to view their vaccination rates against the national target threshold, but not against national or regional achievement and not across other clinical areas. As previously, for the wider set of GP facilities, a standardised information infrastructure is not in place.

Other fundamental quality improvement activities, however, are lacking

Some quality initiatives seen in other primary care systems whether at the level of the individual primary care practitioner, the local service or the national profession, however, are not yet in place in Turkey. Although there are expectations that FPs take part in continuous medical education, on-going professional development is less established amongst PCPs more generally. This stands in contrast to requirements in many other OECD health systems, where physicians are obliged to document their professional development, registering either a minimum number of hours per year spent on activities such as congress participation, journal reading or point-of-care internet research, or (increasingly) document the ways in which the quality of their practice has evolved, irrespective of hours spent, by reflecting on particular cases, particular journal articles, significant events, etc. Neither is there any requirement for periodical recertification.

The first priority is to build the information infrastructure to underpin quality reforms

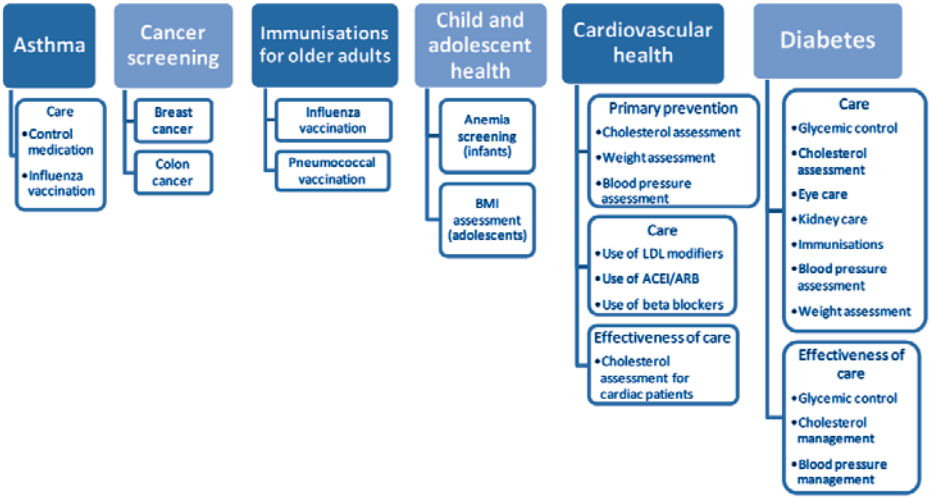
Routinely published national indicators in Turkish primary care focus on discrete activities around maternal and child health (MCH), with much less attention paid to clinical outcomes or other clinical areas. Although

national prevention programmes toward chronic conditions and risks factors have been developed, the set of indicators developed in these clinical areas remains limited. Community Health Centres (notably *not* FM services) are assessed on the "detection and monitoring" of patients with hypertension, COPD, disabilities, cancer or on dialysis, but assessment criteria are vague (the assessment result is either "adequate", "inadequate" or "not assessed", with "adequate" and "inadequate" being left to the Provincial Director of Health to define) and the assessment programme does not extend down to the actual providers of care (i.e. FPs) themselves.

There are ministry plans to extend the primary care monitoring including, possible pay-for-performance schemes, to include management of some chronic diseases and common cancers but it remains unclear what exactly this programme will comprise or how far advanced it is. It was cited, for example, that indicator sets for a range of clinical areas are in development (including LTC, risk factors such as obesity, and mental health), each with a "report card" to give feedback on individual FP performance. This initiative aims at increasing the clinical quality of care in these areas but it may have limited utility if introduced too quickly. Overall, the monitoring of clinical care and outcomes for patients with LTC in Turkey is at a very early stage.

While a focus on the processes of care in MCH has served Turkey well until now, there is now a need to mature the indicator set by expanding to include chronic and non-communicable diseases whilst bringing a new focus on the outcomes of care. Work is already underway to achieve this. As Turkey develops such indicators, an excellent example to look toward would be Israel, where, there Quality Indicators in Community Healthcare (QICH) programme aims to inform policy makers and the public on the quality of primary care across the country. It is a voluntary programme run by the Ministry of Health, the National Institute of Health Policy Research the Hebrew University, Haddassah, and covers almost the entire population. Six clinical areas are included, with a strong focus on prevention and a number of indicators examining clinical outcomes, as shown in Figure 2.14. The indicators are based on national and international guidelines reflecting current scientific evidence. Annual reports are published, disaggregating performance by provider after adjustment for health need and socio-demographic factors.

Figure 2.14. Structure of the Quality Indicators in Community Healthcare (QICH) programme, Israel



Source: OECD (2012), *OECD Reviews of Health Care Quality: Israel 2012 – Raising Standards*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264029941-en.

Managers report that the data fed back to them is instrumental in quality improvement work and some clear successes have been achieved, even within the relatively short history of the programme. For example, one of Israel's health funds, Maccabi, reports that amongst diabetic patients between 2004 and 2009, poor HbA1c control fell by 29% and adequate cholesterol control increased by 96.2% (OECD, 2012b). Notably, QICH is neither mandated nor reliant on financial incentives; instead, its success is thought to be due to its robust scientific basis, consensual development of the indicator set involving GP and health insurance plans early on, clear and patient-oriented objectives and, crucially, the systematic and continuous feed-back of comparative data to both professionals and the public.

Although Turkey produces a range of annual health statistics, these focus mainly on system inputs and financing. A limited number of activities and outputs are measured; those that are produced focus on basic measures of population health (such as all-cause mortality and activity around maternal and child health as discussed above). Turkey is currently unable to provide internationally comparable indicators of the quality of health care, such as those collected by the OECD. Examples include rates of avoidable hospital admission for chronic diseases, cancer survival estimates and rates of adverse events after surgery. It is likely that significant work is needed to

develop Turkey's health information infrastructure to the point where it can contribute internationally comparable indicators of the quality of care. The ministry may feel it is within its capacity to undertake and deliver this; alternatively, an in-depth capability assessment and set of recommendations from an external agency may be necessary to identify the critical shortfalls in infrastructure and prioritise actions to build it up.

Robust indicators need accurate patient registers. At present, Turkey is a long way from having an extensive set of patient registers at practice level: around three quarters of FP in the 2007 WHO survey reported that it would be "somewhat" or "very" difficult to generate a list of patients by diagnosis or health risk (WHO, 2008). This situation has reportedly improved and the fact that a number of FP facilities already run dedicated clinics for some LTCs (more commonly for hypertension than for diabetes), suggests that the operational basis for developing patient registers already exists, at least partially. Additional investment is needed to develop practice-based disease registers more systematically.

As a related point, it is reported that adequately detailed notes are not always made of each consultation. Patients appear conscious of this, given that a majority feel their FP is unaware of their medical history, as noted earlier. Local administrators already make checks that certain items of care have been performed and documented for certain patient groups (regular monitoring of blood pressure in pregnant women, for example), and clinical record keeping is reportedly improving. Audits of physicians' clinical documentation for a wider or random sample of patients, or peer-review of consultation notes, would be an appropriate ways to bring about improvements in clinical record keeping.

A second priority is to make standards and guidelines effective in improving primary care quality

At present, primary care services undergo regular inspection against a set of national standards. As noted earlier, these focus mainly on the physical fabric of the building and availability of clinical equipment and emergency drugs, although a limited number of activity-related standards are included around maternal and child health (yes/no checks on whether all babies have had a newborn hearing test and on personal data are securely stored, for example). These checks represent the most basic elements of quality assurance. What needs to be developed is a more sophisticated set of standards focussing on the processes and outcomes of clinical care.

The Joint Commission International Accreditation Standards for Primary Care provide a model here. These were developed by primary care experts and are designed to support sustained improvements in care,

promote a framework for risk reduction, create a culture of patient and worker safety, and contribute to patient satisfaction (JCI, 2008). The standards not only include expected norms around quality and safety (such as managing the risk of medication errors), patient centeredness (such as the recognition of patient rights) and practice organisation (such as accessibility and adequate clinical record keeping) but also standards around community involvement, including the identification of local health needs and the participation of community members in local service governance.

Standards would become operational in improving quality through regular publication of indicators as earlier discussed but, in time, could also involve programmes of regular clinical audits undertaken at practice level and peer to peer visits of primary care facilities, for inspection and accreditation.

Standards could form part of more comprehensive clinical guidelines for care. Clinical guidelines exist to help physicians and patients meet specified standards of care, by specifying which management options are best given a set of clinical circumstances. They should also reduce unwarranted variation in medical practice, which can be associated with inefficiency or poorer outcomes for certain groups of patients. A limited set of clinical protocols already exist around MCH and immunisations. To expand on this, work is underway to develop a set of indicators and clinical pathways around new clinical areas (including diabetes*)*. A feasibility pilot study of these indicators and pathways in eight provinces is due to report later in 2013.

Turkey has also recently signed licences to take a corpus of national guidelines already validated and in use from the Finnish Medical Society, to be immediately available in English with translation into Turkish and adaptation for local use to be undertaken subsequently. Although this may appear a sensible solution, a number of risks are apparent. First, adoption and adaptation of another country's guideline(s) is notoriously difficult – typically requiring as much time and energy as developing a local guideline from a blank sheet (belying the fact that production of clinical guidelines is a social process that needs active participation of all stakeholders from the earliest point of conception. Use of clinical guidelines in practice is known to be low if clinicians feel little ownership over them, if a great number of guidelines appear simultaneously or if they remain remote from the clinical encounter (languishing in a pile of similar documents) rather than embedded (as a screen pop-up, for example) in the consultation.

The risk of low uptake is evidence by the fact that over 80% of FPs reported using guidelines sparsely or not at all (WHO, 2008). More broadly, a majority also reported finding it difficult to stay abreast of changes and

advances in practice (Kringos et al., 2011). At the same time then, there is also a clear need to support continuing professional development. Although a number of bodies such as the Ministry of Health, the TAHUD and the Turkish Medical Association organise occasional conferences, regional workshops and one-to-one training to support on-going learning, a more formal underpinning, that makes clear the expectation upon each physician and supports them to meet it, would constitute a marked improvement.

Most OECD countries have introduced formal CPD arrangements for primary care physicians. Some details vary, such as whether CPD is compulsory or voluntary (in most countries it is compulsory), the number of hours per year to be spent (around 30-50 is typical) and whether an activity is accredited as constituting CPD by the statutory medical regulator, by scientific societies or by professional associations. An interesting model comes from Belgium, where participation in CPD is voluntary but strongly incentivised by linkage to payment systems: GPs who can demonstrate 60 hours' of CPD over a three-year cycle qualify for increased fee-for-service payments and annual bonus, equating on average to some EUR 4 000 a year. As well as the usual CPD activities such as workshops, seminars, courses and publications, doctors in Belgium must also demonstrate at least three hours a year spent on CPD related to ethics and economics (to reflect on the wider implications of their clinical activities) and at least two peer review groups per year, to qualify for increased fees (Garattini et al., 2010). Some 80% of Belgian doctors participate in the scheme.

The central co-ordinating role of primary care needs special recognition and support

As described earlier, a particularly notable feature of the FM model in Turkey is that it was partly developed in isolation from other parts of the health-care system. Little attempt was made during its development to systematise links to other care providers. This is evident at even the most basic level, with communications between FP and hospital specialists being infrequent at either the point of referral or discharge. Yet high-quality management of chronic conditions (that is effective, safe and patient centered) requires a sophisticated level of integration between different care providers. This arises because patients typically need a mix of continuous, supportive care emergency management of acute exacerbations and rehabilitative care, often have more than one long-term condition, and often make intensive use of both health and social care services. In recognition of this, OECD countries are increasingly addressing care integration as a distinct policy issue that requires new models of working and, in some cases, new resources. In most countries the day-to-day responsibility for integrating care for patients with complex needs falls to primary care

(Hofmarcher et al., 2007); this does not, however, solely implicate *physicians*, since in many countries the care co-ordination role is also performed effectively and efficiently by nurses, a point returned to below.

There is good evidence that well integrated care, as evidenced by multidisciplinary care teams, structured discharge planning and personalised care plans, can reduce hospital use and improve quality of life (Purdy, 2010). Integration can take many forms additional to those at the level of the individual patient as just described; Curry and Ham (2010) also describe integration at the "meso" level (such as development of shared care guidelines across services) and "macro" level (such as shared governance arrangements or funding streams). Hence there are many avenues which Turkey could explore to integrate services. Building on earlier policy recommendations feasible initial steps would include encouraging development of indicator sets and shared clinical guidelines for the management of some chronic diseases spanning both primary and secondary care, setting out the roles and responsibilities at each level of care with a particular emphasis on those responsibilities that are shared and on effective communication between professional groups and with the patient and their carers.

This is not necessarily an argument for introducing gatekeeping ("gatekeeping" refers to the arrangement where a patient is only seen by a hospital specialist if authorised by her primary care physician, who is responsible for overseeing and co-ordinating the health needs of the patient, as well as providing care themselves). Some systems work well without gatekeeping (such as in Sweden and Austria) and, although the evidence is that care continuity and co-ordination are better in systems with gatekeeping, the evidence remains equivocal whether efficiency and patient satisfaction are any better (Masseria, 2009). More important is that hospital-based staff also adapt their practice. As discussed earlier, communications between hospitals and primary care, particularly around the time of discharge, is infrequent and not formalised. This means that the primary care team are in a poor position to deliver on-going community-based care, if they are unclear about the patient's diagnoses or changes in treatment.

If a hierarchy of services is to be reinforced, and patients educated to redirect their health-care demands appropriately, it is reasonable to expect that the hierarchy of care should function consistently. At present, out-of-hours services are very limited for the FP service, with only around a third in the 2007 WHO survey offering evening or weekend opening and a minority of patients reporting they were well informed how to get evening, night and weekend services (WHO, 2008). Investment and new ways of working are needed here: a pragmatic way forward would be to set up co-operatives across FM facilities to share out-of-hours work, requiring

each to provide a telephone advice line with the possibility of a face-to-face consultation should the patient require it.

A lesser priority, although still important, concerns patient education. In a similar vein to the need for greater on-going education for professionals around LTC, more could be done to support patients in self-management and appropriate use of services. The WHO patient survey revealed considerable confusion about the formalities of referral to secondary care and the gatekeeping role of primary care (WHO, 2008). In some cases, reinforcing the idea that most routine health matters can be dealt with in primary care and signposting appropriate services, may also be necessary. Clearly, primary care facilities must be adequately equipped to take on a greater role in LTC management. A WHO survey in 2007 made some surprising findings in this regard; for example less than 10% of FP had access to a peak flow meter (necessary for the chronic and acute management of COPD and asthma) and a third had no access to a sphygmomanometer to measure blood pressure (necessary for the management of many chronic diseases, including hypertension, heart diseases, diabetes and obesity) (WHO, 2008).

Although numbers are relatively small, there is still a significant minority of patients who bypass primary care and seek care for new health problems from hospital specialists directly. Apart from the small co-payment that this incurs, there are no other incentives to prevent this and shift inappropriate care out of hospitals and toward primary care. Once the fundamentals discussed above are in place to ensure high quality primary care, this should be addressed, by increasing the co-payment for example. Future, more ambitious scenarios would include changing contractual arrangements to purchase bundles of care which span the whole care pathway and which specify elements such as structured discharge planning.

Flexibility is needed going forward, particularly regarding task allocation

The FP workload is high, the long patient lists referred to earlier sometimes translating into as many as fifty consultations a day and short consultation lengths of ten minutes or less (WHO, 2008). Nurses, however, have an extremely limited role in delivering primary care in Turkey, even around the management or co-ordination for the elderly or those with chronic conditions or mental health problems. Nurses cannot prescribe and nurse-led clinics do not exist. Patients may occasionally, however, see a nurse for a minor consultation around wound care for example. Admittedly, this limited role for nurses is not unusual even amongst high income countries (Masseira, 2009). The literature, however, consistently points to

the benefits of expanding this role: with appropriate training and on-going support, nurses have been shown to deliver many primary care functions (particularly around the management and co-ordination of one or more long-term conditions) as effectively as physicians, and typically at lower cost and with higher levels of patient satisfaction (Lowery et al., 2011).

Currently nurses do not need any specialist training to work in the general practice arm of primary care. Within the FM speciality, a retraining course is available to nurses, but up to around 40% of nurses working in FM in one province appear not to have completed it (WHO, 2008). FM nurses are mainly involved in maternal care, immunisation and health promotion and education, with a few offering home care for chronic patients. Only around one in ten patients reported experiencing a consultation with a nurse which dealt with the need to see a physician (WHO, 2008).

Accordingly, Turkey should explore expansion of the nursing role in primary care, both during office hours and out-of-hours. As well as quality and efficiency concerns, social preferences will no doubt play a role and it is likely that progress will be incremental here with nurse-led clinics, for example, still some way off. The ministry is open to the idea of appropriate task reallocation however, to use FP time most effectively. The models of municipality-based, nurse-provided services in prevention, rehabilitation and care for some chronic conditions seen in England, Estonia, France, Sweden, Denmark and parts of Spain should be whether this is a model for Turkey should be examined for relevance to the Turkish context and where feasible, piloted. If CPD structures and requirements are to be developed for FP, these should also be offered to nurses.

An additional option would be to expand the role of pharmacists. There are already as many community pharmacies per capita in Turkey as there are in northern European countries such as the United Kingdom and the Netherlands (Carter et al., 2012). Given shortages of medical and nursing labour, the further development of community pharmacies as clinical resources and "healthy living centres" should be considered as a potential health improvement strategy which might lower the future costs of extending access to enhanced primary care.

An expansion of the role of nurses and other professionals will need a greater depth of team working. Kringos et al. (2011) report that multidisciplinary work around patients with chronic disease is not common (with up to a quarter of FP reporting no regular meetings with their practice nurses) and links with wider community services, such as pharmacists, local authorities and social workers, are weak and appear to vary greatly from province to province (WHO, 2008). Multi-disciplinary team (MDT)

working should initially centre around chronic disease management. At present, MDTs do not exist for management of chronic diseases. This is in spite of the evidence that team-based care, particularly if supported by clinical guidelines, can markedly improve clinical outcomes, quality of life and patient satisfaction (Katon et al., 2010). A number of FP facilities already run dedicated clinics for some LTCs (more commonly for hypertension than for diabetes), suggesting that the operational basis for better MDT working already exists.

Diversity in the organisational model of primary care will also signal a truly maturing sector

The Ministry of Health, being the single purchaser of primary health-care services, is clearly in a strong position to steer and remodel the provision of primary care as it sees fit. The Ministry of Health has pursued an unambiguous direction of travel toward family medicine, identifying FM as the unitary model of provision which it wishes to see implemented uniformly across the country. Much progress has been made in pursuing this reform and, while this model has much to commend it, there would be advantages in now allowing some flexibility and diversity in how primary care is delivered in Turkey.

The argument stands on two bases. First, a marked feature of mature primary care systems cross the OECD is the propensity to diversify and try out new models, explained by changing models of care in hospital care and other contingent sectors, shifting patterns of disease, as well as evolving public expectations. These new models include placing GP into hospitals to co-ordinate the care of complex patients or triage acute presentations, placing specialists in community health centres to run specialist clinics with primary care colleagues, encouraging GP to develop specialist interests in defined clinical fields, home care units, step-down facilities and other innovations to avoid or shorten hospital stays. The other argument is that, despite well documented failings, many admired Turkey's pre-existing network of primary care physicians and in particular its community orientation, accommodation of individual initiative and responsiveness to local needs. Indeed, the reforms of 1996 and 2005 encouraging establishment of the FM model generated considerable opposition amongst bodies such as the Turkish Medical Association and Turkish Nurses Association, who felt that the new model was not sufficiently community oriented or proactive in finding unmet health needs, but rather depended on individuals expressing a health-care need and that the new contracts would fragment the team-based approach of the earlier GP model of care.

Hence a solitary focus on the FM model to the exclusion of others may constrain Turkey from best meeting local health needs, as they currently present and evolve in the future. The centre may do well to relax somewhat its operational control and limit itself, instead, to setting out the broad ambitions, holding localities accountable in achieving them, and providing the technical support and necessary resources to make them feasible. Sweden is a good model of the light touch approach. There, health and health care quality indicators are amongst some of the best internationally; the governance style is characterised both by substantial decentralisation and a strong emphasis on the open comparison of quality and outcome indicators. Professional and organisational pride is relied upon to drive continuous quality improvement, rather than centrally devised directives (OECD, 2013).

And with flexibility, greater professional and public participation in the ongoing reform process should be encouraged. Regulations and policy documents from the Ministry of Health do not accommodate any legal role for TAHUD or other professional organisations in policy making, although ad hoc involvement occurs. Professional organisations are, for example, informed about ongoing reform process and their suggestions are taken into account. Similarly, patient groups are not formally a part of the policy making process and patients are not always aware of their rights within the FP system, such as the right to ask for a second opinion, change FP or to have access to their medical records, even though these are set out in a 1998 statute of patient rights. Procedures for handling patient complaints remain unclear in up to a fifth of FM health centres and satisfaction surveys or service improvement through work with community organisations are infrequent (WHO, 2008). One relatively straightforward initial step in this direction would be to give primary care a greater voice in assessing local health needs and influencing strategic purchasing decisions. Professionalisation will also be supported by development of clinical guidelines and extending the task profile of FP.

2.5. Conclusions

As a result of the Health Transformation Programme, supply and access to primary care services in Turkey have both greatly increased. Health outcomes have also improved, most notably around maternal and child health and infectious diseases. Now, there is a need to focus on the quality of services, including safety (thus far neglected) and on non-communicable diseases.

Reinforcing the hierarchy between levels of care whilst strengthening primary care, and increasing the robustness of Turkey's information

systems (in particular, harmonising performance measures to OECD and other international comparators), will be central to meeting this challenge. Greater multi-disciplinary and intersectoral working, both centrally and at local level will also be needed to combat long-term conditions, given the limited determinant role of health services in these chronic conditions.

Turkey has made the classic, and curious, mistake of focussing efforts to expand access to primary care sector but then neglecting the issue of quality, instead focussing all efforts on quality measurement and improvement on the hospital sector. A recurring pattern across countries is that quality initiatives almost always cluster around secondary care, with many fewer relevant to primary care, and with attention to long-term and community care quality left trailing far behind.

Establishing family medicine quality teams centrally and each province would provide national and local leadership to bring all these strands and initiatives together. National and local quality teams would provide leadership, raise awareness of quality issues, provide training, for example on audit or quality indicators.

Notes

1. For a full description of the Health Transformation Programme please refer to Chapter 1 and Tatar et al. (2011).
2. To clarify the various roles during Turkey's transition to a family medicine led primary care service, the following distinct abbreviations are used throughout the chapter: FP (family physician, to designate those primary care practitioners who have undertaken training to practice the speciality of family medicine); GP (general practitioner, to designate those primary care practitioners who have not); and PCP (primary care practitioner, to refer to both FPs and GPs together).

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Chapter 3

Improving hospital care in Turkey

Like other OECD countries, Turkey is grappling with the challenge of improving the quality of hospital care in a context of rising hospital activity and a diversified hospital sector. Over the past ten years, the Turkish hospital sector, and particularly private hospitals, have experienced one of the strongest growths in activity across OECD countries. This followed the successful attainment of universal health coverage, as well as reforms that encouraged hospital productivity. As a complement to the discussion on hospitals in Chapter 1, this chapter focuses principally on the diversity of the structure of the hospital sector, including the significant role that private hospitals are coming to play, and how to drive improvement for the sector as a whole. The chapter starts by describing the Turkish hospital system, its structure, and development. It then considers way to strengthen quality governance in the sector. The chapter finishes by suggesting the need for a shift from a focus on productivity to a focus on keeping people out of hospitals in the first place.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

3.1. The Turkish hospital sector has seen strong capacity development

The Turkish hospital sector consists of both publicly and privately owned and run institutions. The public hospital sector includes Ministry of Health hospitals, accounting for 59% of hospitals and 60% of hospital beds, and university hospitals, which focus on teaching and research. Private hospitals, mainly for-profit, represent about a third (34%) of all hospitals, and 14% of hospital beds (Methat et al., 2011).

The Ministry of Health hospitals receive funding from two main sources. First, a line-item budget that is set and paid for by the Ministry of Health. This is fixed annually and is primarily used for personnel salaries and capital expenditures. The second source consists of revolving funds, paid by the Social Security Institution (SSI). Since 2006, the SSI has transferred a defined amount each year to Ministry of Health which then allocates it to hospitals, using specific allocation criteria. In contrast, University hospitals receive funds from a general budget allocated by the Ministry of Finance, completely independently of the Ministry of Health. University hospitals also receive revolving funds from SSI, which are based on fee for service.

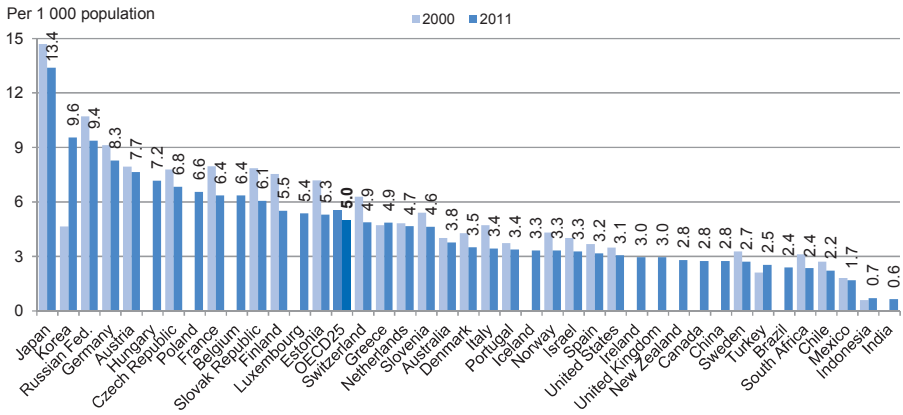
Other private sources represent a smaller share of the overall revenues of hospitals (see also Chapter 4). Private hospitals, which before the Health Transformation Programme (HTP) entirely funded through private sources, also receive SSI payments. The SSI contracts with individual hospitals to deliver services included in the benefits package. Staff working at Ministry of Health hospitals are contracted by the government, with a smaller number under contract financed from the revolving fund, while staff working in private hospitals contract directly with the hospitals.

Capacity has grown, especially in the private hospital sector, but occupancy rates remain low

Turkey has one of the lowest – but fastest growing – supplies of hospitals and hospital capacity within the OECD. Relative to its population size, Turkey has the third lowest number of hospital beds and has a third fewer hospitals than other OECD countries, on average (Figures 3.1 and 3.2). While similarly low numbers can be found in low-income OECD countries such as Mexico and Chile, other higher-income OECD countries such as Sweden, New Zealand, or even the United Kingdom and the United States, have hospital bed numbers only slightly above Turkey.

Figure 3.1. Turkey has the third lowest number of hospital beds in the OECD

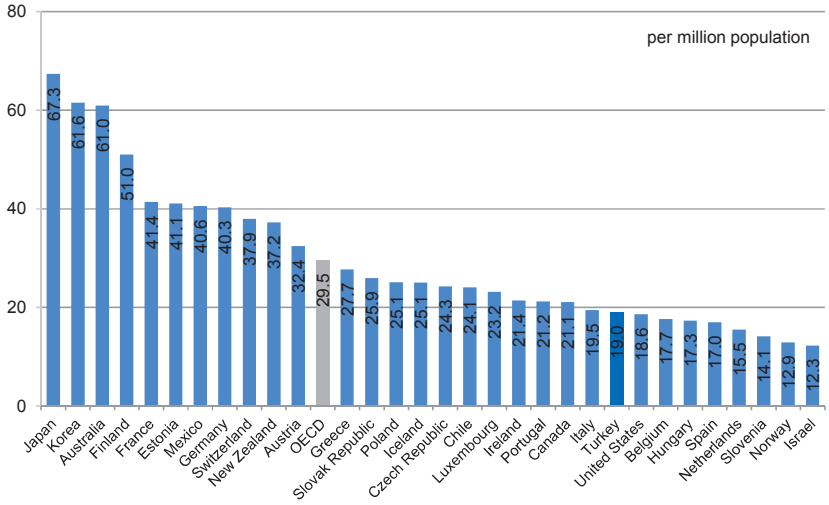
Hospital beds per 1 000 population, 2000 and 2011 (latest year available)



Source: OECD (2013), *Health at a Glance 2013 – OECD Indicators,* OECD Publishing, Paris, http://dx.doi.org/10.1787/health_glance-2013-en.

Figure 3.2. The number of hospitals in Turkey is a third lower than the OECD average

Hospitals per million population, 2011 or latest year available

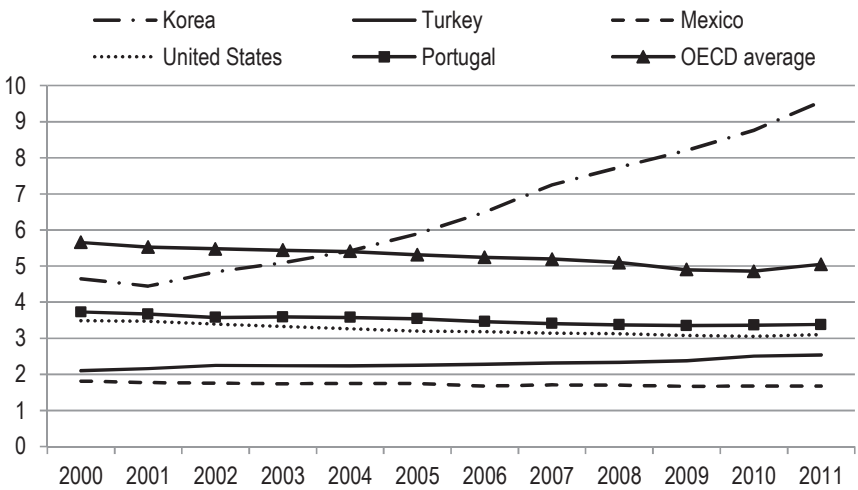


Source: OECD Health Data 2013, www.oecd.org/health/healthdata.

Hospital capacity has been growing over the years. Contrary to the vast majority of OECD countries that have been reducing the size of their hospital sector, hospital beds in Turkey have increased from 2 per 1 000 population in 2000 to 2.5 in 2011. This represents the second largest increase in the OECD after Korea (Figure 3.3), and, with an average annual growth of 2.3%, the fastest growth among in the European Free Trade Association countries (OECD, 2012).

Figure 3.3. The number of hospital beds in Turkey has been growing steadily

Growth in hospital beds per 1 000 population in a selection of OECD countries



Source: OECD Health Data 2013, www.oecd.org/health/healthdata.

Such capacity expansion has been driven by growth in both the private and the MoH sectors (see Table 3.1), which had been encouraged by the generous government incentives since the mid-1990s (Agartan, 2005). For example:

- The number of Turkish hospitals has increased from 1 156 in 2002 to 1 453 in 2011; growth in the public sector was around 10%, while the number of private hospitals has expanded by nearly 90% over this period.
- The number of private beds increased from 5 693 in 2002 to 23 542 in 2012; an even faster growth than was experienced in the public sector.

- The private sector has seen a large increase in the number of specialised units and equipment (MRI, CT, haemodialysis units) delivering an increasingly complex set of procedures. The number of ICUs beds and haemodialysis units in the private sector is now nearly equivalent to that of the public (Ministry of Health) sector, while CT scans and MRI are higher in the private than in the public sector (they remain significantly lower in the university sector).

Table 3.1. Growth in the public and private hospital sector in Turkey

	Public (Ministry of Health) sector		Private sector	
	Number (2011)	Growth 2002-2011	Number (2011)	Growth 2002-2011
Number of hospitals	840	10%	503	90%
Qualified hospital beds	38 272	460%	23 542	310%
ICU beds	9 581	1000%	7 506	660%
Actively used hemodialisys devises	4 481	200%	9 901	290%
MRI devises (per 1 000 000 population)	3.7	n.a.	5.7	n.a.
CT devises (per 1 000 000 population)	6.0	n.a.	7.1	n.a.

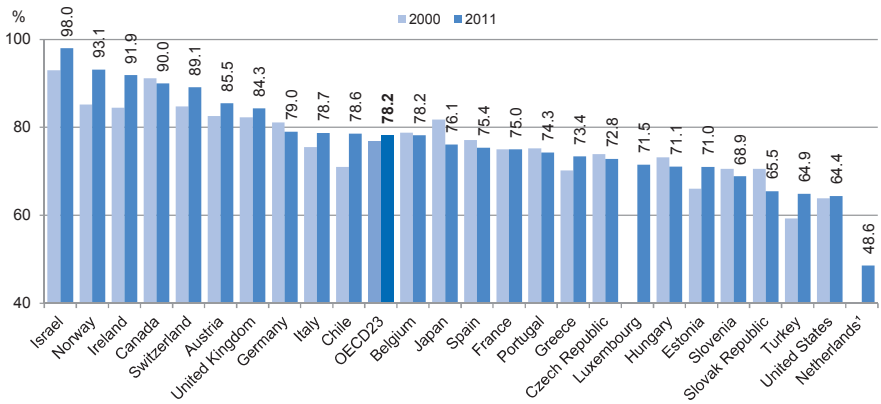
Source: *Turkey Health Statistics Yearbook 2011*, Ministry of Health of Turkey.

This expansion in capacity has only in part been accompanied by higher occupancy rates, which remain among the lowest in the OECD (Figure 3.4) and well below the threshold beyond which hospital activity is often regarded to be unsafe. There are significant differences across sectors. Occupancy rates are just above 50% in the private hospital sector, while reaching 74% in the university hospital sector and 66% in the public sector. Studies prior to the Health Transformation Programme focusing on the public hospital sector have pointed to the fact that a large number of Turkish hospitals are operating at low efficiency levels (Ersoy et al., 1997; Sahin and Ozcan, 2000). More recent analysis suggests that the simultaneous introduction of the HTP and a shift from part-time to full-time physician practice in hospitals make it difficult to draw conclusive results from analyses seeking to assess improvement in public hospital efficiency (Erus and Hatipoglu, 2013).

The average length of hospital stay in Turkey are the shortest in the OECD for acute myocardial infarction (4.0 vs. an OECD average of 6.9), and the second lowest following Mexico for normal delivery (1.5 vs. an OECD average of 3.0), and for all causes of hospitalisation (3.9 vs. 8.0). ALOS has been reducing in all sectors of the Turkish hospital, but especially in the public hospital sector which fell by 50%, relative to a drop of 35% in the private sector. ALOS in the public sector still remains more than double that of the private sector (5.8 days vs. 2 days). The university sector sits in between with an ALOS of 4.3 days in 2002 (Ministry of Health of Turkey, 2012).

Figure 3.4. Bed occupancy in Turkey remains the third lowest in the OECD

Occupancy rate of curative (acute) care beds, 2000 and 2010 (or nearest year)



1. In the Netherlands, hospital beds include all beds that are administratively approved rather than those immediately available for use.

Source: OECD (2013), *Health at a Glance 2013 – OECD Indicators,* OECD Publishing, Paris, http://dx.doi.org/10.1787/health_glance-2013-en.

One possible explanation for these figures is that there is simply less demand for hospital care in Turkey, or lower levels of case complexity, than is standard across OECD countries, i.e. hospital capacity in the Turkish health system is not out of step with population needs. These figures could also indicate a potential risk for high re-admissions and adverse patient outcomes if patients are being discharged in the community earlier than would be medically appropriate. Even if these data do not conclusively confirm or disprove either of these hypotheses, Turkey may nevertheless need to resist the temptation of rapidly expanding hospital capacity without a thorough assessment of its population needs. Failure to do so might put Turkey on a path wherein costs rise quickly, with a growth in hospital activity that doesn't necessarily deliver high quality care. Turkey's focus should instead be on two main issues discussed later in this chapter: first, on ensuring that hospital activity is safe and effective; and second, on keeping people out of hospital where care can be more effectively delivered in primary care settings.

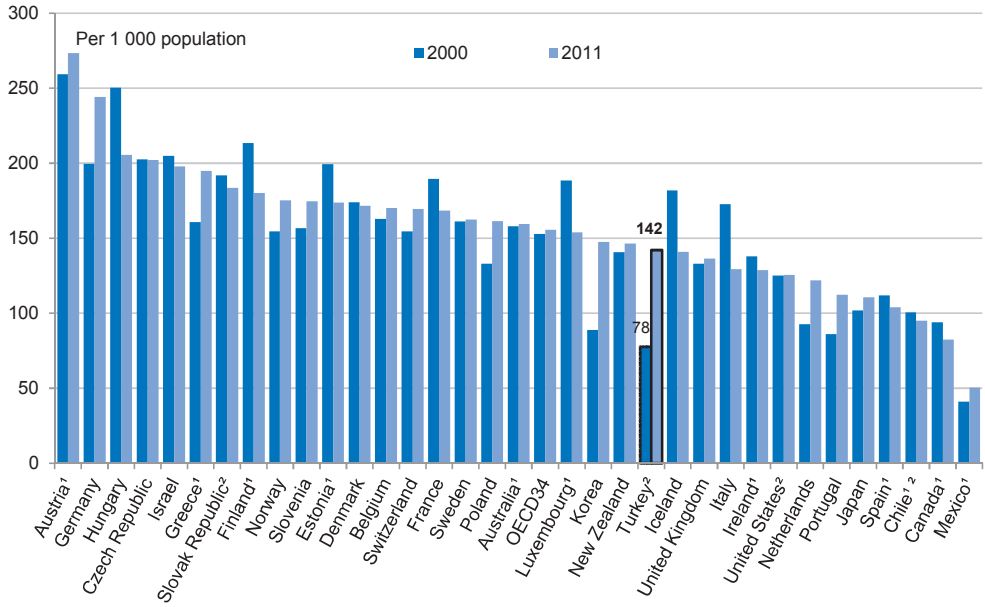
Activity has been growing faster than other OECD countries

The Turkish hospital sector has seen a rapid growth in activity over the past decades. While the number of hospital discharges is lower than in two-thirds of OECD countries, they are only 10% fewer than the OECD average

(OECD, 2013). Strikingly, the number of hospital discharges has doubled since 2000, by far the fastest rate of growth across the OECD (Figure 3.5). According to Turkish statistics, bed turnover intervals – that is, the number of days a bed remains unoccupied between two discharges – has halved over the past ten years (it was 2.1 days in 2011) (Ministry of Health of Turkey, 2012). Fast growth in procedures has been recorded; for example, the number of organ transplantations went from 745 in 2002 to nearly 4 000 in 2011; diagnostic procedures, such as the number of MRI exams, doubled in all Turkish hospital sectors.

Figure 3.5. Hospital discharges in Turkey have doubled since 2000

Hospital discharges per 1 000 population



1. Excludes discharges of healthy babies born in hospital (between 3-10% of all discharges).
2. Includes same-day separations.

Source: OECD Health Data 2013, www.oecd.org/health/healthdata.

The largest number of discharges are for diseases of the respiratory, circulatory and digestive systems, which, together, account for 30% of all hospital discharges. Data on hospital procedures are unfortunately not available. The only procedure for which data are reported to OECD are caesarean sections, which appear to be worryingly high in Turkey – they are the highest in the OECD, and nearly 75% higher than the average for OECD

countries (Figure 3.6). Between 2006 and 2011, the number of caesarean sections in Turkey has increased from 314 per live birth in 2006 to 426 per live birth in 2011 – a nearly 47% increase over a short period of five years, or a 8% yearly increase. These rates are way above those recorded for other OECD countries since 2000 (Figure 3.6). Caesarean sections can pose higher risk for mortality and morbidity for the mother and child, including complications for subsequent deliveries.

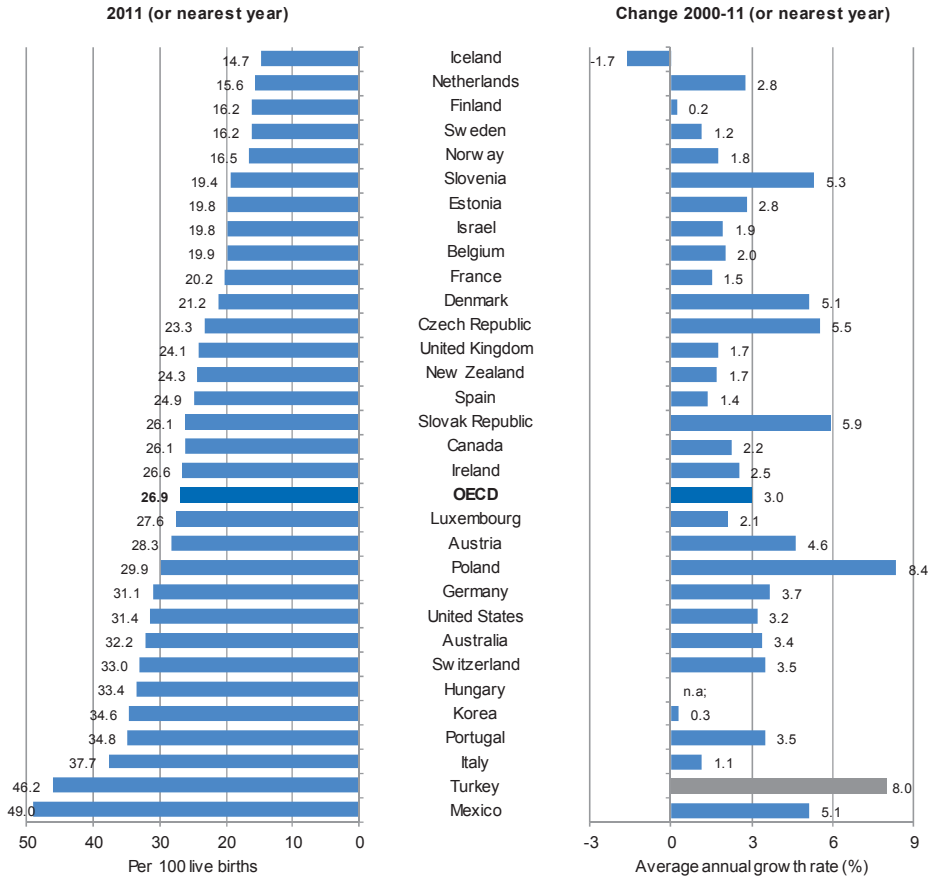
Disaggregating data by sector displays a similar picture to the one described for hospital capacity, that is, high productivity driven primarily by rapid expansion of the private hospital sector activities. According to data from the Turkish Ministry of Health (Ministry of Health of Turkey, 2012), between 2002 and 2011:

- The number of per capita hospital visits in the private sector has grown eight times, while it has tripled in the university sector and doubled in the Ministry of Health facilities.
- The number of inpatients grew six times in the private sector, doubled in the university sector, and grew by 50% in Ministry of Health facilities.
- Surgical procedures doubled in the Ministry of Health and university sector, but they grew by a factor of six in the private hospital sector.
- While the number of radiology examinations are higher in the Ministry of Health sector than in other sectors, the private and university hospital sectors delivers a higher number of MRI exams, CT scans and ultrasound exams than the Ministry of Health sector.

Because public reimbursement of private sector visits and procedures covers only a share of the costs faced by patients, private hospitals provide care mainly to the richer sections of the population. Turkey is also becoming an important destination for "medical tourists", with the private sector being the recipient of a growing number of international patients. The proportion of specialist physicians working in the private sector has remained relatively stable over time (around 31% of total physicians in 2011), but it has reduced slightly in the university sector, from 23% in 2002 to 19.8% in 2011, possibly as a result of recent regulation forbidding clinicians from carrying out dual practice in different sectors.

Figure 3.6. Caesarean sections in Turkey are the highest in the OECD

Caesarean sections per 100 live births, 20011, and change between 2000 and 2011



Source: OECD (2013), *Health at a Glance 2013 – OECD Indicators,* OECD Publishing, Paris, http://dx.doi.org/10.1787/health_glance-2013-en.

There are significant differences across regions in hospital capacity and utilisation

Differences in hospital endowment and infrastructure across Turkish regions are wide. The ratio of hospital beds per 1 000 population is below the OECD average of 4.0 for all the regions in Turkey, but the ratio ranges by a factor of nearly two, from a low of 1.8 per 1 000 population in southeastern Anatolia to a high of 3.3 for western Anatolia (Ministry of

Health of Turkey, 2012). Similarly, the number of intensive care units beds is almost twice as high in western Anatolia relative to northeastern Anatolia. For hospital utilisation, the number of surgical operations varies from a low of 39.3 in western Marmara to a high of 76.8 in western Anatolia (Turkey average being 56.2 per 1 000 population). The proportion of inpatient admissions at Ministry of Health hospitals is only 43% in Istanbul, compared to 77% in northeastern Anatolia.

While variation is significant, gaps across regions have been narrowing over time. For example, better equipped regions had nearly three times as many hospital beds in 2002 than the worst-equipped regions. Such narrowing of regional variation has been mainly the result of private hospital capacity growing fast across all regions of Turkey. According to a study using Turkish data on hospital services, the number of hospital beds in the private sector grew by a factor of nearly 70 between 2001 and 2006, compared to a 2.3 fold increase in the number of beds in the public sector. This growth occurred across all regions of Turkey, but was particularly important in the least- equipped regions. The ratio for hospital beds between the most developed regions and the least-developed regions fell from 29.8 to 14.7 for the private sector, but only from 2.3 to 1.8 for the public sector (Aksan et al., 2010).

Hospital utilisation shows similarly strong development in the private sector. The gap between the most and the least developed regions for surgical operations decreased from 6 to 3.3 for the public sector, but from 117.7 to 13.6 for the private sector (Aksan et al., 2010).

Private sector development has been encouraged by purchasing policies that permitted insured people in Turkey to use private hospital facilities contracted with the social security system. This purchaser-provider split started around the end of the 1990s, and has continued since. With the implementation of the Health Transformation Programme (HTP), government spending became a significant source of revenues for private hospitals. Nevertheless, cost-sharing at private hospital facilities can be more significant for certain procedures in the private sector (although there is an upper limit for the procedures that they charge), because private hospital facilities receive payments from the social security institution while public hospitals are also paid from the Ministry of Health.

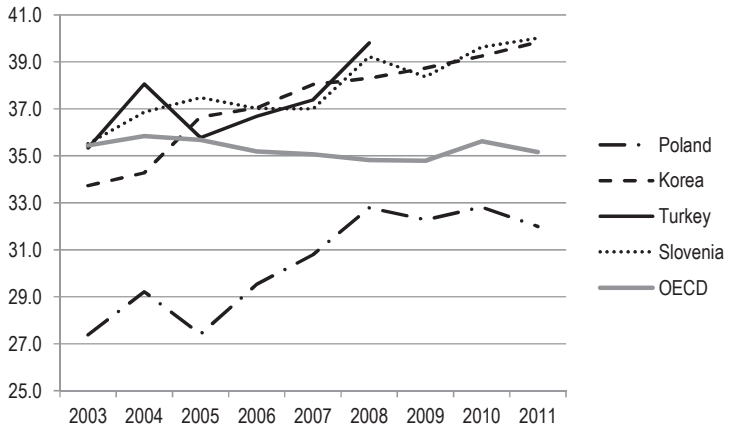
Hospital spending in Turkey

Spending on hospitals in Turkey accounted for 40% of total health expenditure, in 2008. While other five OECD countries (Czech Republic, Denmark, Sweden, Estonia and South Korea) spend on hospitals a higher share of their total health-care spending, Turkey has had one of the fastest growth in spending on hospitals in the OECD over the past few years, along

with Poland, Korea and Slovenia (Figure 3.7). Unfortunately, no data on spending on different services within hospitals (i.e. inpatient, outpatient) are reported to OECD.

Figure 3.7. Expenditure on hospitals in Turkey has been among the fastest in the OECD

Spending on hospitals as a percentage of total health spending



Source: OECD Health Data 2013, www.oecd.org/health/healthdata.

3.2. Strengthening quality governance in the hospital system and creating a quality culture

The Turkish Government has already set up initiatives for accrediting public hospitals and licensing health professionals, as described in Chapter 1. Having achieved significant level of productivity, emphasis should now move to strengthening quality governance in the hospital system as a whole, with the goal of aligning quality culture and clinical outcome in the public, university and private hospital. This is especially important in light of the trends observed in the previous sections – growth in activity and spending, particularly in the private hospital sector, as well as unequal growth across regions – warranting attention in three main areas:

- the establishment of system-wide quality obligations, as a necessary counterpart of granting licensure to practice and SSI funding
- the development of quality monitoring systems across the public and private sector
- the encouragement of a safety and quality improvement culture.

System-wide quality of care initiatives should be developed

Turkey is in the process of moving towards a governance model whereby the government takes responsibility for assuring quality and safety of health services, rather than the operational running of health services and activities. It is important that services offered by private hospitals be included as part of this process. Experience from other OECD countries suggests that the government has a role to play in providing a framework for system-wide quality governance and create an even playing field across different hospital sectors. For example:

- In Australia, the Commission on Safety and Quality in Health Care has developed the National Safety and Quality Health Service Standards (NSQHS Standards), which were implemented nationally from the first of January 2013. Under the new accreditation model, state and territory health departments have agreed that public and private hospitals are required to be accredited to the NSQHS Standards. Further, some states and territories require that additional health service organisations be accredited to the NSQHS Standards. Each hospital selects an approved accrediting agency (agencies accredited by an internationally recognised body) and works with the Commission to ensure the consistent application of the NSQHS Standards. The accreditation cycle ranges from three to four years, and the frequency and style of the mid-cycle assessment, periodic review or surveillance audit vary between agencies. The accrediting agency will provide data on accreditation outcomes to state and territory health departments and to the Commission, which will use this information to report to Health Ministers on the safety and quality of health service organisations across Australia.

- In England, the Care Quality Commission (CQC), an independent statutory body established in 2009, is responsible for hospital accreditation and standards, including both regulation and inspection. Hospitals are required to register with the CQC, which reviews all (NHS and private) hospitals in England to verify that national standards of safety, patient centeredness, and care effectiveness are met. The findings of such reviews are shared with the public, and the public is encouraged to share their experience or report concerns to the CQC. The role is similar to the tasks of the Joint Commission in the United States, and the standards are in line with those of the Joint Commission. Many private hospitals also apply for voluntary accreditation to demonstrate quality of care.

- In France, the accreditation of all health-care organisations, whether public or private, has been mandatory since 1996. The law insists on

external evaluation against standards, incorporating practice guidelines and external recognition. Accreditation focuses specifically on safety issues related to care and is managed by an independent national agency. Financing is ensured partly by the government and partly by the hospitals. The results of the accreditation are communicated to the public and the Regional Hospitalisation Agencies (RHA). In 2004, the government created the Haute Autorité de Santé (HAS), an independent body with financial autonomy in charge of providing information to the public, and responsible for providing health authorities with information needed to make decisions on the reimbursement of medical products and services.

- In the United States, the Joint Commission, an independent, not-for-profit organisation, has accredited public and private hospitals for more than 60 years. Approximately 82% of the US hospitals are currently accredited by the Joint Commission. Joint Commission standards focus on organisational quality and the safety of the environment in which care is provided. A Joint Commission accreditation is a condition for licensure and the Medicaid reimbursement in many states. The Commission's inspections results are made available to the public on the Quality Check Website. Findings from the Joint Commission inspections and accreditation procedures were released in an annual report on quality and safety in 2011, listing hospitals and their performance. Hospitals are subject to a three-year accreditation cycle. Other health-care accreditation organisations also operate in United States.

In 2008 the Turkish Government introduced licensing requirements for private hospitals to ensure quality, and also capped supplementary fees charged by hospitals to patients. A system of standards has been developed to assess the quality of hospital services, which applies to private hospitals, too. In addition to expanding the scope of such government standards, which at the moment focus mainly on structural and process indicators, Turkey could consider strengthening other forms of accreditation of hospitals, inspired by ISQua. This is already happening, in a limited way, as some private hospitals seek voluntary third-party accreditation from the Joint Commission International Accreditation System or Hospital ISO Certification as a way to attract international patients, but could be further encouraged. Accreditation incentivises hospitals to review their care and compare it to international standards, so that compliance with the standards encourages quality improvement of the hospital. Another important area would be to specify minimum staff qualifications and profiles, safety standards and other minimum standards to be met across the public and private sector.

Strengthening monitoring of quality of care across the public and private sectors

The collection and reporting of quality indicators helps to monitor safety and effectiveness of care and contributes to efforts to reduce medical errors and unnecessary treatment. Data infrastructure and monitoring of quality of care in Turkish hospitals could be further strengthened and the underpinning data infrastructure developed across the public and private sector. Chapter 1 already describes the impressive improvement in the data infrastructure for public hospital services at the Ministry of Health level. A quality indicator programme has also developed in the public sector. While private hospitals claim that they collect already some quality indicators, these are not known to the Ministry of Health, or necessarily to patients.

It would seem desirable to strengthen current government efforts at developing quality indicators by extending them to all Turkish hospital sectors, and encouraging reporting by private hospitals on their quality measurement efforts. Nevertheless, Turkish authorities should resist the temptation of imposing top-down requirements onto hospitals. Rather, this process would need to occur as part of the broader reform agenda to support greater hospital transparency and accountability. Individual hospitals should be offered timely feedback on the data submitted, as well as the possibility of monitoring where they appear versus their peers, and thereby identify areas for improvement.

Eventually, this might also support informed decision-making if clinical quality indicators are made available to the public. Some studies suggest that patient satisfaction for inpatient settings is higher than in the equivalent public sector hospitals (Taner and Antony, 2006; Tengilimoglu et al., 1999; Yildiz and Erdogmus, 2004). However, while service and responsiveness (e.g., privacy, communication between the patient and hospital personnel, security, conform and hotel service) are an important dimension of quality, a main concern for patients in making should be that they receive the safest and more effective clinical care quality.

Other OECD countries have initiatives or have arm's length organisations tasked with reporting on quality indicators in the hospital sector, including private hospitals. These have in some cases been associated with policies to encourage competition by improving information available to consumers and encouraging patient choice. Turkey could look at some of the steps taken in other OECD countries for inspiration. For example:

- In Australia, the Institute of Health and Welfare National Hospital Performance Statistics collects 15 indicators for public and private hospital performance which are annually reported, including, for

example, accreditation status, emergency department waiting times, adverse events and length of hospital stay. In addition, the Australian Council on Healthcare Standards (an independent organisation providing accreditation of health services), has developed 300 hospital indicators in specific clinical areas, with comparative reports in different clinical areas provided by voluntarily participating hospitals (ACHR, 2008).

- In England, the Care Quality Commission reports the health-care performance ratings of Acute and Specialist care trusts on an annual basis. Indicators reported include, for example, waiting times (for emergency admissions, waiting less than two weeks for all cancers); hospital cleanliness, time spent in emergency departments, as well as ten clinic indicators and 16 indicators focused on the patient. The Commission also collects data from independent acute services on range of indicators such as serious injury, returns to theatre, unplanned transfer of patients, unplanned re-admissions, surgical site infections and staphylococcus bacteraemia. In addition, the National Centre for Health Outcome Development (NCHOD), publishes comparative reports including clinical quality indicators for services provided by an NHS health-care service.

- In France, national indicators for measuring the quality and safety of hospitals are a component of the hospital accreditation system implemented in 1996, and, since 2009, it has been mandatory for all private and public hospitals to report indicators publicly. The Haute Autorité de Santé (HAS) establishes an annual list of indicators to be reported and the conditions in which all hospitals should make the information public. Although quality indicators are intended to be used for inter-hospital comparison and benchmarking, they are mainly used to achieve compliance with external regulations and standards. Clinical uses of quality indicators are currently being developed, particularly in specialties concerned with measuring quality of care and as part of initiatives such as practice assessment and improvement programmes. The use of indicators for inter-hospital comparisons is underdeveloped at present and mainly takes the form of informal initiatives or reliance on existing professional networks as intermediaries. Public authorities and professional networks are gradually incorporating indicators into their tools and initiatives and the national indicators are beginning to play a part in a global policy of public reporting on hospital performance (HAS, 2011, 2013).

- In the United States, the Agency for Healthcare Research and Quality at the US Department of Health and Human Services

provides research on safety and quality of health care. The Agency has developed patient safety and quality indicators based on hospital inpatient administrative data to measure health-care performance in several clinical areas, including inpatient care and patient safety. The Agency aims to promote quality improvement and a quality of care culture across the hospital sector, both public and private.

A broader issue is the philosophy or approach underlying quality assurance in Turkey's hospital sector. The focus of hospital quality monitoring should move from one of control and penalising bad performers, to one of better encouraging continuous improvement. Clinicians and hospital managers should be encouraged to change practice towards better and safer care. Turkey's creation of Hospital Unions and balanced scorecards of positive and negative performance indicators will go some way towards this. Other ways encourage a culture of continuous quality improvement would be:

- educational measures
- data collection and disclosure requirements with feedback on performance provided back to hospitals and hospital clinicians
- the celebration of good practices or encouragement of hospital/clinician "champion roles"
- encouragement of self-assessment tools.

The experience of other OECD countries could guide Turkish authorities in their efforts.

For example, a study on hospital improvement strategies in the United States suggests key factors that have contributed to the creation of a culture of quality improvement (Silow-Carroll et al., 2007). First, often in a response to a crisis management satiation, hospitals have implemented organisational changes, such as such the establishment of multidisciplinary teams that address deficiencies, quality-related committees, policies to encourage staff to express concerns, and encouragement of clinical or nursing champions who take a lead in developing protocols. These structural changes helped to develop a process of systematic problem-identification and problem-solving, which in turn helped the set-up of new treatment protocols and practices. These letters included, for example, the development of clinical guidelines and protocols, department-specific quality plans with well-defined goals, better educational material on issues such as error reduction, hand-washing and infection prevention, and investment in information technology to reduce medication errors and improve data collection.

Nurses, because of their key role as caregivers and therefore their influence on the quality of the treatment provided, have also been demonstrated to play a pivotal role in driving a quality improvement culture. The American Nurses Credentialing Center, a body of the American Nurses Association, has developed the Magnet Recognition Programme, which recognises those organisations that collect nursing-sensitive quality indicators and are able to benchmark data against national or regional databases. Other requirements focus on encouragement of nurses to express concerns and the establishment of a nursing council, for example. The purpose is therefore to help identifying practices that deliver quality, and facilitate the dissemination of good practices (Draper et al., 2008).

3.3. Shifting from quality of hospital care to keeping people out of hospitals

A new transition from hospital productivity and hospital expansion, to focusing on quality and keeping people out of hospitals is warranted

Besides setting up measures to strengthen quality in the hospital sector, another key priority for Turkey will be to shift incentives and preferences for treatment that tends at present to be provided in hospitals towards other care-delivery settings particularly when hospitalisation could either be prevented, or care be delivered more cost-effectively in primary care settings (Chapter 2).

The data presented in Section 3.1 suggest that the Turkish health-care system is at present very much centered around hospital care. Turkey is one of the few OECD countries that continues to see expansion in the number of hospital beds. Not only is capacity rapidly growing, but also patients have historically had strong preferences for visiting emergency and secondary care including for minor ailments. Patients are, in theory, subject to a co-payment if they visit hospitals without a referral. However, this does not seem to offer sufficient incentive for patients to use the primary care sector, so that the majority of outpatient visits tend to be for problems that could easily be dealt with at the primary care level (Methat et al., 2011).

Recent government plans have emphasized the expansion of hospital capacity, with the establishment of new hospitals and incentives to attract foreign investment. The combination of plans to expand hospital capacity, doctors' incentives for higher volumes as an important source of income (see Chapter 4), and peoples' preferences for hospital services over care in primary care settings could result in escalation of hospital volumes beyond

what is medically appropriate or desirable, particularly for those with minor care needs or in need of chronic care.

Having now achieved universal health coverage, and having had considerable success in encouraging high levels of productivity in the hospital sector, the focus should shift to keeping patients, especially those with chronic as opposed to acute care needs, out of hospitals. While the number of hospital beds in Turkey is still among the lowest in the OECD, it is important to note that nearly all OECD countries are now downsizing their hospital sector. Turkey is in the unique position of being able to avoid recreating a health-care system that might be ill adapted for addressing the future needs of populations living longer and with more chronic conditions. Setting aside payment systems and financial incentives that are reviewed in Chapter 4, the section that follows examines three possible avenues for reform to facilitate this process.

Referral systems and care pathways could be further strengthened in Turkey

Gatekeeping can play an important role in reducing costs, steering demand for specialised services in a way to ensure the appropriate use of different levels of care (Paris et al., 2010). While the effectiveness of gatekeeping systems depends on several factors – such has the ability of primary care doctors to act as good agents managing and co-ordinating the follow-up of patient care, and on the information available on the quality and prices of services supplied by providers of secondary care (Paris et al., 2010) – strengthening referral systems and care pathways has the potential of helping to channel patients towards care that is most appropriate for their condition.

Turkey is one of the few OECD countries without an obligation or strong financial incentive to visit a primary care doctor before accessing hospital services (Table 3.2). Thus far, Turkey has introduced a waiver from co-payments at secondary-level facilities if the patient has a referral from a primary care physician. Demand-side payment incentives – such as higher co-payments for patients that access hospitals without a referral or without having visited the primary care level – can make direct access to hospital care more costly. Nonetheless, their efficacy is questionable if patients are ill-informed about the importance – and potential for cost-saving – of consulting a family physician first. Demand-side payment incentives are also less effective if the requirement to visit a family physician before seeking specialist care is not first formalised in gatekeeping systems; and if primary care physicians simply refer indiscriminately patients to higher levels of care instead of effectively steering them to the most appropriate services.

Table 3.2. Turkey gatekeeping rules are weak

		Primary care physicians referral to access secondary care		
		Required	Incentives	No requirement, no incentive
Are patients required or encouraged to register with a primary care physician?	Required	Denmark, Finland, Ireland, Italy, Netherlands, Portugal, Slovenia, Spain		Czech Republic, Turkey
	Incentives	Australia, New Zealand, Norway, Poland	Belgium, France, Switzerland	
	No requirement, no incentive	Canada, Chile, United Kingdom		Austria, Germany, Greece, Iceland, Israel, Japan, Korea

Source: Elaborated from authors based on data from the OECD Institutional Characteristics of Health Systems Database and information from Turkey.

The Ministry of Health should relinquish responsibility for directly managing hospitals and focus on monitoring

The Ministry of Health owns and controls most of the secondary services in Turkey. Until November 2011, responsibility for the operational running of ministry-owned hospitals was also held centrally. Recent reforms have sought to split the functions of policy making/regulation from that of management and delivery of hospital services by establishing a separate but affiliated Hospital Agency. To facilitate the implementation of the new governance structure, possible future directions may involve three key steps:

First, the Ministry of Health's principal role in the management of hospitals should move to one of oversight, over the activities of both the public and the private sector. While the General Directorate for Health Services in the Ministry of Health is responsible for monitoring, setting guidelines and inspections for the health system as a whole, these activities are still under development for public hospitals, and their reach over private hospitals is limited. Similarly, the Health Information System Directorate is primarily focused on public hospitals, while there are relative few returns from private providers on their quality measures system (*Sağlık Net*). The Social Security Institution collects a wealth of data on utilisation, reimbursement and treatments, but has limited ability to act as a strategic purchaser making effective use of these data.

Second, the ministry should allow the Hospital Agency to function entirely as an arms' length organisation, autonomous from the Ministry of Health. To date, the ministry maintains strong linkages with the Hospital Agency, possibly because public hospitals depend on the Ministry of Health for funding. Public hospitals still enjoy relatively little autonomy; for

example, public hospitals have little say in decisions concerning hiring and firing of clinical staff and have limited margins for modifying payment for staff. Hospital manager and directors are chosen among chief physicians. With such limited autonomy, and a centralised governance model, it is difficult for the Hospital Agency to fully take onboard their independent role while the ministry's focus remains squarely on the public hospital sector. The establishment of Public Hospital Associations in each province, and associated reforms, does have the potential to give hospitals in each province greater managerial responsibilities and accountability for performance to hospitals, and should be fully exploited.

Box 3.1. Organisational changes affecting public hospital facilities in Turkey

One of the key components included in the Turkish's Health Transformation Programme was the introduction of autonomous public hospitals. While other reforms have been effectively implemented since 2003 (e.g, the establishment of a system of family physicians and the extension of health coverage to the entire population), reforms in the public hospital systems have been moving more slowly. Following the 2011 and 2012 organisational changes to the Turkish Ministry of Health, a new semi-autonomous affiliated agency responsible for all public hospitals was established, the Turkish Public Health Institution. This agency is expected to oversee public hospitals across the country, which are supposed to take semi-autonomous status.

Under the new arrangements, Turkey's 81 provinces each have at least one Association for Public Hospitals, and each hospital (and hospital managers) is to be held accountable for the performance – efficiency, effectiveness and quality – of their facilities. Beside performance-based payments for medical staff in hospitals, the new system is expected to make it possible to improve the ability of managers to recruit staff and purchase goods and medical materials. Each Association will have a general secretary responsible for the performance of the facilities under the association, and managers will operate at the Association- and hospital-level. Employment contracts between managers and the Association, and their renewal, are expected to be subject to positive assessment of the hospital performance on an annual basis. The Ministry of Health is expected to set performance criteria. Hospitals will be classified into five groups (A, B, C, D, E) by the Hospitals Agency, based on a range of criteria, including services provided. This classification will be the basis for performance assessments. Facilities will get a report card every six months based on their administrative, medical, financial and other performance. The contracts of managers might be terminated if a hospital is degraded to a lower classification level between two assessments; or if insufficient improvements are seen. For example, if a hospital in group D cannot move to a higher classification level after three assessments; and if a hospital in group E and cannot move to a higher level after two assessments.

The performance of each Association for Public Hospitals is assessed based on the performance of all facilities for which it has responsibility. If the performance of the hospital or hospitals under its remit is/are unacceptably low, the contract of the General Secretary will also be terminated. The contract of the head of the central Agency for Public Hospital Associations depends upon performance of all of the provincial Associations of Public Hospitals The system is due to be in full effect from 2014. At present, all general secretaries of Associations have been appointed and the legislative procedures have also been established.

Third, it would be advantageous for individual hospitals to be given more operational autonomy, although careful consideration ought to be given to decisions about granting greater financial autonomy. In 1995, there was an attempt to make the management of public hospitals autonomous by setting up autonomous board and structures. This however was cancelled by the Constitutional Court, and only implemented in a pilot project in Ankara. The establishment of autonomous management in other OECD countries has been associated with both positive and less favourable outcomes. Granting of autonomy to public hospitals can provide managers with the ability to take decisions and prioritise resource use for the benefit of their patients, but it can also encourage hospitals – particularly when they retain financial surpluses – to prefer better-off patients or more profitable hospital services. This suggest that decisions to move ahead with greater hospital autonomy, while desirable in many respects, should be accompanied by measures to ensure that less profitable activities continue to be delivered.

Greater decentralisation and responsibility for hospital services at local level would be desirable

The complexity and diversity of the care needs of the Turkish population means that decentralisation is a preferable governance model for hospital services. Turkey's diverse geography and society means that health-care needs vary greatly across the country. For example, the health needs of people living in sparsely populated rural areas may differ considerably from those of people living in major urban centres, or populations in wealthier areas. In this context, responsibilities and decisions regarding (hospital) care services should be placed closer to where health-care services are actually delivered, allowing for flexibility to adapt to specific care needs of the population at a local level.

A move in this direction has already occurred. Reforms in 2011 increased the role of decentralised levels of governments and created 87 Public Hospital Unions across the provinces, each having the responsibility of managing hospital care for the population of the province. The general secretary of the hospital union is contracted for two to four years and is responsible to the central public Hospital Agency for hospital care output.

This structure is relatively new, and it remains difficult to gather information on how it is functioning. While it has the potential to bring care planning closer to where health needs are, the hospital unions do not seem to have the data or the information upon which to base their decisions, nor do they have the authority to plan on the organisation of hospital activity across the provinces, which remains a highly centralised matter. Unions have

hardly any authority to hire and fire staff, for example, and have little purchasing autonomy. It would be desirable for the government to create a proper road map for strengthening the autonomous role of hospital unions, devolving financial autonomy and management. Examples of hospital decentralisation that Turkey could draw upon include hospital trusts in England, Australian local hospital networks, and experiences in New Zealand and France.

Last, the establishment of hospital unions has created a separation between hospital and community care (which is managed by provincial health directors). In the longer term, it would be desirable for the hospital unions to be linked to the provincial health structure more fully, and to take a broader role in guiding strategic planning for all hospital activities, including by taking into account private hospital activities.

3.4. Conclusions

The Turkish hospital sector has experienced significant growth in capacity and utilisation since 2010. Although this has helped Turkey fill gaps in capacity and service, including in remote areas, it could point to some risks for quality. Fast growth in activity without information on unnecessary hospitalisation might make it difficult to assess to what extend higher volumes of services deliver appropriate care, and high volume – by international standards – of certain surgical procedures, such as caesarean sections, might point to growing risk to both mothers and babies. Establishing an appropriate governance structure for monitoring and improving quality seems an appropriate next step. This would involve developing further the remarkable work of the department of health-care quality and accreditation, which is developing structural standards for public hospitals, to cover a full range of clinical outcomes and clinical performance indicators. Monitoring and strengthening of the data infrastructure could also extend to all the hospital sectors, regardless of ownership. Similarly, standards, monitoring and transparency could be improved for the hospital system as a whole; other OECD countries experiences, such as Australia, France, England and the United States, would provide Turkey with examples. Another challenge to address will concern the alignment of governance structure at local and provincial level, so that the central authorities focus fully on governance, leaving operational responsibility for running services closer to where the medical needs are.

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Chapter 4

Paying for health care in Turkey

This chapter focuses on the role of payment systems in supporting the development of Turkey's health-care system and improving the health of the Turkish people. The last decade of health reform in Turkey has seen high levels of spending directed at maximising the services delivered by a low number of health professionals. A key feature of Turkish health policy has been the use of performance-based payments that link the salaries of specialists working in public hospitals to the number of services they deliver. The approach has been different in primary care, where steep financial penalties have been introduced where doctors do not deliver a basic set of child and maternal health services. The combination of these reforms has served its purpose in achieving one of the more remarkable extensions of health care to the population in the last half century. To prepare the health-care system for tomorrow's challenges, policy makers now need to grapple with how payment systems can sensibly evolve to reward quality and not just quantity.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Turkey has undergone a remarkable transformation in its health-care system as coverage has rapidly been extended across the population over the past decade. While efforts to consolidate multiple health insurance programmes and improve the pooling of risk have been well documented, behind these system level changes also sit changes to how providers are paid that have helped underwrite improvements in access for patients. After briefly outlining the financial architecture of the Turkish health-care system, this chapter will focus on how payment systems are working in Turkey today. It argues that having expanded coverage to population, the focus of payment systems now needs to evolve to supporting improvements in the quality of care.

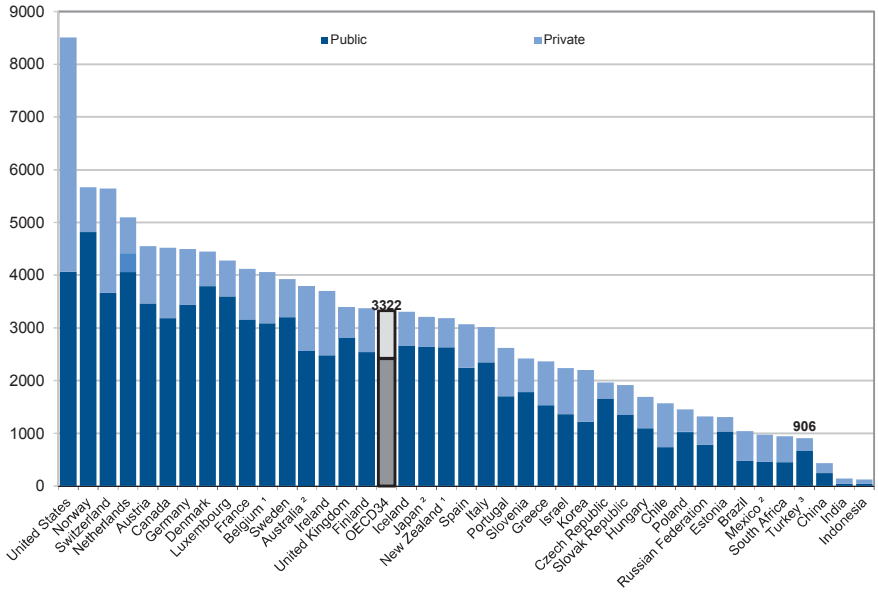
4.1. Context: Rising spending and fewer human resources than most OECD countries

How providers are paid often reflects the history and particular health system challenges faced by individual countries. A number of recent publications have provided a comprehensive overview of the structure of health-care service providers in Turkey (Tatar et al., 2011; and OECD and WHO, 2008) and how these have developed over time. A brief summary of the structure of the Turkish health-care system is also available in Box 1.1 and Figure 1.4. In order to help place in context the discussion on payment systems, this section shall briefly highlight some salient features of the Turkish health-care system in recent years: the rapid growth in health-care spending and the challenge of comparatively few human resources.

Health-care spending in Turkey has grown rapidly, but is still at relatively low levels

Since 2002 Turkey has experienced some of the fastest growth in health-care spending per person amongst OECD countries. Health-care spending per capita has grown at 7.7% a year on average since 2002, placing Turkey equal first with Korea in terms of the fastest rising health spending, and more than double the OECD average of 3.6% a year over the same period. Nonetheless, Turkey remains the lowest spender on health in the OECD, whether measured by on a per capita basis or as a share of the economy. Health-care spending was 6.1% of GDP in 2008 (the latest year for which data is available) compared to an average of 9.3% of GDP across OECD countries in 2011. This translates to health spending of USD 906 per person (adjusted for PPP) in Turkey, roughly one quarter of the USD PPP 3 322 spent on average among OECD countries in 2011 (Figure 4.1).

Figure 4.1. Health expenditure per capita, 2011 (or nearest year)



1. Current health expenditure.

2. Data refers to 2010.

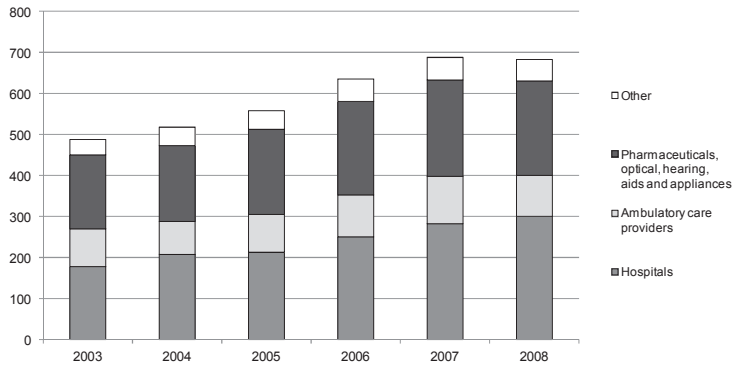
3. Data refers to 2008.

Source: OECD Health Data 2013, www.oecd.org/health/healthdata.

Hospitals and retail medical goods have been the major beneficiaries of growth in health-care spending. While spending increased across all major categories of health-care providers, hospitals and the retail sale of medical goods (pharmaceuticals, optical, hearing and medical aids and appliances), sustained growth rates of 11% and 5% a year respectively between 2003 and 2008. Spending on hospitals per person was 70% higher in 2008 than in 2003, even after holding prices constant (Turkey had the fastest average rate of inflation among OECD countries between 2003 and 2008). In addition to considerable discretionary investments made by government, this strong growth in hospital services is also likely to reflect a demand driven component: hospitals have traditionally been the dominant institutions in Turkey's health-care system, with many Turkish citizens continuing to turn to hospitals for ambulatory and specialist outpatient services (Figure 4.2).

Figure 4.2. Health spending per capita by provider, 2003 to 2008

USD at 2005 PPP rates



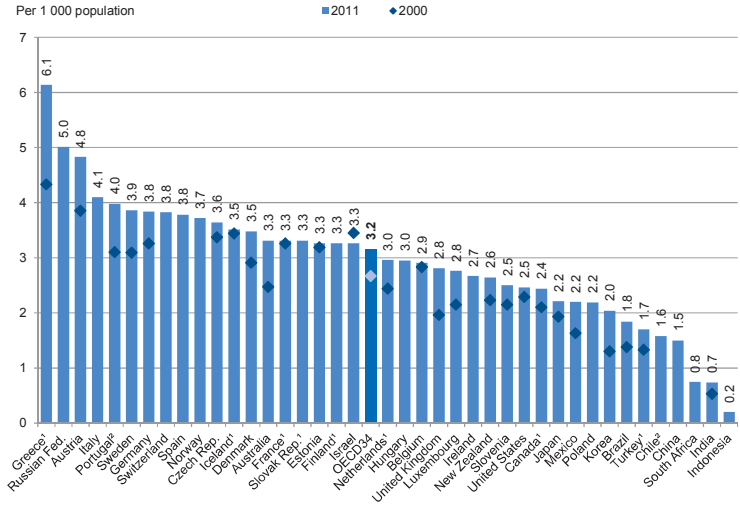
Source: OECD Health Data 2013, www.oecd.org/health/healthdata.

Turkey has fewer doctors relative to its population than almost all other OECD countries

A particular challenge is that Turkey has fewer critical human resources for health when compared to other OECD countries. Turkey has the second lowest number of doctors relative to the population among all OECD countries. In 2011, Turkey had 1.7 doctors per 1 000 population, compared to 1.6 doctors per 1 000 population in Chile and an OECD average of 3.2 doctors per 1 000 population (Figure 4.3). Nonetheless, there has been faster growth in the number of doctors in Turkey relative to other OECD countries, with average annual growth in the number of doctors relative to the population of 5.4% a year between 2000 and 2009, compared to 1.7% a year on average among OECD countries. The relatively lower number of doctors in Turkey is compounded with lower numbers of nurses as well. In 2011, Turkey had 1.7 nurses per 1 000 population, one-fifth of the average among OECD countries of 8.8 nurses per 1 000 population.

It is striking that as well as having lower overall levels of doctors and nurses, Turkey has one of the lowest nurse to physician ratios in the OECD. Compared to the average across OECD countries of 2.8 nurses per doctor, Turkey had just one nurse per doctor (Figure 4.4). While in other OECD countries there has been a trend towards allowing nurses to undertake additional clinical tasks so that doctors can concentrate on the most specialised tasks, it is likely that the skill mix in Turkey places considerable additional demands on doctors relative to other OECD countries. Remuneration of doctors in Turkey has increased significantly with the introduction of performance related in pay in hospitals and initiatives to strengthen primary care.

Figure 4.3. Doctors per 1 000 population, 2000 and 20011 (or earliest available)

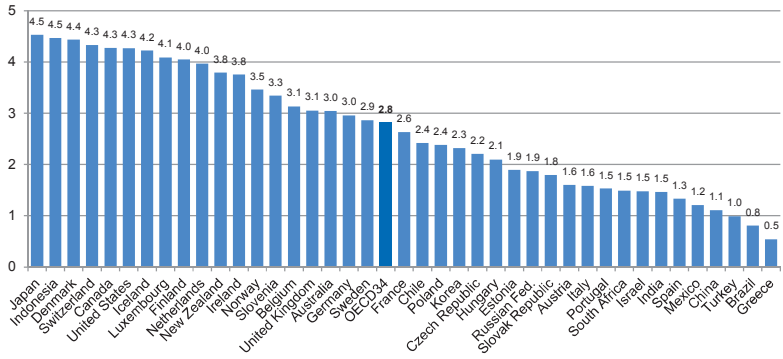


1. Data include not only doctors providing direct care to patients, but also those working in the health sector as managers, educators, researchers, etc. (adding another 5-10% of doctors).

2. Data refer to all doctors licensed to practice (resulting in a large over-estimation of the number of practising doctors in Portugal).

Source: OECD Health Data 2013, www.oecd.org/health/healthdata.

Figure 4.4. Ratio of nurses to doctors, 2011 (or earliest available)



1. For those countries which have not provided data for practising nurses and/or practising physicians, the numbers relate to the same concept ("professionally active" or "licensed to practice") for both nurses and physicians, for the sake of consistency.

Source: OECD Health Data 2013, www.oecd.org/health/healthdata.

4.2. There has been a major transformation in the financing of health-care services

Health-care financing used to be financed through a mixed array of insurance programmes which offered varying degrees of benefits to the population, and left many without comprehensive coverage

Turkey has seen one of the most significant reforms of health system funding across OECD countries in the past decade. Prior to 2003, the Turkish health system was characterised by the presence of several different public agencies funding and providing health care (Box 4.1). Among these were four major insurance programmes: for civil servants, blue and white collar workers and their dependents, the self-employed and, finally, a "Green Card" which was established in 1992 to cover those earning less than one-third of the minimum wage. Each of these provided different levels of benefits and sought different contributions from its members. It is difficult to ascertain the level of coverage across the population precisely, but estimates ranged from 67% of the population to 84.5% (OECD and WHO, 2008).

Even though the bulk of the population was formally covered for health insurance, people often struggled to get timely access to health services. Some of these health-care schemes – such as that for blue and white collar workers – were vertically integrated in that they also ran hospitals and primary care facilities to which patients were directed or obliged to visit. At the same time, the Ministry of Health operated a network of preventative and primary health-care centres and hospitals, though it often suffered from shortages in critical staff and basic resources, particularly in regional areas. The poor with Green cards were eligible for free primary and emergency hospital care, but did not receive reimbursements for outpatient care and had limited reimbursements for pharmaceuticals. A number of private health-care facilities also existed but many of these were not effectively regulated.

Box 4.1. Financing in the Turkish health-care system prior to 2003

In 2003, the majority (approximately 70%) of total health financing in Turkey came from public sources and the remaining 30% from private ones. At the core of public health financing was the social security system. Under this system, there were three separate health insurance funds: i) *Sosyal Sigortalar Kurumu* or SSK for blue and white-collar workers in the public and private sectors; ii) *Bağ-Kur* or the Social Security Organisation for Artisans and the Self-Employed; and iii) *Emekli-Sandigi* or the Government Employees Retirement Fund (GERF). Active civil servants were not included in GERF and their expenses were directly financed from the state budget. In 1992, the government introduced the Green Card or *Yesilkart*, with the objective of providing health benefits to the poor and vulnerable who were incapable of paying for health services. Applications for the Green Card were evaluated and authorised by provinces, who assessed eligibility based on income. Estimates of population coverage under the combination of these programmes ranged from 67% to 85% of the population, with the variation a result of many people being registered with more than one fund, many who were registered but not contributing, and uncertain estimates of numbers of dependents. Coverage under private insurance in Turkey was insignificant (less than 0.5%).

The benefits package differed across the different social security schemes. For example, SSK insurees were allowed to only use SSK facilities and pharmacies. *Bağ-Kur* insurees and dependents, on the other hand, were allowed medical examinations, laboratory tests, and inpatient and outpatient services from a wide range of providers (public and private including Ministry of Health facilities). *Bağ-Kur* contracted with a range of public and private facilities to provide services (e.g. Ministry of Health hospitals, university hospitals, private hospitals and non-governmental organisations such as the Red Crescent). *Emekli-Sandigi* had the most extensive benefits package among the various health insurance schemes, which included medical and non-medical services and access to all types of facilities, public and private.

Payment mechanisms across the health insurance funds also varied. For example, SSK managed its own hospitals which were paid according to line item budgets, while *Emekli-Sandigi* and *Bağ-Kur* payments to providers were on a fee-for-services (FFS) basis. Co-payment rates, however, were largely similar across the different health insurance schemes with minor exceptions.[1]

1. There were co-payments for outpatient services across all programmes, except for SSK pensioner and dependents who had to pay TRL 0.8 per outpatient visit. For inpatient services there were no co-payments. For outpatient pharmaceuticals, coinsurance rates for active workers and dependents under SSK, *Emekli-Sandigi* and *Bağ-Kur* were 20%, while for pensioners and dependents they were 10%.

Source: OECD and World Health Organization (2008), *OECD Reviews on Health System: Turkey 2008*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264051096-en.

Consolidating multiple insurance schemes into a single payer has paved the way for a re-shaping of the health-care system as coverage was expanded to the population

The Government's Health Transformation Programme, which was introduced in 2003, marked the beginning of a major re-shaping of Turkey's health-care system. At the centre of the Health Transformation Programme was a consolidation of multiple health insurance schemes into a single payer. The major health insurance schemes were merged into a single system under a new Social Security Institution (SSI) which is today responsible for paying for all health-care services delivered to Turkish residents. Constitutional challenges delayed the integration of the Green Card scheme for several years, and there remains a very small (less than 1%) proportion of people on this scheme today, though they receive the same benefits as the rest of the population. This pooled the risks previously shared across a number of fragmented schemes across the population. At an administrative level, it also established common beneficiary databases, claims and utilisation management systems.

Critically for patients, the Health Transformation Programme established a common benefit package which delivered improvements to many and provided a basis for expanding coverage. This benefit package is defined by law and covers a range of health-care services that is broad and comparable with the range of publicly financed services in most OECD countries. It covers primary and preventive care, ambulatory and inpatient care, laboratory services, rehabilitation and follow-up services, pharmaceuticals and medical aids and appliances. There are few services excluded from coverage, and those that do exist are also shared by many other OECD countries, such as a limitation on the number of publicly funded IVF cycles and cosmetic orthodontist services. The introduction of this benefit package also saw Green Card holders receive access to outpatient care and to reimbursements for pharmaceuticals. The majority of the population, formerly part of the scheme for blue and white collar workers, were newly able to access care in all public hospitals and pharmacies, whereas previously their access were frequently limited to hospitals run by their respective "social insurance organisation".

There is less reliance on out-of-pocket costs in health-care financing

Each Turkish citizen within the formal labour force contributes towards the cost of public health insurance. There is a social security contribution in the form of payroll taxes of 12.5% of a person's gross income (divided between a 5% employee contribution and 7.5% employer contribution) and payments from the government to subsidise the non-contributing population,

which make up 3% of total contributions. The shift to this single contribution saw a harmonisation of out-of-pocket payments sought from patients for visiting health-care facilities. The array of out-of-pocket payments which used to exist, which varied under each scheme, has been replaced by a consistent set of private charges applicable across the population. Under the common benefit package established by the Health Transformation Programme, the following co-payments are uniformly applied:

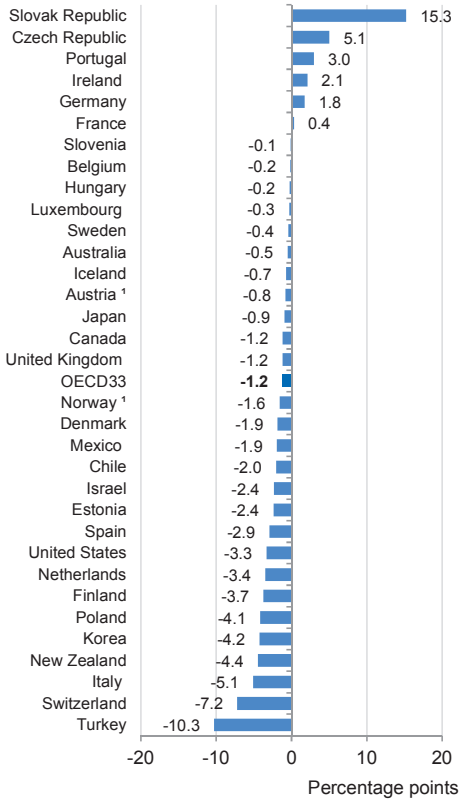
- no co-payments for visits to a primary health-care facility
- TRL 5 per outpatient visit at public sector secondary and tertiary health-care institutions
- TRL 12 per outpatient visit at university and private sector secondary and tertiary health-care institutions
- TRL 3 per prescription item for the first three items, and TRL 1 per item thereafter.

In addition to these co-payments, there are specific co-insurance contributions on the use of particular services. The two major co-insurance charges are: 1) a 20% contribution (10% for retirees) on their total bill for ambulatory treatment, prescription drugs, prostheses, orthotics and curative medical equipment and material; and 2) a 30% contribution to total costs of the first trial and 25% total costs of the second trial of IVF treatment. There also used to be a 30% contribution of total costs when a patient went to a hospital without a referral from primary care, but this was suspended by the government in 2007.

These reforms have made major strides in reducing out-of-pocket payments for health over the past decade. Turkey sits alongside Korea at having seen a 10.3% reduction in out-of-pocket expenditure as a share of total spending on health between 2000 and 2011. Over the same period, the fall in the share of out of pocket payments across OECD countries was a more modest 1.2%. The larger gains in Turkey are likely to reflect both a reduction in out-of-pockets caused by the new benefits package providing greater financial protection when compared to previous arrangements, a reduction in spending by previously uninsured households and a general reduction in out-of-pockets from people developing greater confidence in the public system and no longer paying more to access private sector care (Tatar et al., 2011).

Figure 4.5. Change in out-of-pocket spending

As a share of current expenditure on health, 2000-11 (or nearest year)



1. Data refer to current expenditure.

Source: OECD (2013), *Health at a Glance 2013 – OECD Indicators,* OECD Publishing, Paris, http://dx.doi.org/10.1787/health_glance-2013-en.

The balance of public and private hospitals and the quality of care they offer is likely to be an important determinant of how out-of-pocket costs evolve in the Turkish health-care system. In addition to the major architectural changes to financing, the Health Transformation Programme has sought to change how providers are paid. This shall be the focus of the remainder of this chapter, which will look in turn at payments for hospitals, and for primary care.

4.3. Financing of hospitals

The major changes to financing of hospitals in Turkey have occurred following a re-organisation of the ownership of hospitals. This saw the transfer of a number of hospitals previously run by insurers to the Ministry of Health. A brief summary of the physical resources in Turkey's hospital sector is covered prior to the discussion of issues of financing.

Public hospitals have come to have the lion's share of capacity in the Turkish hospital sector

The Health Transformation Programme established a split between organisations that paid for health care and those that ran health-care services. With the SSI established as the single purchaser of health care, the primary health-care clinics and hospitals of the former social health care insurance agency (the SSK) were transferred to the Ministry of Health in 2005. A small number of facilities were also converted into university hospitals or private entities. The majority of the country's hospitals are now under the ownership of the Ministry of Health, and specifically through its Public Hospitals Agency.

Today, Ministry of Health hospitals dominate the institutional landscape in Turkey, though the share of private hospitals have been growing in recent years. In 2011, there were 840 Ministry of Health hospitals, 65 university hospitals and 503 private hospitals (Ministry of Health of Turkey, 2012). Though public hospitals (Ministry of Health Hospitals and university hospitals) include some of the country's largest hospitals and dominate share of hospital bed capacity. There were 21.1 public hospital beds per 100 000 people in Turkey in 2011, accounting for 83% of total hospital beds. This is down somewhat from 91% a decade ago. Over this time, the number of private sector hospitals have grown to account for 17% of total hospital beds in 2011, up from 9% a decade ago.

Public hospitals in Turkey have generally operated as traditional public sector institutions, with limited financial and management autonomy. Managers had no autonomy to hire or fire staff and all staffing decisions were made by the Ministry of Health (for ministry hospitals) and the SSK General Directorate of Health Services (for SSK hospitals). Health personnel were generally civil servants and could not be fired even if they were underperforming.

Although hard data on quality of care and patient satisfaction from this time period is not available, qualitative information based on focus-group discussions and individual interviews indicates that prior to the changes ushered in by the Health Transformation Programme, university hospitals

ranked first in terms of patient satisfaction and perceived quality of care, followed by SSK hospitals. Overall, Ministry of Health hospitals ranked the lowest prior to the HTP, since Ministry of Health personnel were often on low salaries had little incentive to see public patients and preferred to spend their time in private practice. A particular problem in public hospitals was long waiting time and overcrowding with patients who did not require specialised care, with doctors seeing up to 50 patients per day (OECD and WHO, 2008). However, according to the 2012 TUIK satisfaction survey, the trend has been turned since Ministry of Health hospitals is ranked above university hospitals in terms of patient satisfaction (75.7% and 72.1% satisfaction rates, respectively).

How hospitals are paid in Turkey has changed considerably

The transfer of ownership of hospitals to the Ministry of Health has simplified the purchasing relationship for hospital services, compared to the patchwork of arrangements that existed in the past. The single payer (the SSI) currently negotiates a capped annual budget for services delivered from the 840 Ministry of Health hospitals (Ministry of Health of Turkey, 2012). This funding is provided to the Ministry of Health, which combines it with further funding from the general government budget before paying it to individual hospitals. This arrangement ensures that the ministry remains a very influential player in hospital financing. It is not only the largest purchaser, but it can also influence the relative split of funding between hospitals, should it choose to do so. The relationship between SSI and university hospitals and private facilities is a much clearer purchaser-provider split, whereby the SSI contracts with individual university and private hospitals to deliver services included in the benefits package.

Ministry of Health hospitals have always had and continue to maintain a tradition of categorising their revenues into two sources. In theory, these reflect a component known as “revolving funds” which is based on the number of services they deliver and another component which is a direct budget allocation from the ministry towards the wages and salaries of staff. Historically, revolving funds have covered more than 80% of the budgets of Ministry of Health and university hospitals, and have come from payments by the different schemes (Bağ-Kur, Emekli-Sandigi insurees and the Green Card) for hospital services rendered to their patients, prior to the move to the single payer.

In theory, revolving funds ought to have provided more flexibility to allow for managers to make arrangements for procurement, carrying resources over the next year and paying bonuses to staff up to 40% of the revolving funds (in reality only small amounts were allocated). In practice, however, Ministry of Health hospitals did not provide management with

much budgetary autonomy as decisions about revolving funds required Ankara's approval. Nevertheless, hospital managers and the general secretary of hospital union are free to purchase any equipment, make investments or renovations up to TRL 150 000 without asking permission from the Public Hospital Agency. These revolving funds were then supplemented by direct payments from the Ministry of Health's budget direct to hospitals, initially as payments to cover the cost of staff salaries, investment expenditures and incremental operating costs.

The establishment of the SSI as a single payer has seen policy efforts directed towards establishing case-based financing within a global budget. Turkey has developed a tariff schedule of "package rates" that bundle prices for outpatient and inpatient services and are negotiated annually between the SSI and the Ministry of Health (as the largest hospital service provider). The package rates are paid across public and private hospitals, as part of a first step in moving towards a prospective-payment system in which money would follow the patient.

A subsequent law (the Social Security and Universal Health Insurance Law), adopted in April 2008, sought to specify that the SSI would move towards providing a global budget to hospitals negotiated on the basis of DRGs. At the same time, this law opened the door to "extra billing" by private providers. Private hospitals are allowed to charge up to 30% (initially 90%) above the price paid by the SSI. The difference between the price charged by private hospitals and the price reimbursed by the SSI is to be paid by patients on an out-of-pocket basis.

Progress towards a DRG system, or some form of adjustment for patient complexity, is needed in order to avoid public and private hospitals selecting patients according to ability to pay

While the payment of common package rates from the SSI to public and private hospitals is a major achievement, Turkey's hospital payments are not currently adjusted to reflect patient complexity. A central principle behind the introduction of DRG-based prices across nearly half of OECD countries has been that hospitals ought to be paid more for complex patients. DRG-based hospital financing systems thus combine information about a particular patient with the procedures being undertaken for that patient to develop economically homogenous groups of payments on the basis of difficulty. The package rates paid by the SSI to Turkish hospitals do not vary according to age or other patient characteristics. This implies, for example, that hospitals are being paid the same rate for a hip replacement being provided to a 75 year old as for hip replacement for a 35 year old,

despite the former generally being a more difficult procedure with a higher likelihood of complications.

Turkey already has the data infrastructure and coding processes needed to shift to case-mix adjustment in place and could make this shift quite rapidly. A pilot project on paying hospitals based on Diagnostic-Related Groups (DRGs), using the Australian DRG system and adapting it for use in Turkey, has been ongoing since 2006. Hospital cost data from almost 50 hospitals have been collected and analysed; base costs and relative weights have subsequently been developed. While several OECD countries that are seeking to move to DRGs do not have the underlying data infrastructure needed to make this shift, Turkey's hospitals already undertake the disease coding necessary to classify patients. These patient classifications are reported back to the Ministry of Health, along with information on admission and discharge, the use of emergency services associated with a hospital visit (and triage data) and whether the patient has a secondary diagnosis.

In some cases, public hospitals may have overspends that are incurred due to shortfalls in SSI's package rates reimbursed from other hospitals who are in surplus. In contrast, private and university hospitals receive only the SSI's flat package rate for every patient they see, with patients paying out-of-pocket for any proportion of the hospital's charge not covered by SSI reimbursement. As the SSI's package rates are not adjusted for age or case-mix, this is likely to disadvantage the elderly and those with the most complex cases. The average case-cost for an older person or those suffering from a chronic disease is generally higher than the flat case-fee provided by the SSI, leading private hospitals to have an incentive to not proactively seek these patients unless they have the ability to pay for higher costs out-of-pocket. While it is understandable that the government may wish to maintain some form of price discrimination between public and private hospitals, recognising the number of "additional" or "comfort" services provided by private hospitals, the system currently creates a proactive bias against private hospitals seeking patients with more complex needs. It must be noted, however, that no hospital (including those in the university and private sector) can legally reject a patient due to case-complexity or age.

At a broader level, the continuation of direct payments from the Ministry of Health to public hospitals does not provide a good incentive for disciplined budgetary management. In addition to payments from the SSI, public hospitals receive payments directly from the Ministry of Health. This combination of payments from the SSI and direct payments from the ministry ought to constitute the annual global budget for a hospital. Since 2006, this capped budget amount has been negotiated

between the SSI and the ministry. Hospitals are then paid a monthly amount consistent with the agreed budget and end-year claims may not be paid if spending exceeds the cap.

However, these constraints have not been strictly enforced. Some 30% of hospitals run operational deficits through the year, which are reportedly resolved by an expansion of their global budget the following year in a large number of cases. End-year deficits also influence decision making over whether extra funding ought to be incorporated into the base for the following year. The effect of direct payments from the ministry, and relatively relaxed budgetary constraints, weaken the incentive to improve efficiency in Ministry of Health hospitals. A key principle behind the introduction of common prices – once adjusted for case complexity – is that it ought to encourage activity among those hospitals that are most efficient. Experience in other OECD countries, such as France and the United Kingdom, demonstrates that hospitals with higher average costs can often signal poorer quality of care, reflecting the use of procedures and technologies that may not reflect best clinical practice (IGAS, 2012).

University hospitals are not being served well under the current combination of payments

Payment on the basis of flat package rates without additional support hits the current operating revenues of university hospitals the hardest. As in most OECD countries, university hospitals are generally the destination of last resort for the patients with the complex needs. University hospitals generally house the most highly trained specialists, in part through their ability to offer a combination of challenging clinical practice and the opportunity to undertake research. Without adjustments to reflect the more complex patients that they see, Turkey's university hospitals are likely to face the more extreme cases where the operational cost of a service is greater than that reimbursed by the SSI's flat package rates. The ministry does not provide university hospitals with additional support to reflect their publicly oriented research or the higher average case complexity of patients they see.

While some university hospitals are able to turn to other sources of funds, their capacity to do so varies greatly by hospital. As a result university hospitals are facing challenges in retaining highly skilled staff, who are being offered considerably higher salaries in the private sector. Even those university hospitals with considerable financial capacity (such as Hacettepe) face a 60% regulatory barrier on payments from their revolving funds to doctors salaries. While case-mix funding should help redress this balance somewhat by ensuring that university hospitals are paid more appropriately for the complex patients they see, policy makers ought to also consider

separate funding for research and teaching activities. Such policy efforts could help ensure that university hospitals do not lose key specialists to the private sector where ability to pay plays a bigger role in determining access to care.

The introduction of pay for performance for salaries in public sector hospitals has been the centrepiece of hospital financing reform in Turkey

While the current combination of global budgeting and activity-based payments is not dissimilar from how other OECD countries pay hospitals, this has represented a major change in how public hospital staff are paid in Turkey. The Health Transformation Programme saw the introduction of a major pay for performance scheme that today constitutes the bulk of a hospital doctor's salary. Turkish Ministry of Health and university hospitals are obliged to report back on a broad range of indicators of hospital activity, processes and institutional characteristics (such as the number of invasive procedures per physician, cleanliness of hospitals, patient satisfaction bed occupancy, average length of stay, share of doctors working full time, etc). The majority of these are indicators of productivity measured by health outputs.

Box 4.2. Performance-based payments in Turkey's public hospitals

Performance-based payments were introduced in Ministry of Health hospitals in 2004, following an initial pilot. Today, all Ministry of Health hospitals give their staff performance-based payments in addition to their base salaries. The main objective of performance-based payments was to encourage job motivation and productivity among public sector health personnel, recognising that the ratio of health personnel to population was lower in Turkey than in other middle-income and OECD countries (as described earlier in this chapter), that the majority of public hospital doctors worked part time, and that doctors preferred to work in the private sector. In financial terms, the Ministry of Health's direct payments to public hospitals continue to pay the base salary of hospital staff, but public hospitals are obliged to make performance-based payments to staff from the "revolving" funds that are provided as reimbursement for services delivered from the SSI.

A number of factors influence how much health personnel receive as performance-based payments. The total amount that hospitals may allocate through performance-based payments is capped at 40% of revenues. From time to time, some hospitals may provide less than this, depending on their particular needs (e.g. if laboratory equipment needs to be upgraded or there is a major capital programme). The total amount in a hospital varies based on the institutional performance of the health center or hospital. Every hospital is given a score from 0-1 based on institutional performance indicators and the performance-based bonuses are multiplied by this factor. For example, if a hospital wishes to devote 40% (the capped limit) to staff bonuses, and its institutional performance score is 0.8, then in reality only 32% can be devoted to staff bonuses. This places a high premium on good institutional performance and balances the individual incentives for high service volume with group incentives for overall institutional outputs.

Box 4.2. Performance-based payments in Turkey's public hospitals *(cont.)*

The Ministry of Health has established five categories of indicators to measure the institutional performance of hospitals, each of which carry equal weight. These indicators largely target activity, availability, and patient and provider satisfaction. The five categories include: i) access to examination rooms; ii) hospital infrastructure and process; iii) patient and caregiver satisfaction; iv) institutional productivity (bed occupancy, average length of stay); and v) institutional service targets (caesarian-section rate, share of doctors working full time, surgery points per surgeon and per operating room, and the reporting of scores for the performance monitoring system to the Ministry of Health).

Finally an individual-level performance score is calculated for each staff member. For physicians the individual performance score depends on the number of procedures performed by that staff member and a job title coefficient (that measures workloads other than providing clinical care for different types of doctors). An individual's score is also adjusted by the number of days the person has worked in a year. Each clinical procedure carries a particular point level that is determined by the Ministry of Health. Prior to the 2010 law prohibiting doctors from working in both the public and private sector, a coefficient on the extent to which a person worked full time in a public hospital was also applied to individuals (with 1 representing a full time employee), in order to try to reduce the practice of doctors working in public sector facilities in the morning or daytime, and in the private sector in the afternoon or evening. Beyond the variation in payments from one person to the next linked to their activity, hospital management have little scope to vary payments to individual persons or departments based on discretionary factors. Individual bonuses for staff are capped at a certain multiple of the basic salary. This means, for example, that a specialist earning TRL 1 000 per month in basic salary can receive a maximum bonus of TRL 7 000.

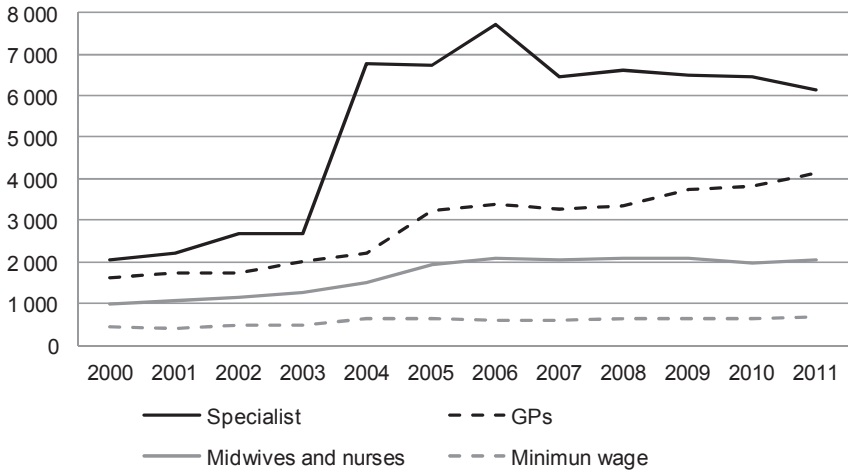
Source: OECD and World Health Organization (2008), *OECD Reviews on Health System: Turkey 2008,* OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264051096-en; Tatar, M. et al. (2011), "Turkey: Health System Review", *Health Systems in Transition*, Vol. 13, No. 6, pp. 1-186.

In Ministry of Heath hospitals, the major part of doctors' salaries are linked to these indicators of clinical activity. Each public hospital is able to distribute up to 40% of its annual budget to its medical staff in the form of performance-based payments. This total amount is adjusted on the basis of a hospital-specific performance score, which determines the overall payment to all staff within this hospital. As a result, each hospital employee (generally doctors, though this extends to nurses) has a personal incentive linked to contributing to a high institutional score and boosting the hospital's overall level of activity. Turkey's performance-based payments for hospitals are unique among OECD countries in that they directly influence individual clinician salaries, rather than the remuneration of the hospital.

Overall, the HTP has substantially increased doctors' salaries in the public hospital sector. The HTP was introduced as an addition to doctors' former base salaries. The most recent data show that the average public hospital doctor's total income consists of 52% performance-based payments, and 48% regular monthly wages (base salary). The effect of this seen the total income for medical specialists employed in Ministry of Health hospitals rise from TRL 2 665 a month to TRL 6 122 a month between 2002 and 2011 (Figure 4.6), with the majority of this increase occurring in 2003 and 2004, reflecting the introduction of performance-based payments.

Figure 4.6. Evolution of remuneration for Ministry of Health personnel

Remuneration (according to cost of living index) adjusted at 2011 price levels (salary plus bonus), Turkish liras

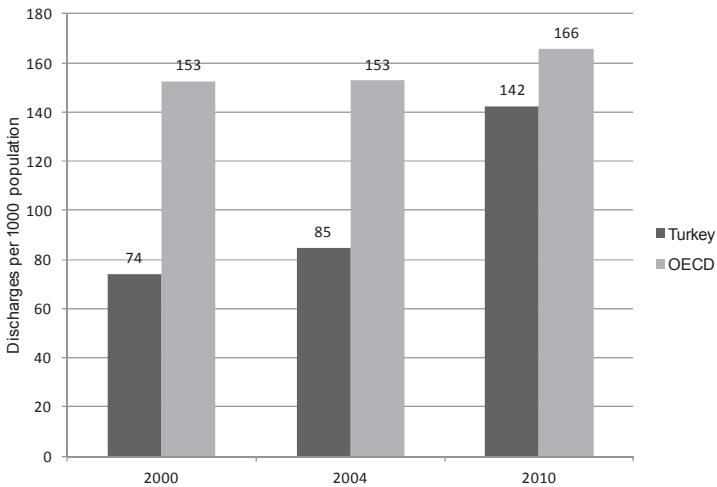


Source: Turkey Public Hospitals Institution, Ministry of Development.

The introduction of performance-based payments for hospital doctors has coincided with a considerable increase hospital activity. The number of hospital discharges in Turkey had grown to 142 discharges per 1 000 population by 2010, close to double the 74 discharges per 1 000 population in 2000 (Figure 4.7), bringing it more in line with levels observed across most OECD countries. In part, this reflects the expansion of and increased levels of activity in the private sector, particularly in recent years. However, with the public sector still accounting for the majority of hospital bed capacity and three quarters of the number of hospital visits per capita, the engine of increased hospital services in Turkey has been the public hospital sector. This is likely to reflect the influence of performance-based

payments that tightly link salaries to activity undertaken by doctors working in hospitals. Following the introduction of the Health Transformation Programme, there have also been reports of shorter waiting times and of steeply rising overall satisfaction with the quality of both primary health care and health care in public hospitals.

Figure 4.7. Hospital discharges per 1 000 people, Turkey and OECD average for 2000, 2004 and 2010



Source: OECD Health Data 2013, www.oecd.org/health/healthdata.

Having now achieved the major expansion in activity needed to deliver hospital services across the population, performance-related payments as currently designed will continue to finance quantity and not quality. Since 2005, Turkey has made efforts to incorporate quality-based measures when determining performance-based payments through the introduction of "quality coefficient", based on hospital staff's self-evaluation of the quality of services provided and a "patient satisfaction coefficient" based on periodic patient surveys (Tatar et al., 2011). Across the OECD, the United States and Korea have made the most substantial efforts to incorporate quality into how hospital care is financed, and both of these programmes have included a combination of process and outcomes measures across key domains of clinical activity (OECD, 2012 and 2013). While it is difficult to judge whether these two programmes have driven improved performance, or merely mimicked a trajectory of gradually improving performance that existed prior to their introduction, their virtue is that they have been a useful way of collecting data on good clinical processes and patient outcomes. In doing so, these programmes have involved considerably less financial outlay

that the programme undertaken in Turkey has demanded. Given the difficulty of collecting clinical information on services delivered in Turkish hospitals to date, policy makers should modify performance-based payments to balance the emphasis on the quantity of services delivered and focus on rewarding the clinical outcomes of services being delivered in public hospitals.

In a country that is stretched for specialist doctors, the ability to use performance-based salaries that are linked to increased quantity will in time come to be limited by the health workforce capacity. While performance-based payments have undoubtedly played a major role in improving access to hospitals to date, contracts linked to volumes may accelerate a tendency towards longer working hours and reductions in time per patient in the future. Nevertheless, it is imperative that surveillance of patient outcomes and good clinical processes are put in place now, to help identify if and when performance-related payments are having a perverse effect.

4.4. Paying for primary care

Payments for primary care combine per capita payments with significant negative penalties based on performance in child and maternal health

Payments are currently seeking to support the change in the organisational model for primary care. As detailed in Chapter 2, a key focus of the government's reform programme has been the creation of a new category of "family physicians" (equivalent to GPs in many OECD countries), who are expected to be the central and first point of contact for patients. Every Turkish citizen is expected to be registered with a family physician. This family physician model was initially introduced as a pilot, but by the end of 2010 was rolled out to cover the entire Turkish population. Payments to family physicians are principally on a per capita basis. These per capita payments are currently based on a catchment population of some 3 500 to 4 000 patients per doctor, though the number of registered patients per doctor can be as high as 4 500. The Ministry of Health is seeking to reduce this to 2 000 patients per doctor by 2023.

These per capita payments are adjusted to reflect the risks in a doctor's patient population. While the mean payment for a family medicine specialist is around TRL 5 600 a month, this can vary by a factor of up to 50%, reflecting patient population and location of practice. Factors taken into account include age, the number of pregnant women, prisoners, income levels and the average socioeconomic development index of a family physician's geographic area. These per capita payments generally form the base salary for a family medicine specialist, and represent an increase in

income up from TRL 4 900 a month paid to doctors who deliver services in community-based health clinics. As managers of their health facilities, family physicians also receive an additional monthly lump sum payment to cover operating expenses such as rent and utilities, cleaning, office supplies, small repairs and medical consumables.

Unlike in hospitals, payments to family physicians come with negative penalties linked to performance. In order to receive their full per capita payment, family physicians are required to offer a basic set of antenatal, baby and child health services and vaccinations to at least 90% of the new children within their population. Failing to achieve this can result in up to 20% of their monthly per capita payments being deducted. In addition to this, there is an administrative system whereby failure to achieve certain governance, service delivery and quality standards across 35 indicators can lead, under a possible worst case scenario, to a family physician's contract being terminated (Box 4.3).

Box 4.3. The family medicine performance pay system in Turkey

There are two key levers to drive performance among family physicians in Turkey:

1. a *salary deduction system* where providers risk losing up to 20% of their base payment if they fail to meet at least 98% of key maternal and child health indicators
2. an *administrative system* of written admonitions or "warning points" for failure to meet governance, service delivery or quality standards specified in a set of 34 indicators.

The *salary deduction system* includes eight indicators on child and maternal health services:

- immunisation coverage rate of registered children for each target vaccination (BCG, DPT3, Pol3, measles, HepB3, Hib3, each are assessed separately)
- registering pregnant women with a minimum of four antenatal care visits according to schedule
- follow-up visits of registered babies & children carried out according to the schedule.

Under the programme, family physicians and their staff, face performance penalties based on their team's performance on these indicators. Deductions are made from the total monthly base payment to each family medicine provider on a sliding scale for each indicator that drops below the minimum target coverage rate of 98%:

- a deduction of 2% if the monthly coverage rate is 97% to 98%
- a deduction of 4% if the monthly coverage rate is 95% to 96%
- a deduction of 6% if the monthly coverage rate is 90% to 94%
- a deduction of 8% if the monthly coverage rate is 85% to 89%
- a deduction of 10% if the monthly coverage rate is lower than 85%.

Box 4.3. The family medicine performance pay system in Turkey *(cont.)*

At the same time, there is an *administrative system* whereby family medicine staff are evaluated against 34 performance indicators and may be subject to "warning points" for violations on matters related to professional accountability, and appropriateness of facilities and recording. Each violation carries a pre-specified number of points based on its severity. These range from maximum violations for serious bad practices such as preparing a non-factual report or intentionally compromising a personal health record (50 points), not ensuring the practice is maintained in a proper physical condition (5-20 points), and poor record keeping and absenteeism (10 points). If a family medicine staff member accumulates 100 or more warning points over a single contract period, his or her contract is terminated and he or she is debarred from applying for a new contract for a year. Repeated failure can result in permanent contract termination.

Source: Borowitz, M. and H. Kluge (forthcoming), "Pay for Performance in Health Care: Implications for Health System Efficiency and Accountability", WHO and the European Observatory on Health Systems and Policies Publishers.

It will be important to gradually introduce payment for performance into other domains

Reflecting the narrow focus of performance payments in primary care, there have been major improvements in processes and outcomes related to maternal and child health. Immunisation rates for diphtheria, pertussis and tetanus vaccines, for example, reached 97% in 2011, up from 78% in 2002. Notably, the considerable regional variations in coverage have been reduced, with the lowest level of coverage for a region now standing at 95% (Figure 4.8). The proportion of pregnant women that receive antenatal care with at least four antenatal visits has risen to 95% by 2011, from 70% in 2002. Infant mortality has fallen dramatically to 7.7 deaths per 1 000 live births by 2011, from 31.5 deaths per 1 000 live births (Ministry of Health of Turkey, 2012). The number of visits to primary care facilities has also increased, rising to 3.3 visits per person by 2011, compared to 1.1 visit per person in 2002 (Ministry of Health of Turkey, 2012). Nonetheless, there continue to be a high number of hospital visits for outpatient services that could be delivered in the community.

The combination of targeted financial penalties and a relatively large number of patients per doctor mean that payment arrangements place considerable demands on family physicians. Child and maternal health services are often identified as a starting point for efforts to improve health systems as they are highly cost-effective interventions which can make a substantial difference to the prospects of illness over the course of a person's life. The gains made in rolling out a basic package of child and maternal

health-care services in Turkey have without doubt been impressive, to date. However, despite having achieved high levels of coverage, capitation payments continue to be geared towards enrolling pregnant women and children and incentivising their care. This may divert activities towards registration and child and maternal health care at the expense of care co-ordination, lifestyle modification and other basic health care that can effectively be delivered in primary care.

Perhaps the larger concern is that this focus on a single domain of clinical activity coincides with a situation where the numbers of family physicians are quite limited. With more accessible health-care services and current demographic trends, non-communicable diseases will continue to become larger challenges for public health. Cognisant of these demands, and with a tradition of record keeping in primary care related to the performance-based payments, Turkey has the opportunity to develop performance incentives to prevent and manage non-communicable disease. Several OECD countries have undertaken programmes to drive improvements in primary care, such as the Quality and Outcomes Framework in the United Kingdom and the Quality Indicators in Community Healthcare programme in Israel. These schemes both offer an evidence-based set of key indicators which Turkey may be able to draw upon.

Experience from these countries has also demonstrated that the collection of data and subsequent reporting of back to professionals can often be more important in motivating better quality care than the size of a performance reward. Indeed, with a care model for chronic disease focused more on multiple visits to help a patient manage their condition over time and less on achieving coverage of a universally beneficial treatment (as in the control of communicable diseases), positive rather than negative incentives are likely to be a more appropriate direction for the future. Having developed institutions and cultural norms associated with good antenatal care, the government may wish to lessen the punitive impact of negative penalties in primary care.

4.5. Conclusions

Payment systems have played a major role in helping drive overall reform in the Turkish health-care system. Major improvements in the accessibility of hospital services has meant that more Turkish people can access critical care when they need it. On a population-wide basis, this is a major improvement for the quality of care delivered by the health-care system at large. The challenge for the future shall be to move from a system that is geared towards driving access to one that can drive appropriateness of

services delivered. To do so will require payment systems to demand that hospitals collect critical patient outcome data, which is the essential foundation for assessing quality through more than just the number of services delivered. Similarly, as more specialist family physicians enter the workforce, primary care payments should be focused on supporting them to practice as the first point of contact and across multiple health conditions. Together, these reforms can help ensure that Turkey's health-care system continues on its now decade-long trajectory of improvement.

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