TÜSİAD

TURKISH INDUSTRIALISTS' AND BUSINESSMEN'S ASSOCIATION

CHARTING THE WAY FORWARD:

HEALTH CARE REFORM IN TURKEY

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Preface

TUSIAD (The Turkish Industrialists' and Businessmen's Association), which was founded in 1971, according to the rules laid by the Constitution and in the Associations Act, is a non-governmental organization working for the public interest. Committed to the universal principles of democracy and human rights, together with the freedoms of enterprise, belief and opinion, TUSIAD tries to foster the development of a social structure which conforms to Atatürk's principles and reforms, and strives to fortify the concept of a democratic civil society and a secular state of law in Turkey, where the government primarily attends to its main functional duties.

TUSIAD aims at establishing the legal and institutional framework of the market economy and ensuring the application of internationally accepted business ethics. TUSIAD believes in and works for the idea of integration within the international economic system, by increasing the competitiveness of the Turkish industrial and services sectors, thereby itself of assuring a well-defined and permanent place in the economic arena.

TUSIAD supports al the policies aimed at the establishment of a liberal economic system which uses human and natural resources more efficiently by means of latest technological innovations and which tries to create the proper conditions for a permanent increase in productivity and quality, thus enhancing competitiveness.

TUSIAD, in accordance with its mission and in the context of its activities, initiates public debate by communicating its position supported by scientific research on current issues.

This report; titled "Health Care Reform in Turkey – Charting the Way Forward", coordinated through the Health Working Group within the TUSIAD Social Affairs Commission, was prepared by Prof. Laura Morlock, Assistant Prof. Hugh Waters and Prof. Alan Lyles of The Johns Hopkins Bloomberg School of Public Health, local consultant of JHI Dr. S. Haluk Özsarı, and JHI research assistant Dr. Göksenin Aktulay, in accordance with the agreement between TUSIAD and Johns Hopkins International (JHI).

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Foreword

This report; titled "Health Care Reform in Turkey – Charting the Way Forward", is the product of the efforts of many different individuals and groups. We would like to sincerely thank the TUSIAD Health Working Group (Attachment 9) under the presidency of Mr. Ethem Sancak, and especially the TUSIAD Project Steering Committee Chairman Dr. Murat Dayanıklı, and members Professor Erdal Akalın, and Associate Professor Melih Bulut. The Steering Committee members provided valuable information throughout the process of data collection, as well as constructive feedback on initial recommendations and versions of the report. We would also like to thank General Secretary of TUSIAD Dr. Haluk Tükel, Deputy General Secretary Ebru Dicle, Head of Social Policy Department Aslı Ulusoy and Department Expert Fecir Alptekin, who provided excellent administrative support through the course of the assignment. Dr. Oktay Çini of NBBJ Consulting participated in the fact-finding phase of the project, and provided valuable insights and interpretation.

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ABBREVIATIONS

AIFD	Association of Research-Based Pharmaceutical Companies
ANSI	American National Standards Institute
ASC X12N	Accredited Standards Committees (X12N is an insurance type)
ASTM	American Society of Testing Materials
Bag-Kur	Social Insurance Agency for Merchants, Artisans and Self-Employed
BOT	Build Operate Transfer
CON	Certificate of Need
CPI	Costumer Price Index
CPT4	Current Procedural Terminology Edition 4
DICOM	Digital Imaging and Communications in Medicine
DPT	Diphtheria Pertussis Tetanus
DRG	Diagnosis Related Groups
DUR	Drug Utilization Review
EC	European Commission
EFPIA	European Federation of Pharmaceutical Industries and Associations
EMEA	European Agency for the Evaluation of Medicinal Products
ES	Pension Fund for Government Employees
EU	European Union
FDA	Food and Drug Administration
FFS	Fee-for-service
G10	High Level Group on Innovation and the Provision of Medicines
GDP	Gross Domestic Product
GHI	General Health Insurance
GLP	Good Laboratory Practices
GMP	Good Manufacturing Practices
GNP	Gross National Product
HII	Health Information Institute
HIS	Health Information System
HTA	Health Technology Assessment
HTTP	Health Transformation Project
ICD-10	International Classification of Diseases 10th Revision
IEEE	Institute of Electrical and Electronics Engineers
IT	Information Technology
JCAHO	Joint Commission on the Accreditation of Healthcare Organizations
JHI	Johns Hopkins International

KOB	Small and Medium Scale Enterprises
MIB	Medical Information Bus
MOF	Ministry of Finance
MOH	Ministry of Health
MOLSS	Ministry of Labor and Social Security
NCQA	National Committee for Quality Assurance
NDI	National Drug Institute
NDP	National Drug Policy
NHA	National Health Accounts
OC	Over-the-Counter
OECD	Organization for Economic Cooperation and Development
OOP	Out-of-Pocket (payment)
PCGP	Primary Care Group Practice
PCP	Primary Care Physician
PERF	Pan-European Regulatory Forum
PMA	Pharmaceutical Manufacturers Association
PPP	Purchasing Power Parity
RBRVS	Resource-based Relative Value Scale
Rx	Pharmaceutical Prescription
SIS	State Institute of Statistics
SPO	State Planning Organization
SSK	Social Insurance Institution
TDHS	Turkey Demographic Health Survey
TFR	Total Fertility Rate
TL	Turkish Lira
TMA	Turkish Medical Association
TPA	Third Party Administration
TÜRKAK	Turkish Accreditation Agency
TUSIAD	Turkish Industrialists' and Businessmen's Association
UEAP	UrgentEmergency Action Plan
UNDP	United Nations Development Program
UNIEDIFACT	U.N. Electronic Data Interchange for Administration, Commerce, and Transport
USD$	United States Dollar
VAT	Value Added Tax
WHO	World Health Organization

CONTENTS

EXECUTIVE SUMMARY **17**

CHAPTER 1 - INTRODUCTION **37**

1.1 A Public-Private Vision for a Reformed Health Care System in Turkey 39

1.2 Key Issues 40

CHAPTER 2 - BACKGROUND **43**

2.1 Historical Antecedents 45

2.2 Economic and Demographic Trends 47

CHAPTER 3 - KEY ISSUES IN THE TURKISH HEALTH CARE SYSTEM **51**

3.1 Low Levels of Financing 53

3.2 The Composition of Health Expenditures – Allocative Efficiency 55

3.3 Insurance Coverage 55

3.4 Cost-Sharing 60

3.5 Organizational Structure and Management of the Delivery System 60

3.6 Human Resources 68

3.7 Information Systems 73

3.8 Provider Payment 78

3.9 Pharmaceuticals 79

3.10 Improving the Quality of Health Care 95

CHAPTER 4 - PERSPECTIVES ON REFORMING THE TURKISH HEALTH SYSTEM **99**

4.1 Stakeholders' Perspectives 101

4.2 International Comparisons 113

4.3 Cost Containment Strategies in the Health Sector 114

4.4 Relevant International Reform Models 119

CHAPTER 5 - AN ACTION PLAN FOR TURKEY'S HEALTH SYSTEM 125

5.1 Universal Coverage and a Unified Public Health Insurance Program 127

5.2 Increased Funding for Health Care 128

5.3 The Role of Private Insurance 129

5.4 Cost Sharing Arrangements 130

5.5 Provider Payment 130

5.6 Public and Private Roles in Health Care Delivery 131

5.7 Strengthening Primary Care 132

5.8 Strengthening Public Hospitals through Greater Autonomy 134

5.9 Human Resources 135

5.10 Pharmaceuticals 137

5.11 Medical Devices 140

5.12 A Framework for Monitoring and Improving Health Care Quality 142

5.13 Information Systems 143

5.14 The Legal Framework Necessary to Support Health Reform 146

REFERENCES 151

Appendix 1. OECD Comparative Tables 161

Appendix 2. International Examples 179

Appendix 3. G10 Recommendations for Action 195

Appendix 4. Elements of a National Drug Policy 199

Appendix 5. Health Technology Assessment Resources 201

Appendix 6. Framework for Transitioning Greater Autonomy to Public Hospitals 203

Appendix 7. Framework for Public-Private Partnerships 206

Appendix 8. Contacts 207

Appendix 9. Members of TUSIAD Health Working Group 211

LIST OF FIGURES

Figure 1. Turkey's Population Pyramid, 2003 49

Figure 2. Percent of Drug Expenses within Total Health Expenditures (OECD 1997-98) 84

Figure 3. Yearly Average % Change in CPI and Pharmaceutical Prices, Turkey, 1994-2001 91

Figure 4. Distribution of Drugs According to Price Categories, Turkey, 2000-2001 92

Figure 5. Percentage of Health Expenditures on Pharmaceuticals, (%), Turkey, 1998-2002 92

Figure 6. Per-capita Total Health Expenditures by Income Level, 2001 ($ US) 113

Figure 7. Life Expectancy at Birth by Income Level, 2001 ($ US) 114

LIST OF TABLES

Table 1. Comparative Economic Indicators, 2003 48

Table 2. Preliminary Results of National Health Accounts Study, 2003 (in $US) 54

Table 3. Coverage of the Turkish Health Care System, 2000 56

Table 4. Health Centers and Health Posts Unattended by Doctors and Midwifes, Turkey 2002 62

Table 5. Distribution of Hospitals and Physicians by Provider Type, 2000 66

Table 6. Provider Payment Mechanisms and Provider Behavior 79

Table 7. Per-Capita and Total Consumption of Pharmaceutical Products, Turkey, 1998-1999 83

Table 8. Exports and Imports in the Pharmaceutical Industry, Turkey, 1995-2000 86

Table 9. Production of Raw Materials in the Pharmaceutical Industry, Turkey, 1995-2000 87

Table 10. Value of Imported and Domestically Produced Raw Material, 1998 87

Table 11. Production of Pharmaceutical Products, Turkey, 1995-2000 88

Table 12. Pharmaceutical Products Manufactured in Turkey and Selected Countries 88

Table 13. Good Manufacturing Practices (GMP) Investments, Turkey, 2002 (million $US) 89

Table 14. Regulation-Based and Market-Oriented Cost-Containment Strategies 118

Table 15. Principal Purchasing Methods in EU Accession Countries 123
Table 16. Total Fertility Rate (births per woman) 161
Table 17. GDP per capita, PPP (current international $) 162
Table 18. Health Expenditures per Capita (current US$) 163
Table 19. Private Health Expenditures as a % of GDP 164
Table 20. Public Health Expenditures as a % of GDP 165
Table 21. Total Health Expenditures as a % of GDP 166
Table 22. Hospital Beds per 1,000 Population 167
Table 23. Immunization, DPT (% of Children under 12 months) 168
Table 24. Immunization, Measles (% of Children under 12 months) 169
Table 25. Life Expectancy at Birth, Female (years) 170
Table 26. Life Expectancy at Birth, Male (years) 171
Table 27. Infant Mortality Rate (under age one mortality per 1,000 live births) 172
Table 28. Child Mortality Rate (under five mortality per 1,000 live births) 173
Table 29. Physicians per 1,000 Population 174
Table 30. Population Growth (annual %) 175
Table 31. Population Total (millions) 176
Table 32. Percentage of Population in Urban Areas 177

EXECUTIVE SUMMARY

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1. Universal Coverage and a Unified Public Health Insurance Program

Turkey has three main social security schemes: *Social Insurance Institution* (SSK) (covers 52% of the population), *Bag-Kur* (covers 23% of the population), and Pension Fund for Government Employees (ES) (covers 15% of the population). Despite the presence of these systems and the Green Card system, an estimated 10 million Turks lack access to health care. The population employed within the agricultural sector presents a particular worry for coverage since this group can not be covered completely by the SSK and Bag-Kur systems. Moreover, the benefits and coverage of the existing social security schemes and the Green Card are highly variable and lack standardization. Per-capita health expenditures are inequitably distributed across these systems. There are also geographic disparities in health status and access to care – health indicators are generally worse in rural areas and the eastern part of Turkey, where 20% or more of health centers do not have a doctor.

Recommendations:

• Turkey's currently fragmented health financing structure should be replaced with a unified public health financing system, funded by payroll-based premiums and subsidized through general taxation. A single public payer – general health insurance (GHI) – should combine the current roles of the social security health insurance programs (ES, SSK, and Bag-Kur), the green card program, and the health financing functions of the Ministry of Finance (through the Ministry of Health). Only the military health care system would remain outside of this network.

• GHI should be mandatory for the entire population, and financed through a combination of a payroll-based premium and general revenues from income taxes. Premiums will be progressive; beneficiaries below an income or salary threshold to be defined will not pay premiums.

• A regulatory board should be established for both public (GHI) and private health insurance. This board will include representatives of the Ministry of Finance, the Ministry of Labor and Social Security, the Ministry of Health, the Treasury, the

private insurers , health service providers, and consumers. The board will regulate premium levels and benefits packages offered by private insurers, facilitate contracting arrangements between insurers and providers, and investigate consumer complaints.

• A standardized benefits package within GHI should be defined; this package must be actuarially sound. The services covered by GHI should include physician visits, obstetrical and gynecological care, pregnancy and family planning services, deliveries, well baby visits, immunizations, emergency room visits, general ward hospital stays, surgeries, chemotherapy and radiation therapy, post-acute home health care, mental health and substance abuse, routine eye exams, hearing aids, laboratory services, X-rays, and prescription drugs (generics where available).

• An actuarial study should be performed to determine the affordability of the benefits package, the levels of premiums, and the financing available for GHI over time. This study should include an in-depth costing component, using Activity-Based Costing techniques to allocate indirect costs in order to determine the true cost of offering specific health services for Turkey's main health providers. Once the actuarial study is complete, the benefits package should be defined based on the package recommended in the paragraph above, with priority given to cost-effective and preventive services.

• GHI beneficiaries (eventually the entire population) would have access to these services through both public and private providers.

• Long-term insurance, including invalid, pension, and survivors insurance, should be administratively separate from the GHI fund.

2. Increased Funding for Health Care

Health spending in Turkey – measured to be between U.S. $112 and $202 per person – is inadequate and far below countries that are socially and economically comparable.

Recommendations:

• Turkey needs to increase funding for healthcare, in both the public and private sectors. Particularly, public spending will need to increase. As much as 78% of MOH health expenditures currently go to pay salaries, and there is a similar situation in SSK hospitals.

• The need for increased health funding will become more marked over time. Financial sustainability for the health care system is critical. Turkey's dependency ratio of 51.5% is high in comparison with EU countries and will worsen as the large cohort of individuals currently aged 15 to 44 ages. As a result, in the next 10 to 15 years Turkey is likely to encounter serious constraints on retirement funds and on social security and public sector benefit programs if the current retirement age is maintained.

• Increased public health funding should come from new revenues. Increasing public debt is not a recommended option. We recommend health system financing that is based on the combination of a mandatory payroll-based premium and contribution from income tax-based premiums, with additional government subsidization from general tax revenues. The payroll-based premium will need to be set at a level that is actuarially sound – in terms of the benefits package proposed, anticipated future growth in health care spending based on technological advancement, and future demographic changes. Additionally, the financing of GHI should not place an undue burden on economic efficiency of the private sector in Turkey. The government subsidy from general tax revenues must be sufficient to cover the premiums and cost-sharing contributions of populations groups that are exempt from these payments, and the administration and execution of important public health functions that are not covered by the General Health Insurance Program.

• Partly because of insufficient levels of funding, health spending patterns in Turkey result in the under-funding of important and highly effective public health programs (problems of allocative efficiency). With large amounts of public health spending going to salaries and pharmaceuticals, the Turkish health system has limited funding remaining to pay for preventive and essential curative care. Public expenditures on preventive care as a share of total expenditures on health decreased from 12.1% in 1996 to 6.3% in 2001.

• Following the models of France, Poland, Hungary, and Taiwan, Turkey could finance its health care system primarily from a payroll-based premium and contribution from income tax-based premiums, supplemented by general taxation. A draft law for Social Security reform proposes a 12.5% payroll-based premium for health – approximately 6.5% to be paid by the employer and 6.0% to be paid by

the employee. Even with such a system, other financing streams will be necessary to cover the employer's portion for the self-employed, those in the informal sector, and the unemployed and their families.

3. The Role of Private Health Insurance

Private health insurance has a strong potential in Turkey but currently is limited to about one percent of the population. The limited reinsurance market represents a potential barrier to growth – only three international reinsurance companies are currently active in Turkey. Some local insurance companies have separate reinsurance arrangements deals with international investors. The potential expansion of private insurance is also limited by problems with data-coding and billing systems.

Recommendations:

• Optional private insurance would be allowed to offer amenities, cover GHI cost-sharing arrangements (deductibles, co-payments, and co-insurance etc.), and cover benefits that are not in the GHI benefits package, but would not be allowed to cover benefits contained within the public package.

• After an initial period during which universal coverage is clearly established, we recommend that the GHI consider an option for beneficiaries above a specific income level (to be defined) to opt-out of the public insurance system and purchase private insurance as their principal coverage. These individuals would not be required to pay GHI premiums – avoiding duplicate payment of premiums for the same benefits, as is currently the case for individuals with both public and private insurance. In this case, careful consideration will need to be given to the regulation of private insurance as primary coverage – including the provision of the basic benefits package described in this report – and to appropriate financing mechanisms to compensate for the loss of relatively wealthy contributors to the GHI pool.

4. Cost Sharing Arrangements

All of the health insurance programs active in Turkey include some type of patient contribution, or cost-sharing, with the exception of the Green Card Program. The MOF sets the fee levels for all health facilities. For example, SSK patients pay a 20% co-payment for outpatient services and no co-payment for

inpatient services. Private insurance policies vary, but typically include a 20% co-payment for outpatient and maternity services and for drugs, with no co-payment for inpatient services.

Recommendations:

• Cost sharing arrangements will include co-payments and deductibles designed to encourage rational use of the health care system. These co-payments will be waived for patients who are incapable of paying.

• A targeted system should be established to identify those who are eligible for waivers of the co-payments. The government is planning to issue each citizen a unique ID number. As described in a draft law prepared by the Ministry of Labor and Social Security (MOLSS), the Social Services and Social Assistance Institution in the MOLSS should build on this system to establish a targeting system for waivers of premiums and co-payments based on objective criteria.

5. Provider Payments

Ministry of Health hospitals receive approximately 80% of their funding from the MOH as line-item disbursements. An additional 15% of MOH hospitals' funding is generated by direct payments into revolving funds from individuals or third-party payers, including insurance companies. These funds are retained at the hospital level. SSK health facilities are primarily funded by social security premiums. Plans to eventually implement a modified system of Diagnostic-Related Group (DRG) payments are subject to current limitations in the availability of systems to track patient diagnostic and payment information. The ES has, however, been paying private hospitals based on the packaged services since 2000.

The MOH has translated, but not yet completely implemented the ICD 10. Information systems are still fragmented. ES and the Turkish Pharmaceutical Association have separate pilot information systems for pharmaceuticals, developed with World Bank assistance and EU grants. The Ministry of Finance and Hacettepe University are planning to implement a pilot payment project moving from fee-for-service to a DRG system. The preliminary results should be available at the end of 2004. Both Bag-Kur and SSK also have ongoing pilot projects for provider reimbursement.

Recommendations:

• Contracts between GHI and different providers, public and private, should be gradually introduced until a comprehensive provider network is covered by GHI. Payments should be structured to encourage high-quality services and to discourage moral hazard (over-provision of services).

• For hospital and provider payment, we recommend diagnosis-related payments subject to a global cap, with global budgets employed during a transition period until the information systems required for diagnostic-related payments are in place. A commission should be formed to determine the appropriate levels of these payments, based on the actuarial and costing study referred to above. To establish DRGs, it should be required to have both a primary and secondary diagnosis.

• At the provincial level, we recommend fee-for-service reimbursement of ambulatory physicians subject to a global cap initially. Once the required information systems are in place, we recommended a transition to a capitated reimbursement system for ambulatory care, also subject to a provincial global cap. For specialists, fee-for-service reimbursement model should be continued for non-hospital ambulatory services.

• The GHI should consider contracting out to private-sector Third Party Administrators (TPAs) such functions as: claims processing; claims review; profiling providers to monitor over-treatment; and case management of patients with costly complex conditions.

6. Public and Private Roles in Health Care Delivery

The opportunities, interests and resources for privatizing health services are unequally distributed across the nation. Successful privatization will need to address potential conflicts-of-interest between the interests of investors vs. the interest of patients, and potential perverse incentives to over- and under-treat ("the insurance effect") (Forde and Malley 1992). Through a mixture of provision, subsidy and regulation of healthcare, the government might employ privatization to realize greater competition, improved financial and administrative performance. Contracts could be used to share risk with the private sector while retaining public oversight.

Recommendations:

• Market forces alone will not realize national health care goals; therefore, the government retains a critical role as regulator of markets and enforcer of regulations. The public sector will be a payer rather than a provider; however, it must establish the conditions under which the health sector functions to assure access and quality for rural, poor and other, disadvantaged, populations.

• The public sector will combine public insurance into one General Health Insurance (GHI). The private sector will provide supplementary health insurance, and will operate and manage "Health Enterprises." The vision is for primary health services to be provided by a mix of public and private providers with an ambulatory referral system to reduce unnecessary hospital use.

• While the Government will provide a basic benefit package that is to cover all citizens, it should continue to monitor and provide hospital services, serving as a safety net when the market place fails to provide services.

7. Strengthening Primary Health Care

The MOH is the most important provider of primary care and essentially the only supplier of preventive health services. Partly due to an expansion in infrastructure in rural areas, there is a shortage of funding for staffing and operations in these areas. Two-thirds of all village health posts did not have a midwife and 12% of health centers lacked physicians in 2000. Nearly 1,887 health posts and 270 health centers have been closed due to lack of staff and equipment. Almost 90% of the MOH primary care budget is used to pay staff salaries, leaving insufficient funding for operating costs, pharmaceuticals and other supplies, the purchase and maintenance of equipment.

Turkey's vision of creating a national primary health care network of health centers and health posts has not yet been fully realized. There is general agreement among stakeholders in Turkey that in principle primary care should be the basis of a well designed, integrated and performance-focused health system. A central feature of this proposed strategy is the concept of family medicine, and the training of general practitioners in this approach. Within this framework, preventive services and primary-level curative services for individuals will be provided by family physicians. An alternative strategy would be to strengthen primary care in Turkey by utilizing a multidisciplinary group practice model.

Recommendations:

• We recommend strengthening primary care in Turkey by transitioning public health centers to Primary Care Group Practices (PCGPs).

• Ideally these group practices should be staffed by certified Primary Care Physicians (PCPs), nurses trained in primary care and support personnel, with staffing levels dependent on the size of the population in the service area.

• As insurance coverage expands, PCGPs could be paid eventually through capitation-based contracts with insurers for panels of patients who have enrolled with the PCGP for primary care.

• These group practices will also need public grant or contract funding for the provision of community and school-based services, as well as outreach services for special populations.

• A Public Health Center should be established in each district with responsibility for health services planning as well as the coordination and oversight of PCGPs, including the investigation of patient complaints regarding PCGP services. The Public Health Centers will also be responsible for data collection and epidemiological surveillance; major community health programs, including large-scale health screening as well as the planning and coordination of immunization campaigns; environmental health programs; and the coordination of preparedness activities to ensure a timely provincial-level or national-level response to needs arising from natural disasters or other unexpected events. Upgrading these activities in Turkey will be necessary for meeting EU expectations.

• Public Health Center staff members should be employees of the MOH in order to provide job security and achieve continuity and sustainability of the public health infrastructure. The staff members should be physicians, nurses and other health personnel with special training in management, epidemiology, planning, crisis management, community health education and other relevant topics. This training should be provided through appropriate master's level programs and/or through certificate-level in-service training.

8. Strengthening Public Hospitals through Greater Autonomy

The majority of hospital services in Turkey are provided by the MOH, the SSK, universities and the private sector. The availability of hospital beds in Turkey (2.6 hospital beds per 1,000 people) is low in comparison to international norms. At the same time there is widespread concern that many hospitals in Turkey are run inefficiently with substantial waste of resources. Approximately one quarter (27%) of the hospitals in Turkey have less than 30 beds and an average occupancy rate of 17%. Privately-owned hospitals have grown significantly during the 1990s, with their capacity almost doubling between 1995 and 2000. They are heavily concentrated in the three largest cities, with over half in Istanbul where both general and specialty private hospitals have opened.

A number of strategies are under discussion for granting greater administrative and financial autonomy to public sector hospitals in efforts to improve the effectiveness, efficiency, accessibility and quality of hospital services. The majority of stakeholders seem in agreement that important hospital decisions should be made closer to the population served in order to improve flexibility and responsiveness to the specific needs of the diverse geographic areas and population groups within Turkey.

Recommendations:

• Demonstration projects should be undertaken in order to test several alternative models for granting public hospitals greater autonomy in order to help determine which models are most appropriate for possible replication throughout the country. (Appendix 6 provides a tool that may be useful in designing alternative hospital autonomy models.)

• Moving these issues forward will require the completion of an appropriate legal framework, the establishment and training of hospital governing boards, and the development of policies and procedures to ensure the orderly transition of authority to the appropriate hospitals.

• It is recommended that each hospital governing board include individuals with expertise in finance and budgeting, legal affairs and regulation, management, medicine and nursing. Board members should also include representatives from the local community.

• The success of the strategy will also heavily depend on ensuring additional training for individuals in hospital management positions (as discussed in this report), and optimally, training for new hospital board members regarding their responsibilities.

9. Human Resources

Concerns have been raised by numerous stakeholders regarding deficiencies in the medical education and certification systems in Turkey. Medical education programs prior to the sub-specialty level should be redesigned to focus on providing the knowledge, skills, values and attitudes central to the provision of primary care. The development of a national examination that would function as a certification mechanism for Primary Care Physicians is a key to assuring that medical graduates from all educational programs have attained sufficient knowledge and skills. At the same time, a strategy should be developed to facilitate PCP certification for general practitioners in office-based practices.

The need to strengthen the management of health care organizations in Turkey is a frequently voiced concern. University-based programs for health managers have been developed, including summer programs in health management education. The MOH has also granted scholarships for management education abroad to over 400 physicians who hold managerial positions. It will be important to expand all of these initiatives.

Recommendations:

• Medical education programs prior to the sub-specialty level must be redesigned to focus on providing the knowledge, skills, values and attitudes central to the provision of primary care.

• A national examination should be developed and implemented as a certification mechanism for Primary Care Physicians (PCPs). Opportunities to obtain certification through this examination should be open not only to new medical graduates from the family practice oriented programs, but also to other physicians who are interested in seeking primary care certification. Incentives for pursuing certification could be provided through approved payment rate differentials for services provided by certified PCPs compared to those that are not certified.

• A strategy should also be developed to facilitate PCP certification for general practitioners in office-based practices. One approach could be the development of primary care training modules that would parallel the topics covered by the newly developed medical education programs. These modules could be organized and delivered by the Turkish Medical Association, possibly in collaboration with the MOH and the universities. These modules should be designed in order to help prepare general practitioners for taking the PCP certification exam, perhaps in multiple stages if the exam could be organized in multiple parts by topic area.

• Nursing education programs should be strengthened by including more opportunities for practice experience and more content related to primary care. Policy makers should consider how to officially recognize the different capabilities of nursing graduates from the varied program levels, as well as how to effect changes in the nurse practice act in order to allow the nursing profession to assume greater responsibility in the management of patient care.

• It is important to further expand the initiatives already undertaken by the MOH and some universities to strengthen the health management and leadership training of senior and mid-level health services managers, as well as to further strengthen the university-based degree programs in health services management.

• There is a need for better health care human resources planning at the national and provincial levels. Greater coordination is required among the State Planning Organization, the Council of Higher Education, the MOH and the universities. One strategy could be the formation of a new council for health care human resources planning with representation from these organizations as well as the appropriate professional associations.

10. Pharmaceuticals

Pharmaceuticals and the pharmaceutical industry are factors both in the provision of health services and in the EU accession. They are also vital in the Transformation in Health Program, which stresses primary healthcare, universal access, private health insurance and the role of the government. Understanding the features of the pharmaceutical industry can suggest policies and incentives to achieve the key goals in the transformation. Pharmaceuticals represent a large and complex industry in Turkey. One hundred and thirty-four (134) pharmaceutical

companies provided 3,316 products in 6,549 preparations in 2002. Turkey's goals of universal access, greater reliance on primary care and on the private sector suggest a prominent role for a National Drug Policy (NDP).

Recommendations:

• We recommend the development of a National Drug Policy, led by the National Institution of Medicine. The NDP would establish priorities and coordinate efforts to enhance access to – and the quality and rational use of – pharmaceutical products. To realize this potential, the NDP that is developed will require the government's support, preferably by act of the legislature. The NDP would integrate policies, regulation, access and financing for pharmaceutical products.

• The National Drug Policy will have integrated components that address pharmaceutical product manufacturing, distribution, financing and use. Consequently, the process for developing the National Drug Policy must include the main stakeholders in the pharmaceutical sector to define objectives, set priorities, develop strategies and build commitment.

• Identification of essential medicines under General Health Insurance – the selection criteria should be based on the national morbidity pattern, levels of scientific evidence and cost-effectiveness.

• Affordability of essential medicines – including the impact of pricing policies, taxes and tariffs, procurement for multi-source and single-source products that enhance access to essential medicines. Pharmaceutical products not on the essential medicines list would be addressed through the broader EU harmonization process that acknowledges individual country pricing approaches.

• Financing options – pharmaceutical products are a substantial percentage of health expenditures in Turkey, consequently, the amount of funds and mechanisms for broad access under general health insurance will be critical for essential medicines. Specific elements to be addressed include targeting priority diseases, procurement and logistics that increase efficiency, encouraging prescription drug coverage in public and private health insurance, and limited use of patient cost-sharing. A high priority is to identify the role in the Basic Benefit Package for essential medicines that are determined under the National Drug Policy. An additional priority is to reduce delays for payment of pharmaceuticals.

• Public-private supply systems – addressing procurement and supply chain logistics for raw and for finished pharmaceutical products to assure availability without excessive inventory costs, diversion or stock-outs.

• Drug regulation – a National Drug Institute, as the drug regulatory authority, oversees scientific review, pre-marketing certification, post-marketing review, pharmaco-vigilance, marketing and advertising. In addition, it inspects all manufacturing facilities for quality assurance and enforcement, including Good Manufacturing Practices, testing and certification of the bio-equivalence of generic products.

• Post-marketing pharmaco-vigilance, as practiced in the EU, will require an adjustment of funding and staffing of the Hygiene Institute Center's post-marketing monitoring of pharmaceutical products.

• Rational pharmacotherapy – the NDP should identify a multidisciplinary body to coordinate medicine use policies, identify clinical guidelines for undergraduate and continuing medical education, and stress patient information and education on pharmaceutical products. In addition, it will establish the clinical criteria for selecting those drugs identified as essential medicines.

11. Medical Devices

The medical device industry continues to experience growth – but the growth is mainly from imports. It is a fragmented industry that would benefit from standardization, quality control, regulation and value-based purchasing decisions. The size, complexity and separate dossier required for devices suggests the need for a separate oversight unit to focus regulatory attention and expedite the time for decisions.

Currently equipment may be purchased without reference to preferred standards, training for use, maintenance contracts or budgets to meet supply requirements. Each of these is essential to manage purchasing, calibration schedules and inventory. For major capital equipment, technical selection criteria should be developed by an unbiased evaluation agency as part of a thorough technology assessment.

Recommendations:

• The fragmented medical devices industry requires a single point of authority for standardization, quality control, and regulation. *Transformation in Health* has identified an Institution of Medical Devices that could be organized to perform these functions.

• Timely decisions are required; consequently, appropriate incentives and expectations must be established for the administration to create a culture of accountability.

• Evidence-based decisions will require rigorous, unbiased technology assessments – these should be encouraged, but preferably using professionals from non-governmental, non-profit organizations such as universities and/or foundations. To encourage the use of such assessments, regulations and purchasing processes should require their consideration whenever they are available.

• Performing and interpreting technology assessments will require additional training for the public and private sector professionals who must make decisions based on these assessments.

• The Institution of Medical Devices' identification of evidence based technical selection criteria would provide guidance to administrators and physicians who must make purchasing decisions and support efficient use of limited capital funds.

• To assure appropriate access without duplication or excess capacity a state Certificate of Need (CON) process should be developed to enhance the optimal use of diagnostic and curative equipment.

• Group purchasing arrangements can be used to obtain better prices. To the extent that it is feasible, opportunities to combine purchases and their negotiations should be pursued.

12. A Framework for Monitoring and Improving Health Care Quality

There is currently a lack of systems to monitor and promote quality of health care. These safeguards are even more necessary when health systems undergo fundamental change and become more market oriented.

Recommendations:

• Creating or strengthening mandatory licensing systems, as well as voluntary certification and accreditation systems are important parts of a strategy to improve quality and accountability of health services. These systems should monitor the qualifications and performance of hospitals, physicians, and other providers in both the public and private sectors.

• Licensure and periodic re-licensure of health professionals and facilities should be the responsibility of an appropriate public sector authority and should be mandatory in order to ensure the minimum standards necessary for protecting public health and safety.

• The certification of health professionals who have met certain predetermined qualifications should be the responsibility of private health professional associations. Certification should be voluntary, but should be encouraged by establishing payment rate differentials after a phase-in period.

• An accreditation process should be established which formally assesses and recognizes public and private hospitals that have met applicable predetermined and published standards. We recommend that a similar process be established for Primary Care Group Practices.

• We suggest that an Accreditation Council be established with oversight authority for the accreditation process in health. Turkey could begin with "facilitated accreditation" – a process that emphasizes capacity building and technical support for quality improvement both prior to and during the accreditation process. Until this Council is established and functional, the MOH should coordinate accreditation activities; an independent department for quality activities should be established within the existing MOH structure.

13. Information Systems

The *Transformation in Health Program* identified the main functional requirements of the preferred health information system. The critical challenges for the public and private sectors are to provide strategic, continuing capital support and disseminate the results of promising pilot projects. For the public sector specifically, support for standards will be vital to progress in information

technology. For the private sector, new ventures and market research can present the government with the necessary options. There currently is no single point of coordination and direction for a Health Information Infrastructure. An independent, non-profit organization will need to be established to guide this field. Currently data that are identified and collected by the different units of the health sector do not form a comprehensive information system for management, clinical care or epidemiology. In particular, individual health registrations do not reside in a single data base.

Recommendations:

• Establish an independent, non-governmental, not-for-profit *Health Information Institute* as Turkey's standard setting organization. This Health Information Institute (HII) will include membership and participation by each of the main IT stakeholders to provide a critical base for this community of practitioners. The HII's primary functions would be to set standards and disseminate health technology and related findings and decisions.

• Establish an information infrastructure to support the proposed health care reform, particularly regarding payments, transfers and data elements required for payments. A functioning information system with standards for sharing and communication will be essential for implementation of the General Health Insurance, Fundamental goals for the IT are to achieve health expenditure control, to support efficient management of medical materiel, and financing mechanisms proposed under this project.

• In the public sector we recommend dedicated funding for information infrastructure, including equipment, personnel, training, maintenance, legislation and replacement. These are particularly needed for healthcare financing functions and institutions.

• We also recommend close coordination between government agencies and the Health Information Institute (HII) to assess rapidly the lessons learned, and accomplishments from their initiatives. This process is intended to reduce delays in making decisions, reduce redundant work, and to disseminate useful tools as soon as they have demonstrated their value.

14. The Legal Framework Necessary to Support Health Reform

Legislative changes are necessary for health reform to successfully move forward in Turkey. New legal arrangements should be prepared conforming to the needs of the health sector transition process. These laws should describe a broad framework, with actual implementation described by separate regulations. One of the principal goals of the new legal arrangements should be to create synergy between public and private resources. In order to avoid the fragmentation that currently exists in the health sector, the preparation and implementation of all legal matters should be coordinated by a steering committee at the level of the Prime Minister.

In this context, new laws should be prepared to cover the following:

- The creation of a General Health Insurance framework and the combination of existing public insurance systems under this framework;
- The roles of public and private hospitals;
- Primary health care services;
- Health management;
- The duties and responsibilities of health personnel;
- Public health; and
- Legal changes to encourage private sector investment.

Each of these areas, and specific recommendations for legislation, are described in Section 5.14 of the report.

CHAPTER 1

INTRODUCTION

1. INTRODUCTION

1.1 A Public-Private Vision for a Reformed Health Care System in Turkey

59th Government Program presented to the Parliament on 18 March 2003 identified the government's leading goals for the health sector. These priorities include expediting accession negotiations for European Union membership, providing services and their administration locally, developing information technology and communications, developing a health sector based on primary care and family physicians, establishing a system of general health insurance, and privatization of services. The Government Program contains following statements on the subject:

"Determined to privatize the Public Sector Enterprises, our Government will decide on policies and take necessary measures towards speeding [the] privatization process and [its] implementation. The necessary … standards will be introduced in … law and administration."

"The fundamental objective of privatization is to create the necessary condition for the better functioning of the free market in the economy and to enable efficiency and productivity… the economic role of the public sector in a market economy is to create the necessary regulatory and control mechanisms for better functioning of the market …"

"The first step of the Health Transformation Programme has been taken by integrating the State Hospitals, Insurance Hospitals and Institution Hospitals and opening them to the use of all citizens … After this point, primary health services will be carried out by family practitioners, our hospitals will be autonomous in … administration and finance, the Ministry of Health will be reconstructed to undertake a planner and inspector role. A general health insurance system covering the population … will be realized…."

The alternative ways to achieve these goals and details of the separation of public and private sector functions are still being defined – particularly for the larger issue of privatization. Privatization may range from the transfer of ownership and management of publicly owned assets or businesses to the private sector to lesser forms of commercialization, in which governments have a contractual relationship with the private sector for the provision of specific services. (Forde

and Malley, 1992) The specific features of the public and private sector roles will differ by the responsibilities that are unique to the government and by components of the health sector, e.g., facilities or insurance.

In principle, a public-private partnership in the health sector may produce more resources and greater efficiency than either one alone could achieve. However, *the hallmark of partnerships is cooperation – not competition* (Linder 2000), so the details of the implementation are as critical as the idea itself. For privatization to create private sector interest, it should present an opportunity for growth with a competitive return-on-investment. As the opportunity for an economic return attracts the private sector and motivates efficiency, it is also a reminder to government that deliberate policies must be implemented to balance social ends with efficiency. Privatization of health sector facilities are planned to place the government in the roles of insurer/financer and regulator rather than medical service provider. In principle this could liberate government funds for alternative uses, perhaps even reallocation in the health budget; however, doing so will require reliable mechanisms to assure all citizens access to at least a minimum benefit package.

Deliberations over the features of a general health insurance system that guarantees a basic benefit package for all of Turkey's citizens stimulated a debate on possible roles for private health insurance in such a system. Though the details of the private insurance market are developing, a current view is that the private insurer's role will be to provide supplementary insurance, which will vary according to consumer preferences (see Appendix 7: Framework for Public-Private Partnerships). Given the relative youth of the private health insurance market, the public sector's immediate tasks of establishing transparency, objectivity and an appropriate balance of incentives and consequences in the marketplace are vital for broad acceptance and sustainable growths.

For a durable public-private partnership, there are three critical commitments for both parties: (1) focus on the long term, (2) commitment and consistency across time and government administrations, and (3) commitment and consistency across economic cycles.

1.2 Key Issues

European Union accession activities have committed Turkey to economic reform, including privatization of state-owned entities. The Program of the 59th

Government surpasses this with a goal of Transformation of Health. Taken together, these pose a number of immediate challenges for the Turkish health sector:

• Defining the Basic Benefit Package for which the government is responsible;

• Establishing a referral system based on primary care and family physicians;

• Decentralizing the healthcare system;

• Harmonizing the public and private sector roles;

• Contracting for payments between the Provincial Health Directorates and health care providers;

• Converting state hospitals to "Healthcare Enterprises" that are managed autonomously;

• Funding, staffing and developing a regulatory system and infrastructure to license, review rates, monitor and enforce insurance laws and regulations, accredit facilities;

• Reducing a relatively high infant mortality rate;

• Developing a national drug policy

• Assuring access of all citizens to essential medicines;

• Implementing policies to stimulate the domestic pharmaceutical industry;

• Building on the pilot projects in medical informatics and healthcare information technology to define standards in data, communications protocols, security and medical terminology, procedures, products and devices;

• Training and certifying a generation of professional healthcare managers;

• Modifying personnel practices that do not support performance-based reviews and the subsequent actions;

• Implementing technology assessments, value-based purchasing, and evidence-based practice in the health sector;

• Providing incentives for cost-consciousness in all decisions-makers; and

• Establishing an initiative for rational pharmacotherapy training and drug utilization review.

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(1) For additional information see, "Economic Reform Activities as part of the EU Accession: Privatization of state-owned entities" http://europa.eu.int/scadplus/leg/en/lvb/e40111a.htm.

CHAPTER 2

BACKGROUND

2. BACKGROUND

2.1 Historical Antecedents

The period from 1920 to 1940 witnessed the enactment of several laws related to the health sector in Turkey, including: Forensic Medicine (1920, Law No: 38), Bacteriology and Chemistry Laboratories (1927, Law No: 992), Pharmaceuticals and Medical Goods (1928, Law No: 1962), Medical Practice and Its Branches (1928, Law No: 1219), General Hygiene (1930, Law No: 1593), Ministry of Health and Social Aid Organization and Their Staff (1936, Law No: 3017), Law about Radiology, Radium and Electrotherapy and other Physiotherapy Organizations (1937, Law No: 3153).

Major progress in the provision of health services was observed in 1960s, including the 1961 "Basic Health Law" or "Socialization of Health Care Services Delivery" (Law No: 224) and the "Population Planning" law (Law No: 554). The main aim of the 1961 Basic Health Law was to socialize health services. It was during these years that General Health Insurance, which would be discussed for years to come, was first mentioned. A draft law for general health insurance was prepared in 1967 but was never handed over to the cabinet. In the second five year plan, in 1969, General Health Insurance was again foreseen. In 1971 a draft General Health Insurance Law was presented to the Parliament, but was rejected. In 1974 it was re-presented to the Parliament but was not debated.

Turkey's 1982 constitution embodies the right of citizens to social security as well as the State's responsibility to realize this right (Amendment 60). The constitution also calls for the establishment of general health insurance (Amendment 58). The Turkish Parliament passed the Health Services Principles Law in 1987. However, the implementation of this law has not yet occurred. The 1982 Constitution contains parallel regulations to the 1961 constitution, whose 60th amendment lays out a universal right to social security. The 58th amendment of the 1982 Constitution states that "general health insurance could be established".

In 1990, a master plan for the health sector was prepared by State Planning Organization (SPO), leading to the first and second National Health Congresses in 1992 and 1993, which launched the national health reform process. National health policy was identified; and the Green Card was made available for low-income individuals who were not covered by the social security.

From a legislative point of view, the health reform program in the 1990s consisted of the following main headings: Health Financing Reform; Hospital and Health Enterprises Reform; Family Physician and Primary Care Reform;

Organization and Management Reform; Human Resources Reform; and Health Information Systems. Three major draft laws (Health Financing Institution Law, Hospitals and Health Enterprises Law, Primary Care and Family Physician Services Law) were submitted to Parliament. These draft laws were prepared by the MOH with contributions from interested parties, including: the MOF, the SPO, Treasury, and the Ministry of Labor and Social Security (MOLSS).

In general, the objectives of health care reform in the 1990s years were to:

- Improve the health status of the whole population by covering the entire population under social health insurance.
- Promote equity in health services,
- Emphasize preventive services, health promotion and primary curative care,
- Promote efficiency in service provision,
- Separate health service purchasers and providers,
- Establish competition among service providers,
- Promote the appropriate use of technology,
- Strengthen multi-sectoral collaboration for health services,
- Collect effective, timely, and accurate information to improve information-based decision making,
- Promote appropriate management of human resources,
- Delegate decision-making authority to individual service units.

After Turkey's general election in 2002, the Government prepared an "Urgent Action Plan". This plan explicitly calls for a social security system that covers the entire population, and confirms that the State has the obligation to provide basic health services to all citizens. As part of the implementation of the urgent action plan, the Ministry of Health launched the *Health Transformation Project* (HTP). The main principles of the urgent action plan and the HTP are as follows:

- Revision of Turkey's Code of Patient Rights in accordance with international standards,
- A transformation of health information systems enabling a computer-based national monitoring system,
- Establishing an efficient general health care insurance system to cover all citizens,

• Strengthening of the actuarial structure and financial status of the public and social security insurance programs, including the Social Insurance Institution (SSK), Pension Fund for Government Employees (ES), and Bag-Kur (Social Insurance Agency for Merchants, Artisans and Self- Employed).

• Providing incentives and encouragement for private health and life insurance companies,

• The Ministry of Health as the central planner and regulator for the health system, with a variety of public and private health care providers,

• Separation of retirement and health insurance within the existing social security programs,

• Establishment of an information system with a unique number ascribed to all Turkish citizens and used to track health insurance coverage and healthcare utilization,

• Establishment of a national quality and accreditation institution to develop systems for the measurement of health outcomes and indicators for best practices,

• Establishment of an independent "National Institution of Medicine", responsible for facilitating and supporting regulations concerning the authorization, production, and marketing of medicines and the management of research and development activities,

• Similarly, the establishment of an independent "National Institution of Medical Devices".

2.2 Economic and Demographic Trends

2.2.1 The Turkish Economy

Efforts for stability in the Turkish economy have not been very durable because of many large number of minor and major economic crisis. The Turkish economy is slowing rebounding due to the implemented economic program, after the financial crisis of 2001, and all economic indicators and expectations have undergone a perceivable improvement. With the acceleration of structural transformation process, a new era of important achievements towards economic stability has begun as of 2002. While one-digit inflation figures have been realized, the economy has shown a fast growth for two consecutive years. Turkish economy has now the opportunity for a stronger growth as of 2004.

Table 1. Comparative Economic Indicators, 2003

	Turkey	France	Greece	Russia	Egypt
GNP (US$ bn)	238.0	1,748.0	173.0	433.5	82.4
Growth (GDP, %)	5.8	0.5	4.2	7.3	3.1
GNP (US$ at PPP)	6,690	27,460	19,920	8,920	3,940
Consumer Price Inflation (%)	25.3	2.2	3.4	13.6	4.5
Unemployment Rate (%)	10.5	9.7	9.5	8.5	9.9

Source: World Bank, OECD, Egypt Central Bank

The share of agriculture in GNP has been declining steadily since 1960 and is around 15% today. On the other hand, the share of industry and services is increasing, as in developing countries. The shares of sectors in the GNP as of 2003 are as follows: Agriculture 12.4%, industry 29.3% and service sector 58.3% (Turkey-European Union Pre-Accession Economic Program, 2003).

Regional distribution of GNP shows that Marmara Region (38% of GNP) is dominant. The figures for other regions are as follows: Aegean Region (16.8%), Central Anatolia Region (16%), Mediterranean Region (11.7%), Black Sea Region (9.1%), Southeastern Anatolia Region (5.1%) and Eastern Anatolia Region (3.3%) (SIS, 2000).

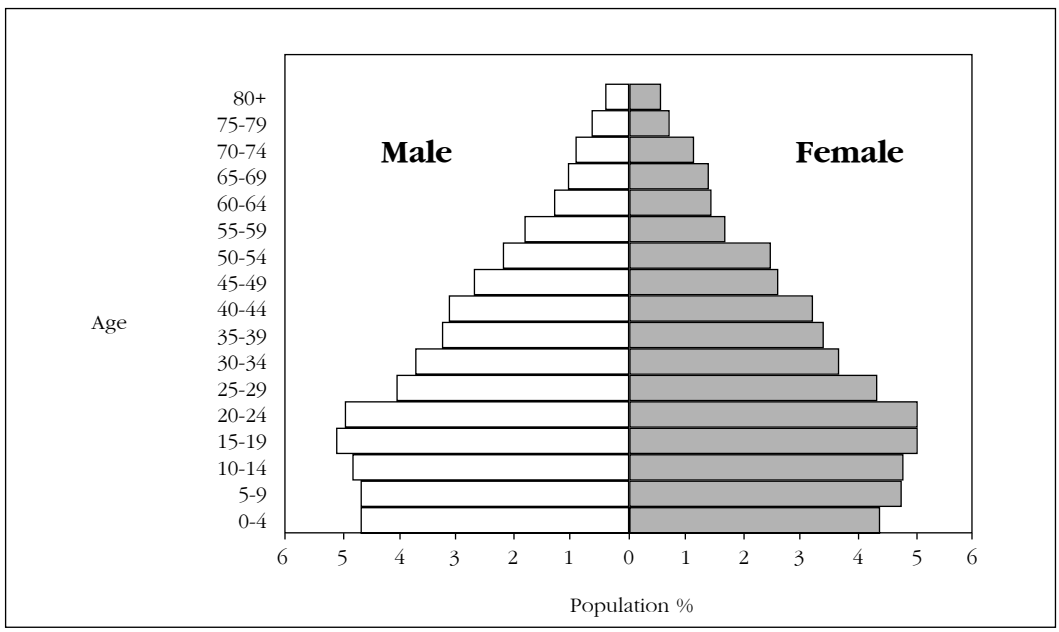
2.2.2 Demographic Structure

Turkey's population was recorded to be 67.8 million by the 2000 census – one of the 20 most populous countries in the world. But the growth rate of the population has slowed down in Turkey and has come closer to those of the developed countries. While the population growth rate was 1.49 % in 2001, it is foreseen that the net renewal rate will fall to 1% and in the long run the population will barely reproduce itself (Turkey's Demographic Window of Opportunity, 1999, TUSIAD Report). The United Nations Development Program (UNDP) projects that the population will reach 80 million by the year 2015.

As a result of the increase in the share of the productive population (15-64 age group) in the total population, Turkey will face the demographic conjuncture known as the "window of opportunity". The "window of opportunity", which can be described as a phase of the demographic transition process whereby the steady increase in the labor force is sustained while there is a fall in the population growth rate, presents Turkey with the possibility to accelerate its economic development.

Turkey has a population pyramid typical of countries that have recently experienced a sharp demographic transition (Figure 1). This transition is still occurring. Turkey's Total Fertility Rate (TFR) was recorded to be 2.23 births per woman (Demographic and Health Survey, 2003), higher than all countries in the European Union. 48.5% of the population is currently between the ages of 20 and 54. If Turkey makes serious adjustments on retirement funds, social security system and public sector benefit programs in the next 10 to 15 years during the transition period where the dependency ratio will not increase, the constraints likely to be encountered due to the increasing of old age cohort, will be relieved.

Figure 1. Population Pyramid in Turkey, 2003



Source: Turkey Demographic and Health Survey, 2003.

CHAPTER 3

KEY ISSUES IN THE TURKISH HEALTH CARE SYSTEM

3. KEY ISSUES IN THE TURKISH HEALTH CARE SYSTEM

3.1 Low Levels of Financing

Turkey's levels of expenditures – both as a percentage of GNP and as an absolute level – are well below countries in the European Union (EU) and the Organization for Economic Cooperation and Development (OECD). Data from Turkey's National Health Accounts (NHA) Study, 2000, Preliminary Results Report have been released in October 2003 and provide additional insights (Table 2). The NHA study measures Turkey's Gross National Product (GNP) at $3,002 per capita in 1999 and $2,935 per capita in 2000. Total health expenditures were $187 per capita in 1999 and $202 per capita in 2000 – 6.8% and 6.9% of GNP, respectively.

By way of comparison, the OECD measures Turkey's 2001 GNP per capita at $3,000, and health expenditures at $150 per capita – 5.0% of GNP (see Table 21 in Appendix 1). Public health expenditures account for 71% of this amount, and private expenditures for 29%. The Turkey NHA study found that public expenditures were 62.9% and 64.3% of total health expenditures in 1999 and 2000, respectively. The World Bank (2003) provides slightly different estimates of per capita healthcare spending – 9,207,615 billion TL in 2001 – or $112 – with 83% from public sources. The OECD estimate is based on international reports, while the World Bank data were collected in-country.

While they differ in terms of details, these sources are consistent in showing that Turkey's health expenditures – measured to be between $112 and $202 per person – are inadequate and far below countries that are socially and economically comparable. Health financing trends in Turkey are increasing, however. The *European Observatory* report on Turkey's health care system (Savaş, Karahan and Saka, 2002) shows that health spending has steadily increased as a percentage of GNP, from 3.5% in 1980.

Public health expenditures are predominantly incurred by the Ministry of Finance, the Ministry of Health, and the social security system – including ES, SSK and Bag-Kur. Other sources of public health spending include the General Directorate of Coastal Health Services, Universities, Social Solidarity Fund, other Ministries and agencies, local governments, and state enterprises. MOH expenditures have been 0.65%-0.86% of GNP for the time period 1996-2002. The MOH budget was equal to just 2.2% of the national budget in 2000, and was 2.4% of the national budget in 2003. Even including money collected by hospital revolving funds, the MOH budget was equal to just 28.6% of total public health

spending in 2001. For SSK and ES, deficit financing is a concern – according to 2002 data from the Ministry of Labor and Social Security, the deficits of SSK, Bag-Kur and ES are $2.5 billion, $1.9 billion and $3.9 billion, respectively, for a total of $8.3 billion.

Table 2. Preliminary Results of National Health Accounts Study, 2003 (in $US)

Statistic	1999	2000
GNP ($ billions)	$183	$199
GNP per Capita	$3,002	$2,935
Total Health Expenditures	$12,409,000,000	$13,726,000,000
Total Health Expenditures / GNP (%)	6.8%	6.9%
Total Health Expenditures per Capita	$187	$202
Public Health Expenditures as % of Total	62.9%	64.3%
OOP as % of Total	27.8%	26.6%
Out of Pocket Health Expenditures per Capita	$52.1	$53.8
Drug Expenditures per Capita	$56.4	$63.7
OOP Drug Expenditures per Capita	$16.0	$16.1
OOP Drug Expenditures as % of Total Drug Expenditures	28.4%	25.3%
Health expenditures per insured person covered. by source:		
SSK	$94.0	$111.1
Bag-Kur	$126.6	$147.9
ES	$254.1	$289.8
Active Civil Servants	$202.5	$210.5
Green Card	$55.9	$56.0
Private Insurance	$1,879.2	$2,118.0
Instituonal average	$129.8	$147.2
Out of Pocket (full population)	$52.1	$53.9
Average (instutional + OOP)	**$181.9**	**$201.1**
Pharmaceutical expenditures per insured person covered. by source:		
SSK	$26.3	$31.2
Bag-Kur	$70.6	$92.0
ES	$136.8	$165.0
Ministry of Finance (active civil servants)	$95.3	$97.4
Institutional Average	$82.3	$96.4
Out of Pocket	$16.0	$16.1
Overall average	**$98.3**	**$112.5**

Source: Preliminary Report of National Health Accounts Study, 2003.

3.2 The Composition of Health Expenditures – Allocative Efficiency

Turkey's health expenditures are characterized by a strong public role, with significant portions of health spending going to pay for salaries and pharmaceuticals. The 2000 National Health Accounts (NHA) study shows that 64.3% of health spending is incurred by the public sector. Separate analyses show that as much as 78% of government health expenditures go to pay for salaries (Johnson and Johnson Turkey, 2003). Our interview with the Pharmaceutical Manufacturers Association also suggested that significant health sector funds – an estimated 40% of combined public and private spending – go to pay for drugs. With these large amounts spent on salaries and pharmaceuticals, the Turkish health system has limited funding remaining to pay for preventive and essential curative care. The World Bank estimates that public expenditures on preventive care as a share of total expenditures on health decreased from 12.1% in 1996 to 6.3% in 2001 (World Bank, 2003).

There has also been a significant shift in public sector health funding away from the MOH and towards social security. MOH expenditures decreased from 50% of all public health spending in 1996 to 33% in 2002, while social security health spending increased from 38% to 53%. Revolving funds in public hospitals also increased their share of public health spending from 4.5% to 7.7% in this time period. Public spending has also increased proportionately in the eastern regions of Turkey. In Eastern Anatolia public health expenditures increased by more than 90% between 1996 and 1999, while in the Marmara region comparable increase was just 27% during this period.

3.3 Insurance Coverage

Turkey has three main social security schemes: (1) SSK, which covers private sector employees and blue-collar public sector employees; (2) Bag-Kur, the insurance scheme for self-employed people; and (3) ES, which covers retired civil servants. Between these three funds, approximately 89% of the population has some type of insurance coverage for health (Table 3). Additionally, a reported 15.3% of the population is covered by the Green Card system, but this system is also reported to double count beneficiaries, so its actual coverage remains in doubt. The World Bank (2003) estimates that 10 million Turks lack access to health care. The population employed within the

agricultural sector presents a particular worry for coverage since this group can not be covered completely by the SSK and Bag-Kur systems. Health insurance is not mandatory for Bag-Kur members.

Table 3. Coverage of the Turkish Health Care System, 2000

Program	Numbers Covered	% of Population Nüfus (%)
SSK	**34,141,000**	**51.5**
Compulsory	5,284,000	8.0
Voluntary	1,029,000	1.6
Pensioners	3,340,000	5.0
Dependents	24,488,000	36.9
Bag-Kur	**15,036,000**	**22.7**
Compulsory	2,173,000	3.3
Voluntary	1,140,000	1.7
Pensioners	1,277,000	1.9
Dependents	10,446,000	15.8
ES	**9,766,000**	**14.7**
Active workers*	2,164,000	3.3
Dependents*	6,305,000	9.5
Pensioners	1,297,000	2.0
Special Insurance Funds	**270,000**	**0.4**
Active workers	78,000	0.4
Pensioners	71,000	0.1
Dependents	121,000	0.2
Total Covered by Insurance	**59,213,000**	**89.3**
Green Card**	**10,125,706**	**15.3**
Insurance or Green Card	**69,338,706**	**104.6**

(*) Active government workers and their dependents are not directly covered by an insurance program; rather the Ministry of Finance reimburses the respective ministries for the health care costs of their

(**) These figures do not reflect the fact that more than 1 million Green Card recipients have recently been removed from the registers following efforts to verify eligibility and remove duplicate cards.

Sources: World Bank (2003); Savaş, Karahan and Saka (2002); NHA Study (2003).

3.3.1 Social Insurance Institution

Social Insurance Institution (SSK) provides pension and health services to private sector employees, blue-collar public sector employees, and agricultural workers – and to the dependants of all three groups. SSK has two separate components that cover health services (occupational injuries and diseases, other diseases and maternity) and retirement services (disability, old age, death). SSK had an estimated 34.1 million beneficiaries in 2000, including workers and their dependants (Table 3). Membership is highly concentrated – approximately 50 percent of beneficiaries are in the urbanized provinces of Ankara, Bursa, Istanbul, and Izmir.

SSK beneficiaries have access to a network of 136 hospitals, 209 health stations and 179 dispensaries, and may also be referred to MOH hospitals, university hospitals and occasionally to private facilities. Since 1991 the SSK has contracted with private hospitals and diagnostic centers for advanced diagnostic services and some surgical operations. Additionally, SSK reimburses the cost of drugs, eye glasses, and dental prostheses purchased in the private sector. Although preventive services have a place in the SSK law, to date the SSK has not utilized this tool. The SSK also itself produces generic drugs.

SSK health services are primarily funded by premiums, paid by employees and employers. The total SSK premium includes 14% of payroll paid by the employee and between 19.5% and 25.0% paid by the employer. Of these amounts, 5.0% of payroll from the employee's share goes to healthcare, as does 7.0% from the employer's share (1.0% of which is earmarked for maternity care). Additionally, within the SSK health system there is a 20% co-payment for outpatient drugs, reduced to 10% for retired beneficiaries. Also, since two years ago there is a co-payment, indexed on minimum wage, for prostheses. According to Ministry of Labor statistics, the SSK ran surpluses in 1996, 1997, and 1998 after two years of deficit financing. In 2000 SSK spent approximately $111 per person per year in health care expenditures, additional to members' out-of-pocket payments (NHA Study, 2003).

3.3.2 Bag-Kur

Bag-Kur (Social Insurance Agency of Merchants, Artisans and the Self-Employed) covers the self-employed and self-employed agricultural workers. In

principle, it covers approximately 15.0 million individuals, or 22.7% of the population. Bag-Kur was uniquely a pension fund for these groups until 1988, when it added health insurance, beginning in pilot provinces. The health insurance program now covers the whole country, but participation rates are low. Of Bag-Kur's 15.0 million members, only an estimated 3.3 million are active health insurance beneficiaries.

Members' health insurance contributions are calculated as 12% of the average "notional income" of insured individuals, separate from the 20% that covers pensions and other benefits. The notional income level is calculated by applying an index determined by the Ministry of Finance that incorporates wage and price inflation. Bag-Kur does not directly provide health services, but contracts with other providers in the public and private sectors. Reimbursement levels vary by type of provider. Drug purchases generally require a 20% co-payment from active members and a 10% co-payment from retired members. Bag-Kur health expenditures per member in 2000 were $148 on average, separate from members' out-of-pocket payments (NHA Study, 2003).

3.3.3 Pension Fund for Government Employees

Pension Fund for Government Employees (ES) combines a pension fund, health insurance, and other benefits. It is managed by the Ministry of Finance. ES health benefits are not based on a health-specific premium. They are financed as part of ES general funding, which consists solely of retirement contributions, which derive from employee contributions – 16% of salary – and contributions from the Government as an employer – 20% of salary. The plan also receives an additional subsidy from Government general revenues.

ES is not an insurance program. Until the General Health Insurance program is in place, the Ministry of Finance reimburses the respective ministries for the health care costs of their employees and employees' dependents. ES covers inpatient and outpatient health services for retired government employees with benefits, against a 10% drug and prostheses co-payment. Hospital accommodation may be based on an individual's grade within the civil service. Like Bag-Kur, ES does not operate health facilities, but contracts with public and private institutions. ES spends twice the level of Bag-Kur and three times that of SSK in terms of per capita health expenditures. Its annual health expenditures per beneficiary are $254 for retired beneficiaries and $202 for active civil servants (Table 2).

3.3.4 The Green Card Program

Since 1992, the Green Card program has provided a targeting mechanism for hospital health services for the poor. Currently, legal arrangements for coverage of outpatient health care services are completed. In principle, Green Card holders are entitled to comprehensive free healthcare benefits. In 2002, there were an estimated 13 million Green Card beneficiaries, covering approximately 18% of the population. For this population, the program spent $56 per beneficiary for inpatient services. Total expenditures for the program have regularly exceeded revenues, with the deficit financed from Government general revenues.

3.3.5 Private Health Insurance

Private health insurance has strong potential in Turkey but currently is limited to about one percent of the population. Private health insurance was permitted in Turkey starting in the 1990s. There are now 36 companies, which covered 704,545 lives at the end of 2003, increased from just 25,000 in 1991. Sixty percent of beneficiaries are in the group (employer) insurance market and 40% in the individual market. In addition, private insurance companies offer policies that supplement public health insurance with specific benefits, including dental, ambulatory check-ups, and glasses.

The private insurance representatives with whom we met expressed an interest in specific parts of the healthcare market in Turkey – focusing on insurance that would be supplementary to public insurance including benefits such as single bed rooms and covering balance paying.

The expansion of private health insurance in Turkey depends critically on the reinsurance market. Only three reinsurance companies are active in Turkey; some local insurance companies have separate reinsurance arrangements deals with international investors. The potential expansion of private insurance is also limited by problems with data-coding and billing systems. All claims are audited, imposing a time-consuming task on the health insurance companies.

Currently, the average premium cost for private insurance in Turkey is approximately $1,000 per person for comprehensive policies covering hospital care. Policies that only cover outpatient services cost approximately $700 to $800. Policies commonly impose exclusions for mental health conditions, and HIV/AIDS

is considered uninsurable. There are waiting periods in most policies for specific conditions such as hernias. The fact that SSK members must pay two premiums if they want to have private insurance was a commonly stated problem during our meetings in Turkey. These individuals typically prefer private insurance because it provides access to higher quality healthcare, but they cannot opt out of the mandatory SSK premium.

3.4 Cost-Sharing

As described above, all of the health insurance programs active in Turkey include some type of patient contribution, or cost-sharing, with the exception of the Green Card Program. The MOF, MOH, and TMA set the fee levels for all health facilities. For example, SSK patients pay a 20% co-payment for outpatient services and no co-payment for inpatient services. Private insurance policies vary, but typically include a 20% co-payment for outpatient and maternity services and for drugs, with no copayment for inpatient services.

MOH hospitals are allowed to operate revolving funds that use these funds to pay for hospital expenditures. 536 MOH hospitals – 73.7% of the total, accounting for 96% of MOH hospital beds – operate revolving funds. There are also 43 revolving funds active in university hospitals. The funds are only used in MOH and university hospitals. The Ministry of Finance recovers a "tax" of 15% on these revolving funds, somewhat comparable to the 18% VAT tax that private hospitals pay on their revenues. However, the use of the funds is not subject to spending restrictions by category, providing a flexible means for hospitals to meet operating expenses.

3.5 Organizational Structure and Management of the Delivery System

3.5.1 Primary Care and Preventive Services – The Current Situation

The MOH is the most important provider of primary care and essentially the only supplier of preventive health services. An extensive network of both primary and secondary care facilities was established throughout the country as a result of the Law on the Nationalization of Health Care Delivery, passed by the Grand National Assembly in 1961. The law provides for rural health posts at the village level to serve an average of 2,000-2,500 individuals. Each post is to be supervised

by a health center, and currently is to be staffed by a nurse midwife whose responsibilities are to include primary health care, family planning services, attending deliveries, and making monthly visits to designated households.

The 1961 law also provides for three types of public health centers. Rural health centers are expected to serve a population of 5,000-10,000 with eight staff members, including a physician, nurse, and health officer, as well as two midwives and support staff. District health centers are expected to serve a population of 10,000-30,000 and should be staffed by a team of approximately 16 health professions and five support staff. Provincial health centers are expected to serve 30,000-50,000 individuals with 22 health professionals and six support staff. The main functions of health centers are the prevention and treatment of communicable diseases, immunization; maternal and child health services, family planning; public health education; environmental health; diagnosis and treatment of cases appropriate for the primary level of care; and the collection of health-related statistical data. It is important to note that health centers and health posts are the only settings with a responsibility to provide preventive care, health promotion and community-based health services (Savaş, Karahan and Saka, 2002).

In order to implement this model, the MOH increased the number of primary care facilities to approximately 11,735 health posts and 5,740 health centers – a substantial increase over the approximate 8,460 health posts and 2,900 health centers established through the mid-1980s (Ministry of Health 2002). This relatively rapid expansion, however, resulted in available funding not being able to fully cover the costs of staffing and operations. The funding policies originally envisioned – including a tax-based system supplemented by income-related contributions from patients – were not implemented for economic and political reasons. Many physicians have been trained to become specialists rather than general practitioners, and stakeholders have noted serious shortcomings in the numbers and quality of nurses and midwives (Savaş, Karahan and Saka, 2002). (Please see Section 3.6, Human Resources, for further discussion of these issues.)

MOH statistics indicate that three fourths of all village health posts did not have a midwife and 13% of health centers lacked physicians in 2000 (MOH, General Directorate of Primary Health Care, Annual Statistics, 2002). About 1,887 health posts and 270 health centers have been closed due to lack of staff and equipment (World Bank, 2003). In addition, the rapid urbanization since the law (no. 224)

was passed was not anticipated, and as a result, primary health care infrastructure is relatively weak in urban areas (Savaş, Karahan and Saka, 2002).

Table 4. Health Centers and Health Posts Unattended by Doctors and Midwifes, Turkey, 2002

Region	Number of Health Centers without Doctors	% of all health centers	number of village health posts without midwifes	% of health posts	% of births unattended by health staff
Marmara	97	11	891	62	1.5
Agean	129	13	814	55	5.6
Mediterranean	78	9	808	70	3.2
Central Anatolia	151	14	1353	80	3.7
Black Sea	130	13	2326	77	3.9
Eastern Anatolia	116	20	1660	90	18.6
Southeastern Anatolia	84	20	984	90	20.3
Turkey	785	13	8836	75	5.8

Source: MOH, General directorate of Primary Health Care, Annual Statistics, 2002.

Although the nationalization law (no. 224) called for integrated health services, the MOH also operates a number of vertical programs for maternal and child care and for critical preventive services. These programs provide funding for specialized health centers, including 280 maternal and child health centers and 272 tuberculosis control dispensaries. These facilities offer training for health personnel from other primary care centers, as well as directly providing preventive and curative health services themselves. The SSK also operates a limited primary care network of 209 health stations and 179 dispensaries, most of which are located in industrial areas with a high concentration of their beneficiaries.

Almost 90% of the MOH General Directorate of Primary Health Care budget is used to pay staff salaries, leaving insufficient funding for operating costs, pharmaceuticals and other supplies, the purchase and maintenance of equipment, or for providing a means of transportation so that health care staff can visit rural areas and the health posts assigned to them for supervision (World Bank 2003). The services provided by health centers and health posts, including essential drugs, used to be free of charge; since 2002, however, official fees have been charged which are assigned to the centers' revolving funds.

The inadequacies of health centers and health posts have resulted in the utilization of other providers as the point of entry to the health care system (first contact health care). In urban areas MOH hospital outpatient departments are used extensively for first contacts with the health care system, while many SSK beneficiaries use its hospital polyclinics for first contact care. Growth in the number of university hospitals over the past two decades has also resulted in heavy use of their outpatient departments for first contact care.

Private outpatient services in Turkey are provided in multiple settings, including: by private physicians who work on a full time basis in private practice (an estimated 15% of all physicians); by public sector physicians, an estimated 60% of whom treat private patients on a part-time basis – usually after 4 p.m. in public facilities; through private policlinics and medical centers; through private services provided in public facilities; and by occupational physicians in private companies with 50 or more employees. The private specialist practices seem to be an important point of initial contact with the health care system for wealthier and university-educated people and those living in western Turkey (Savaş, Karahan ve Saka, 2002).

Despite the recent increases in public health financing in the eastern portions of Turkey, rural parts of the country remain heavily disadvantaged with regard to available public health personnel and operational facilities. In addition, due to harsher working conditions, the staff turnover is estimated to be at least 35% per year, particularly in Eastern and Southeastern Anatolia (World Bank 2003). Private health care providers are also less available than in more urbanized areas.

As previously discussed, health indicators related to the availability and adequacy of primary care – including infant mortality, under-five mortality, maternal mortality, and immunizations – are low in Turkey. As would be anticipated given the state of the public health infrastructure, these health indicators are worse in rural areas and the eastern part of Turkey in general.

3.5.2 Strategies for Strengthening Primary Care: The Current Debate

For all the reasons cited in the previous section, Turkey's vision of creating a national primary health care network of health centers and health posts has not been fully realized. How best to strengthen primary care, including how to achieve an effective referral chain appropriately linking primary, specialist and hospital care, has been discussed and debated for well over a decade. There appears to be general agreement among stakeholders in Turkey that in principle primary care should be the basis of a well designed, integrated and performance-focused health system. It has been difficult, however, to arrive at a consensus regarding how such a system should be developed and implemented.

Currently, the most widely discussed reorganization of primary care involves for rural areas restructuring the village health posts (each staffed by a nurse midwife), health centers, public health laboratories and the clinics of vertical programs (such as family planning and maternal and child health services) into a more integrated system with coordination provided at the district level. Referral systems would then be established with specialists and hospitals that have contracts with provincial health directorates (World Health Organization 1996; World Bank 2003; Ministry of Health 2003). It is recognized that in cities, where the health clinic infrastructure is likely to be insufficient, it will be necessary to rely on private physician practices and private health centers in order to build primary care networks (Ministry of Health 2003).

A central feature of this proposed strategy is the concept of family medicine, and the training of general practitioners in this approach (World Bank 2003). Within this framework, preventive services and primary-level curative services for individuals will be provided by family physicians who will be self-employed but under conditions regulated by the health centers (World Health Organization 1996). Each family physician will be responsible for a panel of registered patients. Individuals will select their own primary care physicians. Those insured individuals who choose to bypass the primary care level and seek care directly from specialists or hospital outpatient departments without a referral may have higher co-payments or deductibles (Ministry of Health 2003).

The family physician model, however, has been controversial. The Turkish Medical Association has interpreted this strategy as promoting solo, office-based

physicians who are likely to focus only on curative services, and who will be difficult to integrate into a unified primary health care network. This approach, they believe, will be detrimental for preventive services and community outreach, as well as for a multidisciplinary team approach to primary care, regular recording keeping for patients, and establishing necessary priorities for planning health services on a provincial basis. They argue that individual physician practices will each need to be furnished and equipped, leading to both duplication in medical equipment and higher overall expenditures. Further, they believe that paying these independent physicians on a contractual basis, rather than as salaried government employees, will lead to decreased job security and social rights, as well as poorer working conditions since cross-coverage is less likely to be unavailable.

3.5.3 Hospital Services: The Current Situation

The majority of hospital services in Turkey are provided by the MOH, the SSK, universities and the private sector. The MOH has 61% of the country's 1,226 hospitals, 44% of beds, and 44% of hospital-based physicians. Nineteen per cent of hospitals, with approximately 7% of beds, are privately-owned and staffed by 7% of Turkey's hospital-based physicians. Finally, university hospitals account for just 3% of total hospitals and 16% of beds, but have 31% of the physicians in the country (and 40% of all specialists).

The availability of hospital beds in Turkey – 2.6 hospital beds per 1,000 population – is quite low in comparison to international norms (Table 22 in Appendix 1). At the same time there is widespread concern that many hospitals in Turkey are run inefficiently with substantial waste of resources. One study, for example, analyzed the efficiency with which general hospitals in Turkey utilize inputs such as hospital beds, physicians, nurses, allied health staff, and revolving funds expenditures (when available) to produce services such as the volume of outpatient visits, number of inpatient admissions, and the number of surgical procedures (Ersoy et al, 1998). The study concluded that only 54 of the 573 general hospitals included in the study were operating efficiently; inefficient hospitals on average used twice as many beds, 30% more generalists and 50% more specialists than their more efficient counterparts.

Table 5. Distribution of Hospitals and Physicians by Provider Type, 2000

Provider	Hospitals	Beds	Doctors		
			GPs	Specialists	Total
MOH Hospitals	744	69,089	12,790	8,788	21,578
SSK Hospitals	118	27.245	4,865	2,531	7,396
University Hospitals	42	23,838	7,204	7,791	14,995
Minstry of Defense	42	15,900		Not available	
Other public hospitals	10	1,491	80	275	355
Municipal Hospitals	9	1,130	182	40	222
Foundation Hospitals	18	1,112	434	40	474
Private Hospitals	234	10,074	3,217	259	3,476
Minority and Foreign	9	976	118	25	143
Total	**1,226**	**150,855**	**29,085**	**19,554**	**48,639**

Source: World Bank (2003).

One factor often cited as contributing to public hospital inefficiency and failure to meet the needs of local communities is the large number of very small hospitals with low occupancy rates. Approximately one quarter (27%) of the hospitals in Turkey have less than 30 beds and an average occupancy rate of 17% according to the most recent data available (Ministry of Health, 2000). These hospitals are too small to benefit from economies of scale. Many are in rural areas where the shortage of manpower and their outdated or ill-functioning equipment lead community residents to by-pass them in favor of larger, more distant facilities (World Bank, 2003).

Privately-owned hospitals have grown significantly during the 1990s, with their capacity almost doubling between 1995 and 2000. They are heavily concentrated in the three largest cities, with over half in Istanbul where both general and specialty private hospitals have opened. Until the mid-1990s, subsidized, targeted Government credits facilitated private hospital expansion (World Bank, 2003).

Some of private hospital services are reimbursed on a package basis (rather than on actual costs) by public health insurance programs. Since July 2003, private health services are covered by the ES for active and retired civil servants. There are concerns that the quality of health services in private facilities varies a great deal, with many stakeholders perceiving the need for strengthening the regulatory framework and/or establishing a system for accreditation (see Section 3.10.1, The Need for Licensing, Certification and Accreditation Systems).

3.5.4 Strategies Under Discussion for Strengthening the Hospital Sector

Strategies for meeting the urgent health care needs of rural residents with greater resource efficiency are under discussion in Turkey. Demonstration projects linking remote facilities with urban medical centers through telemedicine have been suggested (Sozen et al 2003). The significant investments that Turkey has made in telecommunications infrastructure (at least 50% of which is digital) strengthens the possible applications of telemedicine, although subsidized public funding will likely be necessary to sustain the approach.

Another strategy for increasing the viability of small rural hospitals might be to create a new, more sustainable type of facility. For example, in the U.S. since the passage of enabling legislation in 1997, more than 40% of rural hospitals have converted to Critical Access Facilities. Under this designation, small hospitals with less than 15 acute care beds (or less than 25 total beds) can provide limited inpatient care (defined as an annual average inpatient stay of 96 hours or less), outpatient services and 24-hour emergency treatment. Formal transport arrangements are developed with urban or rural referral facilities. Incentives for conversion to this status include more favorable, cost-based reimbursement from public insurers. If a similar strategy were used in Turkey, these should not be considered "full service" small hospitals. They should only have the functions of emergency departments, "observation beds," and transport arrangements to larger facilities. In particular, they should not include a full complement of hospital administrative staff (such as full-time accountants and inventory officers) who could not be used efficiently due to the small scale of operations.

It has long been recognized that hospital managers in the public sector have many constraints and few incentives to strive for more efficiency or greater responsiveness to patients in the communities they serve. For MOH hospitals, most decisions that affect operations are made at the central level; the budgeting system, for example, largely ignores the actual amount of services provided by any specific hospital (World Bank, 2003), making it difficult to respond to changes in local

community needs. The situation is similar with respect to decision-making for SSK hospitals which largely takes place at the central ministry level. In addition, there are concerns that substantial duplication of services exist in those areas where both MOH and SSK hospitals provide services, resulting in relatively low occupancy levels for both types of facilities (World Bank 2003).

A number of strategies are under discussion for granting greater administrative and financial autonomy to public sector hospitals in efforts to improve the effectiveness, efficiency, accessibility and quality of hospital services. The majority of stakeholders seem in agreement that important hospital decisions should be made closer to the population served in order to improve flexibility and responsiveness to the specific needs of the diverse geographic areas and population groups within Turkey.

One type of strategy being debated includes various approaches to decentralization (also referred to as deconcentration) in which some amount of decision-making authority is shifted to lower levels of the ministry hierarchies. Also under debate is devolution in which responsibilities and authorities for the provision of health services are shifted from the central ministry level to either the provincial health authorities (see Erdoğan 2003) or to newly-created quasi-public entities that have some degree of autonomy from the MOH or SSK (World Bank 2003). At the individual hospital level, degree of autonomy refers to the number and types of decisions over which senior managers and/or local hospital governing boards have authority. (See Chapter 4 for the example of Poland regarding the potential benefits that greater autonomy for public hospitals can provide)

3.6 Human Resources

3.6.1 Human Resources in Health Care – The Current Situation

Despite considerable increases in training in the health care sector during the past two decades, Turkey has relatively few health personnel compared with other countries. Currently there are 1.3 physicians per 1,000 population – the lowest ratio among European countries (see Appendix 1, Table 29). The number of nurses in Turkey is particularly low; there are about the same numbers of nurses and midwives as physicians – a skill mix of health personnel that is considered inappropriate for the delivery of cost effective health care (Savaş, Karahan ve Saka, 2002, p. 81).

Until recently, an additional skill mix concern was the disproportionate numbers of medical specialists in comparison to general practitioners (GPs). Before 1985, there were twice as many specialists as GPs. However, policies implemented during the late 1980s and early 1990s increased the number of medical schools and health vocational schools, as well as the numbers of students accepted to these schools. At the same time, the numbers of medical school graduates accepted for specialization did not increase at the same rate, resulting in the numbers of GPs surpassing the numbers of specialists during the 1990s. Currently there is a shortage of GP posts in large cities and other attractive areas, with the numbers of medical graduates outnumbering the available positions (Savaş, Karahan ve Saka, 2002, p 82). At the same time, shortages persist in the poorer provinces, many rural areas and some inner cities.

One of the basic assumptions of Turkish health personnel policy during the 1970s and 1980s was that substantial increases in the supply of physicians, nurses and midwives would solve the problem of personnel shortages as well as their geographic misdistribution. The amount of progress, however, in balancing the geographic distribution of health personnel has been disappointing. For example, the population to physician ratios vary on average from 413 persons per physician in the ten wealthiest provinces to 1,823 persons per physician in the ten poorest provinces (World Bank 2003, pp. 18-19).

Problems cited as contributing to the challenges of recruiting physicians and other health personnel to rural areas include long working hours, frequently being on call, inadequate financial rewards, professional isolation, and the unavailability of adequate equipment. A number of attempts have been made to address the shortages of physicians and other personnel in less developed areas, including compulsory service for physicians, first introduced in the early 1980s. This policy, however, has often resulted in job dissatisfaction and problems in service quality (World Bank 2003). New medical graduates have generally been deployed to positions in primary level services, but often to regions unfamiliar to them with inadequate supervision and support.

One major reason cited for ineffective human resources planning in the health sector in Turkey is that traditionally the major agency with planning authority has been the State Planning Organization. The MOH, which has held the major responsibility for delivering care, has been restricted to only allocating positions and deploying staff to the health facilities (Savaş, Karahan and Saka, 2002:82). By

the late 1990s the MOH had become more actively involved in health resources planning (MOH 1997:4-55) Most recently the MOH has undertaken EU harmonization activities that respond to outdated legislation on the responsibilities and authority of health personnel, as well as the absence of sufficient job descriptions. Efforts have included work on the Law on Health Professions' Associations and Federations, and regulations on specialty training..

3.6.2 Medical Education and Certification – Current Challenges

Concerns have been raised by numerous stakeholders regarding deficiencies in the medical education and certification systems in Turkey. The curriculum for medical education is governed by the Supreme Council of Higher Education which determines the compulsory topics and the minimum duration for training. There is considerable variability, however, in how these requirements are implemented. A recent report by the European Observatory on Health Care Systems, for example, concludes that the quality of training institutions in Turkey varies substantially. Basic training in many of the medical schools is considered inadequate because: the curriculum content is not sufficient in relation to the skills required for effective care; practical training opportunities are scarce; there is an emphasis on producing a high volume of graduates with too little attention to the quality of their performance; and there is a shortage of well qualified medical school faculty (Savaş, Karahan and Saka, 2002, pp. 82-83).

Of equal concern is the lack of a system of certification for the health professions. Although there are entrance exams, there is no board examination or other certification necessary to practice after graduation from medical school, or after completing specialist training. Every medical school graduate is considered qualified to practice as a GP. Those who seek access to specialty training must take a national examination under the auspices of the Council of Higher Education which is administered twice a year. Medical graduates may take the exam as many times as they wish until a passing grade is achieved. Graduates passing the exam may receive specialty training in medical schools or teaching hospitals of the MOH, SSK and military. Among these institutions there is no common curriculum or training standards. There are also no requirements for continuing medical education, although MOH staff are provided with yearly in-service training and the Turkish Medical Association offers courses in occupational health and selected topics for GPs.

The universities, MOH and the Turkish Medical Association have all made a number of suggestions for improving the quality of medical education. These suggestions have included reforming the curriculum so that all new medical graduates have the competencies to function as health officers; knowledge regarding the most common conditions seen in ambulatory settings, disease prevention and public health concepts; as well as the ability to provide primary care at the level of a general practitioner. New graduates also should have sufficient administrative skills to manage primary care centers and lead multidisciplinary projects, as well as communication skills to increase public awareness of basic health issues.

In reports to the MOH in 1998 and 1999, the Ad Hoc Committee on Efficiency in Health Services and the First National Congress on Medical Education made a number of recommendations regarding curriculum changes, and recommended that basic medical knowledge be assessed by introducing national examinations and an accreditation process be developed for medical faculties (World Bank 2003). As part of its Transformation in Health Program, the MOH has proposed that a new educational program be developed in cooperation with the universities for the specialization of family physicians who will work in primary care (MOH 2003).

3.6.3 Improving Nursing Practice

There are three major categories of basic nursing education in Turkey. The first are the four-year high school based diploma programs that are accredited and run by the MOH. Approximately 90% of the nurses in Turkey are graduates of these schools that combine typical high school courses and nursing education. The second category of nursing education is based on the Bachelor of Science degree programs whose main purpose is to train nursing leaders. A third type of program is the university-based associate degree programs whose primary goal is to prepare staff nurses and ease the nursing shortage. Nurse midwives are nurses who receive additional training in nurse midwifery programs; graduates often serve in place of obstetricians/gynecologists in rural areas and sometimes in women's hospitals.

Many agree that nursing education has made considerable progress in the past decade, with growth in the university based nursing programs and considerable strengthening of the nursing curricula. Concerns are widespread, however, that nurses from many programs at all levels graduate with little practical experience. Recommendations have also been made to strengthen the curriculum in areas related to primary care (Aksayan and Cimete 2000; MOH 2003). Of equal concern is how to officially recognize the different capabilities of graduates from the varied program

levels, as well as how to effect changes in the nurse practice act in order to allow the nursing profession to assume greater responsibility for the management of patient care (Aksayan and Cimete 2000; World Bank 2003, pp. 08-9)

3.6.4 The Need to Strengthen Health Services Management

The need to strengthen the management of health care organizations in Turkey is a frequently voiced concern (MOH 1997; Savaş, Karahan ve Saka, 2002; World Bank 2003). Currently the majority of hospital and health services directors are physicians, who continue in clinical practice, and who lack professional training in management. Directors have traditionally been appointed on the basis of criteria such as clinical experience, length of service and political loyalties, with no attempts to determine their managerial effectiveness. Recruitment procedures for directors that proactively include management capabilities as an important criterion are clearly needed. Of equal importance are the development and implementation of programs to increase the management skills of senior and mid-level directors in hospitals and large health centers.

In recognition of these needs, the MOH defined strengthening the institutional capacity of the ministry through management training as one of its essential reform targets of the First Health Project launched in 1991. Among the responsibilities of the current health reform project coordination unit is developing health managers who will function as leaders in the management of change and who are trained in the concepts of cost-effectiveness analysis, efficiency and productivity analysis; as well as encouraging team work, human resources planning and management; and other contemporary health management skills.

To achieve these objectives, since 1997 the MOH in collaboration with the management faculties of various universities, has conducted an extensive program of management training for senior and middle level managers within the central and line departments of the MOH (Ate 2004). This effort includes an intensive four-week module with four courses, including strategic management, organizational change management, human resources management, and management information systems. Weekend seminars are also conducted for senior managers on topics such as contemporary management concepts, leadership, financial management, global trends in health management, crisis management, organizational change and development, team building, strategic management, building learning organizations, and individual skill development (Ate 2004).

In addition to these in-service programs, a number of university-based programs for health managers have been developed, including summer programs in health management education. Attendance by physicians is also increasing at the management seminars offered by the prestigious Turkish and Middle East Public Administration Institute (Ate, 2004). The MOH has also granted scholarships for management education abroad to over 400 physicians who hold managerial positions.

The School of Health was founded in 1936 and the functions of the organization were determined by Article 3959 of the Constitution. The services of the organization which were ceased in 1982, was reopened in 2003. Internal service trainings, conducting of researches and publishing activities under the scope of II. Health Project, were given to the responsibility of the School with its technical staff.

It will be important to expand all of these initiatives. In addition, it should be noted that the current laws do not permit the positions in provincial health directorates to be filled by individuals other than physicians. This precludes the appointment of non-physicians with substantial managerial training – a strategy that has also been strongly opposed by politically influential professional associations and unions (Ate, 2004).

3.7 Information Systems

Investments in statistical systems for surveillance and management have not achieved their promise or met the clinical and management needs of the health sector. The situation is intensified by the speed at which information systems become obsolete and additional funds are required simply to maintain the status quo. Therefore, establishing a functioning, useful health information system requires initial investments, continuing maintenance expenses and replacement costs. Achieving the *Transformation of Health* goals requires timely, accurate comprehensive data for clinical care, for managing billing and collections services, and for managing resources.

Existing pilot projects are promising places to start developing the infrastructure and standards for a nationwide Health Information System. However, there is no convergence to these numerous commendable efforts; therefore, action must be taken to develop a national organization to make objective assessments and disseminate recommendations for information systems and their components. Harmonization with EU standards and practice should develop as part of the EU accession procedure; however, Turkey may benefit additionally from being a member body (Turkish Standards Institution) in the International Organization for Standardization a non-governmental network of over 140 country national standards institutes.

3.7.1 The Need for Data

Data that are identified and collected by the different units of the health sector do not form a comprehensive information system for management, clinical care or epidemiology. In particular, individual health registrations do not reside in a single data base. Registration data generally remain at the level of the outpatient clinic card, lost or in files that are not readily accessed. Data are reported at the hospital level – not the population level. The current fragmented health care system results in each organization having to create its own information system to cope with the demands made on it – but this serves no one well.

Although the data that could be captured by hospital information systems would permit automation of accounting, billing, inventory, and material management, these are not in wide use and many opportunities are lost (Ministry of Health, 2003). Health sector data are not yet available and integrated for planning and decision-making. Transforming the health sector will be an information-intensive project, requiring comprehensive, timely, integrated, accurate and complete data of many kinds – clinical, administrative, and financial. Integrated information is vital to an effectively functioning health sector; making progress in this direction is critical to the other reform goals.

3.7.2 Need for Standardization

Many healthcare information systems applications currently remain at the level of registration information – requiring much work but realizing few of the efficiency, management or planning benefits of an information system. However, establishing standards is vital to realizing the potential gains from information technology in the health sector, and to creating a data base to analyze and manage health expenditures based on diagnoses and treatments. Standards exist, but no one standard exists. Standards are required for the capture, storage, sharing and transmission of information; in their absence data exists in isolation and is frequently inaccessible when needed. A general health insurance system in a decentralized health sector can only function on information systems that conform to shared standards. Consequently, numerous decisions must be made to resolve competing standards and coding practices.

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(2) See. http://www.iso.org/iso/en/aboutiso/introduction/index.html#fifteen.

Electronic exchange of clinical information and funds is fundamental to developing a functioning public-private, decentralized, primary care based health sector. There are numerous categories for which standards must be selected by technically proficient professionals. A representative sample includes (from Salih Güreş, TEPE Teknoloji, October 2003):

- Identifier Standards: Patient, providers, site-of-care, product and supply.

- Communication Standards: ASC X12N (payers and providers), UNIEDIFACT (administration, commerce and transport), ASTM Committee E31 (clinical data and devices), HL7 (a health industry standard), DICOM (digital images), IEEE(MIB) (point-of-care).

- Content and Structure Standards.

- Controlled Medical Terminologies: classification, nomenclature and case-mix.

- Quality Indicators.

- Health Minimum Data Sets.

As insurer and regulator for private insurance, the government requires standards for on-line and batch, financial exchanges. These functions will build on telecommunications and the other standards noted above, but will require specific processes by which enrollment, disenrollment, confirmation of current insurance status, claims submission, verification/validation, reconciliation and payment occur.

This brief summary of categories for which standards must be identified, and subsequently enforced, demonstrates the scope and complexity of the task. The financing and management of the transformed health sector will require these tools inside Turkey. The EU also has a vision of an Information Society with unfettered access, adopting a transparency directive but without imposing harmonization rules.

3.7.3 Infrastructure – Public and Private Roles

The authority of the ministries that work in the health sector, either directly or through an insurance fund to impose standards, is substantial but fragmented. To be effective, standards must apply and be used consistently across jurisdictions. A resolution is a standards-setting organization that builds on the expertise in government and in industry, that relies on the authority of the public sector to enforce those standards, and that encourages the private sector to invest in technologies and build businesses around them. A non-governmental, not-for-

profit Health Information Institute with membership from all stakeholders could provide a critical base for this community of practitioners. Its primary functions could be evidence-based standard setting, and dissemination.

3.7.4 Current Pilot Projects

The Health Expenditures Control Project of the General Directorate Retirement Fund is a project to develop an infrastructure that will be valid for all public institutions. Among its main goals are (1) achieving cost savings, (2) developing a standard structure for medical treatments, (3) applying European Union and World Health Organization standards, (4) reducing errors, (5) permitting inquiries and statistical analyses, and (6) tracking and controlling expenditures.

Other major pilot projects for claims processing and controlling health expenditures include:

Ministry of Finance General Directorate Retirement Fund

Coverage : Approximately 3.5 Million Public Service Retirees

Systems : Prescription Control System; Optical Prescription Control System; Healthcare Procedure Claims Control System

Ministry of Finance Public-Private Partnership with the Turkish Pharmacy Association

Coverage : Approximately 8.5 Million in Public Service (excluding Military)

Systems : Prescription Control System; Optical Prescription Control System

Ministry of Defense

Coverage : Approximately 2.5 Million Public Service People

Systems : Prescription Control System; Optical Prescription Control System; Healthcare Procedure Claims Control System

Bag-Kur

Coverage : Approximately 3.5 Million Privately owned companies

Systems : Prescription Control System; Optical Prescription Control System

(3) See. http://Europa.Eu.int/comm/internal_market/en/ecommerce/transp.htm.

The main goals of these systems are:

- Achieving cost savings,
- Developing a standard structure for medical treatments,
- Adopting European Union and World Health Organization standards,
- Reducing errors,
- Permitting inquiries and statistical analyses,
- Tracking and controlling expenditures.

Briefly, the focus of each system is as follows:

- Prescription Control System: 18,000 pharmacies throughout Turkey enter on-line prescription drug claims.
- Optical Prescription Control System: 3,000 opticians throughout Turkey enter on-line optical prescriptions for payment.
- Healthcare Procedure Claims Control System: allows healthcare institutions (Hospitals, Labs, and Clinics) to process claims online.

The major problem is that none of these systems is based on the same standard, such as a drug data base or a medical device data base - even diagnosis codes are different. This results in a substantial effort to create and maintain these individual info-structures and an overall loss of productivity. Government ministries could perform a vital role in providing and maintaining these services.

In February 2003 a working group was established to address the e-health concept; with the participation of representatives from the public and private sectors – including government, NGOs, and universities – to work on the e-health concept. Ten working groups were established on 15 topics (to address issues such as a unique patient number and, minimum code sets; of codes, etc). These groups finished their reports in April 2003. The resulting reports were converted into 15 e-health actions by the State Planning Organization and were published in the Official Newspaper on December 2003. In January 2004, they were also published by the Ministry of Health as the "Turkish Health Information Systems Action Plan". The next steps to developing the information infrastructure are to allocate resources and implement the project(s).

3.8 Provider Payment

Ministry of Health hospitals receive approximately 80% of their funding from the MOH in terms of transfers of government general revenues. Ministry of Health hospitals generally receive funding from the MOH as line-item disbursements. An additional 15% of MOH hospitals' funding is generated by direct payments intro revolving funds from individuals or third-party payers, including insurance companies. These funds are retained at the hospital level. Fees at MOH fees are set by a commission composed of MOH and Ministry of Finance representatives and are not necessarily related to the actual cost of services. The remaining 5% of MOH hospital funding comes from earmarked taxes on fuel, new car sales, cigarettes and alcohol. Revolving fund revenue is retained by the hospital generating the revenue (Savaş, Karahan and Saka, 2002).

SSK health facilities are primarily funded by social security premiums. Pension and health insurance contributions are identified separately but are combined into single accounting system. Additionally, non-members who use SSK facilities are subject to fees and members also pay co-payments for outpatient drugs as described above. The SSK currently allocates funds to hospitals through global and line-item budgets, but is considering a move to capitated payments for primary health care. Plans to eventually implement a modified system of Diagnostic-Related Payments (DRGs) are subject to current limitations in terms of the availability of systems to track patient diagnostic and payment information. However, ES and the Ministry of Finance have recently been paying private hospitals based on packaged services.

SSK also reimburses private and university facilities for care provided to its beneficiaries – these payments are often subject to considerable delays. There are reports that university hospitals have refused social security patients because of these delays. The prices charged by private hospitals are set in coordination with the Turkish Medical Association (TMA) and are reviewed by the TMA every six months.

Physicians' reimbursement varies by institution. Physicians working in MOH, University or SSK systems receive government salaries, with potential bonuses from revolving funds. Physicians in Eastern Turkey earn a salary differential resulting from government incentives to encourage doctors to practice in these areas. Private primary care physicians are also generally paid on a salaried basis. This type of practice allows them to charge patients on a fee-for-service (FFS) basis. Doctors working in private hospitals earn more than public sector doctors. In general, physicians' incomes have

declined substantially over the last 15 years in relative terms. In 2002, the annual salary of a full-time public sector general practitioner was approximately $3,600 after taxes, compared to $4,800 for a specialist. Many physicians supplement these amounts with additional private practice (Savaş, Karahan and Saka, 2002).

From international experience, options for provider payment methods can be summarized as follows:

Table 6. Provider Payment Mechanisms and Provider Behavior

Mechanisms	Retrospective/ Prospective/	Fixed/ Variable	Incentives for Provider Behavior		
			Prevention	Delivery	Cost Containment
Line item budget	Prospective	Fixed	+ / -	--	+++
Global budget	Prospective	Fixed	++	--	+++
Capitation (with competition)	Prospective	Variable	+++	--	+++
Per case (diagnostic related payment)	Either	Variable	--	++	++
Fee-for-service	Retrospective	Variable	--	+++	---

Source: Adapted from WHO (2000) and Jegers et al (2002)

3.9 Pharmaceuticals

Pharmaceuticals and the pharmaceutical industry are factors both in the provision of health services and in the EU accession. They are also vital in the *Transformation in Health* program, which stresses primary healthcare, universal access, private health insurance and the role of the government. Understanding the features of the pharmaceutical industry can suggest policies and incentives to achieve the key goals in the Transformation.

The vitality of the pharmaceutical industry is influenced by its relationships with other industries; it has been observed that the pharmaceutical industry has a substantial relationship with the chemical industry. While the relationship of the chemical industry to the pharmaceutical industry exceeds the scope of the current project, it does merit a separate detailed technical study to assess how this relationship may be influenced by changes in the pharmaceutical industry and in regulatory decisions.

In the 2002 and 2003 European Union Regular Reports on Turkey's Progress towards Accession, pharmaceuticals and intellectual property were areas specifically identified for alignment (EUCOM 2002, 2003) – insufficient data protection and technical barriers to trade in pharmaceuticals were noted such as "standardization, accreditation and conformity assessment." Turkey is proceeding with harmonization of health sector legislation, pharmaceutical marketing, data protection and accommodating relevant European Union directives in the health sector. The European Union agency with primary responsibility for pharmaceuticals is the European Agency for the Evaluation of Medicinal Products (EMEA), established 22 July 1993. A leading objective of the member states of the European Union is to establish a single market for the pharmaceutical industry. The single market would both enhance access to pharmaceuticals by citizens of Member States and increase the EU's attractiveness for Research and Development investments. To this end, both a legal structure protecting intellectual property and one specifying licensing procedures have been developed by the EU. Diversity in the member states' markets led to the Frankfurt Round Tables and discussions in which it was felt that staged market integrations were more feasible than either the status quo or full integration.

Further clarification of Member State's options is provided by Directive 2001/83/EC of The European Parliament on the Community code relating to medicinal products for human use (EU 2001): *"The provisions of this Directive shall not affect the powers of the Member States' authorities either as regards the setting of prices for medicinal products or their inclusion in the scope of national health insurance schemes, on the basis of health, economic and social conditions."*

The growing integration of the EU, the perceived decline in competitiveness of the European pharmaceutical industry, and matters of public health and access to medications led the European Commission to establish the High Level Group on Innovation and the Provision of Medicines (called the "G10").[4] The G10 examined the issues confronting the pharmaceutical industry in the EU from the perspective of innovative pharmaceuticals while also considering the differences in national and EU sector interests. The result was the G10's report in May 2002, "Recommendations for Action", making 14 recommendations over five broad areas: (1) benefits to patients, (2) developing a competitive European-based industry, (3) strengthening the EU science base, (4) medicines in an enlarged European Union, and (5) Member States learning from each other (details are provided in Appendix 3).[5]

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(4) For the membership see Annex B of http://pharmacos.eudra.org/F3/g10/docs/G10-Medicines.pdf.

(5) http://europa.eu.int/agencies/emea/index_en.htm. The details of technical harmonization for pharmaceutical products, the requisite dossiers and relevant legislation are readily available for detailed examination (EUROPA, the European Union's website is http://europa.eu.int/scadplus/leg/en/s06016.htm).

The G10 recommendations strive to encourage innovation in pharmaceuticals, a regulatory environment that rewards and protects innovation, transparency across markets, the development of a competitive generic market, and the achievement of Member States' public health objectives. While all 14 of the recommendations (and the detailed responses by the European Commission) are relevant for medication policies within Turkey, three are particularly meaningful.

Generic medications are a fundamental aspect of the G10 strategy for revitalizing the European pharmaceutical industry. The G10 encourage "*generic penetration in individual markets (including generic prescribing and dispensing*)". [Recommendation #4] This recommendation is consistent with the vision for affordable general health insurance but not with current practices. Generic products in Turkey offer a relatively small cost advantage and are less frequently used – specific initiatives will be required to change prescribing patterns and to change pricing policies to encourage more competitive generic pricing.

Nonprescription medicines, and moving qualified medicines from prescription to nonprescription status, are a cornerstone of the G10's public health recommendations (Recommendations #5 and #10). The recommendation that "there should be no restrictions on advertising of non-prescription medicines, which are not reimbursed, … [and] to produce a workable distinction between advertising and information that would allow patients actively seeking information to be able to do so" will require a specifically Turkish adaptation. Current nonprescription medicine practices in Turkey are restricted and quite clear – these recommendations will require decisions from the stakeholders in Turkey, but the positions in the EU have been explained above.

Finally, coordinated post-marketing surveillance [Recommendation #12] will require a health sector information system and revised policies and reporting practices. Systems of EU and international pharmaco-vigilance have been developed; this is a next step for Turkey.[6]

Under the Regional Programme on Quality Assurance, the Pan European Regulatory Forum (PERF I) was established in 1999 to support planning and harmonization of candidate states' legislation and relevant practices regarding pharmaceuticals. Specifically, the PERF "is designed to assist Competent Authorities in the Candidate Countries for accession to the European Union in Aligning their standards and practices with those obtaining in the European Union as part of the overall objective: to facilitate the implementation of the acquis communautaire in the area of pharmaceuticals in the participating Candidate Countries." PERF III, the

(6) Pan European Regulatory Forum (PERF). See http://perf.eudra.org/perf1/IndexF.htm

2003 or final stage, addressed six priority topics: Pharmacovigilance, Good Manufacturing Practice, Dossier Assessment, Veterinary topics, Acquis implementation, and Telematics.

Turkey has to fulfill her obligations concerning data exclusivity within the framework of both the TRIPS Agreement and the decisions (1/95 and 2/97) of the EU-Turkey Association Council, signed within the framework of Customs Union Agreement. The Turkish Government has declared during the EU-Turkey Customs Union Joint Committee meeting on October 2003 that the EU laws and regulations on data exclusivity will be adopted in 2004, and their implementation will begin before December 31, 2007.

A mechanism similar to the PERF would provide both a forum and technical assistance to achieve the requisite legislative and regulatory practices in the pharmaceuticals sector for Turkey's steps toward accession and full membership. Once a date has been established for accession talks, then a process like this could be initiated.

Pharmaceuticals represent a large and complex industry in Turkey. One hundred and thirty-four (134) pharmaceutical companies provided 3,316 products in 6,549 preparations in 2002. They were distributed through 434 registered wholesalers and approximately 21,000 pharmacies during 2002 (IEIS 2003). Based on ex-factory prices, Turkey's per-capita pharmaceutical consumption of $38 is among the lowest in Europe in 1999 (Table 7).[7] However, in 2002, drug expenditures per-capita increased 12.9% over the prior year to $US 63.7 (Table 2, above).

(7) Relevant recommendations will be noted in later sections of the report; detailed responses by the European Commission are available at http://europa.eu.int/eur-lex/en/com/cnc/2003/com2003_0383en01.pdf.

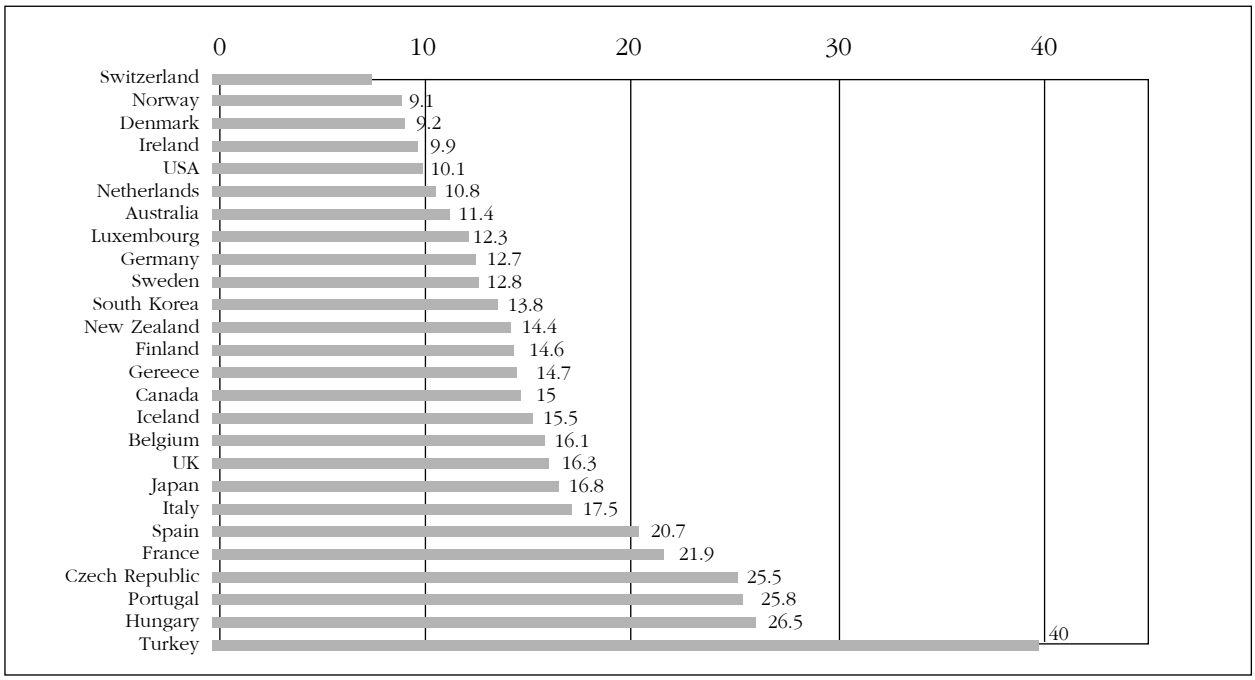
Table 7. Per-Capita and Total Consumption of Pharmaceutical Products, Turkey, 1998-1999

Country	Per Capita Consumption (US$)		Total Consumption (ex-factory prices, $ US million)	
	1998	**1999**	**1998**	**1999**
France	285	287	16,744	17,029
Belgium	252	269	2,547	2,756
Switzerland	250	270	1,822	1,938
Germany	225	227	18,511	18,597
UK	211	213	12,388	12,680
Austria	205	220	1,659	1,776
Portugal	203	212	2,009	2,128
Italy	189	196	10,821	11,266
Denmark	184	163	977	867
Norway	171	197	754	880
Spain	167	177	6,598	7,069
Ireland	158	171	586	651
Netherlands	144	159	2,268	2,525
Greece	134	144	1,424	1,524
Turkey	35	38	2,220	2,519

Sources: IMS Health Turkey, Consumption and Production of Pharmaceutical Products in Turkey: Reforming the Health Sector for Improved Access and Efficiency [Report No. 24358-TU. Volume 2] as Table 1, p. 160. World Bank, March 2003.

Despite lower per capita medication use, pharmaceutical expense remains a disproportionate share of total health expenditures in Turkey. Turkey is ranked 32nd in "Total Health Expenditures as a % of GNP" compared with other European countries (Table 21 in Appendix 1), yet it far exceeds other OECD nations in the proportion that drug expenses represent of general health expenditures (approximately 40%; see Figure 2). Consequently, achieving the government's health policy goals and assuring universal access to health services and pharmacotherapy will require adopting policies adapted to the key features of this sector.

Figure 2. Percent of Drug Expenses within Total Health Expenditures (OECD 1997-98)



Sources: Cited in Chapter 1 Our Health Policies Past to Present in Health Transformation Project (General Framework Text) as Chart 4, p. 15. TC Ministry of Health, 24th April 2003.

Assessing the state of the pharmaceutical industry, the Ministry of Health recently identified numerous outstanding issues to be addressed: licensing of drugs, their production, pricing, selling, exportation, introduction, control, rational use, activities of research-development, intellectual property rights, and the burden that the increase in drug expenses bring to the government budget and social security institutions. Individually these are too numerous to overcome; however, the issues may be approached collectively through a National Drug Policy (*Transformation in Health Program, 2003*).

3.9.1 The Need for a National Drug Policy

Many countries have found a national drug policy to be useful to achieve access, quality and rational use of pharmaceuticals. Sixty-six (66) countries had a national drug policy or had updated one within the previous ten years, and 41 others were developing a national drug policy or had one for more than ten years by 1999. As of 2003, there were national essential medicines lists in over 156 countries (Brundtland, 2002).

Turkey's goals of universal access, greater reliance on primary care and on the private sector suggest a prominent role for a National Drug Policy. Supporting this idea, the Health Transformation Project report (24 April 2003) noted that:

"[The] lack of … a … national drug policy poses distress in this field. When we take a look at the EU countries, while they are trying to practice and foresee protective policies in terms of their own sovereign structure as well as their economies, there are certain standards that … [have been] implemented." (p. 14)

A National Drug Policy provides a framework to coordinate and align the efforts of many different participants in the health sector. It provides direction and specifics to (*"prioritize the medium to long-range goals set by the government for the pharmaceutical sector, and identifies the main strategies for attaining them … it covers both the public and the private sectors, and involves all the main actors in the pharmaceutical field."*) (WHO, 2003)

For a comprehensive National Drug Policy to realize this potential, the process for creating it should permit an opportunity for all of the stakeholders to contribute and to develop support for the ultimate policy. Developing the details for goals for the pharmaceutical sector will permit the various branches of government and those in the private sector to determine their respective places as privatization and the *Transformation in Health Program* is implemented. This process for establishing a National Drug Policy is an expression of the Main Principles in the *Transformation in Health*: Human centrism, Sustainability, Continuous quality improvement, Participating, Reconcilement, Volunteerism, Division of Power, Decentralization and Competition in Service. The individual components and objectives of the National Drug Policy work together for accomplishments that build upon and reinforce each other overtime.

The main aspects of a comprehensive National Drug Policy as defined by the World Health Organization are listed in Appendix 4, with a brief discussion of each. The National Drug Policy that results from these actions will shift discussions from considerations of cost alone to evidence of demonstrated value for the alternative products.

Table 8. Exports and Imports in the Pharmaceutical Industry, Turkey, 1995-2000.

Years	Exports ($)			Imports ($)			Ratio of Exports to Imports (1)/(2) (%)
	Raw Materials	Finished Products	Total (1)	Raw Materials	Finished Products	Total (2)	
1995	47,701,704	46,662,237	94,363,941	565,785,587	163,780,000	729,565,587	12.9
1996	56,278,804	48,777,895	105,056,699	650,000,000	225,000,000	875,000,000	12.0
1997	38,754,528	58,891,348	97,645,876	667,728,360	314,225,111	981,953,471	9.9
1998	60,679,171	68,027,235	128,706,406	769,378,609	411,213,585	1,180,592,194	10.9
1999	66,942,382	61,516,940	128,459,322	784,631,891	552,347,188	1,336,979,079	9.6
2000	69,000,000	71,000,000	140,000,000	828,000,000	683,000,000	1,511,000,000	9.3

Source: Special Ad Hoc Committee Report (2001). Cited in Chapter 7 Consumption and Production of Pharmaceutical Products in Turkey: Reforming the Health Sector for Improved Access and Efficiency [Report No. 24358-TU. Volume 2] as Table 8, p. 164. World Bank, March 2003.

3.9.2 Pharmaceutical Capacity

In recent years, pharmaceutical production has relied increasingly on imports and less on domestic raw materials production. Although total exports grew 48% during the years 1995 to 2000, imports increased by 107% overall and by 317% in Finished Products. This shifted the balance of trade in this sector – with a relatively lower percentage of exports to imports in 2000 (9.3%) than in 1995 (12.9%) (Table 9).

Although raw materials accounted for 51% of total pharmaceutical imports in 2002, the Turkish pharmaceutical industry did export to more than 50 countries with finished products accounting for 51% of total export revenue in 2002. The Turkish pharmaceutical industry represents an opportunity for advancing the Turkish economy directly through a favorable balance of trade and indirectly through inducements for foreign capital as investments.

(8) *Source: IEIS, 26 September 2003.*

Table 9. Production of Raw Materials in the Pharmaceutical Industry, Turkey, 1995-2000

Years	Production (Tons)	% Change
1995	12,646	-
1996	11,083	-12.36
1997	8,860	-20.06
1998	7,076	-20.14
1999	5,552	-21.54
2000	4,980	-10.30

Source : IEIS, Cited in Chapter 7 Consumption and Production of Pharmaceutical Products in Turkey: Reforming the Health Sector for Improved Access and Efficiency [Report No. 24358-TU. Volume 2] as Table 6, p. 163. World Bank, March 2003.

The value of raw materials for pharmaceutical production became overwhelmingly weighted to imports by 1998 (Table 9 and Table 10).

Table 10. Value of Imported and Domestically Produced Raw Material, Turkey, 1998

Inputs	Quantity (kg)		Value (billion TL)	
	Domestic	Imported	Domestic	Imported
Active Materials	1,579,072	12,231,702	25,537	153,181
Auxiliary Materials	5,406,378	52,206,380	3,847	9,608
Packing materials	-	-	14,158	6,920

Source : Special Ad Hoc Committee Report (2001), Cited in Chapter 7 Consumption and Production of Pharmaceutical Products in Turkey: Reforming the Health Sector for Improved Access and Efficiency [Report No. 24358-TU. Volume 2] as Table 7, p. 163. World Bank, March 2003.

The number of private sector pharmaceutical products units increased during this period (Table 11); however, it did not reflect a growing industry.

Table 11. Production of Pharmaceutical Products, Turkey, 1995-2000

Years	Number of Units Produced	
	IEIS	Ad-hoc Committee
1995	810,669,000	975,146,000
1996	840,999,132	1,028,920,000
1997	885,341,459	1,092,988,000
1998	922,912,131	1,136,607,000
1999	1,005,420,472	-
2000	1,094,000,000	-

Sources: IEIS and Ad-hoc Committee Report, Cited in Chapter 7 Consumption and Production of Pharmaceutical Products in Turkey: Reforming the Health Sector for Improved Access and Efficiency [Report No. 24358-TU. Volume 2] as Table 5, p. 162. World Bank, March 2003.

From 1999 to 2000, the number of products manufactured increased in Germany (2.6%), Belgium (10.5%), France (11.3%), and Italy (26.9%). Similarly, the number of presentations manufactured increased in Germany (2.4%), Belgium (10.7%), France (5.7%), and Italy (4.1%). During this period of decline in raw materials production by the pharmaceutical industry, the number of products (-14.3%) and presentations manufactured by the Turkish pharmaceutical industry (-47.6%) also decreased (Table 12). The net result of these international trends has both economic and societal implications as Turkey becomes increasingly dependent on foreign imports to meet its needs for pharmaceutical products.

Table 12. Pharmaceutical Products Manufactured in Turkey and Selected Countries

	1999		2000	
	Number of Products	Number of Presentations	Number of Products	Number of Presentations
Germany	9,438	31,050	9,684	31,782
Belgium	4,830	5,736	5,337	6,349
France	3,640	7,500	4,050	7,925
Switzerland	8,000	25,000	8,000	25,000
Italy	4,158	8,668	5,278	9,025
Portugal	4,370	12,031	4,370	12,031
Pakistan	9,000	15,000	9,000	15,000
Thailand	8,835	16,715	8,835	16,175
Turkey	3,100	8,839	2,658	4,635

Source: Scrip Marketletter Chiffres-Clés (AGIM), IEIS Turkey, 2000, Cited in Chapter 7 Consumption and Production of Pharmaceutical Products in Turkey: Reforming the Health Sector for Improved Access and Efficiency [Report No. 24358-TU. Volume 2] as Table 4, p. 162. World Bank, March 2003.

Domestic pharmaceutical industry capability was enhanced by investments of $US 81.7 million in 2002. It included investments in Good Manufacturing Practices, Good Laboratory Practices, and other applications (Table 13). With EU membership under negotiation, the industry will need to determine how much and what types of investments will be appropriate to be competitive in the new, single market. The SSK and the Ministry of National Defence also maintain factories for pharmaceutical and medicinal products; however, the output is solely for their patients.

Table 13. Good Manufacturing Practices (GMP) Investments, Turkey, 2002 (million $ US)

Good Manufacturing Practices (GMP)	22.6
Good Laboratory Practices (GLP)	13.5
Capacity Extension	9.4
Other Investments	32.5
Production of Raw Materials	3.7
TOTAL	$USD 81.7

Source: IEIS, Turkish Pharmaceutical Industry Presentation, September 2003.

The domestic pharmaceutical industry is regulated by the Refik Saydam Central Institute of Hygiene in the Ministry of Health, which is responsible for enforcing good manufacturing standards (GMP) in the industry (European Conservatory 2001). Licensing, however, is under the Ministry of Health's General Directorate of Drug and Pharmaceuticals. There are 36 pharmaceutical factories in Turkey that are FDA GMP compliant. As part of a comprehensive regulatory function, the government has a Hygiene Institute Center to collect data on side-effects of pharmaceuticals. EU membership and G10 recommendations will increase the importance of this function.

3.9.3 Distribution

Although the Ministry of Health licenses both pharmacists and pharmacies, all pharmacy owners must also belong to the Chamber of Pharmacists in the city in which their pharmacy is located. Consequently, there is dual oversight for the quality of retail pharmacy services: by the Turkish Pharmacy Association and by the Ministry of Health. Pharmacies undergo at least two types of audits: one by the Ministry of Health for adherence to regulations; and another by the Turkish Pharmacists Association to determine (a) if the pharmacists are honoring the

contracts that they have signed, (b) how patients are treated, and (c) whether there has been diversion of product(s).

Health centers, operated as primary care sites throughout Turkey, are not permitted to dispense medications to their clients, nor are physicians permitted to dispense medications unless they are more than ten kilometers from the nearest pharmacy. Those clinics or physicians who qualify as a prescription dispenser based on distance to the nearest pharmacy must obtain a license from the Ministry of Health in order to do so. However, clinics and rural regions are understaffed by physicians (see Table 4), so this exception may not satisfy the need for access to prescription and over-the-counter pharmaceuticals in these areas. Rural areas may also have less access to prescription and over-the-counter medications due to the concentration of pharmacists in the three largest cities in Turkey.

3.9.4 Pricing

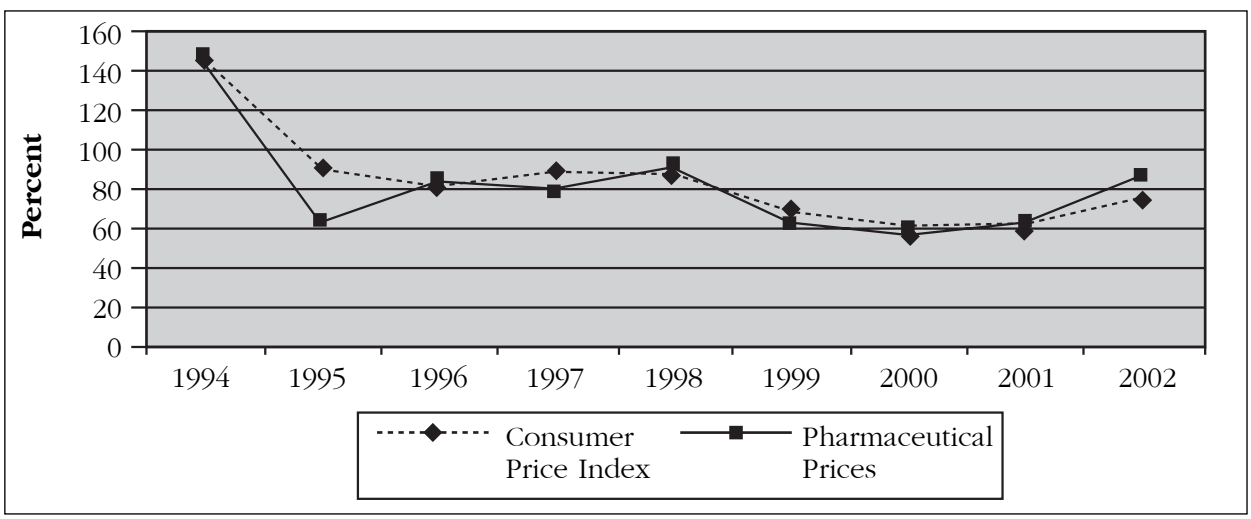
More recently a "Decree on the Pricing of Medicinal Products" (Decree Number 2004/6781) revised the government's payment practices for pharmaceuticals and set wholesaler and pharmacist profit shares. A Price Evaluation Committee, consisting representatives of the Ministry of Health, the State Planning Institute and the Undersecretariat for the Treasury, will recommend maximum prices for pharmaceutical prices to the Ministry of Health. The Ministry of Health will then establish a maximum retail price, although companies may request a price lower than this. The decree uses a reference pricing mechanism, based on ex-factory prices in five specific EU Member States. The lowest factory sale price amongst the five comparison countries will be used as the Turkish price. For generic products, 80% of the reference price determined for original product will be used as the reference price.

Under the new decree, a currency exchange rate change of 5% or more occurring over 30 days will lead to a re-estimate of product prices. Conversely, if there is a decrease in the product price in the reference countries, then the manufacturer must apply for a revised price, or face penalties. Biannually the Ministry of the Treasury will convene a Reimbursement Committee consisting of representation from the Ministry of Health, the Undersecretariat for State Planning Institute, Ministry of the Treasury, Social Securities Institution, Pension Fund and Bag-Kur. In addition to reimbursement, this Committee is also charged with considering the opinions of the non-governmental organizations in the sector. If the ex-factory price in the country the product is being imported from is lower than

the reference price for the generic product, the ex-factory price is used as the reference price.

At present, private insurance is too small a presence in the marketplace to exert negotiating power to modify prices. Under the procurement process prior to the Decree on the Pricing of Medicinal Products, purchases were made through a tender system in which wholesalers, not the companies, bid. Due to the pricing mechanism and incentives of a "cost plus" arrangement, there has been little variation in price. Cost based on this pricing tended to discourage the use of less expensive ingredients and appears to have depressed domestic raw materials production capability. Consequently, there has been less intense price competition from generic products than may exist under another payment structure. Although by law a pharmacist may make a substitution if the price of the substituted product is lower, the market of available generic medications consists mainly of branded generic products. Over the recent decade, pharmaceutical prices have generally been consistent with the changes in the Consumer Price Index (Figure 3).

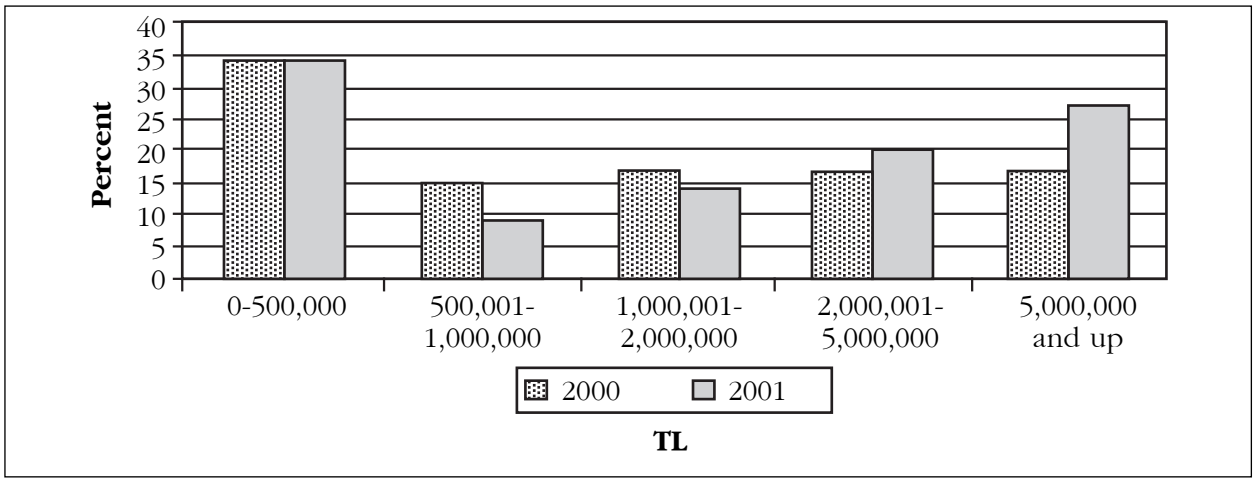
Figure 3. Yearly Average % Change in CPI and Pharmaceutical Prices, Turkey, 1994-2001



Source: SIS, various years; figures for 2002 for urban settlements only, Cited in Chapter 7 Consumption and Production of Pharmaceutical Products in Turkey: Reforming the Health Sector for Improved Access and Efficiency [Report No. 24358-TU. Volume 2] as Figure 2, p. 165. World Bank, March 2003.

These aggregate price increases do not reveal the skewed prices for the range of pharmaceutical products (Figure 4), with a U-shaped distribution that is bimodal for very low and for higher priced medications.

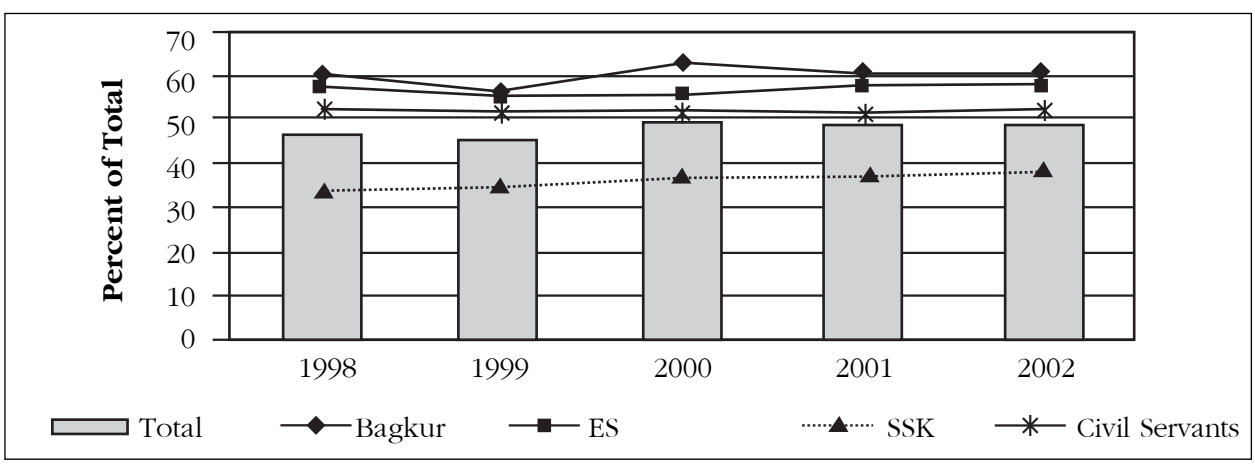
Figure 4. Distribution of Drugs According to Price Categories,Turkey, 2000-2001



Sources: SIS, various years; figures for 2002 for urban settlements only, Cited in Chapter 7 Consumption and Production of Pharmaceutical Products in Turkey: Reforming the Health Sector for Improved Access and Efficiency [Report No. 24358-TU. Volume 2] as Figure 3, p. 165. World Bank, March 2003.

The specific medications used, the specific insurance coverage a patient has, and the prices for the specific agents together will have a significant influence on the affordability and the implementation of the Basic Health Benefit, General Health Insurance and supplementary health insurance. Retail medication prices are highly skewed, with 63% costing less than $US 3.70 in May 2003. For those who obtain medications that are covered by one of the health insurance plans, these plans pay a similar, large proportion of their total medical expenditures on pharmaceuticals (Figure 5).

Figure 5. Percentage of Health Expenditures on Pharmaceuticals, (%), Turkey, 1998-2002



Source: IES, Cited in Chapter 7 Consumption and Production of Pharmaceutical Products in Turkey: Reforming the Health Sector for Improved Access and Efficiency [Report No. 24358-TU. Volume 2] as Figure 1, p. 159. World Bank, March 2003.

Out-of-pocket co-insurance is less for retirees (10%) than for active workers (20%) who have coverage under SSK, ES, or Bag-Kur. These arrangements are changing, to reduce expenses for the insurance fund. Beginning in 2002 Bag-Kur was only to be reimbursed for the price of the cheapest product for the approximately top 55 products in the market, regardless of what the prescription was written for. As of 2003, ES began to pay the arithmetic average of the price of products in the class for the dispensed prescription, but stopped implementation in March 2004 due to legal constraints.

These actions suggest the start of a more cost-conscious approach to pharmacy benefit management. Private health insurance typically has a 20% co-insurance for covered drugs, but it generally excludes: (1) some imported drugs, e.g. vitamins; (2) herbal products; (3) cosmetic drugs; and (4) drugs related to AIDS. Over time it is likely that a wider variety and greater sophistication of evidence-based and patient cost-sharing approaches to pharmacy and benefit policies will evolve.

3.9.5 Technology Assessment and Value Based Purchasing

The European Agency for the Evaluation of Medicinal Products does not require a formal Technology Assessment determining the Added Therapeutic Value for a pharmaceutical product. However, the rising pressure of health care costs and competing demands for resources both in the public and in the private sector have motivated numerous governments, insurers and health care providers elsewhere to use formal technology assessments in their purchasing decisions. As Turkey considers the opportunities and requirements for technology assessments of drugs, devices, procedures and services, the resources developed by other governments and organizations should prove useful (Appendix 5).

The proposed National Institution of Medicine could include the role of national technology assessment expert, performing technology assessments and disseminating the results. This initiative would be consistent with G10 Recommendation #7 and with practice trends. Cost-effectiveness analysis, pharmacoeconomic analyses and technology assessments can provide support for informed, evidence-based health policy, benefit design(s), and purchasing decisions. These tools and methodology for value based purchasing continue to be refined; consequently reports should be made available on a periodic basis from multiple credible sources. A particularly large challenge is to develop a cadre of professionals trained in these disciplines and to adapt the decision processes of government and private insurance to utilize this approach.

There are alternative national models for the scope of responsibilities of a national prescription drug regulatory body: in the United States, for example, the Food and Drug Administration (FDA) only considers the scientific evidence and does not perform cost-effectiveness calculations when considering a product for marketing.

3.9.6 Essential Medicines

Turkey has an essential drugs list, but currently it has no official significance nor does it guide prescribing or prescription drug use (European Conservatory, 2001). Attempts to influence generic prescription drug use have been generally unsuccessful (European Conservatory 2001) and brand name prescribing is common. However, an essential drug list can be a foundation for cost-effective health care for a nation's population. Its inclusion in a National Drug Policy can support Turkey's aims of efficiency, productivity and equity (Transformation in Health, 2003, pp. 26-27). As the WHO notes, no public sector or health insurance system can afford to supply or reimburse all medicines that are available on the market (WHO Essential Rx 2003).

Essential medicines are based on clinical evidence. This evidence is used to identify a small set of medications, and clinical guidelines for their use, that represents the most efficient use of a nation's limited resources. In addition to the list of medicines, for which there would generally exist generic versions, there can also be a complementary list of less affordable medications. The specific essential drugs will vary from nation to nation just as nations vary in their pattern of illnesses.

The multidisciplinary committee or agency that identifies the essential medicines, the process by which its committee members are selected and the criteria by which these committee members make specific drug list determinations should be based on objective, transparent criteria. In the 1990s, a list of essential medicines for the Green Card Scheme was prepared with the cooperation of the Ministry of Health and the Ministry of Finance. In the future, this activity should be part of the national drug policy and its implementation rather than a separate activity.

3.9.7 Medical Devices

The medical device industry continues to experience growth – mainly from imports. It is a fragmented industry that would benefit from standardization, quality control, regulation and value-based purchasing decisions. The size, complexity and separate dossier required for devices suggests the need for a separate oversight unit to focus regulatory attention and reduce the time for decisions.

Currently equipment may be purchased without reference to preferred standards, training for use, maintenance contracts or budgets to meet supply requirements for the equipment to perform its intended function(s). Each of these is essential to manage purchasing, calibration schedules and inventory. For major capital equipment, technical selection criteria should be developed by an unbiased evaluation agency as part of a thorough technology assessment.

Transformation in Health has identified an Institution of Medical Devices to provide training and to perform research. Among the standards to be determined by the Institution of Medical Devices are sterilization policies, single use vs. reuse devices, and tracking and device recalls (the EU has relatively extensive directives on medical devices, see references). This autonomous, non-profit institution will identify evidence-based, technical selection criteria. These criteria would guide administrators and physicians who must make purchasing decisions and support efficient use of limited capital funds. Under the anticipated decentralized health care system, the issue of excess capital equipment purchases should be anticipated and addressed. To assure appropriate access without duplication or excess capacity a state Certificate of Need (CON) process should be developed to enhance the optimal use of diagnostic and curative equipment. Subsequent purchases could be grouped by buyers to secure best prices once the certificate is issued. Furthermore, locally autonomous decisions would fail to secure the negotiated price concessions that group purchasing could obtain.

3.10 Improving the Quality of Health Care

3.10.1 The Need for Licensing, Certification and Accreditation Systems

There is currently a lack of systems to monitor and promote quality of health care. Creating or strengthening mandatory licensing systems, as well as voluntary certification and accreditation systems are important parts of a strategy to improve quality and accountability of health services. These systems would serve to monitor the qualifications and performance of hospitals, physicians, and other providers in both the public and private sectors.

A recent EU Commission Staff Working Paper on Health and Enlargement notes that regulations to ensure that relevant safeguards exist and function properly are more important when systems undergo fundamental change and become more market oriented. Vertically integrated health care systems, such as those that have

existed in Turkey under the MOH and SSK, require less external regulation because they have had hierarchical management structures and the financial flows have been independent of outcomes. However, in countries granting greater autonomy to public facilities and/or experiencing a growing private sector, there is a need for oversight by either a governmental or independent body.

Licensure is a process by which a governmental authority grants permission to an individual practitioner or health care organization to operate or to engage in an occupation or profession (Rooney and van Ostenberg 1999). Licensure regulations generally are established to ensure that the individual or organization meets minimum standards in order to protect public health and safety. Maintenance and periodic renewal of licensure should be mandatory.

Certification is a process by which an authorized agency, usually either a governmental agency or a certification board of a professional society, grants recognition to those practitioners who have met certain pre-determined qualifications (Rooney and van Ostenberg 1999). A proposed strategy for certifying primary care physicians is discussed earlier in this report. Other examples could include certification board exams developed and conducted by medical specialty societies.

Accreditation is a formal process by which a recognized body – usually a non-governmental organization – assesses and recognizes that a health care organization meets applicable pre-determined and published standards. An accreditation decision about a specific health care organization is usually made following a periodic on-site evaluation by a team of peer reviewers, typically conducted every two to three years (Rooney and van Ostenberg 1999). The objectives of accreditation programs may include any of the following: ensure public safety, maintain or improve quality, establish entry level requirements, monitor new facilities, address national public health issues, and recognize excellent examples for benchmarking.

All accreditation programs around the world have: (1) a recognized body that establishes and publishes standards and conducts objective on-site evaluations; (2) the involvement of professionals who develop consensus on standards and serve as peer evaluators; and (3) a focus on continuous improvement. Countries differ regarding whether accreditation is voluntary or mandatory. In Australia and Poland, for example,

hospital accreditation is voluntary, while in France it is mandatory. Countries also differ with respect to whether accreditation is governmental or non-governmental; focuses on optimal or basic requirements; is outcomes vs. system/process oriented; is punitive or improvement focused; emphasizes conformance or innovation; and releases accreditation results and its more detailed findings publicly or maintains confidentiality (Silimperi and Rooney 2003).

For Turkey the first issue is who will have oversight authority for the accreditation of hospitals and other health care organizations such as primary care centers. In the U.S., for example, the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) is an accrediting organization founded by, and with representation from, a variety of hospital and medical professional societies. The JCAHO accredits hospitals, community health centers and other types of health services delivery organizations. In the U.S., the National Committee for Quality Assurance (NCQA) accredits managed care organizations. Compliance with NCQA standards is determined through a review process and evaluation by physicians and managed care experts, under the supervision of a national oversight committee of physicians.

In Turkey accreditation council members could include representatives from the Turkish Medical Association, various specialty societies, the MOH, the MOL, the Private Hospital Association, Health Institutions' Association, Association of the Insurance and Reinsurance Companies of Turkey, the Health Management Association, the Quality Association of Turkey, and other relevant non-governmental organizations. The long-term funding and sustainability of such a body will be a serious issue. Possible funding sources could include subsidies from the government and/or insurers, as well as accreditation fees.

Countries beginning this process sometimes begin with "facilitated accreditation" which emphasizes capacity building and quality improvement technical support prior to and during the accreditation process. Developing exchanges with more developed accreditation programs should be considered. After the accreditation process has been established, health insurers and other large payers can play a powerful role by linking reimbursement to accreditation status.

3.10.2 The Need for Leadership to Promote and Guide Quality Improvement

It is also likely that other strategies will be needed to create an environment that raises expectations and demonstrates quality in health care. One strategy is the development of practice guidelines. The MOH has facilitated the development, for example, of over 70 guidelines for improving primary care. Other strategies could include re-orienting the management of publicly owned health facilities toward quality improvement approaches, and encouraging networking of public and private sector providers and organizations to pursue quality in health care.

The Ministry of Health must play a leadership role in providing training on quality improvement approaches, including the development of quality improvement plans and metrics for each of the facilities, both in clinical and non-clinical areas. This activity could take the form of collaborative learning networks of hospitals and clinics in each geographic area that establish improvement priorities and implement improvement projects. These hospitals and clinics could meet on a regular basis to share experiences. Such quality improvement networks have been shown to accelerate learning regarding how to best develop and adapt new approaches, provide social support and help maintain motivation, and thus increase the potential for sustainability of quality improvements.

We believe that TUSIAD could also play a leadership role in promoting the quality of care in both public and private institutions, similar to the role that the Business Roundtable has recently played in emphasizing the importance of improving the quality of U.S. health care. The Leapfrog Group, founded by the Business Roundtable in 1999, is a consortium of large employers and other healthcare purchasers in the U.S., covering 32 million individuals (Shannon et al 2002). Among other activities, the group has developed standards for patient safety and quality of care, and actively promotes the implementation of these standards in hospital settings. The Leapfrog Group also promotes publicizing these standards and hospitals' comparative performance for use by individuals and large healthcare purchasers (Mello et al 2003).

CHAPTER 4

PERSPECTIVES ON REFORMING THE TURKISH HEALTH SYSTEM

4. PERSPECTIVES ON REFORMING THE TURKISH HEALTH SYSTEM

4.1 Stakeholders' Perspectives

We obtained the views and recommendations of the stakeholders of the health sector through face to face interviews and in cases where not possible through written communication – the list of those interviewed is contained within Appendix 8. Representatives of 22 organizations, both public and private, were interviewed in Ankara and Istanbul. We also reviewed related written documents. The resulting statements and recommendations from the perspective of the discussants have been grouped under the headings given below. We did not make a specific effort to measure public opinion concerning alternative health reform models.

4.1.1 Information Management

- Data is not available to support decisions, policy management, planning, pricing.
- An independent Health Information Institute is required to:
  - ➡ Set health information standards; mutual coding systems, including supplies, drugs, devices, financial procedures, diagnostic and therapeutic procedures such as ICD10, CPT4, etc.;
  - ➡ Determine minimum data sets;
  - ➡ Automate health establishments.
- A unique patient identification number is essential to organize patient information across providers and time; maintaining the confidentiality of this information is the highest priority.

4.1.2 Financing

- Universal coverage and a unified public health insurance program are needed, in part to eliminate double and repeated payments.
- A basic benefits package needs to be defined.
- Charges should reflect true costs through a universal system such as DRGs, casemix, etc.
- There must be a patient contribution, or cost sharing with the exception of those in poverty (such as the current Green Card holders).

- The supplementary insurance concept should be expanded as to cover all insured persons (e.g. SSK, Bag-Kur members).
- Funds for the health sector have not kept pace with growing needs and allocations are inefficient.
- Payment delays – the long period for the government to pay invoices creates additional complexity and layers in the system.
- The multiple public payment systems require consolidation.
- A timely public provider payment system should be established.
- There is a need for VAT reduction not only for pharmaceuticals, but for all health expenditures.
- A general taxation system that finances all health institutions (public, private, foundation, etc.) would enhance equity and encourage fair competition.
- Those who have public insurance but have obtained an additional supplementary insurance should be partly reimbursed in accordance with the public price tariff for the services they have obtained through supplementary insurance.
- Prices for hospital beds should be determined freely.

4.1.3 Service Delivery

- An easily accessible system including all public and private service providers should be established.
- The focus and resources of the current system are directed towards curative care rather than preventive services.
- Preventive health activities and community preventive health services should not be fragmented and must be under the Ministry of Health's authority.
- Fragmentation of public service providers should be prevented through reorganization (including public hospitals and primary level health services) in order to increase cost effectiveness and efficiency.
- A general practitioner / family medicine model needs to be developed and implemented.

- Public health infrastructure needs to be coordinated and funded.
- A cost-effective referral chain should be enforced.
- Family planning, pre-natal, and peri-natal care needs to be enhanced from multiple directions – including insurance, provider training, rural access and professional staffing, patient access to over-the-counter drugs and prescriptions.
- Health care institutions should be managed by professional managers.
- Except the national strategic health policies, the decision-making process should be at the provincial level.
- At public hospitals, models such as outsourcing, Build-Operate-Transfer, Build-Operate-Ownership, etc. should be applicable for all services including health care services and human resources acquisition in order to reduce idle capacity of the current health facilities.
- Private hospitals should be given the same incentives that are provided for "Small and Medium Sized Enterprises" (KOBİ in the Turkish acronym).
- The prices for pharmaceuticals, medical devices, hospital services, and laboratory procedures should be determined by the free market.
- Contemporary approaches – including continuity of care, chronic disease management, homecare, infrastructure for terminal phases (hospice care) – should be evaluated as part of the health care system.
- In high-income countries the frequency of visits to the dentist is 5 visits per year, whereas this figure is only 0.7 for Turkey. Dental care expenditures are 8% of total health expenditures in Turkey, while they represent 10% in high-income countries despite being directed more towards preventive services.
- The social and private health insurance system does not cover most dental care expenditures. Two-thirds of the dentists are only practicing privately. 70% of the visits to private practicing dentists are by individuals who are publicly-insured.
- Preventive dental care services and priority age groups should be included in the basic benefits package with the possibility of co-payments.

- All dental care services should be obtained from public and private providers such as active civil servants and pensioners receiving all other health services from public and private.
- Utilization of private health facilities by patients with public insurance – so far applicable only to ES members and active government employees – should be expanded to include other publicly insured citizens such as those covered by SSK and Bag-Kur.
- Public-private partnership models for service delivery should be introduced to the health sector.
- Evidence-based medical and treatment protocols should be implemented.

4.1.4 Legislation

- The existing health legislation does not fit to the current situation, and should be renewed. For example, Law No: 1219 (The Practice of Medicine and It's Branches) passed in the 1920's does not contain health professions such as dietician, psychologist, and physiotherapist.
- The structure and content of the health laws are too complex and too detailed. They should be rewritten as a framework according to the current realities and requirements.
- Laws should be changed to take into consideration EU norms and without discriminating between public and private service providers.
- A large number of institutions and establishments are directly involved in health care and financing, and are administered from Ankara,
- Central health authority should not be fragmented and should be concentrated under the Ministry of Health. On the other hand, the MOH should determine only national health policies, strategies, and targets; it should also monitor and supervise health services nationally. The central operational power should be transferred to the provinces, with local administration and participatory management by NGOs,
- In addition to the "Health Reform Laws", there are necessary supplementary legal arrangements, as below;

- ➡ Build Operate Transfer (BOT)/Build Operate Procedures;
- ➡ Tax reductions for private health care facilities;
- ➡ Reduction of VAT in all health care services and goods;
- ➡ Investment and operational incentives for the private sector, with priority to geriatric, rehabilitation, and oncology centers;
- ➡ Integration of emergency health and rescue services at the national, regional, and provincial levels, and their possible outsourcing.

- VAT rates should be decreased to 1% and there should be no discrimination between the public and private sectors.
- Licensing procedures should be conducted solely by the Ministry of Health, thus preventing the fragmentation and complexity caused by the involvement of different institutions.
- Private health institutions should be provided with the means to be able to establish associations.
- The mandatory admittance of 3% of patients to private hospitals free-of-charge – when even public hospitals are not obliged to do so by law – is not acceptable under the principle of free market competition.
- Services provided to non-Turkish patients should be accepted as exports – VAT should be refunded or these services should be exempt from VAT.

4.1.5 Quality Management

- Priority should be given to establishing health care standards.
- Both a model and a national accrediting body on health need to be created. Such an institution should be national, non-governmental and non-profit.
- Licenses should be given only following application. Periodical license renewal procedures should be established.
- Licensing and laws should be applied to all public and private facilities equally. There should be comprehensive regulatory procedures to replace the current outdated patchwork system.
- An accreditation system should be established to provide optimal accreditation.

4.1.6 Human Resources and Training

- The geographic distribution of health personnel is uneven. Many personnel do not attend continued post-graduate training, are not provided performance incentives, and work unproductively due to low salary and other employment issues.
- Health human resource planning should be focused within one public authority,
- The existing job descriptions of health professions should be reviewed, with new job descriptions for health professions not written before.
- Licensing examinations for physicians, nurses, pharmacists and other health care providers should be developed.
- Continuous training programs for health professionals should be developed.
- The Turkish Medical Association should monitor and evaluate all training programs for physicians.
- Beginning with medical schools, all health professional vocational schools should be accredited and their curricula should be upgraded on an ongoing basis.
- Professional health management should be improved, with undergraduate and postgraduate training programs.

4.1.7 Pharmaceuticals

Where recommendations come from the Turkish Association of Research-Based Pharmaceutical Companies (AİFD) and the European Federation of Pharmaceutical Industries and Associations (EFPIA), or the Pharmaceutical Manufacturers' Association (PMA) (IEIS in Turkish), these organizations are noted at the end of the corresponding paragraph.

- An independent, non-governmental, non-profit "National Drug Institute" should be established in order to prevent the fragmented licensing, supervision, regulation, and related activities currently in application through different Ministries and institutions. Scientific and political authorities should be under different structures.

- This National Drug Institute should be organized in terms of licensing, monitoring, auditing, following-up legislative changes in the EU, arranging relevant training activities, symposia, seminars, and publishing materials. However, legislative harmony will not be enough to achieve these objectives: this Institute must be organized to address implementation, supervision, enforcement, and legislative revisions. In establishing a National Drug Institute, scientific evaluation, scientific responsibilities and economic or political responsibilities have to be separated; these should not be under the same agency [İEİS].

- A National Drug Institute should be established with the structure anticipated in the VIIIth Five year Development Plan [İEİS and Fako Pharmaceutical Company].

- The new "Pricing Decree" (14 April 2004) reduces VAT from 18% down to 8% for pharmaceuticals. This has been an important step towards harmony with the EU norms, but OTCs, raw materials and other health products have to be included in the application of reduced VAT.

- Pharmaceutical reimbursements should be made on time. Since the last 4-5 years, one of the major reasons that economic problems have reached crisis levels – especially in the financing, manufacturing, distribution and purchasing processes – is the delays encountered in reimbursements by public social insurance. 80-85% of the domestic pharmaceutical market is reimbursed by these public institutions. There have been periods when the overdue reimbursements to the industry and pharmacies have reached 300-800 trillion TL and 200-500 trillion TL, respectively. The problem still exists. Payment of these overdue reimbursements should be done in a just and transparent way and necessary measures should be taken for the timely payment of future reimbursements [İEİS and Fako Pharmaceutical Company].

- Compliance with EU regulations should be completed in a cautious manner in order to prevent a burden on the national pharmaceutical sector.

- Data exclusivity: AİFD and EFPIA are in general supportive of the G10 recommendations. Although they believe that G10's recommendation # 4 on data protection does not fully meet the needs of the innovative pharmaceutical industry, they see it as a compromise between the interests of the various stakeholders involved.

- With the acceptance of data exclusivity the competing power of generic manufacturers will diminish, usage of single original products will increase, imports will greatly increase, and a monopoly environment will be created to the advantage of foreign and multinational firms. The limitation of this development for a reasonable time after Turkey's acceptance to the EU (as is done for other new entrees) will be useful. In accordance with the "Harmony with the EU activities", the "Licensing Regulation" has been prepared in 1996. With this regulation the data and documents required for licensing have become harmonious with the EU licensing procedures. An additional guideline has been in effect since 1996, in accordance with the EU and International Congress on Harmonization (ICH) criteria on pharmaceutical stability, though there some differences remain [İEİS].

- The Turkish pharmaceutical industry's manufacturing capacity within GMP, in terms of technological accumulation, is among the world's developed pharmaceutical industries. Medical sciences and practices are relatively developed in Turkey. Academic know-how is at world standards and is well developed. Multinational pharmaceutical manufacturers owning original products spend approximately 50 billion USD annually for R&D. The expenditures on the 3rd and 4th phases of product development form the major portion of the budget. Because of this, the multinational manufacturers establish cooperation and operate in countries similar to Turkey in terms of production and sectoral capacity (for example, Mexico, India, Chile, South Africa, and China). In the near future, Turkey should follow a strategy of compromise and cooperation with the multinational pharmaceutical companies so as to draw these direct external funds and technology and make Turkey a joint production and R&D center. With this strategy, Turkey should take advantage of her capabilities for exporting to surrounding countries (as in the automotive industry). A cooperation and partnership culture in the pharmaceutical industry should be developed in order to achieve these goals. This approach should be accepted as a national strategy and all sides, government included, should make efforts in this direction. In the near future, this should be accepted as a National Strategy. Related legislative arrangements should be revised, taking also into consideration harmonization with EU standards [Ethem SANCAK, Hedef Alliance Holding A.Ş.].

- These arrangements – aimed at R&D activities in pharmaceutical field – should also be considered for all other health services [TUSIAD Health Working Group].
- The licensing process is slow and complex. To complete the licensing process in 210 days as in EU, some organizational changes, new flowcharts and infrastructure developments are needed in the Ministry of Health [İEİS].
- In Turkey, it is not possible, in the short term, for the pharmaceutical industry to finance such high research [and development] expenditures. One of the reasons for the Turkish pharmaceutical industry's not being able to create funds for such investments is the delay and irregularity of payments for pharmaceutical reimbursements of the Public Social Security Institutions. Because of delays in reimbursement, our sector confronts a serious financing problem [İEİS].
- The government Project aiming to collect all social security institutions (ES, SSK, Bag-Kur) under one roof should be speeded up, and parallel developments should be achieved in terms of pharmaceuticals purchasing policies [İEİS].
- Generic substitution: AİFD and EFPIA's views are that the right or the obligation conferred upon the pharmacist to substitute the prescribed medicine (original or otherwise) with a lower-priced generic (with the same therapeutic effect) is a tool that could be used in Turkey to achieve cost savings. However, research-based pharmaceutical companies are not in favor of this kind of measure for the following reasons:
  - ➡ The interest of the patient requires that the doctor or prescriber should be the only person who can assume responsibility for allowing the substitution of one medicine by another one. Substitution leads to ambiguous liability of manufacturers, doctors, pharmacists and the authorities in cases where a patient experiences adverse side effects [AİFD and EFPIA].
  - ➡ Substitution cannot be dissociated from the issue of the pharmacist's remuneration, and may induce pharmacists to give priority to purely economic or commercial considerations over patient needs. This can also lead to market distortion and gives certain products an unjustified competitive advantage over others, which they would not have if normal market conditions prevailed [AİFD and EFPIA].

- Price Controls: The G10 recommends that price controls, where they exist, should be limited only to those medicines purchased or reimbursed by the State. This recommendation is a first step towards a long-term vision of the European market since it allows companies to launch new medicines at competitive market prices while advancing – in parallel – negotiations with the relevant authorities or social security bodies responsible for managing the approval of medicines for reimbursement and public pharmaceutical expenditure.

  This recommendation does not involve any "big-bang" process and it does not have any impact on Member States' ability to negotiate or control the price of reimbursed medicines. Meanwhile, this recommendation will enable patients to get immediate access to new medicines at the same time in all European countries, including those that are less economically advanced. In fact, the set of proposals is intended to help ensure the future supply of high quality medicines to all European citizens who need them [AİFD and EFPIA].

- Reimbursement decisions should be based on scientific evidence, which are transparent and non-discriminatory. Moreover, Reimbursement Committee members should be accountable for their decisions in relation to healthcare outcomes.

- Advertising non-prescription medicines: AİFD and EFPIA support the G10 recommendation on advertising (# 6) and are in favor of public advertisement of non-prescription medicines.

- Differences among Member States and accessions countries (G10 recommendation # 14): To take into account of disparity in the levels of intellectual property protection for products on the market accession countries, the principle of free movement of goods should be waived for any product which has a lesser degree of intellectual property protection in an accession country than it does in the current 15 EU member states. The implementation of this transitional non-exhaustion principle is based on the enforcement of intellectual property rights to prevent importation of the product into a EU15 country. However, to supplement that right and to facilitate the smooth operation of the waiver, we suggest the compilation of a register of products that have different levels of IP protection between different countries. Regulatory authorities would not grant parallel import licenses for a product on the register. The register would be based on information from right-holders [AİFD and EFPIA].

- It should be considered that although there is not a basic pharmaceuticals list application, public insurance institutions exercise an exaggerated and irrational restriction on the expenses of pharmaceuticals lists which the paybacks are not done or a prescription can only be written on specified indications by only limited medical specialists. It should be taken into consideration that, because of the applications which are irrational and do not allow the public to reach the pharmaceuticals and, the internal market and the sector which did not reach adequate dimensions will be negatively affected from these applications. In conclusion, if this subject must take place in the report; after the results of the reform program-with consistent data- reaches the optimum level, it should be emphasized that "basic pharmaceuticals" issue should be taken into consideration (Fako Pharmaceutical Company).

4.1.8 Purchasing

- Fragmented purchasing, at the individual hospital level, with cash payments, leads to over-investment in equipment.
- Value-based purchasing and technology assessment are missing.
- Suppliers are overly burdened by bureaucracy. As a result, procurements are delayed and tenders are often cancelled. These problems are present at all stages of the procurement process – from the preparation of tenders to the realization of the procurement, the performance of the services, and the payment.
- The government should accelerate the e-transformation process and prevent red tape.
- Appropriate, trained, professional personnel should be recruited for procurement.
- Against the absolute and binding provisions in the Public Tender Law, some public institutions and agencies establish entitlement conditions on their will and set forth impossible conditions or require incomplete documents
- Standards for establishing calibration laboratories are determined by TSE, while the inspection, examination, and follow-up services, including the documents required for starting the laboratory to operation, are carried out by TURKAK. While establishing the service fees for these transactions, TURKAK applies an extremely high, single fee policy. Accordingly, a pipe calibration laboratory,

which does not have much income, and a calibration laboratory of high income such as an incubator calibration laboratory are placed in the same category. Additionally, there are a significant great number of bureaucratic hurdles to obtaining a certificate. Calibration laboratories should be divided into separate groups according to the type of the service they provide by amending relevant laws. Service fees should be established accordingly.

4.1.9 Medical Devices

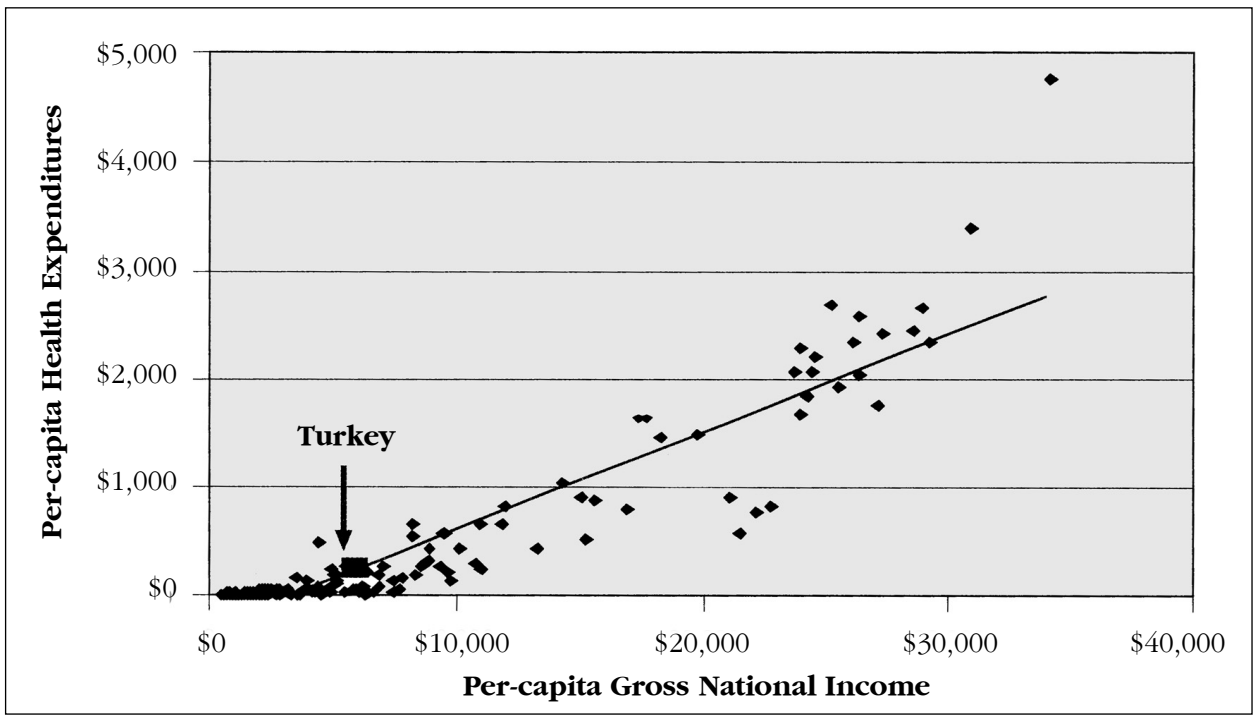
- Certificates for the quality, service competency and after-sales service should be mandatory for producers, importers, and side industry companies in the medical devices sector.
- The omission of "Medical Devices" from the "Draft Law on National Drug Institution" suggests that "medical devices are a sub-element within the drug and pharmacy sector". Medical devices are a completely different field and should be addressed separately.
- Domestic testing and certification institutions that would be acceptable to the EU should be formed immediately. Otherwise, producers serving the domestic market will have to satisfy the conformity assessment procedures of the EU's testing and certification institutions. This places extremely high costs on the sector and it will suffer serious damage.
- The same inspection standards should be applied to the government and to the private sector.
- The existing legal sanctions, which cover the rights, powers, inspections and sanctions of the health system stakeholders are not sufficient, and the system runs slowly for those seeking to use their rights. The suppliers have difficulty defending their legal rights against the institutions that perform procurement within the framework of the Public Tender Law. The law that should prevent unjust competition does not have adequate sanctions and inspections.
- Standardization, planning, coordination and quality control should be fully applied in public procurements.
- The administrative and legal arrangements, which prevent official organizations and institutions from making maintenance/repair agreements or make them difficult, should be annulled.

- Legal arrangements should be made to ensure that only authorized services are allowed to perform maintenance/repair services.

4.2 International Comparisons

The World Bank and the Organization for Economic Cooperation and Development (OECD) produce data comparing countries on a variety of economic and social-sector related indicators. The tables in Appendix 1 (Table 16 through Table 32) provide a comparison of Turkey's health spending and health status indicators with countries in Europe and the former Soviet Union. The most recent such data available, for 2001, show that Turkey is considerably poorer than most of its OECD co-members. Turkey's level of health expenditures – recorded as $150 per person in 2001 by the OECD – are similar to countries at Turkey's level of income but are substantially lower than typical health spending patterns in either the OECD or the EU (Figure 6 below and Table 18 in Appendix 1).

Figure 6. Per-capita Total Health Expenditures by Income Level, 2001 ($ US)



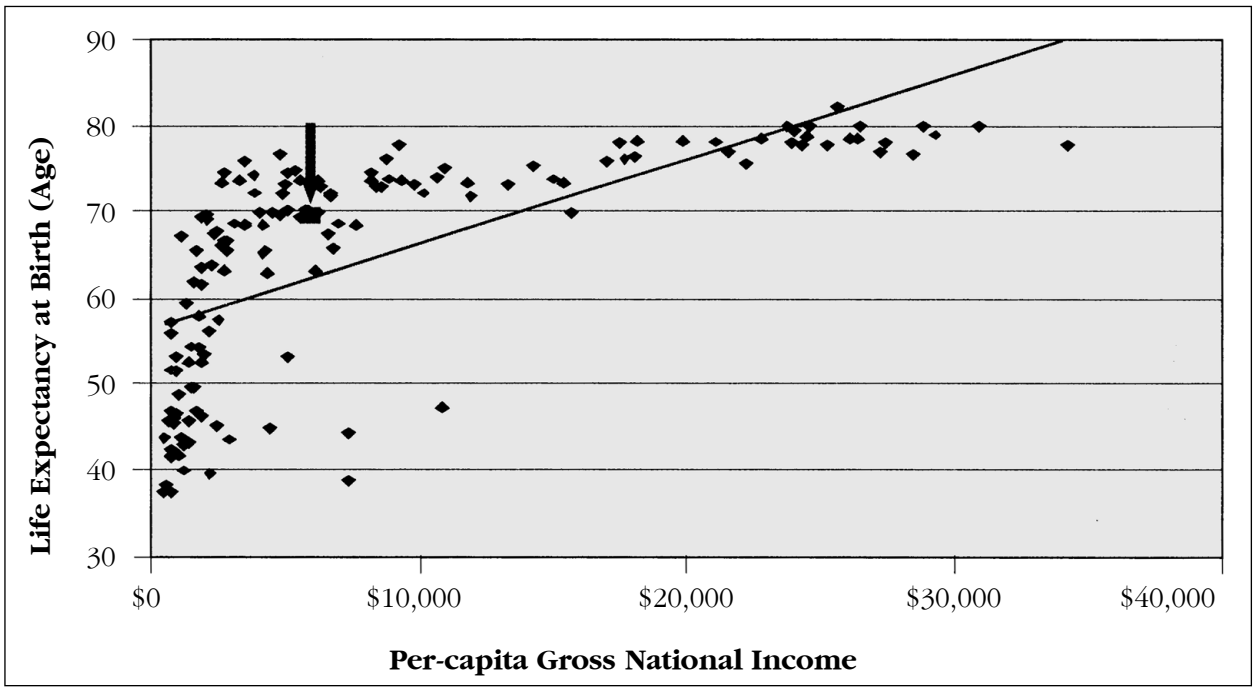
Source: OECD database

Among these countries, Turkey has the highest infant mortality rate – 36.0 per 1,000 live births (Table 27) – and under-five mortality rate – 43.0 per 1,000 live births

(Table 28). As measured by the Turkey Demographic Health Survey (TDHS), Turkey's infant mortality rate decreased from 200 deaths before the age of one year per 1,000 live births in the 1960s to 28.7 per thousand during the 1998-2003 period. The under-five mortality rate is also decreasing rapidly – it was measured at 37.0 per 1,000 live births during the 1998-2003 period.

Life expectancy at birth, 68.3 years, is high for Turkey's level of income but is also below standards in the EU and the OECD (Figure 7, Table 26 in Appendix 1). According to the data from the State Planning Organization (SPO), total life expectancy at birth was 69.6 years in 2002, projected to reach 70.3 in 2005.

Figure 7. Life Expectancy at Birth by Income Level, 2001 ($ US)



Source: OECD database.

4.3 Cost Containment Strategies in the Health Sector

Cost containment in the health sector is of major concern in most countries, and may become increasingly important as access to health care services improves due to expanded health insurance coverage. National cost containment efforts may involve "top-down" regulatory approaches, market-based (competition driven) strategies, or a mixture of both (see Table 14)

4.3.1 Regulatory Approaches to Cost Containment

Regulatory approaches to health care cost containment most frequently try to control supply-side capacity, prices of health care products and services, and/or health care utilization (Shi and Singh 2004). Attempts to control the supply-side of the health care sector rely on a health planning process at either the national or provincial level in which limits are placed on the number of hospital beds and the diffusion of costly technology. An example is the Certificate of Need (CON) process utilized by some states in the U.S. to control capital expenditures by health facilities. Depending on the state, the CON process requires prior approval from a state governmental agency for the construction of new facilities such as hospitals and long term care facilities; the expansion of existing facilities; and the purchase of expensive equipment. Approvals are based on a demonstration of community need for additional services. Unless there is a convincing evidence of need, the concern is that increases in beds and equipment will result in supplier-induced demand. Using a similar rationale, a health planning process may be used to place restrictions on the supply of physicians by regulating the capacity of training programs and/or through entry barriers for foreign medical graduates.

There is usually a concern that placing regulatory limits on the capacity of the health care system may operate to create monopolies or near-monopolies on the supply side - a situation that is likely to result in driving up health care prices. For this reason, supply side constraints are usually accompanied by price and budgetary controls. Countries with national health care programs (and single payers) usually tightly control supply and often use global budgets that limit total expenditures by restricting payments to hospitals and physicians.

Many countries have attempted to control the prices of hospital services through using a formula for hospital reimbursement based on Diagnosis-Related Groups (DRGs). Under this system, a hospital is paid for its services to a patient based on a prospectively established fee determined by the patient's diagnostic category, regardless of the cost to the hospital of providing the services. Physician payment may also be regulated. In the U.S., for example, physicians are paid by the federal Medicare insurance program according to a prospectively determined resource-based relative value scale (RBRVS). In this approach physicians are paid according to relative value units established for more than 7,000 covered services.

Regulatory strategies used by the public sector for the control of health services utilization typically employ physicians (peer reviewers) to review health insurance claims to determine retrospectively whether the care provided was reasonable, necessary, and provided in the most appropriate health care setting. If the reviewer's findings are negative, payment may be denied. This type of peer review may also be used to determine if the care provided meets standards of quality generally accepted by the medical profession.

4.3.2 Market-Oriented Strategies for Cost Containment

Market-oriented strategies for cost containment are based on altering consumer incentives, increasing provider and/or insurer competition and private sector utilization controls. Consumer (demand-side) incentives are usually based on cost sharing. The assumption is that if consumers pay part of their insurance premiums they will be more cost-conscious in selecting the insurance plan that best meets their needs. Similarly, if patients pay part of the cost of the health services they use, they will be more cost-conscious in their behaviors and minimize unnecessary utilization. It has often been noted that the health care market is imperfect in many respects, including the absence of readily available information that would facilitate consumer comparisons regarding either health care prices or quality. Efforts to provide better information to consumers, such as making provider "report cards" available, are strategies for helping consumers make more knowledgeable purchasing and utilization decisions.

Other market-oriented strategies rely on maintaining or improving competition among insurers and/or providers based on price or value. These types of strategies often require public sector regulation of the health care market to control practices that decrease competition such as price fixing, price discrimination, exclusive contracting arrangements and anti-competitive mergers (Shi and Singh 2004). Private insurers also attempt to control costs through the mechanisms that they use to reimburse providers, such as DRGs for hospital payment and RBRVS-type strategies to reimburse physicians.

Utilization controls in the private sector typically rely on utilization review and managed care processes in which each request for services (pre-authorization) or episode of care (retrospective review) is examined to determine the most appropriate types of services to be provided, the care setting in which services should be

delivered, the most cost-efficient methods for care delivery, and the plan for subsequent care (e.g., hospital discharge planning). Utilization review and managed care are designed to intervene in the care process to ensure that the patient receives only appropriate and necessary services that are provided in the most efficient manner. These processes rely on the review of information that is often not available to patients/consumers. These processes may be conducted by a managed care provider, an insurer, or a third party administrator (TPA). TPAs are independent, private organizations that may perform a number of functions, including the utilization review and managed care processes described above, as well as administering group insurance benefits, claims processing, and other administrative tasks for an insurer whose role includes underwriting risk.

4.3.3 Patient Rights and Consumer Protection

Strategies for cost containment that rely on "managed care" and other utilization controls must be accompanied by safeguards for health care consumers. A legal and regulatory framework must be in place that assures consumer protection. Health insurance plans, for example, must be clear regarding benefits covered, as well as the conditions under which coverage continues or is terminated. Patients/consumers must have procedures in place for filing grievances against insurers, including mechanisms for an expeditious review of care denials.

A legal and regulatory framework must also be in place that ensures the rights of patients. In the U.S., for example, the Patient Self-Determination Act of 1990 applies to all health care facilities participating in federally-sponsored health insurance programs. The law requires hospitals and other facilities to provide all patients upon admission with information regarding patient rights. These include the right to confidentiality and to make informed choices regarding medical treatment (informed consent). Other rights include the right to be informed about diagnosis and treatment, to refuse treatment, and to give directions regarding continuation or withdrawal of care when the patient is unable to be involved in decision-making. Grievance mechanisms must also be in place to receive and investigate patient complaints.

Table 14. Regulation-Based and Market-Oriented Cost-Containment Strategies

Regulation-Based Cost-Containment Strategies	**Examples**
Supply-side controls	Restrictions on capital expenditures (new construction, renovations, and technology diffusion). Example: Certificate of Need requirements
	Restrictions on supply of physicians. Examples: Regulated capacity of training programs; Entry barriers for foreign medical graduates.
Price controls	Regulated prices. Examples: Reimbursement formulas Capitation payments Diagnosis-Related Groups Resource-based relative value scale Global budgets
Utilization controls	Public sector sponsored peer view
Market-Oriented Cost-Containment Strategies	**Examples**
Demand-side incentives	Cost Sharing: Sharing of premium costs Deductibles and copayments
Improving market functioning	Providing better information to consumers. Example: Provider "report cards" Antitrust regulation
Market competition on price/value	Competition among insurers on price/value Competition among providers on price/value
Utilization controls	Utilization review and managed care by: Managed care providers Insurers and payers Third Party Administrators (TPAs)

4.4 Relevant International Reform Models

Appendix 2 contains detailed descriptions of the health systems in Australia, France, Poland, Hungary, Mexico, and Taiwan. These countries have been chosen for this report because they contain examples of great interest for the Turkish health system. Australia features a tax-financed system with universal coverage and innovative use of payment mechanisms including DRGs. France has a social insurance structure – with the majority of the population insured through the place of employment – and was ranked as the best health system in the world by the World Health Organization in 2000 (WHO, 2000). Poland and Hungary, as advanced EU accession countries, both have valuable lessons to provide for Turkey. Like Turkey, Mexico has a Ministry of Health and Social Security Institute that both provide health services. Taiwan provides an excellent example of how a country can reach universal health insurance coverage. The following sections present highlights from these country descriptions; the reader is referred to Appendix 2 for a detailed description of each country's health system.[9]

4.4.1 Overview

With the exception of Mexico, all six countries have universal or nearly universal health insurance coverage. In Australia, the Federal government finances most health services through general taxation, while service provision is the responsibility of the states and private providers. The French health care system is predominantly funded through payroll taxes from employers (12.8% of salary) and employees (0.75% of salary), supplemented by general taxation. Health care in France is purchased and paid for by health insurance pools and by the government and is provided by private physicians and both non-profit and for-profit hospitals. Most ambulatory physicians are paid on a fee-for-service basis, while health workers in public hospitals are paid on a salary basis. French patients have free choice of provider.

In Poland, a new national health insurance system began in 1999, creating multiple regional health funds and a special fund with nation-wide coverage. The health funds are non-profit and largely financed by a payroll tax system (7.5% of salary net of other benefits for employees). The 1999 reform sought to encourage the development of primary care services and promote the role of family doctors. All

(9) This part is adapted from these documents: European Observatory for Health Services (2002), OECD (2000a), OECD (2000b), OECD (2003); Frenk et al. (2003), and Morlock et al. (being published).

people are covered, including the unemployed, whose participation is financed by the state budget. However, the new system suffers from certain deficiencies and has not so far attracted active public support. The Hungarian healthcare system features a comprehensive, compulsory, employment-based national health insurance scheme that provides near universal coverage. Within the current system, the purchasing and service-provision functions are separated with the National Health Insurance Fund Administration (HIFA) entering into performance-based contracts with hospitals, outpatient clinics and independent caregivers.

4.4.2 Financing

Per-capita health expenditures in the four countries in 2001 were $2,085 in Australia, $2,057 in France, $246 in Poland, and $315 in Hungary. By comparison, Turkey spent $150, according to the OECD (2003). Australia funds its health care mostly through general taxes. Out-of-pocket payments are equal to 16.2% of total health expenditures. Private health insurance accounts for just 7.1% of total health expenditures. France also has a limited role for private insurance, which covers supplementary services and copayments. France also uses an income tax, pharmaceutical taxes, and alcohol and tobacco taxes to fund health care. The Polish and Hungarian health systems are primarily financed by payroll taxes.

The primary financing sources for Taiwan's universal National Health Insurance (NHI) are premium revenues – contributed by the insured and their employers – and government subsidies. Analysis of the total NHI revenues for the 2001 calendar year shows that 40% of the revenues came directly from insurees, and 32% from private employers. The remaining 28% of revenues came from national and local governments – including both their share of the premiums for public employees and as subsidies from general tax revenues.

4.4.3 Coverage

Australia offers universal access to health care, regardless of ability to pay, through the government health insurance system, Medicare. Additional private health insurance is voluntary but encouraged through tax incentives – 45% of the population had such insurance in 2001. In France, all legal residents are covered by public health insurance. Since the Universal Health Coverage Act, enacted in 2000, the small proportion of the population without employment-based coverage is entitled to public coverage on the basis of legal residence. Three main health insurance schemes cover 96% of the

population, with the National Fund for the Insurance of Employed Workers covering about 83% of the population. The population has no choice of insurer. All residents are automatically affiliated to a health insurance scheme on the basis of their professional status and place of residence. In 2000 86% of the population had additional (complementary) voluntary health insurance (VHI) coverage. Patients can visit any GP or specialist practicing privately or working in hospital outpatient departments, without referral or any limit on the number of consultations.

Taiwan's health insurance enrollment rate increased from below 60% prior to the NHI program to 92% immediately following the implementation of the program in 1995. As of 2001, the coverage rate was 96%, with over 90% of providers participating in the program. In Poland, all people are covered, including the unemployed, whose participation is financed by the state budget. Hungary has nearly universal health insurance coverage. Mexico's does not have universal health insurance coverage. Additionally, the PROGRESA program identifies the poor for "conditional" cash transfers – a negative tax provided to poor families if they fulfill certain conditions and use specific services.[10]

The program reaches 20 percent of Mexico's population and represents a remarkable 20 percent of total income for this group. For health, payments are provided if family members, especially mothers and children, make a specified number of annual clinic visits. The program has led to increases in school enrollment, declines in levels of child malnutrition and illness, and reductions in poverty. PROGRESA uses a 2 stage process to identify poor families – based first on community identification from the census, and then proxy means tests.

4.4.4 Purchasing

Australia systematically separates financing and purchasing. The type of payment method varies: medical consultations are reimbursed retrospectively; drug prices are regulated; hospitals are paid prospectively; and nursing homes fees are paid per diem. For ambulatory and primary care, the Medicare Benefits Schedule sets out a schedule fee for medical services for which the Federal government will pay medical benefits. General practitioners charge fee-for-service and can bill patients directly. For hospital care, the Federal government provides prospective block grants for public hospitals to the States, subject to performance measures.

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(10) PROGRESA is an abbreviation for; "Programa de Educación, Salud y Alimentación" - English is, "Education, Health and Nutrition Program"

Poland has taken steps to develop and introduce new information systems including a new standardized cost accounting system for hospitals and clinics, which calculates costs based on market prices and charges for depreciating capital items. A new patient-based record system is being tested –allowing analysis of resource use and outcomes for individual episodes, and tracing the patient through different levels of the health care system. These efforts would facilitate the development of a Diagnostic Related Group (DRG) type payment system which has proved to be a potentially effective means of improving hospital efficiency in some countries.

In Taiwan, case payment and global budgeting have been introduced to complement the fee-for-service payment structure – to give providers added incentives to control costs. A per-case prospective payment system has been gradually phased in, also to provide incentives for increasing providers' efficiency and cost-effectiveness. In addition to the fee-for-service and per-case payment systems, global budgets have been introduced for dental care, Chinese medicine, and hospital services. Global budgeting should result in slower growth in health care costs by providing cost containment incentives to providers. Demonstration projects are currently testing the feasibility of using capitation payments. In addition, other demonstration projects are testing the feasibility of including patient care outcomes as part of the basis for determining the level of provider payments.

EU Accession countries have adopted a range of purchasing options (Table 15). Most of these countries use global budgets for hospitals, while some are experimenting with per-diem payments (Slovenia and Latvia), per admission payments (Poland), and DRGs (Hungary). Capitation is the most common type of reimbursement method for ambulatory primary care.

Table 15. Principal Purchasing Methods in EU Accession Countries

Provider	Primary Care	Outpatient Specialist Care	Inpatient Care
Bulgaria	Capitation	Salary	Budget
Czech Republic	Capitation	Capped fee-for service	Budget
Estonia	Capitation payment and fee-for-service	Capped fee-for-service	Per-diem
Hungary	Capitation	Capped fee-for-service	DRG (758 categories)
Slovakia	Capitation	Salary and fee-for-service	Budget
Slovenia	Capitation	Salary	Per-diem
Latvia	Capitation payment and fee-for-service	Salary and points system	Per-diem
Lithuania	Salary and capitation	Salary and points system	Case-based
Poland	Capitation	Capped fee-for-service	Per admission
Romania	Capaitation and fee-for-service	Capped fee-for-service	Global budget

Source: World Bank (2003).

4.4.5 An Example of the Potential Benefits of Greater Public Hospital Autonomy – Poland

Poland provides an example of the types of benefits that greater autonomy for public hospitals can provide (European Observatory on Health Care Systems, 1999). Autonomy was granted to all public health facilities in Poland at the same time that compulsory health insurance was implemented on January 1, 1999. Autonomous hospitals acquired the legal right to sign multiple institutional contracts, as well as to generate and keep surpluses for investment. They no longer needed MOH approval for borrowing (short-term credit), investing surpluses, or shifting expenses among budgetary line items, including personnel (World Bank, 2003). Traditionally public hospital managers had been able to hire, terminate and promote individuals, within certain limits. Autonomous status also conveyed the authority to determine the number of positions and to set salary levels.

An analysis based on a sample of public hospitals in Poland found that greater autonomy was associated with a range of more positive indicators, including: the introduction of more medical and non-medical services; the initiation of more new programs to generate additional revenue; decreases in staffing levels to improve

efficiency; reductions in institutional debt; and undertaking improvements in physical facilities and administrative processes in attempts to attract more patients (Campbell, Chawla et al 2000). The study did not find, however, that greater autonomy was associated with the introduction of more sophisticated financial management practices as had been hoped by the program's advocates.

CHAPTER 5

AN ACTION PLAN FOR TURKEY'S HEALTH SYSTEM

5. AN ACTION PLAN FOR TURKEY'S HEALTH SYSTEM

5.1 Universal Coverage and a Unified Public Health Insurance Program

- Turkey's currently fragmented health financing structure should be replaced with a unified public health financing system, funded by payroll-based premiums and subsidized through general taxation. A single public payer – general health insurance (GHI) – should combine the current roles of the social security health insurance programs (ES, SSK, and Bag-Kur), the green card program, and the health financing functions of Ministry of Finance (through the Ministry of Health). Only the military health care system would remain outside of this network.
- GHI should be mandatory for the entire population, and financed through a combination of a payroll tax and general revenues from income taxes. Premiums will be progressive; beneficiaries below an income threshold to be defined will not pay premiums.
- A regulatory board should be established for both public (GHI) and private health insurance. This board will include representatives of the Ministry of Finance, the Ministry of Labor and Social Security, the Ministry of Health, the Treasury, the private insurers association, health service providers, and consumers. The board will regulate premium levels and benefits packages offered by private insurers, facilitate contracting arrangements between insurers and providers, and investigate consumer complaints.
- A standardized benefits package within GHI should be defined; this package must be actuarially sound. The services covered by GHI should include physician visits, obstetrical and gynecological care, pregnancy and family planning services, deliveries, well baby visits, immunizations, emergency room visits, general ward hospital stays, surgeries, chemotherapy and radiation therapy, post-acute home health care, mental health and substance abuse, routine eye exams, hearing aids, laboratory services, X-rays, and prescription drugs (generics where available).
- An actuarial study should be performed to determine the affordability of the

benefits package, the levels of premiums, and the financing available for GHI over time. This study should include an in-depth costing component, using Activity-Based Costing techniques to allocate indirect costs in order to determine the true cost of offering specific health services for Turkey's main health providers. Once the actuarial study is complete, the benefits package should be defined based on the package recommended in the paragraph above, with priority given to cost-effective and preventive services.

- GHI beneficiaries (eventually the entire population) would have access to these services through both public and private providers.
- Long-term insurance, including invalid, pension, and survivors insurance, should be administratively separate from the GHI fund.

5.2 Increased Funding for Health Care

- Turkey will face a need to sharply increase funding for healthcare, in both the public and private sectors. Overall health expenditures – measured to be between $112 and $202 per person – are inadequate and far below countries that are socially and economically comparable. Particularly, public spending will need to increase. As much as 78% of MOH health expenditures currently go to pay salaries, and there is a similar situation in SSK hospitals.
- The need for increased health funding will become more marked over time. Financial sustainability for the health care system is critical. Turkey's dependency ratio of 51.5% is high in comparison with EU countries and will worsen as the large cohort of individuals currently aged 15 to 44 ages. As a result, in the next 10 to 15 years Turkey is likely to encounter serious constraints on retirement funds and on social security and public sector benefit programs if the current retirement age is maintained.
- Increased public health funding should come from new revenues. Increasing public debt is not a recommended option. We recommend health system financing that is based on the combination of a mandatory payroll tax and contribution from income tax-based premiums, with additional government subsidization from general tax revenues. The payroll tax will need to be set at a level that is actuarially sound – in terms of the benefits package proposed, anticipated future growth in health care spending based on technological advancement, and future demographic changes. Additionally, the financing of

GHI should not place an undue burden on economic efficiency of the private sector in Turkey. The government subsidy from general tax revenues must be sufficient to cover the premiums and cost-sharing contributions of populations groups that are exempt from these payments, and the administration and execution of important public health functions that are not covered by the General Health Insurance Program.

- Partly because of insufficient levels of funding, health spending patterns in Turkey result in the under-funding of important and highly effective public health programs (problems of allocative efficiency). With large amounts of public health spending going to salaries and pharmaceuticals, the Turkish health system has limited funding remaining to pay for preventive and essential curative care. Public expenditures on preventive care as a share of total expenditures on health decreased from 12.1% in 1996 to 6.3% in 2001.

- Following the models of France, Poland, Hungary, and Taiwan, Turkey could finance its health care system primarily from a payroll tax, supplemented by general taxation. A draft law for Social Security reform proposes a 12.5% payroll tax for health – approximately 6.5% to be paid by the employer and 6.0% to be paid by the employee. Even with such a system, other financing streams will be necessary to cover the employer's portion for the self-employed, those in the informal sector, and the unemployed and their families.

5.3 The Role of Private Insurance

- Optional private insurance would be allowed to offer amenities, cover GHI cost-sharing arrangements (deductibles, co-payments, and co-insurance), and cover benefits that are not in the GHI benefits package, but would not be allowed to cover benefits contained within the public package.

- After an initial period during which universal coverage is clearly established, we recommend that the GHI consider an option for beneficiaries above a specific income level to be defined to opt-out of the public insurance system and purchase private insurance as their principal coverage if this option is acceptable from a political and social perspective. These individuals would not be required to pay GHI premiums – avoiding duplicate payment of premiums for the same benefits, as is currently the case for individuals with both public and private insurance. In this case, careful consideration will need to be given

to the regulation of private insurance as primary coverage – including the provision of the basic benefits package described in this report – and to appropriate financing mechanisms to compensate for the loss of relatively wealthy contributors to the GHI pool.

5.4 Cost Sharing Arrangements

All of the health insurance programs active in Turkey include some type of patient contribution, or cost-sharing, with the exception of the Green Card Program. The MOF, MOH, and TMA set the fee levels for all health facilities. For example, SSK patients pay a 20% co-payment for outpatient services and no co-payment for inpatient services. Private insurance policies vary, but typically include a 20% co-payment for outpatient and maternity services and for drugs, with no copayment for inpatient services.

- Cost sharing arrangements will include co-payments and deductibles designed to encourage rational use of the health care system. These co-payments will be waived for patients who are incapable of paying.

- A targeted system should be established to identify those who are eligible for waivers of the co-payments. The government is planning to issue each citizen a unique ID number. As described in a draft law prepared by the Ministry of Labor and Social Security (MOLSS), the Social Services and Social Assistance Institution in the MOLSS should build on this system to establish a targeting system for waivers of premiums and co-payments based on objective criteria.

5.5 Provider Payment

The MOH has translated, but not yet completely implemented the ICD 10. Information systems are still fragmented. Emekli Sandığı and the Turkish Pharmaceutical Association have separate pilot information system for pharmaceuticals, developed with World Bank assistance and EU grants. The Ministry of Finance and Hacettepe University are planning to implement a pilot payment project moving from fee-for-service to a DRG system. The preliminary results should be available at the end of 2004. Both Bag-Kur and SSK also have ongoing pilot projects for provider reimbursement.

- Contracts between GHI and different providers, public and private, should be gradually introduced until a comprehensive provider network is covered by

GHI. Payments should be structured to encourage high-quality services and to discourage moral hazard (over-provision of services).

- For hospital and provider payment, we recommend diagnosis-related payments subject to a global cap, with global budgets employed during a transition period until the information systems required for diagnostic-related payments are in place. A commission should be formed to determine the appropriate levels of these payments, based on the actuarial and costing study referred to above. To establish DRGs, it should be required to have both a primary and secondary diagnosis.

- At the provincial level, we recommend fee-for-service reimbursement of ambulatory physicians subject to a global cap initially. Once the required information systems are in place, we recommended a transition to a capitated reimbursement system for ambulatory care, also subject to a provincial global cap. For specialists, fee-for-service reimbursement model should be continued for non-hospital ambulatory services.

- The GHI should consider contracting out to private-sector Third Party Administrators (TPAs) such functions as: claims processing; claims review; profiling providers to monitor over-treatment; and case management of patients with costly complex conditions.

5.6 Public and Private Roles in Health Care Delivery

The opportunities, interests and resources for privatizing health services are unequally distributed across the nation. Successful privatization will need to address potential conflicts-of-interest between the interests of investors vs. the interest of patients, and potential perverse incentives to over- and under-treat ("the insurance effect") (Forde and Malley 1992). Through a mixture of provision, subsidy and regulation of healthcare, the government might employ privatization to realize greater competition, improved financial and administrative performance. Contracts could be used to share risk with the private sector while retaining public oversight.

- Market forces alone will not realize national health care goals; therefore, the government retains a critical role as regulator of markets and enforcer of regulations. The public sector will be a payer rather than a provider; however, it must establish the conditions under which the health sector functions to assure access and quality for rural, poor and other, disadvantaged, populations.

- The public sector will combine public insurance into one General Health Insurance (GHI). The private sector will provide supplementary health insurance, and will operate and manage "Health Enterprises." The vision is for primary health services to be provided by a mix of public and private providers with an ambulatory referral system to reduce unnecessary hospital use.
- While the Government will provide a basic benefit package that is to cover all citizens, it should continue to monitor and provide hospital services, serving as a safety net when the market place fails to provide services.

5.7 Strengthening Primary Care

- We recommend strengthening primary care in Turkey through the utilization of a multidisciplinary group practice model. Using this approach the public health centers would be transitioned to Primary Care Group Practices (PCGPs) staffed ideally by certified Primary Care Physicians (PCPs), nurses trained in primary care and support personnel, with staffing levels dependent on the size of the population in the service area. (See the Section 5.9 on Human Resources for discussion of PCP training and certification.)
- The main functions of PCGPs will be diagnosis and treatment of cases appropriate for the primary level of care, including the management of the most prevalent chronic illnesses (disease management); prevention and treatment of communicable diseases; immunization; maternal and child health services, family planning; public health education; community and school-based health promotion, medical record keeping and the collection of health-related statistical data. Dental services and mental health services could also be included where desirable. Ideally these Centers will tailor their services to address the special needs and priorities of their communities. PCGPs should have 24-hour on-call capability. Referral agreements should be established with appropriate hospitals and other health care providers in the service area.
- Whenever possible, PCGPs should include at least two physicians with shared responsibilities, as well as nurses with primary care training and other staff members. Group practices have many advantages over solo physician practices with regard to coverage, collegiality, the sharing of a business and clinical infrastructure, and financial stability (Hough 2002). On average they are able to provide better access and a higher quality of care than solo physician practices.

- Currently many patients, even in rural areas, are bypassing health centers and seeking first contact care in settings—such as hospital outpatient departments—that they perceive are providing higher quality care. This pattern suggests that fewer, better staffed and equipped Centers may be desirable. Decisions regarding the number and location of these Centers must take into consideration the potential trade-offs among access (in terms of the average distances patients must travel), possible efficiencies of Center operations, and the comprehensiveness and quality of services each Center will be able to provide.

- Funding for PCGPs could include varied mixes of public and private financing, depending on their geographic locations. In the first phase, funding should be provided by the GHI through the provincial health directorates or the municipalities, supplemented by patient fees from those with ability to pay. PCGP physicians could be a mix of salaried public employees, individual private physicians under contract, and/or private physician networks under contract.

- As insurance coverage expands, PCGPs could be paid eventually through capitation-based contracts with insurers for panels of patients who have enrolled with the PCGP for primary care. Payments could be adjusted for panel case-mix (age and gender), as well as practice location. The Centers will also, however, need public grant or contract funding from local, regional or the national level for the provision of community and school-based services, as well as outreach services for special populations.

- The ownership of PCGPs may vary: some Centers, particularly in rural areas, may retain public ownership while others (once the appropriate legal framework is in place) may be structured as private, not-for-profit corporations. In urban areas it is anticipated that many private clinics will transition to privately owned PCGPs. All PCGPs must be licensed and will have mandatory reporting requirements to their district Public Health Centers (see below).

- In addition, a Public Health Center should be established in each district with responsibility for health services planning as well as the coordination and oversight of PCGPs, including the investigation of patient complaints regarding PCGP services. The Public Health Centers will also be responsible for data

collection and epidemiological surveillance; major community health programs, including large-scale health screening as well as the planning and coordination of immunization campaigns; environmental health programs; and the coordination of preparedness activities to ensure a timely regional-level or national-level response to needs arising from natural disasters or other unexpected events. Upgrading these activities in Turkey will be necessary for meeting EU norms.

- Public Health Center staff members should be employees of the MOH in order to provide job security and achieve continuity and sustainability of the public health infrastructure. The staff members should be physicians, nurses and other health personnel with special training in management, epidemiology, planning, crisis management, community health education and other relevant topics. This training should be provided through appropriate master's level programs and/or through certificate-level in-service training.

5.8 Strengthening Public Hospitals through Greater Autonomy

In order to operationalize one or more models of public hospital autonomy appropriate for Turkey, consensus must be achieved on how to best realign decision-making in order to give greater responsibilities to regional (or quasi-public) authorities and individual hospitals, perhaps on a selective or pilot basis. Appendix 6 presents a decision-making matrix that might help frame the discussion regarding the types of decisions that should be reassigned to provincial bodies or delegated to autonomous or semi-autonomous hospitals. One model, for example, might delegate many of these types of decisions to local hospital boards (perhaps with community members) or senior managers, while retaining at the regional level the authority for health services planning, capital equipment resource planning and budgeting (similar to a Certificate of Need process), and oversight over hospital outcomes reporting. It is important to note that it is not necessary to obtain agreement on only one decision-making model.

- We recommend that demonstration projects be developed in order to test several alternative models for granting public hospitals greater autonomy in order to help determine which models are most appropriate for possible replication throughout the country.

- Moving these issues forward will require the completion of an appropriate legal framework, the establishment and training of hospital governing boards, and the development of policies and procedures to ensure the orderly transition of authority to the appropriate hospitals.
- It is recommended that each hospital governing board include individuals with expertise in finance and budgeting, legal affairs and regulation, management, medicine and nursing. Board members should also include representatives from the local community.
- The Success of the strategy will also heavily depend on ensuring additional training for individuals in hospital management positions, and optimally, training for new hospital board members regarding their responsibilities.

5.9 Human Resources

Central to any approach for improving the primary care infrastructure in Turkey is assuring that both newly graduated and currently practicing general practitioners have the knowledge and skills to deliver high quality primary care and prevention services. This will require a multi-pronged strategy.

- First, as the government's *Transformation in Health Program* intends, medical education programs prior to the sub-specialty level must be redesigned to focus on providing the knowledge, skills, values and attitudes central to the provision of primary care. The curriculum should include: knowledge regarding the most common conditions seen in ambulatory care; disease prevention and public health concepts; skills to provide primary care at the level of a general practitioner; management skills; and communication skills.
- Medical students should be given opportunities for observation and learning in primary care settings as early in their training as feasible. Ideally, these practical training opportunities should be provided by qualified primary care group practices affiliated with the medical education programs.
- Key to assuring that medical graduates from all educational programs have attained sufficient knowledge and skills is the development of a national examination that would function as a certification mechanism for Primary Care Physicians (PCPs). Such an exam could be developed and administered under the auspices of the Council of Higher Education, or a newly formed body with

membership representing universities, the MOH and the Turkish Medical Association among others who would constitute a Primary Care Physician Board of Examiners.

- Opportunities to obtain certification through this board examination should be open not only to new medical graduates from the family practice oriented programs, but also to practicing physicians, including general practitioners, pediatricians, internists, obstetricians/gynecologists, general surgeons, and other physicians who are interested in seeking primary care certification.
- Incentives for pursuing certification could be provided through the phasing in by health insurers of approved payment rate differentials for services provided by certified PCPs.
- A strategy should also be developed to facilitate PCP certification for general practitioners in office-based practices. One approach could be the development of primary care training modules that would parallel the topics covered by the newly developed medical education programs. These modules could be organized and delivered by the Turkish Medical Association, possibly in collaboration with the MOH and the universities. These modules should be designed in order to help prepare general practitioners for taking the PCP certification exam, perhaps in multiple stages if the exam could be organized in multiple parts by topic area.
- Nursing education programs must be strengthened by including more opportunities for practice experience and more content related to primary care.
- Policy makers should consider how to officially recognize the different capabilities of nursing graduates from the varied program levels, as well as how to effect changes in the nurse practice act in order to allow the nursing profession to assume greater responsibility in the management of patient care.
- It is important to further expand the initiatives already undertaken by the MOH and some universities to strengthen the health management and leadership training of senior and mid-level health services managers. This training could be conducted in intensive modules of several weeks duration as well as in weekend seminars. The curriculum of these training programs should include: strategic management; financial management; leadership of organizations and

change efforts; human resources management, including team building; management information systems; performance improvement concepts and skills; cost-effectiveness analysis, efficiency and productivity analysis; and skills training in conflict management, negotiation and communication.

- University-based programs in health care leadership and management should be further strengthened. Government scholarships for health management education in Turkey and abroad should be continued and expanded.
- There is a need for better health care human resources planning, based on epidemiologic and demographic data, at the national and provincial levels. Greater coordination is required among the State Planning Organization, the Council of Higher Education, and the MOH. One strategy could be the formation of a new council for health care human resources planning with representation from these organizations as well as the appropriate professional associations.

5.10 Pharmaceuticals

We recommend the development of a National Drug Policy (NDP), led by the National Institution of Medicine. The pharmaceutical industry is large and complex, it contains multiple perspectives and no one position represents all of the industry. Consequently, a NDP would establish priorities and coordinate efforts to enhance access to – and the quality and rational use of – pharmaceutical products. To realize this potential, the NDP that is developed will require the government's support, preferably by act of the legislature. The NDP would integrate policies, regulation, access and financing for pharmaceutical products.

A national drug policy does not result from a single decision – it evolves and is built over time. The integration of these components, the division of roles between the private and public sectors, and the determination of which regulatory authorities will ultimately have jurisdiction of each aspect must be decided by Turkey. It is the next logical step in Turkey's transformation of its health sector and accession to EU membership. The National Drug Policy should include representatives of all stakeholders for an open process to develop the NDP. The existing fragmentation and lack of explicitly identified national priorities and integrated support for their achievement must be overcome. The National Drug Policy will have integrated components that address pharmaceutical product manufacturing, distribution, financing and use.

Consequently, the process for developing the National Drug Policy must include the main stakeholders in the pharmaceutical sector to define objectives, set priorities, develop strategies and build commitment. Policies resulting from this process may extend beyond the health sector, including economic policies such as developing capacity in the domestic pharmaceutical industry. *It is critical that all the drug policy objectives are explicit, so that the roles of the public and private sectors and of the various ministries (health, finance, trade and industry) and government bodies (such as the drug regulatory authority) can be specified. [Other parties to this dialogue include] doctors, pharmacists, nurses, local and international pharmaceutical industries, professional associations, consumer groups, …, provincial and district personnel, … government sponsored health care schemes and insurance companies* (WHO, 2003).

Regarding accession to the European Union, a process such as the guide provided by the Pan European Regulatory Forum (PERF, 2004) that the EU employed with the recently admitted member states should be initiated once a date for talks with Turkey is set. PERF could provide a detailed, planned harmonization with EU pharmaceutical legislation, and practices. In the interim, work to remove barriers to EU accession should continue, particularly those concerning intellectual property, data protection and technical barriers to trade.

The National Drug Policy should balance its attention to include each aspect of the "access framework":

- Identification of essential medicines for the General Health Insurance: the selection criteria should be based on the national morbidity pattern, levels of scientific evidence and cost-effectiveness. The essential medicines list as a component of the National Drug Policy should be a priority, not a consideration.

- Affordability of essential medicines: including the impact of pricing policies, taxes and tariffs, procurement for multi-source and single-source products that enhance access to essential medicines. Pharmaceutical products not on the essential medicines list would be addressed through the broader EU harmonization process that acknowledges individual country pricing approaches.

- Financing options: pharmaceutical products are a substantial percentage of health expenditures in Turkey, consequently, the amount of funds and

mechanisms for broad access under general health insurance will be critical for essential medicines. Specific elements to be addressed include targeting priority diseases, procurement and logistics that increase efficiency, encouraging prescription drug coverage in public and private health insurance, and limited use of patient cost-sharing. A high priority is to identify the role in the Basic Benefit Package for essential medicines that are determined under the National Drug Policy. An additional priority is to reduce delays for payment of pharmaceuticals.

- Public-private supply systems: addressing procurement and supply chain logistics for raw and for finished pharmaceutical products to assure availability without excessive inventory costs, diversion or stock-outs.
- Drug regulation: A National Drug Institute, as the drug regulatory authority, oversees scientific review, pre-marketing certification, post-marketing review, pharmaco-vigilance, marketing and advertising. In addition, it inspects all manufacturing facilities for quality assurance and enforcement, including Good Manufacturing Practices, testing and certification of the bio-equivalence of generic products. Due to the challenge of enforcement of these regulations, WHO proposes basic requirements in addition to those identified in the previous material: laws, regulations, staffing and monetary resources are appropriate to the tasks; and an independent regulatory authority.
- Post-marketing pharmaco-vigilance, as practiced in the EU (Eudra, 2004), will require an adjustment of funding and staffing of the Hygiene Institute Center's post-marketing monitoring of pharmaceutical products.
- Rational pharmacotherapy: The NDP will identify a multidisciplinary body to coordinate medicine use policies, identify clinical guidelines for undergraduate and continuing medical education, and stress patient information and education on pharmaceutical products. In addition, it will establish the clinical criteria for selecting those drugs identified as essential medicines.
- Operational research: The NDP would encourage two related types of research: for efficient delivery systems, and for clinical research.
- Human resources: The NDP recognizes the government's role in planning for the number, diversity and staff level required for the national drug policy functions, indicator-based monitoring, evaluation and corrective actions.

Educational requirements, training and licensing must be consistent with the compensation and performance expectations.

- Additional recommendations concerning pharmaceutical products include:

  ✓ Addressing directly the prescription and over-the-counter medication needs for patients at primary health centers;

  ✓ Establishing policies that provide incentives that encourage investments in domestic pharmaceutical production capacity;

  ✓ Timely payments by government and insurers

  ✓ Implementing value based purchasing and technology assessment. The National Institution of Medicine should take the lead in training, or identifying the organizations that provide training for professionals in performing rigorous, unbiased technology assessments. Cost-effectiveness analyses and pricing assessments should be separate from the National Drug Institute's responsibilities – instead, this applied research should be performed by university faculty, non-profit organizations, and manufacturers based on a professional standard of practice. Examples of such guidelines for pharmaceutical product assessments come from professional societies (AMCP 2001), government (USPHS 1996) and nonprofit organizations (Cochrane 2004). These analyses can be used to determine the content and the extent of insurance coverage of specific pharmaceutical products, for example, varying the amount of patient cost-sharing as a function of the level of evidence supporting the clinical and economic value of the pharmaceutical product.

  ✓ Performing drug utilization review (DUR): DUR is a formal, continuous program that reviews, analyzes, and interprets instances and episodes of drug use against predetermined criteria and standards (Lyles 1998, Lyles 2001). DUR can identify fraud and abuse, detect potential drug-drug interactions, and identify prescribing patterns that may not be consistent with recommendations or treatment guidelines.

5.11 Medical Devices

- The fragmented medical devices industry requires a single point of authority for standardization, quality control, and regulation. *Transformation in Health* has identified an Institution of Medical Devices that could be organized to perform these functions.

- Timely decisions are required; consequently, appropriate incentives and expectations must be established for the administration to create a culture of accountability.
- Evidence-based decisions will require rigorous, unbiased technology assessments – these should be encouraged, but preferably using professionals from non-governmental, non-profit organizations such as universities and/or foundations. To encourage the use of such assessments, regulations and purchasing processes should require their consideration whenever they are available.
- Performing and interpreting technology assessments will require additional training for the public and private sector professionals who must make decisions based on these assessments.
- The Institution of Medical Devices' identification of evidence based technical selection criteria would provide guidance to administrators and physicians who must make purchasing decisions and support efficient use of limited capital funds.
- The Institution of Medical Devices should consult with public and private sector stakeholders, then issue guidelines on practice for equipment technical criteria, maintenance and repair. These guidelines should include specifying the qualifications for service technicians / engineers, the appropriate activities and frequency for their work on installed devices, and requirements for specific technical continuing education.
- The Institution of Medical Devices should also issue standards on sterilization policies, single use vs. reuse devices, and tracking and device recalls. The EU has relatively extensive directives on medical devices that will require harmonization.
- To assure appropriate access without duplication or excess capacity a state Certificate of Need (CON) process should be developed to enhance the optimal use of diagnostic and curative equipment.
- Group purchasing arrangements can be used to obtain better prices. To the extent that it is feasible, opportunities to combine purchases and their negotiations should be pursued.

- Medical devices are a potential growth industry for the Turkish private sector; consequently, government policies should encourage should encourage investment in this sector.

5.12 A Framework for Monitoring and Improving Health Care Quality

There is currently a lack of systems to monitor and promote quality of health care. These safeguards are even more necessary when health systems undergo fundamental change and become more market oriented.

- Creating or strengthening mandatory licensing systems, as well as voluntary certification and accreditation systems are important parts of a strategy to improve quality and accountability of health services. These systems should monitor the qualifications and performance of hospitals, physicians, and other providers in both the public and private sectors.

- Licensure and periodic re-licensure of health professionals and facilities should be the responsibility of an appropriate public sector authority and should be mandatory in order to ensure the minimum standards necessary for protecting public health and safety.

- The certification of health professionals who have met certain predetermined qualifications should be the responsibility of private health professional associations. (A certification process for Primary Care Physicians has been discussed above). Certification should be voluntary, but should be encouraged by establishing payment rate differentials after a phase-in period.

- An accreditation process should be established which formally assesses and recognizes public and private hospitals that have met applicable predetermined and published standards. We recommend that a similar process be established for Primary Care Group Practices.

- We suggest that a Turkish Accreditation Council be established with oversight authority for the accreditation process in health sector. This Council should have representatives from the Turkish Medical Association, various medical specialty societies, professional nursing, the MOH and MOL, the Private Hospitals' Association, the Health Management Association, Health Institutions' Association, Association of the Insurance and Reinsurance Companies of Turkey, the Quality

Association of Turkey and others as appropriate. Possible funding sources for establishing and maintaining the accreditation process could include government subsidies, accreditation fees, the sale of publications (including "download" fees), and revenues from workshops and educational offerings.

- Until this Council is established and functional, the MOH should coordinate these activities; an independent department for quality activities should be established within the existing MOH structure.
- We recommend that Turkey begin with "facilitated accreditation"—a process that could emphasize capacity building and technical support for quality improvement both prior to and during the accreditation process. It may be helpful to have various categories of accreditation status such as "accreditation with commendation," "full accreditation," "accreditation with requirements for improvement," etc. It would be desirable for Turkey to develop exchanges with more developed accreditation programs.
- Eventually, differential reimbursements should be linked to accreditation status.
- Other strategies for improving health care quality should include the development of practice guidelines, such as the guidelines developed for improving primary care under the leadership of the MOH. The MOH could also facilitate the development of quality improvement networks of hospitals. They could also encourage the development, implementation and continued refinement of standardized process and outcome indicators.
- We believe TUSIAD could play a leadership role in promoting quality of care in both public and private institutions. One model for such an approach is the Leapfrog Group, an initiative of the Business Roundtable in the U.S. This group has developed standards for patient safety and quality of care, actively promotes the implementation of these standards in hospital settings, and publicizes these standards and the comparative performance of hospitals for use by individual consumers and large health care purchasers.

5.13 Information Systems

The *Transformation in Health* project identified the main functional requirements of the preferred health information system. The critical challenges for the public and private sectors are to provide strategic, continuing capital support to

support and disseminate the results of promising pilot projects. For the public sector specifically, support for standards will be vital to progress in information technology. For the private sector, new ventures and market research can present the government with the necessary options. There currently is no single point of coordination and direction for a Health Information Infrastructure. An independent, non-profit organization will need to be established to guide this field. Such an Institute could make decisions between alternative technical approaches to avoid continued fragmentation and encourage progress to compatible standards. Performance measurement, the basis for quality improvement and resource allocation decisions, ultimately depends on a functional, integrated information system (NCQA, 1998).

The following recommendations address the priority, urgency and framework for a national information infrastructure:

- Establish an independent, non-governmental, not-for-profit Health Information Institute as Turkey's information standard setting organization. This Health Information Institute (HII) will include membership and participation by each of the main IT stakeholders to provide a critical base for this community of practitioners. The HII's primary functions would be to set standards and disseminate health technology and related findings and decisions, therefore, it would become the single point of coordination for a *health information infrastructure*.

  ✓ The Institute should be based in a University environment.

  ✓ The Health Information Institute's strategic framework begins with the government delegating authority to it to be the sole health information standard setting organization in Turkey. Initially, a board composed of both appointed and representative members from government, academia and industry will be required – they should determine the succession process for membership.

  ✓ The Institute will develop its own policies and procedures to address disclosure, potential conflicts of interest and resolution of these matters. This will be crucial to the production and the acceptance of unbiased, evidence-based decisions.

  ✓ The Health Information Institute, as a consortium, may use consultants or outsource work as required by project requirements for staffing or expertise.

- ✓ Funding models will differ for start-up and for ongoing operations. The start-up phase should be funded by a combination of fees (industry) and grants (government). Ongoing operations should be funded through a combination of fees, licensing or technical sales / training materials on standards, and grants or contracts.

- The Health Information Institute's agenda to guide the infrastructure's evolution includes developing, or certifying, the following standards:

  - ✓ National Health Informatics Standards: Identifier, Communication, Confidentiality, Security and Encryption
  - ✓ National Conceptual Health Data Model: content and structure
  - ✓ National Minimum Health Data Sets
  - ✓ National Health Data Dictionary
  - ✓ National Case-Mix Classification System (Inpatient/Ambulatory)
  - ✓ Computer-based patient records
  - ✓ Payments, transfers and financial system interface requirements: this will be essential to the implementation of the General Health Insurance
  - ✓ Quality Indicators: The infrastructure for a Health Information System requires organization and authoritative guidance; however, it also requires initial and continuing resources.

- Government should promote regulations to encourage and reward health sector information system investments by the private sector; possible models include public-private partnerships, Build Operate Own (BOO), and/or Build Operate Transfer (BOT) projects.

- Establish an information infrastructure to support the proposed health care reform, particularly regarding payments, transfers and data elements required for payments. A functioning information system with standards for sharing and communication will be essential for implementation of the General Health Insurance, Fundamental goals for the IS are to achieve health expenditure control, to support efficient management of medical materiel, and financing mechanisms proposed under this project.

- Identify standards for coding and systems communications to support effective material management.
- In the public sector we recommend dedicated funding for information infrastructure, including equipment, personnel, training, maintenance, legislation and replacement. These are particularly needed for healthcare financing functions and institutions.
- We also recommend close coordination between government agencies and the Health Information Institute (HII) to assess rapidly the lessons learned, and accomplishments from their initiatives. This process is intended to reduce delays in making decisions, reduce redundant work, and to disseminate useful tools as soon as they have demonstrated their value.
- We recommend an iteration methodology instead of massive, comprehensive one time projects. For example, as a first step a pilot study sampling current data sources and data collection activities should be undertaken; this would establish a baseline and objective information from which a Health Information System can be planned.

5.14 The Legal Framework Necessary to Support Health Reform

Certain legislative changes are necessary for health reform to successfully take place in Turkey. In addition to new laws, changes to the Constitution may be necessary. In this context, either the abolishment or revision of the following existing legal arrangements will be required:

- Law No. 224 – Socialization of Health Services (dated 1961);
- Law No. 3359 – Health Services Basic Law (dated 1987);
- Law No. 1593 – General Hygiene (dated 1930);
- Law No. 1219 – Practice of Medicine and Its Branches (dated 1928);
- Law No. 3017 – Ministry of Health and Social Aid Organization and its workers Law (dated 1936);
- Governmental Decree No. 181 and 210 – Organization of the Ministry of Health (dated 1981 and 1983);

- Law No. 3958 – Optometrists and Ophthalmic Opticians (dated 1940);
- Law No. 6023 – Turkish Medical Association (dated 1953);
- Law No. 6197 – Chemists and Pharmacies (dated 1953);
- Law No. 6283 – Nursing (dated 1954);
- Law No. 6643 – Turkish Pharmacists' Association (dated 1956); and
- Related laws governing SSK, Bag-Kur, ES, Green Card Scheme.

New legal arrangements should be prepared conforming to the needs of the health sector transition process. The laws should contain a broad framework, with actual implementation described by separate regulations. One of the goals of these arrangements should be to create synergy between public and private resources. Flexibility in implementation should also be permitted. The recommendations and concerns of all stakeholders should be taken into consideration during the preparation and implementation of legal arrangements. In order to avoid the fragmentation that currently exists in the health sector, the preparation and implementation of all legal matters should be coordinated by a steering committee at the level of the Prime Minister.

In this context, new laws should be prepared to cover the following:

- General Health Insurance;
- Public and Private Hospitals;
- Primary Health Care Services;
- Health Management;
- Duties and Responsibilities of Health Personnel;
- Public Health; and
- Legal Changes to Encourage Private Sector Investment.

Each of these is described in further detail below.

- **A General Health Insurance Law** (instead of separate laws for SSK, Bag-Kur, ES, and the Green Card Scheme).

- ✓ Should be premium based.
- ✓ Should be mandatory.
- ✓ The establishment of a General Health Insurance institution. All health allocations to the Pension Fund, SSK, Bag-Kur and the consolidated budget (such as the Green Card Scheme, Active Government Employees), should be transferred to this institution.
- ✓ Premiums will be collected by the Ministry of Finance.
- ✓ Premiums of those without the ability to pay will be paid by the government.
- ✓ The law should include the possibility for financial management to be tendered out to the private sector, potentially Third Party Administrators (TPAs).
- ✓ With a defined basic benefits package provided by the General Health Insurance Institution, supplementary insurance would be provided by the private insurers.
- ✓ Duplicate health premium payments should be eliminated.

• **A Public and Private Hospitals Law** (instead of Law No. 3359, other related rules and regulations).

- ✓ Should cover all hospitals (public, private, university, foundation, etc.).
- ✓ Conformity with the defined minimum benefits package and standards should be mandatory.
- ✓ Only those hospitals conforming to this law should be able to enter into contracts with General Health Insurance Institution.
- ✓ Public hospitals should be made more autonomous, managed by professional directors.
- ✓ Procurement procedures using the private health sector should be encouraged, through tax incentives, Build Operate Transfer (BOT) agreements.
- ✓ Periodic licenses renewal should be mandatory.
- ✓ Accreditation should be encouraged through payment rate differentials.
- ✓ For patients, skipping any level in the referral chain should result in increased co-payment.

- ✓ A separate management and financing model should be created to enhance the educational quality and ensure the financial sustainability of tertiary and academic hospitals.

- **Primary Health Care Services** (instead of Law No. 224-3359, and other related rules and regulations).
  - ✓ Fragmentation should be prevented in Primary Health Care Services. In this context all public health facilities should be unified under a single structure.
  - ✓ Private service providers should be able to provide services within this structure.
  - ✓ Primary health care services should be the first step in the referral chain.
  - ✓ Job descriptions and minimum staffing standards for Primary Care Providers (PCPs) should be determined on a population basis.
  - ✓ The public sector's responsibilities in primary level health services should be defined – in terms of supervision of PCPs and providing preventive services for the community.
  - ✓ Staffing standards, financial mechanisms, and job descriptions for district-level public health centers should be defined.
- **Health Management** (instead of Law No. 3017, Government Decree181 and 210, and other related rules and regulations).
  - ✓ Should conform to the health sector-related principles of the Public Management Reform.
  - ✓ National health policies should be determined at the central level.
  - ✓ Operational health management should be delegated to provincial level.
- **Duties and Responsibilities of Health Personnel** (instead of Law No. 1219-6023-6197-6283-6643-3958, and other related rules and regulations).
  - ✓ The responsibilities, job descriptions, authority and qualifications of current health professions should be defined.
  - ✓ Planning and monitoring of the quality and quantity of health personnel at the pre and post--graduation level should be defined.
  - ✓ The licensing and certification procedures of health personnel should be defined.

- **Public Health** (instead of Law No. 1593, and other rules and regulations).
  - ✓ Responsibilities of the public sector in terms of public health should be clearly identified.
  - ✓ The structure of public health services in terms of supervision and providing preventive services for the community should be defined.
  - ✓ Staffing standards and job descriptions for public health services should be determined.
- **Legal Changes to Encourage Private Sector Investment**: A number of legal changes could be considered to encourage private investment in the health care sector:
  - ✓ Possible models include Build Operate Transfer (BOT) / Build Operate / Ownership / Service Procurement Procedures in Health Sector, and other Public-Private Partnership Models.
  - ✓ Tax reductions for private health care facilities.
  - ✓ Reduction in taxes, outlays and fund payments for devices such as prostheses, hearing aids, etc.
  - ✓ Reduction of VAT for health care services.
  - ✓ VAT exemption for services rendered to non-Turkish citizens should be introduced.
  - ✓ Open advertisement for over-the-counter (OTC) pharmaceutical products, consistent with EU standards.
  - ✓ Investment and operation incentives for the private sector for geriatric rehabilitation and oncology centers.
  - ✓ Integration of emergency health and rescue services covering all public and private sources and facilities.
  - ✓ Integration of the struggle against narcotics into public health.
  - ✓ The introduction of legal arrangements to enforce patients' rights and appeals process.

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Appendix 1. OECD COMPARATIVE TABLES (2001)

Table 16. Total Fertility Rate (births per woman)

Rank	Country	Value
1	**Turkey**	**2.3**
2	Iceland	2.0
3	Cyprus	1.9
4	France	1.9
5	Ireland	1.9
6	Denmark	1.8
7	Luxembourg	1.8
8	Norway	1.8
9	Macedonia, FYR	1.8
10	Finland	1.7
11	Yugoslavia Fed. Rep.	1.7
12	Netherlands	1.7
13	United Kingdom	1.7
14	Belgium	1.6
15	Bosnia and Herzegovina	1.6
16	Sweden	1.6
17	Portugal	1.5
18	Switzerland	1.4
19	Croatia	1.4
20	Germany	1.4
21	Poland	1.3
22	Slovak Republic	1.3
23	Greece	1.3
24	Austria	1.3
25	Romania	1.3
26	Hungary	1.3
27	Belarus	1.3
28	Lithuania	1.3
29	Bulgaria	1.3
30	Estonia	1.2
31	Italy	1.2
32	Slovenia	1.2
33	Spain	1.2
34	Czech Republic	1.2
35	Latvia	1.2

Table 17. GNP per capita, PPP (current international $)

Rank	Country	Value
1	Luxembourg	53,780
2	Ireland	32,410
3	Iceland	29,990
4	Norway	29,620
5	Denmark	29,000
6	Switzerland	28,100
7	Netherlands	27,190
8	Austria	26,730
9	Belgium	55,520
10	Germany	25,350
11	Italy	24,670
12	Finland	24,430
13	Sweden	24,180
14	United Kingdom	24,160
15	France	23,990
16	Cyprus	21,190
17	Spain	20,150
18	Portugal	18,150
19	Greece	17,440
20	Slovenia	17,130
21	Czech Republic	14,720
22	Hungary	12,340
23	Slovak Republic	11,960
24	Estonia	10,170
25	Poland	9,450
26	Croatia	9,170
27	Lithuania	8,470
28	Latvia	7,730
29	Belarus	7,620
30	Bulgaria	6,890
31	Macedonia, FYR	6,110
32	Bosnia and Herzegovina	5,970
33	**Turkey**	**5,890**
34	Romania	5,830
35	Yugoslavia, Fed. Rep.	-

Table 18. Health Expenditures per Capita (current US$)

Rank	Country	Value
1	Switzerland	$3,573
2	Norway	$2,832
3	Iceland	$2,729
4	Luxembourg	$2,514
5	Denmark	$2,512
6	Germany	$2,422
7	Sweden	$2,179
8	France	$2,057
9	Belgium	$1,936
10	Netherlands	$1,900
11	Austria	$1,872
12	United Kingdom	$1,747
13	Ireland	$1,692
14	Finland	$1,559
15	Italy	$1,498
16	Spain	$1,073
17	Cyprus	$888
18	Greece	$884
19	Portugal	$862
20	Slovenia	$788
21	Croatia	$434
22	Czech Republic	$358
23	Hungary	$315
24	Poland	$246
25	Estonia	$218
26	Slovak Republic	$210
27	Lithuania	$185
28	Latvia	$174
29	**Turkey**	**$150**
30	Macedonia, FYR	$106
31	Bulgaria	$59
32	Belarus	$57
33	Bosnia and Herzegovina	$50
34	Yugoslavia, Fed. Rep.	$50
35	Romania	$48

Table 19. Private Health Expenditures as a % of GNP

Rank	Country	Value
1	Switzerland	4.8
2	Greece	2.7
3	Cyprus	3.6
4	Yugoslavia, Fed. Rep.	2.7
5	Germany	2.6
6	Netherlands	2.6
7	Belgium	2.5
8	Austria	2.4
9	Portugal	2.4
10	Latvia	2.4
11	Spain	2.3
12	France	2.3
13	Italy	2.1
14	Croatia	2.0
15	Sweden	1.9
16	Poland	1.8
17	Slovenia	1.8
18	Lithuania	1.7
19	Hungary	1.7
20	Finland	1.6
21	Ireland	1.6
22	Denmark	1.5
23	**Turkey**	**1.4**
24	Estonia	1.4
25	Bosnia and Herzegovina	1.4
26	Iceland	1.4
27	United Kingdom	1.4
28	Norway	1.2
29	Romania	1.0
30	Belarus	1.0
31	Macedonia, FYR	0.9
32	Bulgaria	0.9
33	Czech Rebuplic	0.6
34	Slovak Republic	0.6
35	Luxembourg	0.5

Table 20. Public Health Expenditures as a % of GNP

Rank	Country	Value
1	Croatia	8.0
2	Germany	8.0
3	Iceland	7.5
4	France	7.2
5	Denmark	6.8
6	Slovenia	6.8
7	Norway	6.6
8	Czech Republic	6.6
9	Sweden	6.5
10	Belgium	6.2
11	Italy	6.0
12	Switzerland	5.9
13	United Kingdom	5.9
14	Portugal	5.8
15	Austria	5.6
16	Netherlands	5.5
17	Spain	5.4
18	Luxembourg	5.3
19	Slovak Republic	5.3
20	Hungary	5.1
21	Ireland	5.1
22	Macedonia, FYR	5.1
23	Finland	5.0
24	Belarus	4.7
25	Estonia	4.7
26	Greece	4.6
27	Lithuania	4.3
28	Cyprus	4.3
29	Poland	4.2
30	**Turkey**	**3.6**
31	Latvia	3.5
32	Bosnia and Herzegovina	3.1
33	Bulgaria	3.0
34	Yugoslavia, Fed. Rep.	2.9
35	Romania	1.9

Table 21. Total Health Expenditures as a % of GNP

Rank	Country	Value
1	Switzerland	10.7
2	Germany	10.6
3	Croatia	10.0
4	France	9.5
5	Iceland	8.9
6	Belgium	8.7
7	Slovenia	8.6
8	Sweden	8.4
9	Denmark	8.3
10	Greece	8.3
11	Portugal	8.2
12	Italy	8.1
13	Netherlands	8.1
14	Austria	8.0
15	Cyprus	7.9
16	Norway	7.8
17	Spain	7.7
18	United Kingdom	7.3
19	Czech Republic	7.2
20	Hungary	6.8
21	Ireland	6.7
22	Finland	6.6
23	Estonia	6.1
24	Lithuania	6.0
25	Macedonia, FYR	6.0
26	Poland	6.0
27	Latvia	5.9
28	Slovak Republic	5.9
29	Luxembourg	5.8
30	Belarus	5.7
31	Yugoslavia, Fed. Rep.	5.6
32	**Turkey**	**5.0**
33	Bosnia and Herzegovina	4.5
34	Bulgaria	3.9
35	Romania	2.9

Table 22. Hospital Beds per 1,000 Population

Rank	Country	Value
1	Switzerland	17.9
2	Norway	14.6
3	Netherlands	10.8
4	Ireland	9.7
5	Lithuania	9.2
6	Germany	9.1
7	Czech Republic	8.8
8	Austria	8.6
9	France	8.2
10	Hungary	8.2
11	Luxembourg	8.0
12	Finland	7.5
13	Bulgaria	7.4
14	Estonia	7.4
15	Belgium	7.3
16	Slovak Republic	7.1
17	Greece	4.9
18	Italy	4.9
19	Macedonia, FYR	4.9
20	Poland	4.9
21	Denmark	4.5
22	Spain	4.1
23	United Kingdom	4.1
24	Portugal	4.0
25	Sweden	3.6
26	**Turkey**	**2.6**
27	Belarus	n/a
28	Bosnia and Herzegovina	n/a
29	Croatia	n/a
30	Cyprus	n/a
31	Iceland	n/a
32	Latvia	n/a
33	Romania	n/a
34	Slovenia	n/a
35	Yugoslavia, Fed. Rep.	n/a

Table 23. Immunization, DPT (% of Children under 12 months)

Rank	Country	Value
1	Belarus	99.0
2	Finland	99.0
3	Hungary	99.0
4	Romania	99.0
5	Slovak Republic	99.0
6	Sweden	99.0
7	Czech Republic	98.0
8	France	98.0
9	Luxembourg	98.0
10	Poland	98.0
11	Denmark	97.0
12	Germany	97.0
13	Latvia	97.0
14	Netherlands	97.0
15	Belgium	96.0
16	Bulgaria	96.0
17	Portugal	96.0
18	Italy	95.0
19	Lithuania	95.0
20	Norway	95.0
21	Spain	95.0
22	Switzerland	95.0
23	Croatia	94.0
24	Estonia	94.0
25	United Kingdom	94.0
26	Yugoslavia, Fed. Rep.	93.0
27	Iceland	92.0
28	Slovenia	92.0
29	Bosnia and Herzegovina	91.0
30	Macedonia, FYR	90.0
31	Greece	88.0
32	**Turkey**	**88.0**
33	Austria	84.0
34	Ireland	84.0
35	Cyprus	n/a

Table 24. Immunization, Measles (% Children under 12 months)

Rank	Country	Value
1	Belarus	99.0
2	Hungary	99.0
3	Slovak Republic	99.0
4	Latvia	98.0
5	Romania	98.0
6	Slovenia	98.0
7	Czech Republic	97.0
8	Lithuania	97.0
9	Poland	97.0
10	Bulgaria	96.0
11	Finland	96.0
12	Netherlands	96.0
13	Estonia	95.0
14	Croatia	94.0
15	Denmark	94.0
16	Spain	94.0
17	Sweden	94.0
18	Norway	93.0
19	Bosnia and Herzegovina	92.0
20	Macedonia, FYR	92.0
21	Luxembourg	91.0
22	**Turkey**	**90.0**
23	Yugoslavia, Fed. Rep.	90.0
24	Germany	89.0
25	Greece	88.0
26	Iceland	88.0
27	Portugal	87.0
28	Cyprus	86.0
29	United Kingdom	85.0
30	France	84.0
31	Belgium	83.0
32	Switzerland	81.0
33	Austria	79.0
34	Ireland	73.0
35	Italy	70.0

Table 25. Life Expectancy at Birth, Female (years)

Rank	Country	Value
1	France	83.0
2	Switzerland	83.0
3	Sweden	82.1
4	Italy	81.9
5	Spain	81.9
6	Iceland	81.9
7	Belgium	81.6
8	Finland	81.5
9	Norway	81.5
10	Austria	81.4
11	Greece	80.7
12	Germany	80.7
13	Luxembourg	80.7
14	Netherlands	80.6
15	Cyprus	80.4
16	United Kingdom	80.0
17	Ireland	79.5
18	Slovenia	79.5
19	Portugal	79.3
20	Denmark	78.9
21	Czech Republic	78.4
22	Lithuania	77.9
23	Croatia	77.9
24	Poland	77.8
25	Slovak Republic	77.3
26	Estonia	76.4
27	Bosnia and Herzegovina	76.3
28	Latvia	76.1
29	Hungary	75.9
30	Macedonia, FYR	75.5
31	Bulgaria	75.2
32	Yugoslavia, Fed. Rep.	75.1
33	Belarus	74.1
34	Romania	73.8
35	**Turkey**	**72.3**

Table 26. Life Expectancy at Birth, Male (years)

Rank	Country	Value
1	Sweden	77.6
2	Iceland	77.5
3	Switzerland	76.9
4	Norway	76.0
5	Cyprus	75.7
6	Austria	75.7
7	France	75.5
8	Greece	75.3
9	Netherlands	75.3
10	Italy	75.3
11	Belgium	75.2
12	United Kingdom	74.9
13	Spain	74.7
14	Germany	74.7
15	Finland	74.6
16	Denmark	74.2
17	Ireland	73.9
18	Luxembourg	73.9
19	Portugal	72.5
20	Slovenia	71.9
21	Czech Republic	71.6
22	Bosnia and Herzegovina	71.0
23	Macedonia, FYR	70.9
24	Yogoslavia, Fed. Rep.	70.2
25	Poland	69.5
26	Croatia	69.4
27	Slovak Republic	69.3
28	Bulgaria	68.3
29	Lithuania	67.7
30	Hungary	67.4
31	**Turkey**	**67.3**
32	Romania	66.2
33	Estonia	65.1
34	Latvia	65.0
35	Belarus	62.4

Table 27. Infant Mortality Rate (under age one mortality per 1,000 live births)

Rank	Country	Value
1	**Turkey**	**36.0**
2	Macedonia, FYR	22.0
3	Romania	19.0
4	Belarus	17.0
5	Latvia	17.0
6	Yugoslavia, Fed. Rep.	17.0
7	Bosnia and Herzegovina	15.0
8	Bulgaria	14.0
9	Estonia	11.0
10	Hungary	8.0
11	Lithuania	8.0
12	Poland	8.0
13	Slovak Republic	8.0
14	Croatia	7.0
15	Ireland	6.0
16	United Kingdom	6.0
17	Austria	5.0
18	Belgium	5.0
19	Cyprus	5.0
20	Greece	5.0
21	Luxembourg	5.0
22	Netherlands	5.0
23	Portugal	5.0
24	Switzerland	5.0
25	Czech Republic	4.0
26	Denmark	4.0
27	Finland	4.0
28	France	4.0
29	Germany	4.0
30	Italy	4.0
31	Norway	4.0
32	Slovenia	4.0
33	Spain	4.0
34	Iceland	3.0
35	Sweden	3.0

Table 28. Child Mortality Rate (under five mortality per 1,000 live births)

Rank	Country	Value
1	**Turkey**	**43.0**
2	Macedonia, FYR	26.0
3	Latvia	21.0
4	Romania	21.0
5	Belarus	20.0
6	Yugoslavia, Fed. Rep.	19.0
7	Bosnia and Herzegovina	18.0
8	Bulgaria	16.0
9	Estonia	12.0
10	Hungary	9.0
11	Lithuania	9.0
12	Poland	9.0
13	Slovak Republic	9.0
14	Croatia	8.0
15	United Kingdom	7.0
16	Belgium	6.0
17	Cyprus	6.0
18	France	6.0
19	Ireland	6.0
20	Italy	6.0
21	Netherlands	6.0
22	Portugal	6.0
23	Spain	6.0
24	Switzerland	6.0
25	Austria	5.0
26	Czech Republic	5.0
27	Finland	5.0
28	Germany	5.0
29	Greece	5.0
30	Luxembourg	5.0
31	Slovenia	5.0
32	Denmark	4.0
33	Iceland	4.0
34	Norway	4.0
35	Sweden	3.0

Table 29. Physicians per 1,000 Population

Rank	Country	Value
1	Italy	6.0
2	Belarus	4.4
3	Greece	4.4
4	Lithuania	4.0
5	Belgium	3.9
6	Germany	3.6
7	Slovak Republic	3.5
8	Switzerland	3.5
9	Bulgaria	3.4
10	Denmark	3.4
11	Iceland	3.4
12	Spain	3.3
13	Hungary	3.2
14	Netherlands	3.2
15	Portugal	3.2
16	Austria	3.1
17	Czech Republic	3.1
18	Finland	3.1
19	Luxembourg	3.1
20	France	3.0
21	Estonia	3.0
22	Norway	2.9
23	Sweden	2.9
24	Latvia	2.8
25	Ireland	2.3
26	Croatia	2.3
27	Slovenia	2.3
28	Macedonia, FYR	2.2
29	Poland	2.2
30	Romania	1.8
31	United Kingdom	1.8
32	Bosnia and Herzegovina	1.4
33	**Turkey**	**1.3**
34	Cyprus	n/a
35	Yugoslavia, Fed. Rep.	n/a

Table 30. Population Growth (annual %)

Rank	Country	Value
1	Bosnia and Herzegovina	1.5
2	**Turkey**	**1.4**
3	Ireland	1.0
4	Switzerland	0.7
5	Iceland	0.7
6	Netherlands	0.7
7	Norway	0.6
8	Cyprus	0.6
9	Luxembourg	0.6
10	Macedonia, FYR	0.6
11	France	0.4
12	Greece	0.4
13	Sweden	0.3
14	Belgium	0.3
15	Denmark	0.3
16	Finland	0.2
17	Germany	0.2
18	Spain	0.2
19	Austria	0.1
20	United Kingdom	0.1
21	Slovak Republic	0.1
22	Portugal	0.1
23	Yugoslavia, Fed. Rep.	0.1
24	Slovenia	0.0
25	Poland	0.0
26	Italy	0.0
27	Croatia	-0.1
28	Czech Republic	-0.1
29	Lithuania	-0.2
30	Hungary	-0.2
31	Romania	-0.2
32	Belarus	-0.4
33	Estonia	-0.4
34	Bulgaria	-0.7
35	Latvia	-1.0

Table 31. Population Total (millions)

Rank	Country	Value
1	Germany	82.3
2	**Turkey**	**68.5**
3	France	59.2
4	United Kingdom	58.8
5	Italy	57.9
6	Spain	41.1
7	Poland	38.6
8	Romania	22.4
9	Netherlands	16.0
10	Yugoslavia, Fed. Rep.	10.7
11	Greece	10.6
12	Belgium	10.3
13	Czech Republic	10.2
14	Hungary	10.2
15	Portugal	10.0
16	Belarus	10.0
17	Sweden	8.9
18	Austria	8.1
19	Bulgaria	7.9
20	Switzerland	7.2
21	Slovak Republic	5.4
22	Denmark	5.4
23	Finland	5.2
24	Norway	4.5
25	Croatia	4.4
26	Bosnia and Herzegovina	4.1
27	Ireland	3.8
28	Lithuania	3.5
29	Latvia	2.4
30	Macedonia, FYR	2.0
31	Slovenia	2.0
32	Estonia	1.4
33	Cyprus	0.8
34	Luxembourg	0.4
35	Iceland	0.3

Table 32. Percentage of Population in Urban Areas

Rank	Country	Value
1	Belgium	97.4
2	Iceland	92.6
3	Luxembourg	91.8
4	Netherlands	89.6
5	United Kingdom	89.5
6	Germany	87.7
7	Denmark	85.1
8	Sweden	83.3
9	Spain	77.8
10	France	75.5
11	Norway	75.0
12	Czech Republic	74.6
13	Cyprus	70.2
14	Belarus	69.6
15	Estonia	69.4
16	Lithuania	68.7
17	Bulgaria	67.5
18	Switzerland	67.5
19	Austria	67.4
20	Italy	67.1
21	**Turkey**	**66.2**
22	Portugal	65.6
23	Hungary	64.8
24	Poland	62.6
25	Latvia	60.4
26	Greece	60.4
27	Macedonia, FYR	59.5
28	Ireland	59.3
29	Finland	59.0
30	Croatia	58.1
31	Slovak Republic	57.6
32	Romania	55.3
33	Yugoslavia, Fed. Rep.	51.7
34	Slovenia	49.2
35	Bosnia and Herzegovina	43.4

Appendix 2. INTERNATIONAL EXAMPLES

AUSTRALIA

Source: Adapted from European Observatory on Health Care Systems (2002)

Australia has a complex health care system with many types of services and providers and a range of funding and regulatory mechanisms. The Federal government funds rather than provides health services, funding the bulk of the health system, and subsidizing pharmaceuticals and aged residential care (nursing homes and hostels). The States, with federal financial assistance, primarily are responsible for funding and administering public hospitals, mental health services and community health services, as well as for regulating health workers. Private practitioners provide most community-based medical and dental treatment and there is a large private hospital sector.

Financing

Australia spent 8.5% of its GNP on health in 2000. Expenditure has risen steadily over the past decade with mean annual growth above 4%. Expenditure per capita in terms of purchasing power parity was $2,085 in Australia in 1998 (compared to $1,510 in the United Kingdom). The public sector proportion of total expenditure is somewhat lower in Australia (71%) than in some OECD countries (due to the significant private sector primary care and also hospital care). The Federal government contributed 48% of health expenditure in 1999-2000 and State and local governments 23% (the latter a very minor amount), while the remaining 29% came from private sources.

Australia has a predominantly publicly funded health care system with 71.2% of revenue in 2000 coming from public sources. Federal government funds for health are raised through general taxes, supplemented by the Medicare levy, the latter being equal to about 20% of total Federal government health expenditure and about 8.5% of total national health expenditure. Out-of-pocket payments account for 16.2% of total health expenditure, private health insurance 7.1%, and other sources of finance account for 5.5%.

Coverage

Australia offers universal access to health care, regardless of ability to pay, through the government health insurance system, "*Medicare*". Health care is financed through general taxation and a compulsory health tax levy on income. Additional private health insurance is voluntary but strongly encouraged by the current government. Benefits are available to people who reside in Australia, who hold Australian citizenship, have been issued with a permanent visa, or hold New Zealand citizenship.

The percentage of the population with additional private health insurance cover increased from 30% in December 1998 to 45% in March 2001, following the implementation of subsidies for purchasing, and tax penalties for not purchasing private insurance. A tax penalty for the higher income groups without private health insurance has been retained since its introduction in July 1997. The intentions of the national government were to halt the decline in private membership that had occurred since Medicare was established in 1984, and to encourage younger and healthier individuals to take out and maintain private health insurance in order to improve the overall risk profile of members, which was expected to result in lower premiums. The private health insurance funds, however, increased premiums in early 2002 – citing rising costs resulting from rising claims.

Benefits

Medical service subsidies are limited to those items listed on the Medical Benefits Schedule. These items include consultation fees for doctors and specialists, radiology and pathology tests, eye tests by optometrists, and surgical and therapeutic procedures performed by doctors. The Medical Services Advisory Committee makes recommendations to the Minister of Health as to which new medical services and technologies should be included, using an evidence-based approach that includes cost-effectiveness criteria. Individuals eligible for Medicare receive free ambulatory medical care (if the doctor bulk-bills Medicare) and free accommodation and medical, nursing and other care as public patients in State funded hospitals. Alternatively, they may choose treatment as private patients in public or private hospitals, with some assistance from Medicare.

The Pharmaceutical Benefits Scheme (PBS) subsidizes the purchase of pharmaceuticals on its extensive approved list for two groups: general beneficiaries,

and concessionary beneficiaries (holders of pensioner and other entitlement cards). Pharmaceuticals not listed on the PBS schedule are excluded from subsidies. The following services are excluded from "*Medicare*": dental treatment, ambulance services, home nursing, physiotherapy, occupational therapy, speech therapy, chiropractic and podiatry services, treatment by psychologists, visual and hearing aids and prostheses, and medical services that are not listed under "*Medicare*" as clinically necessary such as cosmetic surgery. Since the introduction of "*Medicare*" in 1984, private insurance is precluded from covering ambulatory care. However, the cost of some ancillary items not available under "*Medicare*" are covered to some extent by private health insurance funds such as dental and optical services (glasses and contact lenses), physiotherapy, chiropractic and appliances, and prescribed medicines not covered by the Pharmaceutical Benefits Scheme. There is no limit upon the amount of medical services that an individual may use. Health care benefits are not rationed.

Purchasing

Australia does not have a comprehensive system of separate funding and purchasing agents. The type of payment methods also varies: medical consultations are reimbursed retrospectively; drug prices are regulated; hospitals are paid prospectively; and nursing homes fees are paid per diem.

For ambulatory and primary care – "*The Medicare Benefits Schedule*" sets out a schedule fee for medical services for which the Federal government will pay medical benefits. General practitioners charge a fee-for-service and can bill patients directly, or "bulk-bill" the Health Insurance Commission provided that the physician accepts 85% of the schedule fee as full payment for their service. There are no significant reimbursement delays. The Federal government has some influence over private general practitioners and specialists through the imposition of the "Medicare Benefits Schedule". To prevent over-utilization of services, patterns of GP practice are scrutinized by the Health Insurance Commission. Although the Medical Benefits Schedule acts as a break on medical fees (but also provides guaranteed payments), funding has not been used as a lever to change clinical practice.

For hospital care – Under the "Australian Health Care Agreements", the Federal government provides prospective block grants for public hospitals to the States, subject to various performance measures. Most public hospitals are responsible for

managing the funds they receive from the State. Most States now fund hospitals via a combination of global prospective budgets and DRG payments. Australia began to pilot the United States diagnosis related group (DRG) method of payment in 1985 and so has over 15 years experience in the intricacies of DRG systems. Australia has produced its own standardized classification system, currently with 667 categories, known as the Australian National Diagnostic Related Groups (AN-DRGs). All States (except New South Wales) now use the DRG system to fund public hospitals. New South Wales has retained a large element of population funding in paying hospitals and uses case-mix information more as a management tool.

Challenges

- Hospital waiting lists for elective surgery.
- Shortages of trained nurses in hospitals.
- Costs to the Federal government of tax rebates to encourage people to take out private health insurance.

FRANCE

Source: Adapted from European Observatory on Health Care Systems (2002)

The French health care system is predominantly funded through tax revenues and social health insurance contributions from employers and employees. Health care is purchased and paid for by health insurance schemes and the government and provided by private (self-employed) practitioners and public and private (non-profit and for-profit) hospitals. Most general practitioners and specialists in the ambulatory sector are paid on a fee-for-service basis according to agreed fee schedules, while health workers in public hospitals are paid on a salary basis. French patients have free choice of doctor and hospital.

Financing

Average household expenditure on health care was EUR 253 per capita per year in 2000, of which average expenditure on co-payments for doctor visits was EUR 10. All co-payments are eligible for reimbursement by complementary VHI policies. The level of reimbursement varies according to the policy. There is no annual out-of-pocket limit or tax relief on out-of-pocket payments. However, there are two mechanisms that can be used to avoid heavy charges: (1) co-payment exemptions (the

ticket modérateur) for people with serious illnesses and hospital procedures costing over EUR 200; and (2) free complementary VHI coverage for those with low incomes.

Earmarked taxes include: (1) the 'general social contribution' (CSG): since 1998 this tax based on total income has replaced most of the employee component of social health insurance contributions; the CSG rate is 5.25% (3.95% on pensions, unemployment benefits and sickness benefits); the CSG financed 6.2% of health care in 1997 and 30.1% in 1998; it now accounts for a third of the health insurance funds' revenue; (2) taxes paid by pharmaceutical firms (based on sales and promotional expenditure); (3) specific taxes on tobacco and alcohol; these taxes are allocated to the main health insurance fund and account for 3.4% of its revenue.

In addition, social health insurance contributions are a major financing source for the health care system. These contributions are regressive for self-employed people and farmers, and proportional for salaried workers. The total contribution is 13.55% of gross earning (with no ceiling), of which the employer's contribution 12.80% and the employee's contribution 0.75%. There is no general rule for calculating voluntary health insurance premiums.

Coverage

All legal residents of France are covered by public health insurance. The population has no choice to opt out. Until recently the basis of entitlement was employment status. Since the Universal Health Coverage Act (CMU) came into force in January 2000, the small proportion of the population without public health insurance is now entitled to public coverage on the basis of legal residence in France. Three main health insurance schemes cover 96% of the population, with the National Fund for the Insurance of Employed Workers covering about 83% of the population. The population has no choice of insurer. All residents are automatically affiliated to a health insurance scheme on the basis of their professional status and place of residence. In 2000 86% of the population had additional (complementary) voluntary health insurance (VHI) coverage. Since the introduction of CMU in 2000, which provides free complementary VHI coverage for low income people, an additional 7.2% have gained VHI coverage, bringing the proportion of the population covered by complementary VHI to over 90%.

Patients can visit any GP or specialist practicing privately or working in hospital outpatient departments, without referral or any limit on the number of consultations.

Patients can be hospitalized in the public or private hospital of their choice. In practice there are some limits to this legally-defined principle due to financial barriers (co-payments) or problems with geographical accessibility in rural or suburban areas. Patients do not have a single medical record (except in experiments with local networks), but patient smart cards contain administrative information – including health insurance fund affiliation and co-payment exemption status.

Benefits

Lists of approved procedures are established jointly by the health insurance schemes and the professions represented in the Permanent Committee on Official Schedules of Professional Procedures; their proposals have to be approved by the Ministry of Health. Lists for approved d medical devices are established and updated by the Economic Committee for Medical Products. These rules only apply to the fee-for-service sector (that is, ambulatory care in private practice and care in private hospitals). All diagnostic and curative procedures carried out in public hospitals are covered by a global budget (even if they are not reimbursed in private practice). However, public hospitals are not entitled to perform certain activities such as cosmetic surgery.

Challenges

• Health care supply – The dissatisfaction of doctors and other professionals and the increasing difficulty of concluding agreements with health care professionals. Relations with doctors have deteriorated since 1996, when a major reform that put a ceiling on doctors' fees was passed. Since then the main doctors' union has never signed an agreement with the health insurance schemes, and currently there is no agreement, either for GPs or for specialists. At the present time, GPs are on strike over out-of-hours care; they are pushing for a large increase in their fees and in some areas they have increased their tariffs without authorization.

• The demography of the medical profession and other health professionals. The number of doctors will decline as a result of past decisions to impose quotas in medical schools. Many fear a shortage of doctors, and this fear also raises the question of geographical distribution – it is already difficult to find doctors to practice in some rural or suburban areas. Doctors' freedom of choice in setting up their practice and the optimal skill mix required are among the issues debated.

• Evolving needs and demands – patients' rights and the use of 'patients' voice' in the system. A bill on patients' rights and the quality of the health care system is

currently being debated in parliament. The bill contains measures to increase and enforce patients' rights and more generally to enhance the ability for health care consumers to use have their views heard within the system, in order to improve responsiveness and accountability. This represents a major challenge for the health care system. The ageing of the population and its impact on health care needs and costs is also a subject of concern.

POLAND

Source: Adapted from OECD (2000a)

Financing

The public health sector is largely financed by a payroll tax. Employees are obliged to pay 7.5% of the employee's gross salary after deduction of the employee's portion of social insurance premiums. Other benefits including disability and old-age pension are also subject to the deduction of the premium.

Coverage

A new national health insurance system entered into force in 1999. This reform marked an important shift from a centrally controlled, budget-based system to a decentralized insurance-based system, operating through multiple regional funds and a special fund with nation-wide coverage. These health funds are not profit-making insurance companies and are financed through a tax. The reform is also intended to encourage the development of primary care services and in this context to promote the role of family doctors. All people are covered, including the unemployed, whose participation is financed by the state budget. However, the new system suffers from certain deficiencies and has not so far attracted active public support.

Currently the Ministry of Health wants to introduce a National Health Fund to replace the 16 independent regional Health Funds. Health Funds, as self-governed fund holders supervised by the regional government, are free to create their own policies, regardless of health ministry plans or priorities. The funds contract services and procedures with local health care providers whereas the central and local governments are responsible for public health and health policies. A new law on the National Health Fund is currently following its legislation path.

Purchasing

An important input to hospital sector improvements is an adequate database and accounting system permitting all relevant participants to get accurate data. Poland has taken steps to develop and introduce some of the new information systems including a new standardized cost accounting system for hospitals and clinics, which calculates costs based on market prices and charges for depreciating capital items. A new patient-based record system is being tested –allowing analysis of resource use and outcomes for individual episodes, and tracing the patient through different levels of the health care system. These efforts would facilitate the development of a Diagnostic Related Group (DRG) type payment system which has proved to be a potentially effective means of improving hospital efficiency in some countries.

The computerization of the health care system, however, is lagging the institutional and financial reforms, and more effort should be made to ensure that the information equipment is compatible across health funds. Another major need for efficiency in hospital decision-making is the access to qualified managers, particularly with the ongoing decentralization process of financial autonomy and their new role in contracting with health funds and services providers.

Provision

The Polish health care system provides services through three tiers of a highly structured network, corresponding in part to the former administrative organization of the country. The three tiers comprise the central level, the regional level, and the communal level with autonomous health care administration units. At the central level, the Ministry of Health is directly responsible for national health services and programs, including hospitals associated with medical academies, medical research institutes, and education and postgraduate training of medical staff.

Recent devolution of power to regions and communes and increasing privatization within the health care sector have reduced the role of the MOH in the provision of health services. Moreover, with the introduction of health insurance, the financing role of the central government has been reduced. The autonomy of regions and their independence from the MOH has been strengthened since 1992 with funding coming directly from the Ministry of Finance.

Long-term care is provided in both general hospitals and sanatoria. Local hospitals provide extensive outpatient care through specialist outpatient clinics, diagnostic and physiotherapy departments, and emergency services. Certain government ministries (Defense, Interior, Justice, and Transport) operate parallel health care services for some of their employees and their dependants. These systems provide both ambulatory and hospital care. Expenditure on drugs and salaries are financed through the MOH budget, and non-medical salaries, maintenance, and capital outlays are financed through the respective ministries.

While these parallel systems offer an additional source of capacity and about 10 per cent of total hospital beds, a lack of accountability towards the MOH and poor national co-ordination result in duplication of facilities and excess capacity. There is limited private health care provision in Poland, which has developed rapidly over the last years. Private medical practice which existed legally under communism increased sharply in 1988 with the enactment of the Law on Economic Activity and a number of private companies, mostly located in big cities, have opened facilities for ambulatory and hospital care. The majority of these operate on a "fee-for-service" basis.

Since 1990, the privatization of both manufacturers and wholesalers of pharmaceutical products is proceeding gradually. Among the 57 enterprises in the industry, 39 are private, and the remaining state-owned, accounting for more than 50 per cent of the Polish market in 1998. By contrast, pharmacies have been rapidly privatized. Between 1990 and 1997, the ratio of pharmacies in the private sector rose from 44 per cent to 93 per cent.

Challenges

Poland's health care system suffered, and still does suffer from familiar problems for centrally tax funded systems, and particularly the problems found in the Soviet system. These problems can be summarized as:

- The relatively small proportion of GNP dedicated to health care;
- The centralized and inequitable allocation of resources (with "under-the table payments" and privileges to the nomenclature);
- The limited response to local needs;
- The poor quality primary care services, inadequate referral and the overemphasis on hospital-based inpatient services and deficiency of high-tech equipment and drugs.

HUNGARY

Sources: Adapted from OECD (2003) and OECD (2000b).

The Hungarian healthcare system is principally a comprehensive, compulsory, employment-based national health insurance scheme that provides near universal coverage both in terms of treatments and in terms of population, with nearly all citizens receiving care whether or not they contribute. The current structures were introduced beginning in 1990. Prior to that time, the healthcare system operated as an integral part of the government with no separate budget or accounting system. Within the new scheme, the purchasing and service-provision functions are separated with the National Health Insurance Fund Administration (HIFA) entering into performance-based contracts with hospitals, outpatient clinics and independent caregivers. Most of the HIFA's revenues derive from earmarked payroll and poll taxes levied on employees and employers. These are supplemented by direct subsidies from the central budget, which cover any deficit. Public health activities and the National Ambulance Service are financed from the state budget, while investments are funded by state and local governments who own most health facilities. A growing proportion of total spending is financed privately through co-payments (on pharmaceuticals, some dental procedures and prosthetics), by under-the-table payments made directly to caregivers (so-called "gratitude money") and via direct out-of-pocket payments.

Financing

Total health spending (public and private) accounted for 6.8% of GNP in 2001 in Hungary. Health spending as a share of GNP was lower in Hungary not only than in most of the higher income OECD countries, but also lower than, for example, in the Czech Republic, Portugal and Greece. Per capita health spending was $911 (calculated at purchasing power parity) compared with an OECD average of $2,117 USD PPP

During the 1990s, health spending per capita in Hungary increased in real terms only by 1.5% per year on average, a growth rate far lower than the OECD average of 3.3% per year. In 2000 and 2001, health expenditure started to grow more rapidly, with an annual rate of 4.5% for total health spending and 2.4% for public expenditure. This, however, still remained below the growth rate of public expenditure on health in most of the OECD countries.

One of the main reasons behind this trend was that the transition to a market economy entailed a reduction in the level of public spending in general and short-term management of budget deficits took precedence over the resource needs of the health system. The high share of pharmaceutical spending is a distinctive feature of health spending in Hungary. Lower-income OECD countries tend to spend a greater share of their health expenditure on pharmaceuticals, partly because pharmaceuticals have international market prices while labor costs are usually based on national wage structures. Only the Slovak Republic has a higher share of pharmaceutical spending than Hungary.

Challenges

Cost pressures on the healthcare system are likely to intensify in the future, although the economy's capacity to pay will also be improving. Several decades of neglect during the former political regime and the necessity of increasing healthcare workers' salaries, upgrading existing technological infrastructure and demographic pressures will all place upward pressure on costs. While cost containment policies must be retained, it improvements in the economy's capacity to pay should permit the quality and quantity of services provided to rise relatively quickly and to current European levels. A key challenge in any reform will be to help citizens to take greater responsibility for their own health by choosing healthier lifestyles and being more proactive concerning care.

MEXICO

Source: Adapted from Frenk et al (2003), using statistics from the WHO country profile for Mexico (http://www.who.int/country/mex/en/).

Mexico is an upper middle-income country with a gross domestic product (GNP) per person of US$8,903 in 2001 in PPP-adjusted dollars and a population of 102 million. Life expectancy at birth is 71.7 for men and 77.0 for women. The Mexican health system dates back to 1943, when the Ministry of Health and the Mexican Institute for Social Security (IMSS) were created. Since its inception, the Mexican health system had been marked by the gap between the insured in the formal sector of the economy and the uninsured poor. By the late 1960s, the system was not reaching many poor people in rural areas and many households had to use their own resources in a private market that frequently offered poor-quality, unregulated services. More recently, the Mexican health system has realized several important accomplishments.

Financing

Total health expenditures per capita are $544, or 6.1% of GNP – with approximately half from public sources and half from private. Decentralization of health services for the uninsured has allowed the Ministry of Health to concentrate on its leadership role. The financial basis of the IMSS has been strengthened.

The National Health Plan for 2001–2006 established five main goals: (1) to improve the health conditions of Mexicans; (2) to address health inequalities; (3) to improve the responsiveness of public and private services; (4) to ensure fair financing for health; and (5) to strengthen the health system, especially public institutions. To reduce the health backlog and address the issue of health equity in Mexico, effective access to basic health services for the population living in poverty, in both rural and urban areas, is being extended.

Coverage

Although most Mexicans have access to basic health-care services through public institutions, the range and quality of available services is highly variable. Many Mexicans, both poor and wealthy, choose to pay private providers for care because of poor access to, and the poor quality of, public health-care facilities.

Additionally, the PROGRESA program identifies the poor for "conditional" cash transfers – a negative tax provided to poor families if they fulfill certain conditions and use specific services.[11] The program reaches 20 percent of Mexico's population and represents a remarkable 20 percent of total income for this group. For health, payments are provided if family members, especially mothers and children, make a specified number of annual clinic visits. The program has led to increases in school enrollment, declines in levels of child malnutrition and illness, and reductions in poverty. PROGRESA uses a 2 stage process to identify poor families – based first on community identification from the census, and then proxy means tests.

Benefits

A package of essential health-care interventions has been extended to target groups of poor people in rural areas. This package includes: basic household sanitary measures; family planning; pre-natal, peri-natal, and post-natal care; nutrition and

(11) PROGRESA is an abbreviation for; "Prorema de Educación, Saludy Alimentación" English is, "Education, Health and Nutrition Program."

growth surveillance; immunization; treatment of diarrhea and resulting dehydration; treatment of common parasitic diseases; treatment of acute respiratory infections; prevention and treatment of tuberculosis; prevention and control of hypertension and diabetes; prevention of accidents and initial treatment of injuries; and community training for health promotion.

Challenges

Quality of care is still a challenge. Public sector health agencies mainly operate as monopolies, so there is little consumer choice, few incentives for responsiveness to consumer needs, and little concern for quality of care. Until recently, there was no regular accreditation process. The quality of hospital services varies widely. Issues of quality are also common in the private sector, which includes many small units that are often badly equipped, undersupplied, and uncertified.

TAIWAN

Source: Morlock et al (forthcoming); Cheng (2003); Lu and Hsiao (2003).

Taiwan created a National Health Insurance (NHI) program in 1995. The Department of Underwriting at the Bureau of National Health Insurance (BNHI) has the overall responsibility for promoting universal enrollment, advising group insurance applicants, issuing and renewing NHI cards, and auditing payroll-related contributions. NHI is a government-run social insurance program with compulsory participation.

Financing

The primary financing sources for NHI are premium revenues – contributed by the insured and their employers – and government subsidies. Analysis of the total NHI revenues for the 2001 calendar year shows that 40% of the revenues came directly from insurees, and 32% from private employers. The remaining 28% of revenues came from national and local governments – including both their share of the premiums for public employees and as subsidies from general tax revenues.

NHI's premium revenues come from two general sources – the insured and employers. These revenues are supplemented by a government subsidy. In 1998, the insured and group insurance applicants contributed 72.2% of NHI revenues, and 27.8% came from the Government as subsidies. These are billed amounts, as opposed to actual receipts. For the insured and employer groups, uncollected

premiums are generally the result of a time lag between the sending of the bill and receipt of the payment. The Government subsidy, however, is underpaid because local governments at times delay payments because of budget shortfalls or disagreements with government councils about the budget.

Coverage

Taiwan's health insurance enrollment rate increased from below 60% prior to the NHI program to 92% immediately following the implementation of the program in 1995. As of 2001, the coverage rate was 96%, with over 90% of providers participating in the program. Despite the overall success of NHI coverage in Taiwan, enrollment rates are considerably lower than the national average among specific subgroups of the population, particularly indigenous aboriginal groups. Statistics of the end of December 1996 showed the enrollment rate of indigenous aborigines to be 86.9%, compared to the average national enrollment rate of 96.0%. One of the major reasons for non-enrollment among this group is a problem of financial access. By February 1998, the enrollment rate for aboriginal groups as a whole had risen from 82.5% to 84.0%. Residents of Taiwan's mountainous areas and outlying islands also have NHI enrollment rates that are significantly lower than the national average. After the implementation of a project to enroll individuals in these areas, their NHI enrollment rate rose from 81.0% to 90.2% at the end of 1998.

Benefits

Prior to the implementation of NHI, there were significant variations in the benefits provided by the larger social health insurance programs in Taiwan. Many of these programs excluded pre-existing conditions, required waiting periods, and had significant restrictions on benefits. Now, NHI features a comprehensive benefits package that has no exclusions for pre-existing conditions, but does include a detailed system of copayments for most services.

The benefits package includes comprehensive facility-based health care services for sickness, injury, and maternity services. The package covers almost all essential medical services, including diagnostic services, lab tests, surgery, medicine, materials, physical therapy, nursing, and room and board for hospital stays. The main categories of benefits are outpatient visits, hospitalization, Chinese medical care, dental care, maternity, rehabilitation, preventive medical services, home health care, and day treatment for the mentally ill. Additionally, the government provides the

BNHI with a budget for prevention and treatment of communicable diseases, vaccination, and the treatment of the mentally ill. Since 1998, the government has also paid for HIV/AIDS prevention and ensures treatment of all AIDS cases.

Purchasing

By 1999, NHI had contracted with 94% of the medical facilities in the country, the vast majority of which are public and private clinics. The volume of providers contracted, and the fact that almost all providers are part of NHI, makes the adoption of a universal payment system designed to control costs both feasible and practical. Following its implementation, NHI introduced a series of amendments and reforms to change the fee-for-service payment system used by the earlier Government Employees' Insurance, Labor Insurance, and Farmers' Health Insurance programs. The main goals of these changes have been to lessen discrepancies in providers' profit margins and to rationalize the payment structure and providers' incentives in order to control costs.

Starting with the payment schedule used by the Labor Insurance program, the NHI added 460 reimbursable services to this schedule, including home health care, preventive services, community pharmacy service, day care for psychiatric patients, and rehabilitation of psychiatric patients in the community. 41 services have been canceled. NHI has also increased reimbursement levels for 1,440 services (including outpatient consultation, hospital beds, surgery, and anesthesia), and decreased reimbursement for 18 services. As of 1999, the fee schedule included 22 case payment categories, and 3,412 reimbursable services in total. Additionally, the principle of volume-adjusted outpatient visit payment rates – decreasing unit payments for increasing numbers of outpatient visits – has been established in order to discourage an excess of supplier-induced demand.

Case payment and global budgeting have been introduced to complement the fee-for-service payment structure – to give providers added incentives to control costs. A per-case prospective payment system has been gradually phased in, also to provide incentives for increasing providers' efficiency and cost-effectiveness.

In addition to the fee-for-service and per-case payment systems, a global budget system for outpatient dental care was implemented in 1998, after two and a half years of planning. Intended to rationalize the growth of medical payments, the calculation of the first year's global budget was based on the previous year's total outpatient

dental care payments, plus a ceiling of 8 percent annual growth. Global budgeting should result in slower growth in health care costs by providing cost containment incentives to providers. Demonstration projects are currently testing the feasibility of using capitation payments. In addition, other demonstration projects are testing the feasibility of including patient care outcomes as part of the basis for determining the level of provider payments.

Challenges

Funding for the NHI Program is insufficient and will need to increase as health care costs go up in the future. Most likely, the contribution rate will need to increase as a percentage of salary. In addition, to increase premium revenues the BNHI has two main priorities – to improve auditing of the salary levels on which the premium calculation is based, and to expedite the premium collection process.

Appendix 3. EUROPEAN COMMISSION, MEDICINES HIGH LEVEL GROUP ON INNOVATION AND PROVISION OF MEDICINES (G10) RECOMMENDATIONS FOR ACTION

AUSTRALIA

Recommendation # 1: The development by the Commission of a comprehensive set of indicators covering:

- the performance of the pharmaceutical industry in relation to indicators of industrial competitiveness; and
- the prevention and treatment of diseases and emerging health threats with reference to data on morbidity and mortality including the performance of products; and
- the relationship between the various EU and Member State regulatory structures (licensing, pricing and reimbursement) and availability (time to license, time to market) access and uptake of pharmaceuticals.

Recommendation # 2: To secure the development of a competitive innovative-based industry:

- that the European Institutions should, as part of the review of Community pharmaceutical legislation now underway, consider ways of improving the legislation or the operation of the licensing system to improve the introduction to the market in particular for innovative medicines; and
- that the European Institutions and Member States should improve the use of telematics to facilitate the operation of the Community regulatory system.

Recommendation # 3: Respecting national competence, Member States should examine the scope for improving time taken between the granting of a marketing authorization and pricing and reimbursement decisions in full consistency with Community legislation. To do this with a view to securing greater uniformity and transparency between markets and rapid access of patients to medicines.

Recommendation # 4: To secure the development of a competitive generic market in Europe, that:

- the European Institutions agree a way forward on intellectual property rights issues (especially data exclusivity and Bolar) covered in the Commission's proposed legislation.

- Member States - facilitated by the Commission - explore ways of increasing generic penetration in individual markets (including generic prescribing and dispensing). Particular attention should be given to improved market mechanisms in full respect of public health considerations.

Recommendation # 5: To meet public health objectives in Member States and to secure the development of a competitive nonprescription medicines market in the EU (respecting that the reimbursement of medicines remains in the Member States' competence) by:

- reviewing, with full respect to health criteria, and, if appropriate, amending mechanisms and concepts for moving medicines from prescription to non-prescription status; and
- allowing the use of the same trademark for products moved to non-prescription status.

Recommendation # 6: That the Commission and Member States should secure the principle that a Member State's authority to regulate prices in the EU should extend only to those medicines purchased by, or reimbursed by, the State. Full competition should be allowed for medicines not reimbursed by State systems or medicines sold into private markets.

Recommendation # 7:

- The Commission should organize a European reflection to explore how Member States can improve ways of sharing information and data requirements to achieve greater certainty and reliability for all stakeholders, even if the decisions they take may differ.
- The objective is to foster the development of health technology assessment (HTA), including clinical and cost effectiveness, in the Member States and the EU; to improve the value of HTA, to share national experiences and data while recognising that relative evaluation should remain a responsibility of Member States.

Recommendation # 8: The creation of the European virtual institutes of health, connecting all existing competence centers on fundamental and clinical research into a European network of excellence.

Recommendation # 9: To improve the co-ordination of Community and national activities, by:

- Commission and Member States to co-ordinate and support the conduct of clinical trials on a European scale, establish a database of trials and clinical research results;
- Commission and Member States to put in place an effective policy in terms of incentives to research and support the development and marketing of orphan and paediatric medicines;
- supporting the development of a biotechnology strategy in Europe.

Recommendation # 10: The restriction on advertising of prescription medicines to the general public should continue;

- There should be no restrictions on advertising of non-prescription medicines, which are not reimbursed, in line with existing requirements for advertising to encourage the rational use of the product and not to be misleading. There should be sharing of information and development of common approaches to regulation of such advertising;
- Consideration should be given by the European Institutions, as part of their current review of the pharmaceutical legislation, to:
    - in co-operation with all stakeholders to produce a workable distinction between advertising and information that would allow patients actively seeking information to be able to do so, and to develop standards to ensure the quality of such information; and
    - the establishment of a collaborative publicprivate partnership involving a range of interested parties. The information should be carefully piloted and evaluated to assess the extent to which it meets the needs of patients.

Recommendation # 11: In the context of the current review of Community legislation, the legislation relating to patient information leaflets should be reviewed taking into account views of users as well as regulators and industry.

Recommendation # 12: That systems for post-marketing surveillance should be optimised to ensure that co-ordinated processes are in place to gather data on adverse events and patient safety.

Recommendation # 13: That the Commission consider providing core funding for European patient groups to enable them to participate independently in the debate and decision making on health matters in the EU.

Recommendation # 14: That the implementation of the above recommendations should take full account of the future enlargement of the EU. In particular, rules should recognise the differences between public health, marketing and economic conditions between existing Member States and the accession countries; to that extent, a derogation governing parallel imports should be included in the accession treaties.

Appendix 4. ELEMENTS OF A NATIONAL DRUG POLICY

- **Affordability**, for example, through pricing policies, taxes and tariffs that support access,
- **Financing options**, such as increased government funding for priority diseases, and the poor and disadvantaged, [and] promotion of medicine reimbursement as part of public and private health insurance schemes,
- **Supply systems:** promoting a public-private mix in medicine supply and distribution systems, committing to good pharmaceutical procurement practices in the public sector,
- **Regulation and Quality Assurance:** to ensure quality, purity, and accuracy of the information provided. It is critical that the government is committed to drug regulation, including the need to ensure a sound legal basis and adequate human and financial resources {and} independence of the regulatory authority to ensure that there is no conflict of interest.
- **Rational use:**

(1) development of clinical guidelines as the basis for selection of essential medicines and training of health professionals.

(2) Problem-based training in pharmacotherapy in undergraduate training

(3) Continuing in-service medical education as a licensure requirement

(4) Avoidance of perverse financial incentives to prescribers and dispensers,

- **Research:** Operational research, and drug development and clinical research,
- **Human Resources Development:**

(1) government responsibility for planning and overseeing the development, training, team building and career planning of human resources needed for the pharmaceutical sector

(2) definition of minimum education and training requirements for each category of staff

- **Monitoring and evaluation:**

(1) explicit government commitment to the principles of monitoring and evaluation

(2) monitoring of the pharmaceutical sector through regular indicator-based surveys.

(From: http://www.who.int/medicines/library/edm_general/6pagers/No6-6pg-en.pdf)

Appendix 5. HEALTH TECHNOLOGY ASSESSMENT RESOURCES

National Institute for Clinical Excellence (NICE)

http://www.nice.org.uk/

NICE is part of the NHS. It is the independent organization responsible for providing national guidance on treatments and care for those using the NHS in England and Wales. Its guidance is for healthcare professionals and patients and their careers, to help them make decisions about treatment and healthcare.

NICE guidance and recommendations are prepared by independent groups that include healthcare professionals working in the NHS and people who are familiar with the issues affecting patients and careers.

Currently NICE produces guidance in three areas of health:

- the use of new and existing medicines and treatments within the NHS in England and Wales - technology appraisals
- the appropriate treatment and care of patients with specific diseases and conditions within the NHS in England and Wales - clinical guidelines.
- whether interventional procedures used for diagnosis or treatment are safe enough and work well enough for routine use - interventional procedures.

NICE also funds four enquiries that undertake research into the way patients are treated, to identify ways of improving the quality of care. (These investigations are known as Confidential Enquiries.)

Canadian Coordinating Office for Health Technology Assessment (CCOHTA) http://www.ccohta.ca/entry_e.html

CCOHTA is a national, non-profit organization and we systematically review research that has been done on medical technologies such as devices and drugs. We provide this information to the ministries of health, Health Canada, hospitals and health practitioners to help with healthcare decisions.

International Journal of Technology Assessment in Health Care

http://titles.cambridge.org/journals/journal_catalogue.asp?mnemonic=thc

The International Journal of Technology Assessment in Health Care serves as a forum for the wide range of professionals interested in the assessment of medical technology, its consequences for patients and its impact on society. It covers the generation, evaluation, diffusion and use of health care technology. In addition to general essays and research notes, regular columns on technology assessment reports and thematic sections are published.

International Society for Pharmacoeconomics and Outcomes Research (ISPOR) http://www.ispor.org/

The International Society for Pharmacoeconomics and Outcomes Research is an international organization promoting the science of pharmacoeconomics and health outcomes research.

The International Society is organized to act as a scientific leader relevant to research in pharmacoeconomics, health outcomes assessment, and related issues of public policy.

The International Society represents healthcare researchers and practitioners including pharmacists, physicians, economists, nurses and researchers from academia, pharmaceutical industry, government, managed care, health research organizations, and purchasers of healthcare. The mission of the International Society for Pharmacoeconomics and Outcomes Research is to translate pharmacoeconomics and outcomes research into practice to ensure that society allocates scarce healthcare resources wisely, fairly, and efficiently.

Australian Drug Evaluation Committee (ADEC)

http://www.health.gov.au/tga/docs/html/adec/adec.htm#role

The ADEC is appointed by the Minister for Health and Ageing and provides advice to the Minister and the Secretary of the Commonwealth Department of Health and Ageing through the Therapeutic Goods Administration, on:

- The quality, risk-benefit, effectiveness and access within a reasonable time of any drug referred to it for evaluation;
- Medical and scientific evaluations of applications for registration of prescription drugs (e.g. new chemical entities, new forms of previously registered drugs and therapeutic variations to registered drugs).

The Committee also provides services to other Government departments, committees and community-based organizations on a wide variety of regulatory matters related to prescription medicines.

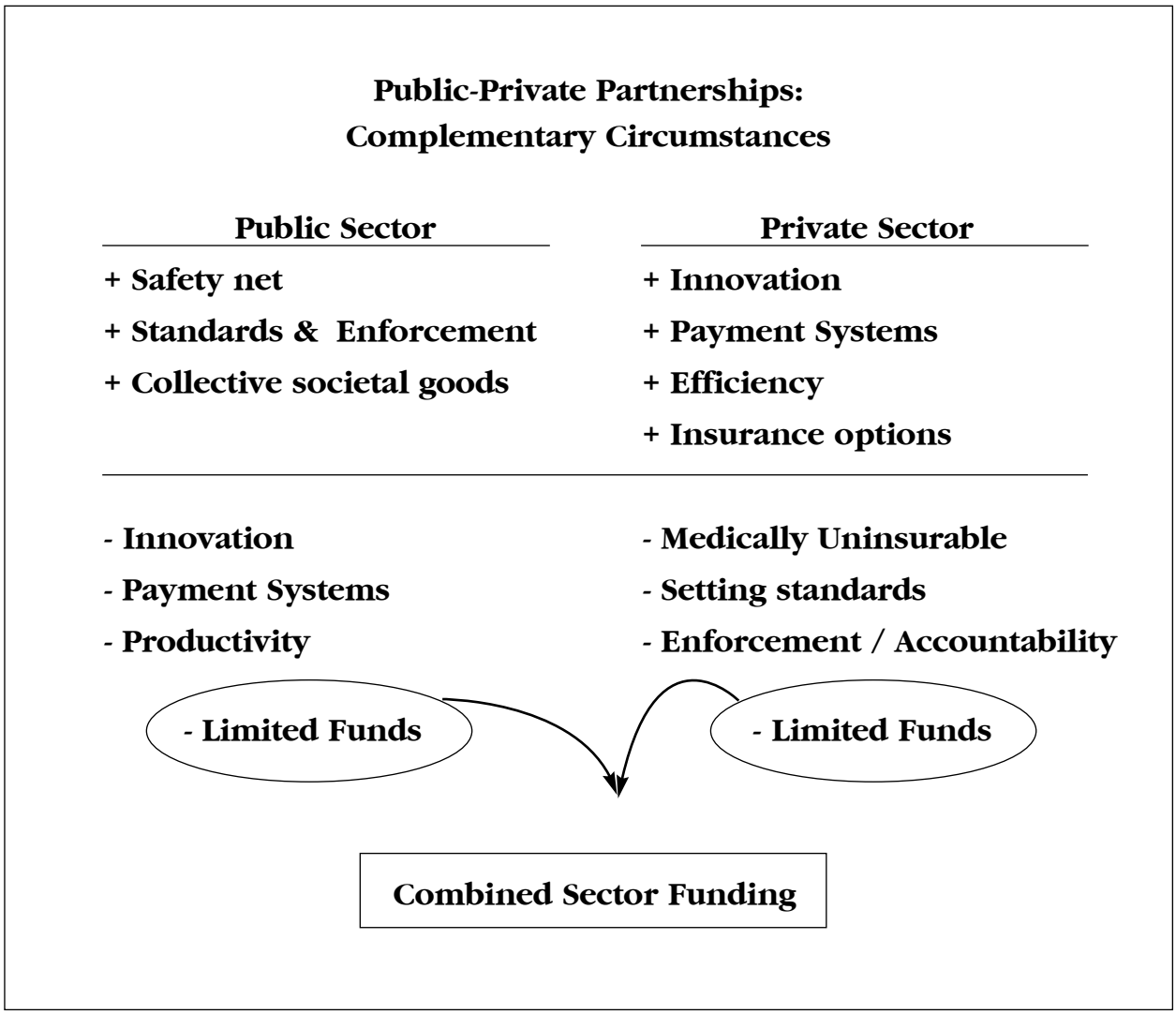
Appendix 6. FRAMEWORK FOR TRANSITIONING GREATER AUTONOMY TO PUBLIC HOSPITALS

TYPE OF DECISION	LEVEL OF DECISION MAKING AUTHORITY					
	NATIONAL LEVEL		LOCAL LEVEL	HOSPITAL LEVEL		
	Ministry of Health or Labor	Ministry of Finance	Provincial Planning Authority or Municipality Authority	Governing or Advisory Board	Hospital Managers	
Development of criteria for the selection of: • Hospital board members • Senior hospital managers						
Appointment/Termination of key hospital managers						
Development of criteria for hospital leadership performance evaluation						
Development, approval and monitoring of operating budgets • Shifting expenditures among line items						
Financial Management: • Accounting procedures • Bidding procedures • Negotiation of contracts • Management of revolving funds • Use/investment of surpluses • Borrowing (short-term debt)						

TYPE OF DECISION	LEVEL OF DECISION MAKING AUTHORITY				
	NATIONAL LEVEL		LOCAL LEVEL	HOSPITAL LEVEL	
	Ministry of Health or Labor	Ministry of Finance	Provincial Planning Authority or Municipality Authority	Governing or Advisory Board	Hospital Managers
Decisions regarding fee schedules • Setting prices • Establishing policies regarding fee waivers and discounts • Proportion of fees retained by hospital • Development of policies on how retained fees can be utilized					
Development, approval and monitoring of capital budgets: • Occurring long-term debt • Purchasing major equipment • New facilities • Renovations					
Strategic planning • Expansion of current services • Development of new programs/services • Closure of services					

TYPE OF DECISION	LEVEL OF DECISION MAKING AUTHORITY				
	NATIONAL LEVEL		LOCAL LEVEL	HOSPITAL LEVEL	
	Ministry of Health or Labor	Ministry of Finance	Provincial Planning Authority or Municipality Authority	Governing or Advisory Board	Hospital Managers
Personnel • Creation/termination of positions • Position definitions • Establishment of compensation guidelines • Recruitment • Promotion • Performance evaluation • Discipline and termination of staff					
Union negotiations					
Establishing and monitoring contractual relationships • Temporary employees • Outsourcing services					
Materials procurement and management • Medical supplies • Pharmaceutical supplies • Medical devices • Other					
Alliance (network) formation with other providers in the health care market • With primary care providers • With other hospitals • With other providers					
Monitoring the quality of services					

Appendix 7. FRAMEWORK FOR PUBLIC-PRIVATE PARTNERSHIPS



Appendix 8. CONTACTS

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Şükrü Bozluolcay
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Murat Dayanıklı
Erhan Dumanlı
Bülent Eriş
Faruk Ersezgin
Ahmet Esen
Hakan Göker
Hasan İnsel
Bülent Kiymir
Akif Köksel
Meltem Kurtsan
Selçuk Metiner
Arcan Nayır
Kemal Özgirin
Tandoğan Tokgöz
Turgut Tokgöz


TÜSİAD