Pharmaceutical Health Information System

PHIS Hospital Pharma Report 2010

TURKEY

Commissioned by the European Commission, Executive Agency for Health and Consumers (EAHC) and the Austrian Federal Ministry of Health (BMG)

PHIS

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Executive Summary

Hospitals are defined as “institutions that provide out-patient and in-patient medical examination, diagnosis, treatment and rehabilitative services to patients, and treat injured and those suspected to have a disease and also institutions that deliver babies” in Turkey. Hospitals can be both public and private. In the public sphere, the Ministry of Health is the dominant owner of hospitals followed by universities. Starting from 2003, with introduction and implementation of recent reforms the private hospital sector has flourished as public purchasing agencies started to purchase health care services from the private sector as well. Public hospitals have dual budgets: the general government budget and revolving fund budget. Each public hospital receives a line item budget from the government covering mainly the salaries of the staff and restricted amount for amenities. Revolving fund budgets, on the other hand, are comprised of the income from the services provided by the hospital. These are mainly the payments made by the Social Security Institution, private health insurance and out-of-pocket payments. Currently hospitals rely more on revolving fund than on general budget.

Turkey has both external and internal reference pricing system in pricing of medicines. Currently there is a basket of five countries (France, Greece, Italy, Portugal and Spain) and the prices of both the original and generic products cannot be more than 60% of the cheapest price among these countries. The reimbursement price of medicines is also different as there is a public discount of 23% upon the reference price. The Social Security Institution has classified medicines and pays up to 15% of the cheapest product in each group. Hospitals purchase their own medicines from wholesalers or manufacturers. There are a limited number of hospital-only-medicines and prices of these medicines are also determined as explained. However, for products with hospital packing (these are not only hospital-only-medicines and others can also have hospital packages as well), the price of the product should be at least 10% less than the price of the cheapest other pack size of the same medicine. There is a tendering process where a hospital advertises its medicine requirements and wholesalers or manufacturers bid for this request. At the end of the purchasing process, the cheapest offer wins the bid and provides the medicines.

The Social Security Institution is the main reimbursement agency in Turkey. The rules of reimbursement for each service and product (including health) are declared annually in the Health Implementation Guide of the institution. The guide has a positive list for medicines. In order to be included in the list, companies should submit an application covering clinical effectiveness and pharmacoeconomic analysis of the product. In-patient medicines are reimbursed fully and are exempt from any co-payment. Unfortunately there is no public data on consumption and evaluation of pharmaceuticals in hospitals. Hospitals provide medicines only to in-patients. In cases where the prescribed medicine is not available in the hospital pharmacy, upon certification of this, the patient can purchase it from private pharmacies. This is also reimbursed fully by the reimbursement agency.

The Turkish pharmaceutical sector is undergoing a dynamic reform process in parallel with health care reforms. That is why the reform process will continue in the years to come as well.

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List of abbreviations

AIFA	Agenzia Italiana del Farmaco / Italian Medicines Agency
ATC	Anatomic therapeutic chemical classification
BMG	Bundesministerium für Gesundheit / Austrian Ministry of Health
DDD	Defined daily doses
DG SANCO	Health and Consumer protection Directorate General
DRG	Diagnosis-related group
EAHC	Executive Agency for Health and Consumers
EU	European Union
GDP	Gross domestic product
GÖG/ÖBIG	Gesundheit Österreich GmbH, Geschäftsbereich ÖBIG
HE	Health expenditure
HIG	Health implementation guideline
HOSHE	Health expenditure in hospitals
HOSPE	Pharmaceutical expenditure in hospitals
HPF	Hospital pharmaceutical formulary
HTA	Health Technology Assessment
IHHII	International Healthcare and Health Insurance Institute
NCU	National currency unit
Mio.	Million
MoH	Ministry of Health
OECD	Organisation for Economic Co-operation and Development
OPP	Out-of pocket payments
OTC	Over-the-counter medicines
PE	Pharmaceutical expenditure
PHIS	Pharmaceutical Health Information System
POM	Prescription-only medicines
SSI	Social Security Institution
SSK	Social Insurance Organization

SUKL	Statny Ustav pre Kontrlu Lieciv / State Institute for Drug Control (Slovakia)
THE	Total health expenditure
TPE	Total pharmaceutical expenditure
VAT	Value added tax
WP	Work package

Introduction

PHIS research project

PHIS (Pharmaceutical Health Information System) is a research project commissioned under the call for proposals 2007 in the priority area “health information” of the European Commission, DG SANCO. It has been commissioned by the Executive Agency for Health and Consumers (EAHC) and co-funded by the Austrian Ministry of Health (BMG).

The PHIS project aims at increasing knowledge and exchange of information on pharmaceutical policies, in particular on pricing and reimbursement, in the European Union (EU) Member States, covering both the out-patient and the in-patient sector.

This will be done via different work packages (WP) resulting in the following deliverables:

- the PHIS Glossary with key terms related to pharmaceuticals,
- the PHIS Library offering country specific information on out-patient and in-patient pharmaceutical pricing and reimbursement for the EU Member States,
- the PHIS Indicators and the PHIS Database, containing major data for the developed indicators in the Member States,
- the PHIS Hospital Pharma Report with information on pharmaceutical policies in the in-patient sector in the EU Member States, including a price survey.

The PHIS project management is a consortium of the project leader Gesundheit Österreich GmbH, Geschäftsbereich Österreichisches Bundesinstitut für Gesundheitswesen / Austrian Health Institute (GÖG/ÖBIG), which is a research institute situated in Vienna, Austria, and four associated partners:

- the Italian Medicines Agency (AIFA),
- the International Healthcare and Health Insurance Institute (IHHII), Bulgaria,
- SOGETI Luxembourg SA., which is a services provider, and
- the State Institute for Drug Control (SUKL), Slovakia

SUKL is the WP leader of Hospital Pharma.

Further key stakeholders are the PHIS Advisory Board covering EU Commission services and agencies and other international organisations, and the PHIS network, which comprises national representatives from competent authorities and further relevant institutions from the EU Member States and associated countries.

The PHIS project runs from September 2008 to April 2011 (32 months). Further information and all deliverables are made available at the PHIS project website http://phis.goeg.at.

PHIS Hospital Pharma

The aim of the work package “Hospital Pharma” is an in-depth investigation of the in-patient sector, as systematic knowledge of pharmaceutical policies in this sector has been rather poor.

The survey is divided in two phases:

- Phase 1: General survey

  Country reports on pharmaceuticals in hospitals (“PHIS Hospital Pharma Reports”), designed to describe specific pharmaceutical policies in the in-patient sector in the EU Member States (spring 2009).

- Phase 2: Case studies

  A specific survey, including a price survey, provided by means of case studies, in a limited number of hospitals in a few countries (autumn 2009).

The final PHIS Hospital Report, covering information from the general survey (phase 1) and the case studies (phase 2), is scheduled for February 2010.

Methodology of the general survey

The production of the country-specific PHIS Hospital Pharma Reports is based on three steps:

1. Development of a uniform PHIS Hospital Pharma Report Template

   The PHIS Hospital Pharma Report Template offers a homogenous, very detailed structure for describing the pharmaceutical pricing and reimbursement system in the in-patient sector of a country. The Template was developed by SUKL, Slovakia (Work Package leader of Hospital Pharma) in coordination with GÖG/ÖBIG (PHIS project leader) and further members of the PHIS project management. It is based on literature and internet reviews as well as interviews with experts in the hospital sector in the EU Member States. Members of the PHIS network received the draft Template for feed-back, and had an opportunity to discuss and provide personal feed-back during a meeting.

2. Collecting information and data and drafting the PHIS Hospital Pharma Report

   The country-specific PHIS Hospital Pharma Reports were written by members of the PHIS network. In order to get the needed information and data, hospital experts were contacted and involved in several countries. They provided information and data in written form and during telephone conservations and personal talks. In some countries the reports (or parts of it) were written by hospital experts. In several countries, the preparatory work for drafting the PHIS Hospital Pharma Reports also included study visits of the authors to hospitals and hospital pharmacies. Information on persons and institutions involved can be found in the “Acknowledgements” at the beginning of this PHIS Hospital Pharma Report and in section 8 “References and data sources”, listing “Literature and documents” (section 8.1) and “Contacts” (section 8.2).

3. Editorial process

The draft PHIS Hospital Pharma Reports were submitted to the project management for review, which was undertaken by SUKL, Slovakia (Work Package leader of Hospital Pharma) in coordination with GÖG/ÖBIG (PHIS project leader). The review focused on checking clarity and consistency in general and with regard to the outline of the Template and terminology (PHIS Glossary). In the course of the editorial process, the reviewers contacted the authors for providing feed-back on language and content, offering suggestions for re-phrasing and change and clarified open and/or misunderstanding points.

1 Background

1.1 Definition and scope

There are two Decrees that define hospitals and hospital care and also outline the rules and principles of operation of these organisations. Hospitals can be both public and private in Turkey. For public hospitals, the Decree on Operational Principles of Hospitals, for private hospitals the Decree on Private Hospitals outlines these rules. In the Decree on Operational Principles of Hospitals, hospitals are defined as "institutions that provide out-patient and in-patient medical examination, diagnosis, treatment and rehabilitative services to patients, and treat injured and those suspected to have a disease and also institutions that deliver babies" (Official Gazette, 2005). In the Decree on Private Hospitals, hospitals are defined as "organisations owned by private persons or corporate bodies that provide out-patient and in-patient medical examination, laboratory tests, surgery, medical care and other medical services with a minimum of 10 beds" (Official Gazette, 2002). The main difference between these definitions and the OECD definition of hospitals lie on the emphasis made in out-patient and in-patient services. In the OECD definition, providing out-patient services is defined as the secondary activity of a hospital. In Turkey, hospitals have evolved with this dual responsibility. Lack of an active referral system has contributed to increasing role of hospitals in ambulatory care. As currently there is no effectively working referral system in place, even the university hospitals act as primary care provider.

In article five of the Decree on Operational Principles of Hospitals, five subtypes of hospitals are defined. As can be seen below the Turkish classification of hospitals is not completely compatible with the OECD classification. The OECD classifies hospitals as general, mental health and substance abuse and specialty hospitals. In Turkey, mental health and substance abuse hospitals are classified under specialty hospitals. The classification in the Decree is as follows:

District Hospitals: These are hospitals providing emergency services, delivery, in-patient and out-patient care and integrating preventive and curative care. Doctors in these hospitals refer patients to other hospitals in cases where the treatment of patients is not possible under the hospital premises and facilities.

Day Hospital: These are hospitals that are located either within a hospital or that work in coordination with another hospital. They provide day care for 24 hours in more than one branch of medicine and have at least five beds.

General Hospitals: Hospitals that provide in-patient, out-patient and emergency care in available specialties without any restrictions on age and gender. Their required minimum bed size is 50.

Specialty Hospitals: These are hospitals that serve to a particular gender or age group or to patients with specific diseases.

Teaching and Research Hospitals: These are general and specialty hospitals with teaching and research responsibilities.

In the Decree on Private Hospitals, hospitals are classified as general and specialty hospitals. According to this definition, private general hospitals are hospitals with at least 25 beds (excluding intensive care beds) and provide diagnosis, treatment and emergency services for 24 hours. These hospitals should have at least six full-time doctors of which at least three of them are from surgical specialties. Specialty private hospitals, on the other hand, are hospitals serving to a particular gender or age group or to patients with specific diseases. They too should have at least 25 beds and have at least 4 full-time doctors in their specialty.

This report covers information about reimbursement, pricing and monitoring of hospital medicines in Turkey and the information refers to all hospitals in the country. The main distinction between hospitals occurs between public and private hospitals and information is given for both of these hospitals.

1.2 Organisation

The Turkish health care system is a highly centralised system. After the recent health care reforms, the purchaser and provider roles are split between the Social Security Institution and the Ministry of Health (MoH). Currently the Social Security Institution (SIO) is the main reimbursement agency covering around 90% of the population. The MoH, besides other responsibilities, is the main actor in providing health care services in the public sphere. The MoH is the ultimate authority for accreditation, establishment and supervision of hospitals both in the public and private sector. A hospital cannot be opened without the final decision of the MoH. Both public and private hospitals have to meet the predetermined criteria by the MoH and these criteria are enforced by law. The regulations are made at the national level and are applied in all parts of the country.

As far as budgets are concerned a distinction should be made first between public and private hospitals and then between MoH hospitals and university hospitals. Private hospitals have their own budgetary arrangements. They are paid by public reimbursement agencies, private insurance companies and households. For patients with public coverage, private hospitals are reimbursed by the prices set by the SSI. Until 2010 January, the private hospitals were allowed to ask up to 30% of the total bill from patients as a co-payment. Starting from 1 January 2010 the SSI categorised all private hospitals in five classes and determined new co-payment rates changing for each category. Accordingly all private hospitals are allocated to a group among five (from A to E). Co-payment rates are determined as 70%, 60%, 50%, 40% and 30% for hospitals in groups A, B, C, D, E respectively. The rates reflect the maximum extra payment that a hospital can ask from a patient additional to the payment by the SSI. A hospital can ask for lower rates or may not even ask for it. The categorisation is mainly based on the volume of services provided to SSI members and quality indicators did not have a prominent place. That is why some very renowned hospitals were classified in

lower places as they provided fewer services to the SSI. Hospitals are penalised if they exceed this co-payment rate.

As far as public hospitals are concerned there are MoH hospitals, university hospitals and Ministry of Defence hospitals. All these hospitals have a dual budgetary system: public budget and revolving fund budget. The allocations from the government budget are pooled in the public budgets of hospitals. These budgets, in the last years, are said to meet only the salaries of public employees and some investment items in hospitals. The revolving fund budgets in public hospitals are comprised of the payments made by reimbursement agencies, private insurance companies and households for the services provided by that hospital. These payments are made for the services provided by the hospital. Hospitals can use these budgets for various purposes. They can make supplementary payments to their staff, hire staff, buy medicines and medical devices, pay for utilities etc. In recent years it is believed that the revolving fund budgets cover the majority of the expenditures of hospitals. In the most recent National Health Accounts study for 2000, it was concluded that the public budget contribution to the total incomes of hospitals were 34.7% for MoH hospitals and 14.3% for university hospitals (Berman, Tatar, 2003). As the weight and importance of revolving funds have increased in the Turkish health care system, after reforms in 2003, it is envisaged that these percentages have at least stayed the same or increased but not decreased.

Table 1.1: Turkey – Key data on in-patient care, 2000 and 2004–2008

In-patient care	2000	2004	2005	2006	2007	2008
No. of hospitals[1]	1,184	1,175	1,156	1,163	1,276	n.a.
Classified according to ownership						
- thereof public hospitals owned by the MoH	744	683	795	769	849	n.a.
- thereof municipal hospitals	9	8	9	6	5	
- thereof university hospitals	42	52	53	56	56	
- thereof other public	10	8	30	27	1	
- thereof SSK*hospitals	118	146	0	0	0	
- thereof private hospitals	261	278	269	305	365	n.a.
Classified according to subtypes						
- thereof general hospitals[2]	933	1,059	1,024	1,033	n.a.	n.a.
- thereof mental health and substance abuse hospitals[2]	8	8	9	11	n.a.	n.a.
- thereof speciality (other than mental health and sub-stance abuse) hospitals[2]	243	108	123	119	n.a.	n.a.
No. of acute care beds[3]	156,549	171,888	176,786	180,767	184,983	n.a.
- thereof in the public sector[3]	142,292	157,330	161,924	164,059	166,988	n.a.
- thereof in the private sector[3]	14,257	14,558	14,861	16,708	17,995	n.a.
Average length of stay in hospitals[3]	5.9	5.7	5.4	5.1	4.4[4]	n.a.
No. of hospital pharmacies	n.a.	n.a	n.a	n.a	n.a	n.a
thereof no. of hospital pharmacies that serve out-patients	n.appl.	n.appl.	n.appl.	n.appl.	n.appl.	n.appl.

n.a. = not available, n.appl. = not applicable

* Until 2005 the Social Insurance Organization (SSK) had its own facilities. In 2005 these were transferred to the MoH

[1] *http://www.tuik.gov.tr/Gosterge.do?id=3696&metod=IlgiliGosterge (21.08.2009)*

[2] Yataklı Tedavi Kurumları İstatistik Yıllığı

[3] http://www.tuik.gov.tr/VeriBilgi.do?tb_id=6&ust_id=1 (21.08.2009)

[4] www.irdes.fr/EcoSante/Download/OECDHealthData_FrequentlyRequestedData.xls

As can be seen from the table, public sector is the main owner of hospitals in Turkey. In 2007, 849 hospitals out of 1,276 were owned by the MoH. There are specialised hospitals in the system such as mental hospitals, physiotherapy hospitals, children's hospitals, maternity hospitals, tuberculosis hospitals etc. There is no hierarchy among hospitals but university hospitals are by definition expected to look after complex cases. However, as currently there is no statutory referral system all patients with different stages of severity can go to any hospital they choose. With the increased role of the private sector, the number of beds in the private sector has increased from 14,257 in 2000 to 17,995 in 2007.

Table 1.2: Turkey – Pharmaceuticals, 2000 and 2005–2009

Number of pharmaceuticals	2000	2005	2006	2007	2008	2009
Authorised pharmaceuticals in total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- thereof hospital-only pharmaceuticals	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

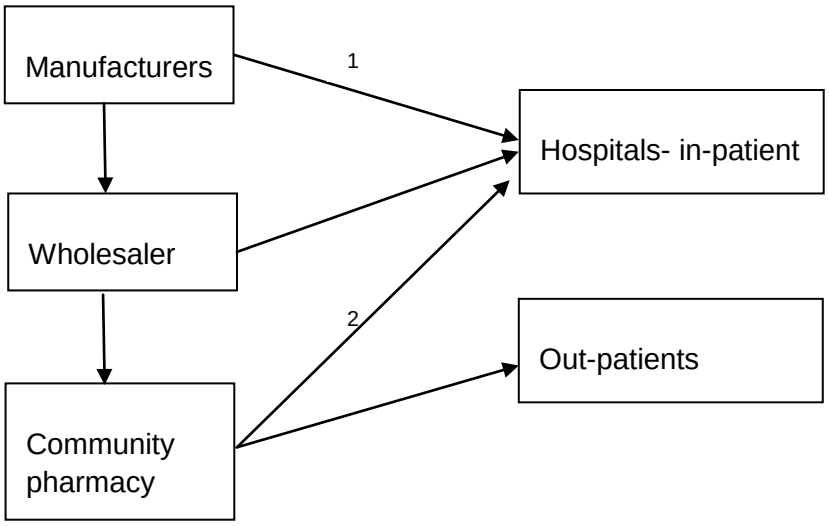
n.a. = not available

The figures required in this table are not publicly available. As stated in section 2.1.1. there is a list of hospital-only-medicines and those molecules are only allowed to be used in hospitals, there is no information currently about the number of these medicines.

Hospitals with 50 and more beds in Turkey are obliged to have a hospital pharmacy by law. These hospitals are parts of hospitals and parts of the organisational chart, not separate entities. They dispense medicines only to in-patients in accordance with the orders of the doctors. The main responsibility of these pharmacies is to provide the right amount of medicine at the right time to in-patients.

Hospital pharmacies cannot sell/provide medicines to out-patients or to public. Medicines are distributed through manufacturers, wholesalers and community pharmacies. Figure 1 below provides a flow-chart on the delivery chain.

Figure 1.1: Turkey – Flowchart of delivery chain, 2009



[1]- Manufacturers can enter the competitive bidding process for each hospital and sell medicines directly. However, due to operational costs and other difficulties, this is not usually preferred.

[2]- If the medicine prescribed by the doctor is not available in the hospital pharmacy, after documentation of the case the medicine can be purchased from a community pharmacy by the patient. In this case, it is not the hospital but the patient that the medicine is sold to. If the patient is covered by the social security system then the SSI pays for the prescription.

Source: Tatar 2009

1.3 Funding

The main payers of health services in Turkey are the SSI and the Ministry of Finance. The SSI pays the health services of the blue and white collar workers, self-employed and the retired civil servants. There are some special population groups such as war veterans that are covered by this scheme as well. The Ministry of Finance pays the health services of the active civil servants and the poor. Every year a certain amount of money is allocated to the budgets of public departments for health care expenditures of the active civil servants and their dependants. In cases where the budget is exceeded, the government allocates a supplementary amount. There is also a different scheme for the poor population named as the “Green Card”. This is a personal card issued to people who are under a predetermined income level. In the past this scheme covered only the in-patient expenditures but not the out-patient services and out-patient prescriptions. Starting from 2003 the coverage of the scheme was extended to these services as well. Starting from 15 January 2010 the active civil servants will be transferred to the SSI and this will be followed by the transfer of the Green Card Scheme as well. When all these transfers are completed, the SSI will have a monopsonic power as the sole public reimbursement agency.

Hospitals are remunerated from the government budget, by the public reimbursement agencies, private insurance companies and households. Public hospitals, both state and university hospitals have a dual budget. All public hospitals receive a line-item budget from the State through the MoH (for state hospitals) and the Ministry of Education (for university hospitals). These allocations are made through the routine budget allocation process and mainly cover salary payments and other current and capital expenses.

As stated earlier, currently the majority of the population is covered by the SSI but expenditures for active civil servants and their dependants and Green Card holders are made from the Ministry of Finance budget. Starting from 14 January 2010 active civil servants will be transferred to the SSI followed by the Green Card Scheme. Payment rules by public reimbursement agencies are determined by the Health Implementation Guideline issued by the SSI. The Guideline covers rules of payments for all health goods and services ranging from out-patient to in-patient care and pharmaceuticals to medical devices. The Guideline is binding both for the public and the private sector. Reimbursement of in-patients are made either by payment per case or by fee for service system. The guideline classifies health care interventions that should be paid by case (Attachment 9) and any other intervention outside the list is paid by fee for service. Attachment 9 of the Guideline covers both the interventions to be paid by case payment system and their fees. These fees consist of bed fees, all consultations and examinations, operations and invasive interventions, anaesthetics, medicines (except blood products), blood components (erythrosine suspensions, full blood, trombosites, plasma etc), disposable goods, anaesthetic fees, laboratory, pathology and radiology tests and feeds for the accompanying person. Under the fee for service system, all fees are determined by the Guideline. The SSI pays the MoH hospitals through a global budget determined annually at the beginning of the year.

Other remuneration sources for hospitals are private insurance companies and patients. The private insurance companies pay for their beneficiaries based on their contracts with the private hospitals. Private hospitals are also allowed to ask for a co-payment from publicly covered patients up to a percentage determined by their classification by the SSI explained above.

Table 1.3: Turkey – Health and pharmaceutical expenditure, 2000 and 2004–2008

Expenditure (in million TL)	2000	2004	2005	2006	2007	2008
Total health expenditure (THE)	8,248[1]	33,237[1]	37,013[1]	43,200[1]	n.a.	n.a.
- thereof THE public	5,190[1]	23,964[1]	26,427[1]	31,300[1]	n.a.	n.a.
thereof THE private	3,058[1]	9,273[1]	10,586[1]	11,900[1]	n.a.	n.a.
THE in hospitals (HOSHE)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
thereof HOSHE public	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
thereof HOSHE private	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total pharmaceutical expenditure (TPE)	1,993[2]	n.a.	n.a.	n.a.	n.a.	n.a.
- thereof TPE public	1,277[2]	n.a.	n.a.	n.a.	n.a.	n.a.
- thereof TPE private	716[2]	n.a.	n.a.	n.a.	n.a.	n.a.
Pharmaceutical expenditure in hospitals (HOSPE)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- thereof HOSPE public	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- thereof HOSPE private	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

HOSHE = health expenditure in hospitals, HOSPE = pharmaceutical expenditure in hospitals, n.a. = not available, PE = pharmaceutical expenditure, THE = total health expenditure, TPE = total pharmaceutical expenditure
Note: Data are indicated as of 31 December.
[1] www.who.int./nha/country/WHO
[2] Berman, Tatar, 2003

As can be seen from table 1.3, there are problems in collecting health expenditure data in Turkey. The 1999 and 2000 National Health Accounts Study (Berman, Tatar, 2003) is the first example of its kind where the country had for the first time to have a nationally comparable health expenditure data. The study followed the methodology of the OECD System of Health Accounts and compiled both total expenditures and breakdown of these expenditures by provider, function and financing agent. However the same methodology was not followed in the following years and figures especially for private expenditures were estimated from extrapolations. The Table also shows a dramatic increase in expenditures between 2000 and 2004. This is undoubtedly due to radical reforms that started to be implemented from the beginning of 2003. Major reforms were made especially to increase the accessibility of health care services to the whole population. Some examples include extension of the Green Card Scheme to outpatient services and pharmaceuticals, purchasing of services from private hospitals etc.

In-patient treatments under the SSI are fully reimbursed. Currently there is no co-payment for patients. However, patients who are treated in private hospitals but reimbursed by the SSI can be asked to contribute between 30-70% more of the original bill. There are no special arrangements for medicines of the patients from abroad.

2 Pricing

2.1 Organisation

2.1.1 Framework

There is a legal framework regarding pricing of medicines. The pricing principles do not differ between hospital medicines and others. Statutory pricing is binding for all pharmaceuticals authorised by the MoH at all price levels. Prices are determined by the Department of Pharmaceutical Pricing in the General Directorate of Pharmaceuticals and Pharmacists of the MoH. External price referencing is used in the pricing process. The system has started to be implemented from 2004 with the Decree No 2004/6781. The pricing procedures are written in law and enforceable. The Decree was last revised in September 2009.

The MoH is the ultimate authority for prices of all medicines. Neither the reimbursement agencies nor hospitals have the authority to alter the prices of medicines. The reimbursement price is determined by internal reference pricing. In other words, the public reimbursement price of medicines is lower than the retail price. Hospitals can purchase medicines through a tendering process and can have discounted prices from the wholesalers or manufacturers. Below, first general information is provided about the pricing of pharmaceuticals and then hospital procurement procedures will be explained.

The prices of original products are determined by using the prices in a basket of five EU countries (Italy, France, Spain, Portugal and Greece) at the time being (January 2010. Until the last revision in September 2009 the reference countries were determined annually but there has not been any change since the inception of this model. In the last revision it is stated that “every year a minimum of 5 and a maximum of 10 reference countries are determined from the EU Member States and these countries can be changed with a two months notice”. The lowest price in these reference countries is taken as the maximum ex-factory price of an original product. Once a generic is on the market the reference price of the original product cannot be more than 60% of the cheapest reference price and generics cannot have more than 60% of the original price. For products with hospital packing (these are not only hospital-only-medicines and others can also have hospital packages as well), the price of the product should be at least 10% less than the price of the cheapest other pack size of the same medicine.

After the ex-factory prices of medicines are determined, the rates for wholesaler and pharmacy mark-ups are applied. These mark-ups are summarised in the table below:

Table 2.1: Turkey - Wholesale mark-up scheme, 2009

Ex-Factory Price in TL	Maximum Mark-up in % of Ex-factory price
< 10 TL / 4.7€	9%
10-50 TL / 4.7-23.5 €	8%
50-100 TL / 23.5-47 €	7%
100-200 TL / 47-94 €	4%
> 200 TL / > 94 €	2%

TL = Turkish Lira

1 Euro= 2.13 TL (5 January 2010)

Source: Decree No 2004/6781

Table 2.2: Turkey - Pharmacy mark-up scheme, 2009

Pharmacy purchase price (PPP) from … to… in TL/€	Pharmacy mark-up coefficient in % of PPP
< 10 TL / 4.7€	25%
10-50 TL / 4.7- 23.5€	24%
50-100 TL / 23.5 - 47.5€	23%
100-200 TL / 47 - 94€	16%
> 200 TL / >94 €	10%

TL = Turkish Lira

1 Euro= 2.13 TL (5 January 2010)

Source: Decree No. 2004/6781

The retail sale of a medicine is determined after adding an 8% VAT to the pharmacy sale price.

Prices of hospital-only medicines are determined the same way in Turkey, however, hospitals can have discounts during the purchasing process. Public hospitals purchase their medicines through a tendering process (open tendering, tendering among predetermined competitors, bargaining and direct purchasing) and private hospitals apply their own procedures and rules in the tendering process.

The retail prices of hospital medicines are determined by the MoH by using the external reference pricing system but the purchasing prices of hospitals can be different because of the tendering system and a price difference can occur for the same medicine among different hospitals.

2.1.2 Hospital prices

Hospital prices are either the ex-factory or wholesaler prices as both can supply hospitals. An 8% VAT is added to this value. This rate is fixed for all pharmaceuticals. Normal mark-ups mentioned above are applied to the prices. Discounts can be given in the tendering process (cf. section 2.2.1). In general it is known that hospital prices are lower than the retail pharmacy prices. First of all there are no pharmacy mark-ups in hospitals and also there are discounts in the tendering process. Public information on prices of pharmaceuticals is not available.

2.2 Pricing policies

2.2.1 Procurement

As mentioned above public hospitals purchase their medicines through tendering processes and the rules of this process are clearly defined in the “Public Tendering Law”. This law is binding for all public institutions in Turkey. The law has determined certain threshold values that also determine the method of purchasing. There are four ways of purchasing medicines for hospitals.

Open tendering: In open tendering, the process is open to everyone meeting the requirements determined by the administration.

Tendering among predetermined competitors: In cases where the good or service has some specific characteristics and not everyone can produce, the administration can invite these firms to the tendering process. So this is not open to everyone but to those invited only.

Bargaining: Bargaining can be used in cases where the monetary value of the good or service is under TL 50,000 / €23.474 (1 Euro=2.13.TL, 5 January 2010). In this case, the administration does not have to advertise the purchasing decision but invite those firms that can provide the service.

Direct purchase: In cases where the value of the good or service is less than TL 15,000 / € 7042 (1 Euro=2.13.TL, 5 January 2010) the administration can directly purchase from the market.

In the final decision to purchase, the cheapest offer has to be selected. This whole purchasing process is overlooked by a committee established from members of the institution. The hospital pharmacist has a crucial role in purchasing medicines from the beginning to the end. The need for medicines (type, amount etc) is determined by the pharmacist who is also responsible for administering the stocks. The pharmacist has an important role making the last decision as well. Only pharmaceutical firms and wholesalers can enter the bidding

process. Retail pharmacies are not allowed. As the offer with the cheapest price wins the bet the price of the medicine can be cheaper than the price determined by following the external reference pricing system detailed above.

Hospitals carry out their own procurement procedures. Each hospital has its own procurement commission comprised of members from the hospital (5 people) and their decision is the last verdict. The offered price is the main criteria for accepting a tender. As stated above the offer with the cheapest price wins the tender. Pharmaceuticals are not mixed with other goods and services and are purchased alone. The frequency of the procurement process is determined entirely by the hospital itself. The tender is published in the official gazette, local papers and other media depending on the estimated value of the tender. In procurements by invitation the tender is not published but special letters are sent as invitations. Hospitals do not share information about the procurement process and its results.

2.2.2 Negotiations

The decision-making procedures and conditions are clearly identified in the legal documents regulating the bidding process. Accordingly, the hospital prepares a detailed document defining the goods and services to be purchased as detailed as possible. For instance the active ingredient, form, pack size and number of medicines to be purchased are presented in the document and these are advertised in the web-sites, local and national newspapers to attract providers. Each firm willing to provide the medicines to the hospital are obliged to prepare a dossier comprised of all legal documents declared in the advertisement together with the offered price. The offer is sealed and the application process is completed when the firm officially submits the material until the closing date and hour of the bidding. When the bidding process is closed, all applications are counted and documented in front of all bidders and opened starting from the first applied to the last. If they want, firms can be present in this meeting. The commission can require further information or clarification of certain points in the application but this cannot be related to the price of the offer. The commission may also require further clarification or justification from the firms who offered unacceptably low prices. If these clarifications are still not sufficient to justify the prices then these offers are excluded from the process. After these procedures are completed, the firm that offered the cheapest price is declared as the winner of the bidding process. As can be seen, at this stage there is not a chance of price change and negotiation.

3 Reimbursement

3.1 National hospital reimbursement procedure

The reimbursement system covers both the public and private hospitals as the current social security schemes purchase services from both sectors. The reimbursement system is organised at a national level. The legal framework is determined by the Social Insurance Law and following legal documents. The Health Implementation Guide (HIG) prepared by the SSI determined the rules and principles for reimbursement of hospitals.

In case a patient is covered by a social security organisation then his/her medicines during an in-patient episode are fully reimbursed by this organisation. There is no special pharmaceutical budget. If the patient is not covered by a social security organisation he/she pays out-of pocket or through his/her private insurance scheme.

There are two positive lists in place. One for out-patient medicines and one for hospital-only medicines. These lists are declared as attachments to the Health Implementation Guide. If the medicine used in the hospital is not listed in the hospital-only-medicines list then the medicines are purchased from the out-patient medicines list. In other words, both lists are used in hospitals. These lists are published as attachments to the HIG. The attachment 2/B lists the hospital-only medicines that are reimbursable by social security agencies. Currently there are around 50 active ingredients on this list. The same procedures as for out-patient medicines are followed regarding the inclusion of hospital-only medicines on the list.

Hospital medicines are fully reimbursed with no co-payments. Hospital pharmacies serve only to in-patients with no exceptions. When a patient is hospitalized his/her medicines are supplied from the hospital pharmacy. The bill includes all expenditures including pharmaceutical expenditures. The SSI or the Ministry of Finance (in case of active civil servant and the Green Card) reimburses the hospital based on the total amount on the bill. If the hospital pharmacy does not have the ordered medicine in the pharmacy then, upon certification of this case by the pharmacists, the medicine can be purchased from retail pharmacies.

3.2 Hospital pharmaceutical formularies

Apart from the positive list for hospital-only medicines no hospital pharmaceutical formularies exist in Turkey.

4 Consumption of pharmaceuticals

Table 4.1: Turkey – Pharmaceutical consumption, 2000 and 2004–2008

Pharmaceutical consumption	2000	2004	2005	2006	2007	2008
Annual pharmaceutical consumption in total						
in packs (million pack)	n.a.	954	1,108	1,191	1,312.	1,379
in DDD (Defined Daily Doses)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
In other measures units (e.g. unit doses, please specify	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Annual pharmaceutical consumption in hospitals						
in packs	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
in DDD	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
In other measures units (e.g. unit doses, please specify	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

DDD = Defined Daily Doses, n.a. = not available

Source: www.ieis.org.tr

Table 4.2: Turkey – Top 10 pharmaceuticals by pharmaceutical expenditure and consumption 2007 or latest available year in hospitals

Position	Top pharmaceuticals used in hospitals, indicated by active ingredient, ranked with regard to consumption	Position	Top pharmaceuticals used in hospitals, indicated by active ingredient ranked with regard to expenditure
1	n.a.	1	n.a.
2	n.a.	2	n.a.
3	n.a.	3	n.a.
4	n.a.	4	n.a.
5	n.a.	5	n.a.
6	n.a.	6	n.a.
7	n.a.	7	n.a.
8	n.a.	8	n.a.
9	n.a.	9	n.a.
10	n.a.	10	n.a.

n.a. = not available

As can be seen from tables 4.1 and 4.2 data problems are not exclusive to health expenditure data but on data about medicines as well. Companies may have this information by themselves but they are not publicly accessible.

5 Evaluation

5.1 Monitoring

In Turkey there is no monitoring system of expenditures, prices and/or consumption of pharmaceuticals used in hospitals in place.

The main task of a hospital pharmacist is to manage the hospital pharmacy as effectively and efficiently as possible and serve the needs of the in-patients. The pharmacist is responsible for provision of medicines timely and correctly to the wards. She/he is also responsible for controlling stocks and preparing list of medicines to be purchased.

5.2 Assessment

Health technology assessment (HTA) is at its infancy in Turkey. New applications of medicines for reimbursement are required to submit the results of cost-effectiveness results. As there is no separate system for hospital medicines there is only one reimbursement application. The main cost containment tool for hospital medicines is to buy medicines in mega forms and to make bulk buying.

6 Interface management

There is no interface management in Turkey.

7 Developments and outlook

Turkey has been undergoing a radical reform process since 2003 for the whole health care sector. In this process, critical changes have been made in the primary level of care and financing of health care services. Although there have been intentions since the beginning of the reforms to intervene the hospital sector as well, until today only incremental changes have been made. An exception to this is the transfer of Social Security Organisation hospitals to the MoH. Currently there are attempts to give autonomous status to hospitals and to create an internal market whereby hospitals both in the public and private sector compete with each other.

8 Literature and documents

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