

Health Care Systems in Transition

Written by
Bruce Rosen

With the assistance of
Rachel Goldwag

Edited by
**Sarah Thomson and
Elias Mossialos**

Israel

2003



The European Observatory on Health Care Systems is a partnership between the World Health Organization Regional Office for Europe, the Government of Greece, the Government of Norway, the Government of Spain, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine.



Keywords:

DELIVERY OF HEALTH CARE

EVALUATION STUDIES

FINANCING, HEALTH

HEALTH CARE REFORM

HEALTH SYSTEM PLANS – organization and administration

ISRAEL

© European Observatory on Health Care Systems, 2003

This document may be freely reviewed or abstracted, but not for commercial purposes. For rights of reproduction, in part or in whole, application should be made to the Secretariat of the European Observatory on Health Care Systems, WHO Regional Office for Europe, Scherfigsvej 8, DK-2100 Copenhagen Ø, Denmark. The European Observatory on Health Care Systems welcomes such applications.

The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the European Observatory on Health Care Systems or its participating organizations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The names of countries or areas used in this document are those which were obtained at the time the original language edition of the document was prepared.

The views expressed in this document are those of the contributors and do not necessarily represent the decisions or the stated policy of the European Observatory on Health Care Systems or its participating organizations.

Suggested citation:

Rosen, B. in Thomson, S. and Mossialos, E. (ed.) *Health care systems in transition: Israel*. Copenhagen, European Observatory on Health Care Systems, 5(1) (2003).

European Observatory on Health Care Systems:

WHO Regional Office for Europe

Government of Greece

Government of Norway

Government of Spain

European Investment Bank

Open Society Institute

World Bank

London School of Economics and Political Science

London School of Hygiene & Tropical Medicine

Contents

Foreword	v
Acknowledgements	vii
Introduction and historical background	1
Introductory overview	1
Historical background	7
Organizational structure and management	11
Organizational structure of the health care system	11
Planning, regulation and management	17
Decentralization	19
Health care financing and expenditure	21
Main system of financing and coverage	21
Health care benefits and rationing	25
Complementary sources of financing	28
Health care expenditure	34
Health care delivery system	41
Primary health care	41
Public health services	50
Secondary and tertiary care	58
Social care	65
Human resources and training	71
Pharmaceuticals and health care technology assessment	78
Dental care	81
Mental health care	83
Rehabilitation	86
Financial resource allocation	89
Third-party budget setting and resource allocation	89
Payment of hospitals	96
Payment of physicians	100
Health care reforms	109
Conclusions	137
Glossary, abbreviations and websites	143
References	145
Further reading	153



Foreword

The Health Care Systems in Transition (HiT) profiles are country-based reports that provide an analytical description of a health care system and of reform initiatives in progress or under development. The HiTs are a key element of the work of the European Observatory on Health Care Systems.

HiTs seek to provide relevant comparative information to support policy-makers and analysts in the development of health care systems in Europe. The HiT profiles are building blocks that can be used:

- to learn in detail about different approaches to the organization, financing and delivery of health services;
- to describe the process, content and implementation of health care reform programmes;
- to highlight challenges and areas that require more in-depth analysis; and
- to provide a tool for the dissemination of information on health care systems and the exchange of experiences of reform strategies between policy-makers and analysts in different countries.

The HiT profiles are produced by country experts in collaboration with the Observatory's research directors and staff. In order to facilitate comparisons between countries, the profiles are based on a template, which is revised periodically. The template provides the detailed guidelines and specific questions, definitions and examples needed to compile a HiT. This guidance is intended to be flexible to allow authors to take account of their national context.

Compiling the HiT profiles poses a number of methodological problems. In many countries, there is relatively little information available on the health care system and the impact of reforms. Due to the lack of a uniform data source,

quantitative data on health services are based on a number of different sources, including the WHO Regional Office for Europe health for all database, Organisation for Economic Cooperation and Development (OECD) Health Data and data from the World Bank. Data collection methods and definitions sometimes vary, but typically are consistent within each separate series.

The HiT profiles provide a source of descriptive information on health care systems. They can be used to inform policy-makers about experiences in other countries that may be relevant to their own national situation. They can also be used to inform comparative analysis of health care systems. This series is an ongoing initiative: material is updated at regular intervals. Comments and suggestions for the further development and improvement of the HiT profiles are most welcome and can be sent to observatory@who.dk. HiTs, HiT summaries and a glossary of terms used in the HiTs are available on the Observatory's website at www.observatory.dk.



Acknowledgements

The Health Care System in Transition profile on Israel was written by Bruce Rosen (Director, Health Policy Research Program, JDC-Brookdale Institute), with the assistance of Rachel Goldwag (Senior Research Assistant, JDC-Brookdale Institute). The editors of the Israel HiT were Sarah Thomson and Elias Mossialos. The research director was Elias Mossialos.

The following persons provided critical input, as noted in the introductions to different sections: Yehuda Baruch, Sharaon Bason, Shuli Brammli-Greenberg, Neta Bentur, Jenny Brodsky, Mark Clarfield, Michael Davies, Leon Epstein, Gary Ginsberg, Manfred Green, Revital Gross, Anneke Ifrah, Avi Israeli, Johnny Lemberger, Adina Marks, Tal Morgenstin, Daniella Nahan, Nurit Nirel, Ari Paltiel, Boaz Porter, Shoshana Reba, Philip Sax, Carmel Shalev, Segev Shani, Shifra Shvarts, Naomi Struch, Israel Sykes, Ted Tulchinsky, Miri Zibzenher, Shlomo Zusman.

Special thanks to Rachelle Kaye (Maccabi Health Services) and Malka Borrow (Israel Medical Association) for their helpful comments on the entire manuscript.

The European Observatory on Health Care Systems is grateful to Gabi Bin Nun (Deputy Director General for Health Economics, Ministry of Health) and David Chinitz (Senior lecturer, Braun School of Public Health, Hebrew University) for reviewing the HiT.

The current series of Health Care Systems in Transition profiles has been prepared by the research directors and staff of the European Observatory on Health Care Systems. The European Observatory on Health Care Systems is a partnership between the WHO Regional Office for Europe, the Governments

of Greece, Norway and Spain, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine.

The Observatory team working on the HiT profiles is led by Josep Figueras, Head of the Secretariat, and research directors Martin McKee, Elias Mossialos and Richard Saltman. Technical coordination is led by Susanne Grosse-Tebbe.

Jeffrey V. Lazarus managed the production and copy-editing, with the support of Shirley and Johannes Frederiksen (lay-out) and Thomas Petruso (copy-editor). Administrative support for preparing the HiT on Israel was undertaken by Dorit Ganot-Levinger, Uta Lorenz and Anna Maresso.

Special thanks are extended to the WHO Regional Office for Europe health for all database, from which data on health services were extracted; to the OECD for the data on health services in western Europe; and to the World Bank for the data on health expenditure in central and eastern European countries. Thanks are also due to national statistical offices that have provided data.



Introduction and historical background

Introductory overview¹

Country profile

Geography

The State of Israel was established in 1948. Israel is a small country at the eastern end of the Mediterranean. It lies in the Middle East, at the junction of three continents (Africa, Asia and Europe) and is bordered by Lebanon on the north, Syria and Jordan on the east, Egypt on the southwest and the Mediterranean Sea on the west. At the end of 2000 Israel had an estimated population of 6 369 000, of whom 78% were Jews and 22% non-Jews, the majority of these Muslim Arabs² (CBS 2002b). Population density is among the highest in the western world, with 288 people per square kilometre. Israel's three largest cities are Tel Aviv (1 153 800 inhabitants), Jerusalem (758 300) and Haifa (534 000). Israel has two official languages: Hebrew and Arabic. English and Russian are the most commonly used foreign languages.

Israel's terrain consists of the Negev desert in the south, low coastal plains, central mountains and the Jordan Rift Valley. Natural resources include copper, phosphates and crude oil. Limited freshwater resources and arable land are the country's largest environmental concerns.

¹ This section draws heavily on Dolev 1996 and on Central Bureau of Statistics 2002b. Anneke Ifrah, Manfred Green, Ari Paltiel, Ted Tulchinsky and Michael Davies made important suggestions and corrections.

² Muslims account for 14.6% of the population. Other minority groups include Christians (3.2%) and Druze (1.7%).

As noted in the Statistical Abstract of Israel (CBS 2002b), “Israel’s [...] southern and eastern areas are characterized by an arid climate, while the rest of the country has a Mediterranean climate. This results in high variability in quantities of precipitation from year to year and between different areas. In addition, there is a clear division into two seasons: a hot summer with hardly any rain and a cool, rainy winter.”

More than 60% of the population is concentrated in the narrow strip along the Mediterranean Sea and the population density in this area is several times higher than the national average. The Jewish population is largely urban; only 10% live in rural areas, principally in two types of cooperative communities: *moshavim* and *kibbutzim*. Most of the Arab population live in non-urban settings, primarily small- to medium-sized towns.

Israel is a relatively young society; 29% of the population are under age 15 and only 10% are over age 64. Israel’s general population is still significantly younger than that of most other western countries. Its relatively high total fertility rate (2.95 per woman) has been accompanied by phenomenal growth in the absolute number of elderly people. Since 1955 the elderly population has increased sevenfold, while the general population has increased approximately 3.5 times. The proportion of elderly people in the population is expected to reach 12% by 2020 and 19% by 2050.

Immigration has played a critical feature in the demographics of Israel. When the State was declared in 1948, its population was 873 000. In its early years the population increased as a result of large waves of Jewish immigration from Eastern Europe and the Arab countries of the Middle East and North Africa in the 1950s. As a result, the population passed the two million mark within a decade of Israel’s founding. In the 1970s another major wave of immigration arrived, this time from the Soviet Union. Immigration rates were lower in the 1980s and surged again in the 1990s. The years 1990–2000 saw the arrival of almost one million new immigrants, including almost 400 000 in 1990/1991 alone. The vast majority of these new immigrants arrived from Former Soviet Union (FSU) countries. From 1990 to 1995 – years of particularly high immigration rates – the Israeli population grew at an annual average rate of 3.5% per year, while from 1996 to 2001 the average annual growth was 2.5%.

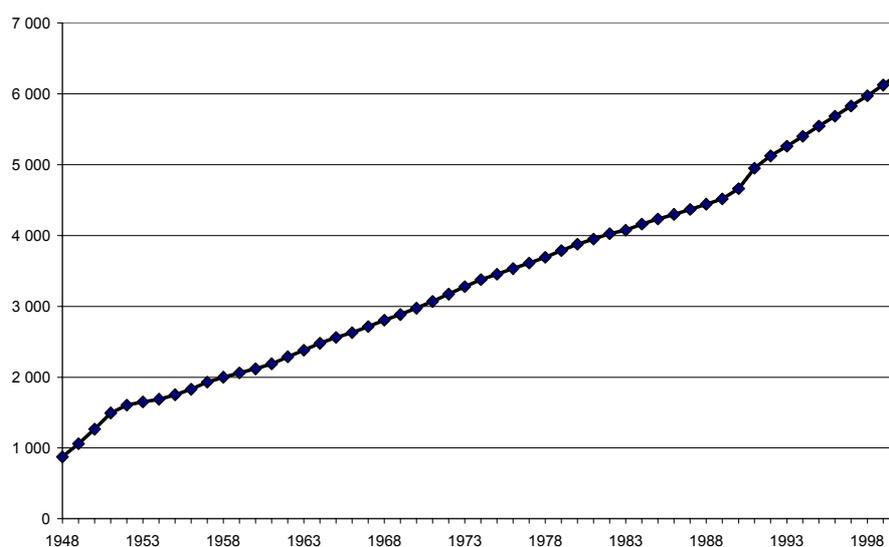
Government

Israel is a democratic state with a parliamentary, multi-party system. All citizens age 18 and over have the right to vote. The head of state is the president, who has largely ceremonial duties. The state’s legislative branch is the Knesset (parliament), which has 120 members. Elections are held every four years by a

Table 1. Population and demographic indicators, 1990 and 2000

	1990	2000
Average population (thousands)	4 660.2	6 289.2
Number of newly arrived immigrants (thousands)	199.5	60.2
Averages	1985-1989	1995-1999
Birth rate (per 1000 women)	22.8	21.7
Infant mortality rate (per 1000 live births)	10.9	5.4
Male life expectancy at birth	73.8	76.1
Female life expectancy at birth	78.8	80.0
Male mortality rate (per 1000 residents)	7.0	6.4
Female mortality rate (per 1000 residents)	6.0	6.0

Source: CBS 2002b.

Fig. 1. The population (in thousands), 1948-1998

Source: CBS 2002b.

system of proportional representation. A Prime Minister heads the executive branch. There are many political parties, so all governments have been formed from coalitions. At no time in Knesset history has any one political party held an absolute majority. The cabinet (referred to in Israel as 'The Government') is assembled by the prime minister, but it must receive a collective vote of confidence from the Knesset. As a result, the cabinet usually involves political leaders from a number of different parties. The judicial branch, headed by the Supreme Court, has the authority to supervise the legal system throughout the various localities.

Local governments are elected every five years and operate as independent authorities providing local services such as water, sanitation, education and social welfare. There has been a continuing process of transfer of responsibilities and decentralization to these local authorities, which nonetheless remain dependent on central government for much of their financing.

Economy

Throughout its history, armed conflicts with neighbouring Arab countries and large-scale immigration have posed heavy burdens on the Israeli economy, thus creating the need for loans and extensive foreign support. Despite these challenges, Israel is a developed, industrialized country with a small, technologically advanced agricultural sector (less than 4% of the work force), a growing service sector and a substantial high-tech sector. The 1999 GDP per capita income was US \$PPP 18 600, slightly higher than that of Spain, but well below that of more developed countries such as Switzerland (US \$PPP 28 700) and the United States (US \$PPP 33 800). Israel's economy grew rapidly in the mid-late 1990s, but growth has slowed since 2000 due to the worldwide recession, the global downturn in the high-tech sector and the recent upsurge in the Israeli-Palestinian conflict.

54.4% of the population age 15 and over were part of the civilian labour force in 2001 and the unemployment rate was 9.3% (CBS 2002b). Income inequality in Israel is among the highest of developed countries including the United States, Australia and Europe. In 1997 Israel was ranked fourth in income inequality after the United States, the United Kingdom and Italy (Luxembourg Income Survey data; www.lisproject.org).

Table 2. Macroeconomic indicators, 1996-2000

	1996	1997	1998	1999	2000
GDP (NIS million), 1995 prices	282 493	291 714	299 650	307 392	326 517
GDP per capita (NIS), 1995 prices	49 690	50 046	50 187	50 184	51 939
Annual inflation rate (%)	11.3	9.0	5.4	5.2	1.1
Unemployment rate (%)	6.7	7.7	8.6	8.9	8.8

Source: CBS 2002b.

Israel's national currency is the shekel (often abbreviated as NIS, for New Israeli Shekel). As of 14 January 2003 the official exchange rate was US \$1= NIS 4.8 and €1= NIS 5.1.

Health status

Health indicators³

In 1999 life expectancy at birth was 76.6 for males and 80.4 for females (Fig. 2). Life expectancy for Israeli males is among the highest for countries in the Organisation of Economic Cooperation and Development (OECD) and that for women is in the low-middle range. Over the past two decades life expectancy has increased by 4.8 years for males and by 5.0 years for females.

In 2000 the infant mortality rate was 5.4 per thousand live births (Fig. 3); it has declined by 50% over the past decade. The infant mortality rate for the Arab population has shown an even more rapid decline than the Jewish population, but still remains approximately double that of the latter, reflecting the influence of high rates of consanguineous marriages and various socioeconomic factors. The main causes of infant mortality are congenital anomalies in the non-Jewish (Arab) population and prematurity in the Jewish population. The maternal mortality rate was 8 per 100 000 live births in the period 1995–1997.⁴

The crude mortality rate in 1999 was 6.1 per 1000 population, down from 6.6 per 1000 population in 1985. The leading causes of death were heart disease, malignant neoplasms, cerebrovascular diseases, diabetes and accidents, accounting for two thirds of all deaths from 1995 to 1997. Mortality from stroke and coronary heart disease declined dramatically between 1975 and 1990; thereafter rates remained stable. The decline was largely due to improved treatment (medication and surgical intervention) and greater awareness and prevention. The decline was generally more marked in the Jewish than in the Arab population. Notwithstanding this decline, heart disease remains a major health problem in Israel, particularly among women.

Among women, breast cancer is the leading cancer, accounting for approximately 30% of all cancer morbidity and 20% of cancer mortality. Among men, the leading cancers are prostate cancer (in Jewish men) and lung cancer (in Arab men). The cancer with the highest mortality is lung cancer (for both Jewish and Arab men) (National Cancer Registry, www.health.gov.il).

Data on the incidence of cancer are based on the National Cancer Registry, while other morbidity data are generally self-reported, based on large population surveys.

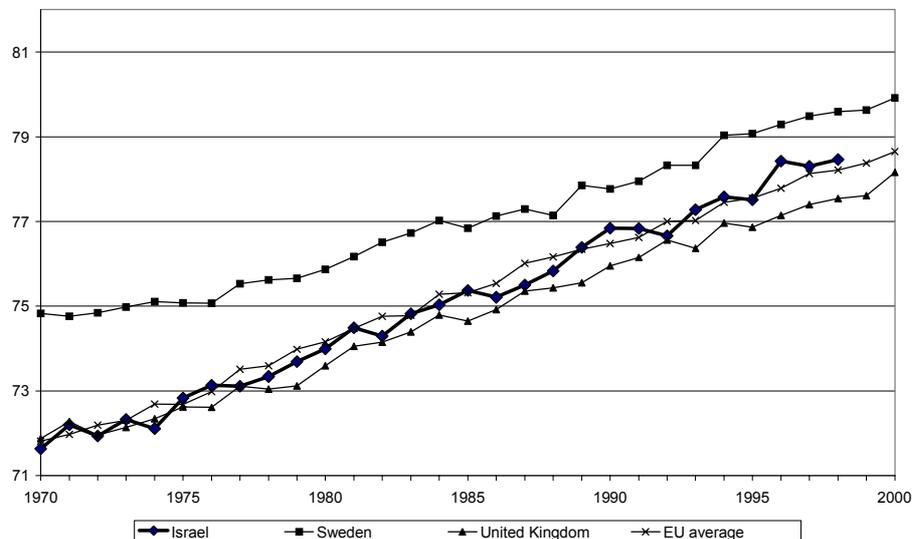
³ This section is based on a Ministry of Health publication (Ministry of Health 2001a), which also includes extensive data on morbidity, health care system resources and other dimensions of health care in Israel.

⁴ The maternal mortality rate was lower in the Arab population than in the Jewish population.

In the Arab population, the leading causes of morbidity and mortality are heart disease, stroke and diabetes. Risk factors for cardiovascular disease, such as obesity, diabetes and physical inactivity, are particularly prevalent among Arab women over age 45. Lung cancer, which is the leading cancer among Arab men, carries a 50% higher mortality rate among Arab men than among Jewish men; this has been linked to the higher rates of smoking among Arab men (approximately 50%) compared to Jewish men (approximately 30%).

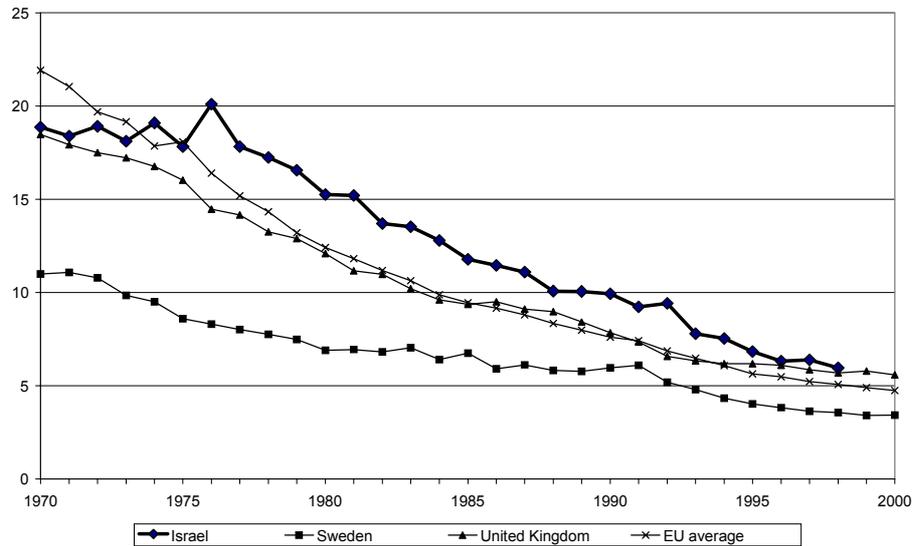
With regard to lifestyle factors, alcohol consumption is appreciably lower in Israel than in European countries and rates of cigarette smoking are generally slightly lower. Rates of smoking have shown no significant decline in the past decade; in the year 2000 approximately 27% of the population aged 18 and above reported that they were smokers. The prevalence of cigarette smoking is increasing in young women and teenagers (Ministry of Health 2002b).

Fig. 2. Life expectancy at birth (in years), 1970-2000



Source: WHO Regional Office for Europe health for all database.

Fig. 3. Infant mortality rates (per 1000 live births), 1970-2000



Source: WHO Regional Office for Europe health for all database.

Historical background

Health care services in Israel have been developed over the past century by voluntary health plans originally called sick funds, non-profit institutions, the government and the British Mandatory regime that existed prior to the establishment of the State of Israel in 1948. Workers' associations established the first health plan in 1911 to provide care to workers and their families and to employ immigrant doctors. This laid the basis of the health plan system, which is still a major component of the Israeli health care system. All four of Israel's health plans were formally established in the period between 1920 and the early 1940s; some of them emerged from mergers of health plans established even earlier.

Another important actor in the early years of the Israeli health care system was the Hadassah Medical Organization. Hadassah began its medical activities in Israel in 1913 by establishing the *Tipat Halav* system ("well-baby" clinics, literally "drop-of-milk" centres), another key feature of Israel's present health care system. In 1918 Hadassah began establishing hospitals in urban centres such as Jerusalem, Safed and Tiberias.

Government hospitals, which currently provide more than half of all acute beds in the country and most psychiatric facilities, consist primarily of hospitals established by the State of Israel in British Mandate hospitals and in buildings abandoned by British Army camps, left over from the War of Independence in 1947-1948.

The nature and the achievement of the health care system in Israel stem, to a large extent, from its foundation in organized social arrangements as well as a general consensus that society as a whole is responsible for the health of its citizens. This guiding principle has been reflected in the structure of health services in Israel, combining state activities with those of the voluntary health plans (non-profit mutual organizations).

Until the introduction of National Health Insurance (NHI) in 1995, the health plans both insured their members and provided them with most health services. By the late 1980s, approximately 95% of the population were insured in one of the four competing health plans, who provided their members with most curative health services either directly or by contract with other agencies. Public health and individual preventive services were provided by the government, Hadassah and some of the larger municipalities.

At present, four non-profit health plans operate in Israel: Clalit, Maccabi, Meuhedet and Leumit. Established in 1911, Clalit has been the dominant fund both in size and in influence, insuring more than 80% of the population until the beginning of the 1980s. It was affiliated with the Histadrut (General Federation of Labour in Israel), which was established in 1920.

In recent decades the transfer, mainly of younger members, from Clalit to the smaller funds, and the tendency of new immigrants to join the smaller funds, have reduced Clalit's relative position so that it now enrolls approximately 55% of the population. Until recently Clalit was the only fund that operated its own network of hospitals and, under state arrangements, provided inpatient care to members of the other funds as well.

Two of the four health plans had ties with political parties. As part of the Histadrut, Clalit was tied to the Labour Party, while the Leumit health plan was tied to the revisionist parties. These ties greatly politicized the health care system and they remained in place until the 1995 advent of the NHI law.

The state has been responsible for supervising, licensing and overall planning of health services. It has also subsidized some of the voluntary health plans and other bodies, as well as directly providing some services not offered by the health plans, such as control of communicable diseases, mother and child care, psychiatric services and long-term hospitalization.

As a result of the network of general hospitals developed by the state, the Ministry of Health is in effect the owner of approximately half of the acute care hospital beds in the country. These hospitals, together with hospitals built by Clalit and voluntary and religion-based hospitals, provide services to the members of all the health plans on the basis of reimbursement rules established by the state.

Since the late 1970s the Israeli health care system, like those of other countries, has had to confront population ageing, steadily increasing demand for geriatric services and care of chronically ill people and the need for the latest technology for diagnosis and treatment. The Israeli public have expected and demanded the provision of modern and progressive services to meet their needs, requiring investment in sophisticated equipment as well as research and professional expertise, in order to remain current with leading international standards. The result has been an ongoing rise in health expenditures, and an ever-widening gap between the resources available and the actual expenditures of the health care system.

The 1980s saw substantial labour unrest throughout the Israeli health care system, accompanied by increasing consumer dissatisfaction with lengthening queues for elective surgery, the growth of 'black-market' medicine, cream-skimming by some of the health plans and lack of responsiveness of the public system to rising consumer expectations.

In June 1988, against this background, the Cabinet of the State of Israel decided to establish a State Commission of Inquiry into the functioning and efficiency of the health care system, chaired by Supreme Court Justice Shoshana Netanyahu and thus referred to as the Netanyahu Commission. Though numerous public committees had been set up to examine the problems in the nation's health care system since 1948, the establishment of this high-level commission reflected the public's sense that the health care system was in a state of crisis and that drastic action was needed.

The recommendations of the Netanyahu Commission constituted a major watershed in the history of Israeli health policy. The commission emphasized the following problems in the Israeli health care system:

- inadequacies in the services provided to the public
- the Ministry of Health's dual role as service provider and regulator
- vague financing and budgeting procedures
- sub-optimal organization of the system and lack of managerial tools
- low levels of employee satisfaction and motivation.

The majority report of the Commission⁵ presented the following recommendations (see the section on *Health care reforms* for a full overview):

- legislation to introduce NHI
- reorganization of the Ministry of Health
- regionalization, decentralization and enhanced competition
- a centralized financing system and capitation payments
- introduction of private medical practice in public hospitals
- financial incentives for increased productivity, along with enforcement of the principle of equal pay for equal work.

Majority report recommendations were adopted by the Minister of Health, who established implementation task forces to deal with the reconstitution of government hospitals as freestanding for-profit entities, the reorganization of the Ministry of Health, preparation of the NHI law and health care system economics, including the design of capitation arrangements.

In the years immediately following the submission of the Commission's recommendations (1990–1993), reform efforts focused on an attempt to transform the government hospitals into freestanding hospital trusts. This effort, discussed in greater detail in the sections on *Health care delivery* and *Health care reforms*, failed due to opposition from health care workers' unions and the Histadrut, although recently there have been renewed efforts to move the trust initiative forward. The focus then turned to the development of the NHI law, which proved to be more successful; the NHI law was passed in 1994 and came into effect in January 1995. The problems that led to the adoption of NHI and the main components of the NHI law are discussed extensively in the sections on *Health care financing and expenditure* and *Health care reforms*.

⁵ The minority report, written and endorsed by one of the five commission members, called for greater targeting of the reforms on the main areas of health care system dysfunction and for less radical, more evolutionary change.



Organizational structure and management⁶

Organizational structure of the health care system

This section begins with an introduction of the overall framework of government in health in Israel and continues with a description of the organization of the Ministry of Health and the health care system.

The Knesset

Israel is a parliamentary democracy, thus it is the Knesset that ultimately determines laws and budgets. In the past decade the Knesset has been very active in health-related legislation, passing such laws as the NHI law 1995 and the Patients' Rights Law 1996. The key Knesset committees relating to health are the Finance Committee, which prepares the annual budget for votes in the plenum and the Labour, Social Affairs and Health Committee, which is formally charged with the leading role on health issues.

It is important to note that over the past decade much use has been made of the annual Budget Arrangements Bill, which accompanies the national budget, to move health and other social policy matters quickly through the Knesset in late December as part of the annual budgeting process. This bill is handled by the Finance Committee, rather than by the Labour, Social Affairs and Health Committee, and its use for substantive issues has come under increasing criticism on the part of Israel's social lobby.⁷

⁶ This section was prepared in consultation with Ted Tulchinsky.

⁷ The social lobby is a loose network of Knesset members and nongovernmental organizations, which seeks to advance legislation to promote equality and the wellbeing of low-income groups.

The government

Executive power is in the hands of the government. Only the Prime Minister is directly elected by popular vote, and the elected Prime Minister⁸ then tries to assemble a government (cabinet), which must secure and maintain majority support in the Knesset. This is done through the distribution of cabinet portfolios among the various coalition parties. Until the 1990s the health portfolio was given to one of the smaller, less powerful parties, with the major parties preferring the more visible and powerful portfolios of Foreign Affairs, Finance, Defence, Education, etc. The period from 1990–1994 was unique, as the Ministry of Health was held by major players: first by one of the rising stars of the Likud Party and then by a rising star of the Labour Party. This was a reflection of the growing salience of health care issues in Israel. Between 1995 and 2001 there were six ministers of health, some from the smaller parties and some second-tier figures from the dominant parties.

The government plays a role in health care at several critical junctures. First, while the Knesset must vote on the annual budget, it is the government that prepares and submits the budget. The Ministry of Finance and its powerful Budget Division play a critical role in drafting the budget. However, the government ultimately determines what is proposed in the budget sent to the Knesset and the political balances of power, as well as the policy priorities of the government as a whole, invariably affect allocations to health care.

Similarly, the government plays an important role in the legislative process. While the Knesset will entertain private members' bills, in practice most legislation, and almost all major legislation, is submitted by the government. While the relevant ministry prepares any particular bill, the government's Ministerial Committee on Legislation plays an important role. For example, in the case of the NHI law, this was the place where a crucial compromise was reached whereby the Finance Minister agreed to support the bill on the condition that the Health Minister would agree to various measures that would serve to control NHI expenditures.

The Ministry of Health

As in other countries, the Ministry of Health has overall responsibility for the health of the population and the effective functioning of the health care system. The Ministry is headed by the Minister of Health, who is a member of the Government (cabinet) and appoints a physician as Director-General, the Ministry's senior health care professional.

⁸ The direct election of Prime Minister is a relatively new phenomenon in Israel and it will no longer apply as of forthcoming elections.

Key functions of the Ministry of Health include:

- planning and determining health priorities;
- drafting of health care laws to be put before the Knesset and enacting of regulations subsequent to primary legislation;
- advocating for adequate resources for the NHI system and for other components of the health care system;
- promoting the effective use of resources within the health care system, including proposing the ministry's annual budget for the Ministry of Finance and the government;
- monitoring and promoting population health (see the section on *Health care delivery*);
- overseeing the operation of the government's 11 acute care hospitals, 11 psychiatric hospitals and 5 chronic disease hospitals;
- monitoring and regulating the activities of nongovernmental actors in the health care system, including hospitals, health plans,⁹ various freestanding diagnostic facilities, etc.;
- regulating the health care professions;¹⁰
- preparing the health care system for various emergency situations including terror attacks or military attacks with conventional and nonconventional weapons.

In addition to all the usual planning, public health, regulatory and stewardship functions, Israel's Ministry of Health also plays a major role in the direct provision of care. It owns and operates almost half of the nation's acute hospital beds, approximately two thirds of the psychiatric hospital beds and 10% of the chronic disease beds. In addition, it operates the majority of the nation's mother and child preventive health centres. This multiplicity of Ministry roles has long been recognized¹¹ as one of the problems of the Israeli health care system, and it is an issue that is discussed further in the section on *Health care delivery*.

The Ministry of Health receives important input from various advisory bodies. These include the National Health Council, a statutory body established to advise the Minister of Health on implementation of the NHI law, and a series of standing national councils on, for example, community medicine,

⁹ The Ministry of Health is involved in primary care in part through its regulation of the health plans and in part through a small unit involved in developing policy and strategic initiatives in primary care. However, primary care has not been a major focus of ministry attention.

¹⁰ Part of this function is then delegated to the Scientific Council of the IMA, which works closely with the ministry on issues of physician licensing and other key matters.

¹¹ This problem was discussed thoroughly by the Netanyahu Commission, as well as by various prior commissions. Most senior managers in the government and in the health plans concur with this assessment.

oncology, cardiovascular disease and women's health, appointed to advise the Director-General on both long-term goals and pressing issues requiring an immediate policy response.

Other key government bodies involved in health

- **The Ministry of Finance:** As noted above, this is the agency of the executive branch that prepares the budget for approval by the cabinet and Knesset and monitors its implementation. Historically, its budget division has also been a catalyst for major structural reforms in Israeli health care. In addition, the Ministry's wages and collective bargaining division is the lead government actor in negotiations with the health care labour unions. Its finance and capital markets division plays an important role in regulating the commercial insurance sector. Thus, the Ministry of Finance has multiple, powerful points of influence on Israeli health care. As in other countries, the ministry is the key governmental actor seeking to limit public spending on health care, constrain the construction of new health care facilities, limit the number of employed physicians, etc.
- **The National Insurance Institute:** The National Insurance Institute (NII) collects the health tax that plays a major role in the financing of the NHI system. See the section on *Health care financing and expenditure* for further details.
- **The Israel Defence Force:** This operates a medical corps that directly provides basic and emergency care for military personnel and purchases tertiary services from the civilian sector.

Key nongovernmental actors

- **Health plans:** Health plans are voluntary, non-profit organizations, obliged to ensure that their members have access to a benefits package specified in the NHI law. In return, the health plans receive an annual per-member capitation fee from the government. There are currently four health plans and their mid-2003 market shares are as follows: Clalit – 55%; Maccabi – 24%; Meuhedet – 11%; Leumit – 10%. The health plans are governed by boards of directors, which in some cases are self-perpetuating, and in other cases are indirectly elected by the members of the plan.
- **Hospitals:** While the government owns approximately half of the acute beds, Clalit owns one third of the acute beds and the remaining beds are owned by various non-profit and for-profit entities.
- **Health care unions:** Most notable in this regard are the Israel Medical Association (IMA) and the Israel Nurses' Association (INA). For further

details see the sections on *Health care delivery* and *Financial resource allocation*.

- **Magen David Adom ('Red Star of David')**: Israel's equivalent of the Red Cross operates ambulances and other emergency services.
- **Voluntary organizations**: Many of these are organized around specific diseases or health care services.

Citizen influences on health policy

In theory citizens can influence Israeli health policy through several major channels. The first is through the political parties' primary elections and the Knesset elections themselves. However, throughout the history of the State domestic issues in general and health care in particular have not figured prominently in election campaigns. One important exception was the 1992 general election campaign in which the introduction of NHI and, even more so, reduction of questionable practices in the Histadrut, the national labour federation, and its separation from Clalit constituted central campaign issues of both parties.

It should be noted that the political parties had a substantial impact on health policy even during periods when health policy was not a central campaign issue.¹² For many years the Labour Party resisted efforts to eliminate the health plan system in favour of a unitary, government-run NHI system. They also successfully fought for government subsidies of the Histadrut-affiliated health plan. Conversely, for decades the revisionist parties, predecessors of the current Likud, used their political power to block any NHI legislation that would preserve the dominance of the Histadrut-affiliated health plan. The religious parties used their pivotal role in the political balance of power both to influence NHI legislation and to influence legislation on sensitive issues such as abortion and autopsies.

In addition to their influence via political parties, citizens also influence the health care system through their involvement in the boards of directors of key organizations, such as Hadassah, the health plans and Magen David Adom, and through participation on various government advisory bodies such as the National Health Council. Of course some of these boards are dominated by professionals and the influence of 'ordinary citizens' is therefore not that great.

Citizens as consumers also have influence through the mechanisms of 'voice' and 'exit'. Increasingly, researchers are using surveys and in-depth interviews

¹² Since they are voluntary associations of citizens, political parties' actions can be considered a form of citizen participation.

to help consumers articulate their needs and wants with regard to an ever-widening set of health care services and issues. Moreover, in those areas of health care characterized by competition, such as the health plan sector, shifts and potential shifts in market shares have led providers to be much more responsive to consumer demands and wants than they were in the past.

The health care system since 1990

The major organizational problems identified by the 1990 Netanyahu Commission report were that:

- the health care system was overly politicized due to the political affiliations of some of the health plans; many key health policies were influenced by partisan political considerations;
- there was no comprehensive legal framework for the activities of the health plans;
- the Ministry of Health's dual role as regulator and provider led to conflicts of interest and inefficiencies.

Israel's NHI law, which came into force in 1995, addressed the first two of these problems to a significant extent. In the early 1990s unsuccessful efforts were made to address the third problem. The major change expected in the coming years is in the reduction of government provision of health services: there are major efforts underway to transfer responsibility for mental health services from the government to the health plans. Those heading up these efforts appear to have learned from the failures of prior efforts to implement such a change, and the current process is characterized by greater collaboration and sharing of information.

The primary organizational changes since 1990 are summarized in the following paragraphs.

Prior to 1995 individuals paid their health insurance premiums directly to the health plans on a voluntary basis. Since the introduction of NHI in 1995, these payments are collected by the NII on a compulsory basis as a health tax. The NII then distributes the revenue raised to the health plans. See the sections on *Health care financing and expenditure* and *Financial resource allocation* for further details.

Employers used to play a substantial role in financing health insurance, although it is worth pointing out that unlike in European social health insurance systems, where employer finance comes with employer involvement in health policy, the role of Israeli employers was always limited to writing a cheque without having any interest in what was done with the money. Since the

employers' tax was abolished in 1997 and replaced by an increase in general tax revenue, employers no longer play a significant role in the public system.¹³ See the section on *Health care financing and expenditure* for further details.

Government hospitals are more autonomous than in the past, although they continue to be owned and managed by the Ministry of Health.

Several significant new planning and regulatory units staffed by highly trained professionals have been established within the Ministry of Health, including units for health economics, supervision of health plans and regulation of the adoption of new technologies.

Planning, regulation and management

Planning

National health care planning in Israel includes the development of long-term plans for the number of acute and long-term care beds that should be built. These are handled by interministerial working groups, and nongovernmental bodies are also involved in the planning processes. Israel does not have a comprehensive national health plan, nor an active system for setting and updating national health targets.

The Ministry of Health has had a consistent policy of keeping a low hospital bed-to-population ratio as a key to planning for many years, thus helping to maintain the balance in resource allocation between hospital and community services.

In 1990 the Ministry of Health sponsored a planning process involving key health care system actors in order to develop a Health for All 2000 document. The document identified various areas for priority action and specified several quantitative health goals. However, the document does not appear to have been a major guide to subsequent policy development. The Ministry of Health does monitor performance on various Health for All measures (Haklai et al 2002), but little was done in the 1990s to compare achievements with targets or to update the targets. More recently, the Ministry has begun an effort to update the targets.

External, highly visible, temporary commissions such as the Netanyahu Commission (see the sections on *Historical background* and *Health care*

¹³ At the same time many large employers have begun to organize voluntary health insurance coverage for their employees. See the section on *Health care financing and expenditure*.

reforms) appear to have had as strong an impact on planning and policy development as the Ministry of Health or any permanent planning entities. These commissions are perceived as capable of examining issues more objectively, more professionally and less politically than the Ministry of Health, mainly because of the latter's multiplicity of roles. Further analysis is needed to determine whether this is indeed the case and whether relying on temporary public commissions as the primary vehicle of policy development is advisable.

Most planning is done on a yearly basis and is closely tied to the annual budget process. Periodic strategic planning efforts take place in some health plans and hospitals, typically initiated when a new chief executive is appointed.

Regulation

Outside the public health arena, Israel does not have a well-developed culture of government regulation in the health sector. Instead, government has relied primarily on budgetary controls, offers of subsidies and moral and political suasion to influence nongovernmental providers. Since the introduction of NHI and the Patients' Rights Act in the mid-1990s, the Ministry of Health has developed new capabilities in the regulatory area.

Areas of long-standing Ministry of Health regulation include:

- food safety
- water safety
- drug safety and efficacy
- licensing of health professionals
- structural safety of health care facilities
- major capital expenditures such as expansion of bed complements, acquisition of expensive technologies, etc.
- hospital per diem rates.

Areas of recent Ministry of Health regulation:

- filtration of community water supplies
- mandatory fluoridation of community water supplies
- long-term care
- smoking in public places
- patients' rights
- health plan benefits and financing.

Areas still lacking regulation:

- food fortification and quality

- number of health care personnel
- quality of acute care.

One area of particular note is the lack of planning regarding the number of health care personnel. This is particularly significant in light of Israel's high physician- and dentist-to-population ratios. The prevailing sentiment has been that human resource planning in Israel would be an exercise in futility, due to the open-door policy for all Jewish immigrants, including high numbers of health care professionals. In recent years there has been a growing sense that Israel should, nonetheless, begin to engage in some form of human resource planning.

Decentralization

Israel has a unitary, as opposed to a federal, system of government. While the government has administrative divisions at the regional level, these do not have independent authority in the same way as US states or German *Laender*.

Although the Ministry of Health's Public Health Division operates through regional and district offices, which have some leeway in responding to local conditions, the ultimate source of authority is the national office. The regional and district offices serve primarily to implement the policies and strategies developed at the national level, both in the public health area and in the regulation of long-term and psychiatric care.

The same is true of the health plans; all have regional administrations, but authority rests with their national headquarters. In recent years the health plans have been undergoing a process of decentralizing authority and responsibility to the regions and branches. This is particularly true of Clalit, which is in the process of an ambitious programme of decentralization down to the clinic level.

The recommendation of the Netanyahu Commission for regionalization of health services in Israel has not been adopted. The Ministry and its institutions have one set of regional structures and the health plans each have their own. There is little in the way of coordination between these bodies at the regional level.

The NHI law called for reducing the role of government in service provision in three key areas of activity: personal preventive care, long-term care and mental health care. The law stated that within a three-year transition period, these responsibilities would be transferred to the health plans. As discussed in greater detail in the section on *Health care delivery*, the original decision to transfer responsibility for personal preventive care was reversed by the Knesset

in 1998, and while the decision to transfer responsibility in the other two areas remains on the books, it has not yet been taken.

A major effort was undertaken in the early 1990s to transform the government hospitals into independent, non-profit trusts. This was a top priority of the Minister of Health at the time. However, the effort failed, primarily due to the opposition of the health care unions (see the section on *Health care delivery*). Instead, the government hospitals have been gradually given far more autonomy than they had in the past.

Most analysts interpret the NHI law as increasing government control of the health care system. Previously, the health plans were largely unregulated, whereas the government now has substantial regulatory powers regarding the benefits to be provided and how much to finance health plan activity. Nevertheless, the health plans remain separate legal entities with wide latitude for strategic and managerial discretion. The change is less radical than that which was envisaged by competing approaches to NHI such as abolition of the health plans and institution of a unitary health insurance system run by the government. Still, there is no denying that health plans have significantly less independence than they had prior to 1995.

The change appears to have enhanced the public's right to a defined benefits package and has increased equity in the health care system. What is less clear is the magnitude of the costs of the change in terms of reduced innovation, responsiveness and diversity.

In summary, in the past decade the Israeli health care system has undergone:

- some *deconcentration* of central government authority to lower administrative levels of central government, particularly in the case of the government hospitals;
- no significant *devolution* of authority to regional or local governments;
- no significant *delegation* of responsibilities to quasi-public organizations (on the contrary, NHI constitutes a process of transfer of authority from the health plans to the government);
- various attempts at *privatization*, in the sense of transferring responsibilities for service provision from the government to the voluntary sector, none of which has been successfully implemented to date.

Questions remain as to the desirable extent of deconcentration, devolution, delegation and privatization in Israeli health care. Thus there continue to be vigorous debates as to the desirability of the changes that took place in the 1990s. Similarly, there is no clear consensus as to how Israeli health care should change with regard to these issues in the decade ahead.



Health care financing and expenditure¹⁴

Health care in Israel is predominantly financed from public sources via a mixed system of payroll tax and general tax revenue. Supplementary voluntary health insurance (VHI), statutory cost sharing and direct out-of-pocket payments for private sector services also play a role. In recent years the share of public financing has declined, while the share of private financing has increased.

The section on the main systems of financing and coverage briefly presents data on financing sources for the health care system as a whole and then focuses on the main component of the health care system, which is financed by NHI. The section briefly notes those components of the health care system that are not financed by NHI. The following sections discuss how the NHI benefits package is determined, complementary sources of financing and health care expenditure.

Main systems of financing and coverage

Table 3 presents information on the main sources of financing for the health care system as a whole. General tax revenue comes from a mix of progressive taxes such as income tax and regressive taxes such as value added tax and customs levies. The employer tax, which was known as ‘the parallel tax’ and earmarked for health care, was abolished in 1997. The shortfall was compensated for by an increase in the share of general tax revenue, which rose as a result from 26% in 1995 to 46% in 2000. Prior to the introduction of NHI in

¹⁴ This section was prepared in consultation with Avi Israeli, Gary Ginsberg, Miri Zibzenher and Shuli Brammli-Greenberg.

1995 individuals paid their health insurance premiums directly to the health plans on a voluntary basis. Health plan premiums were subsequently replaced by the health tax, which is a payroll tax earmarked for health (see below). By 2000 the health tax accounted for 25% of total health care financing.

Table 3. Main sources of financing for health care in Israel (as % of total), 1985-2000

Source of financing	1985 %	1990 %	1994 %	1995 %	2000 %
Public	68	65	71	70	71
–general taxation	27	19	27	26	46
–employer tax	27	27	22	22	0
–health tax	0	0	0	22	25
–health plan premiums	14	19	22	0	0
Private	25	28	24	26	29
Other/unknown	7	7	5	4	0
Total	100	100	100	100	100

Source: CBS 2002a.

NHI financing

More than half of the health care system's activities are financed by NHI, which was established by the NHI law in 1995. See the section on *Health care reforms* for further details on the background to and implementation of this law.

Since the beginning of 1995, all permanent residents of the State of Israel¹⁵ have been entitled to a benefits package specified in the NHI law (see below). They are also required to enrol in one of four competing, non-profit health plans offering the NHI benefits package and are allowed to switch between plans once a year (Rosen and Shamai 1998; Gross et al 2001). Residents are free to choose among the health plans, which must accept all applicants. There are two 'open enrolment' periods each year. No permanent resident can voluntarily opt out of the NHI system. The health plans are independent, nongovernmental legal entities, but they operate within a legal and regulatory framework defined by the government.

Each year the government determines the level at which the NHI system will be funded. See the section on *Financial resource allocation* for further

¹⁵ The NHI system only covers recognized permanent residents. Israel currently has several hundred thousand foreign workers, primarily from Eastern Europe and Southeast Asia, and they are not covered under NHI. Employers of foreign workers are required to arrange private health insurance for them and the Knesset has ensured that these private packages are similar in scope to the benefits package offered by NHI. Accordingly, those foreign workers who are in Israel legally have adequate health insurance. However, there are also large numbers of illegal foreign workers and, generally speaking, they lack health insurance. Recently, the government took measures to ensure basic health insurance coverage for the children of the illegal foreign workers.

information about this process. The officially determined NHI funding level is almost entirely financed from public sources. The remainder comes from private sources, through cost sharing (see below).

Public NHI financing comes from two sources: the health tax and general tax revenue. The health tax is an earmarked payroll tax collected by the National Insurance Institute (NII). Individuals pay 3.1% on wages up to half of the average national wage and 4.8% on income beyond that level.¹⁶ Income above five times the national wage is not taxed for NHI purposes. There are exemptions and discounts for various groups such as pensioners and recipients of income maintenance allowances. Failure to pay the required health tax will result in government action to enforce payment, but in no way jeopardizes the individual's right to NHI benefits. Prior to the abolition of the employer tax in 1997, the proportion of public financing for health care that came from earmarked sources was substantially higher.

General tax revenue is used to fill the gap between the officially determined level of NHI funding and revenue from the health tax. The system therefore lies somewhere between a social health insurance system and a tax-financed system.

Some in Israel are uncomfortable with this hybrid system and there are conflicting calls about the direction the system should move towards. On one hand, various economists and public finance professionals argue that the health tax should be absorbed into the income tax system, which they prefer because it is more progressive. In addition, they are dissatisfied with the precedent set by an earmarked tax, as earmarking reduces government freedom, particularly the freedom of the Ministry of Finance.

On the other hand, many actors and analysts within the health care system argue for the reinstatement of the employer tax, which was earmarked for health, but was abolished in 1997. They contend that the health care system needs earmarked sources of financing because it is the only area in which the government has stipulated a benefits package to which all residents are entitled by law. These proponents believe that a greater degree of earmarking will result in a higher level of public financing of health care in the long term.

The debate continues with no signs of immediate change in either direction.

Public NHI financing is allocated among the four competing health plans. See the section on *Financial resource allocation* for further information about this process.

¹⁶ In the initial legislation the ceiling was four times the average wage. This was changed to five times the average wage in 2000. The ceiling was abolished in June 2002. The extra revenue was not earmarked for health, but could be used for any type of public expenditure.

Prior to the introduction of NHI, enrolment in the health plans was voluntary. Approximately 5% of the population were uninsured, with relatively high rates of uninsured among the young, poor and Arab population groups. Health insurance premiums were set and collected by the health plans themselves. Premium levels rose with income, but were less progressive than the current health tax. The health plans also received financing from an employer tax collected by the NII and distributed among health plans on the basis of the number and age of their members.

The pre-NHI voluntary system was characterized by a number of problems:

- 5% of the population were uninsured;
- the health plans had a financial incentive to cream skim younger or healthier people, who would use fewer services, or people with higher incomes, whose contributions were higher;
- the one health plan which did cater to older or poorer people or people in poor health was at a competitive disadvantage and incurred large and growing deficits;
- the system was highly politicized, with two of the four health plans having ties to the major political parties;
- the benefits package was stated in general terms only and the nature of members' entitlement to it was unclear (Rosen 1999).

The NHI law addressed these problems by instituting universal coverage, tying health plan revenue to members' expected utilization levels rather than their income levels, guaranteeing free choice of health plan, breaking – or at least weakening – the ties between the health plans and the political parties and specifying the content of the benefits package in law.

Even with this major reform, however, many problems and issues remain (Rosen et al 2000; Gross and Harrison 2001). It was hoped that NHI would bring an end to the accumulation of financial deficits in the health care system, but this has not happened and periodic financial crises have continued (Gross et al 2001). For further discussion of ongoing debates about levels of NHI financing, see the section on *Financial resource allocation*.

Non-NHI financing

Services not included in the NHI benefits package and not generally provided by the health plans include long-term care, psychiatric care, preventive health care, public health services and dental care. Details about the financing of these services can be found in the section on *Health care delivery*. Non-NHI financing also covers investment in hospital construction and equipment and

medical research. Services such as inpatient care and physician consultations are provided primarily by the health plans, but are also available from the private sector on a commercial basis.

Long-term care financing is shared among households and a number of agencies including the NII, government ministries and the health plans. Mental health care in government hospitals, private hospitals and in psychiatric departments of general hospitals are financed by the Ministry of Health (see the section on *Health care delivery*). Nongovernmental outpatient mental health services are financed by fee-for-service payments and health plan financing.

Households pay out-of-pocket for the following services: private surgery and laboratory tests, alternative medicine, private nurses and ambulances, psychological and psychiatric visits and dental care. In addition, households are subject to cost sharing for some services. Approximately 90% of dental care is financed by households, about 10% of which have commercial VHI coverage for dental care. The government also plays a role in financing dental care, primarily for indigent or elderly people and school children.

Health care benefits and rationing

The NHI law stipulates the benefits package which all residents are entitled to receive from their health plans. In setting the initial benefits package in 1995 the Knesset essentially adopted that of Clalit, the largest health plan. The initial benefits package provided by the health plans under NHI included hospital care, community-based health care, pharmaceuticals, etc. All health plans are legally mandated to provide all the benefits included in the NHI benefits package.

Prior to the introduction of NHI, there were slight differences in the benefits covered by the health plans, although they basically covered the same broad categories of care. The NHI therefore brought greater detail, specificity and clarity to the benefits package, but did not bring about any immediate major changes in the types of benefits covered (Gross et al 2001).

The NHI law called for the transferral of responsibility for three key services – inpatient long-term care, mental health care and preventive services – from the government to the health plans at the end of a three-year transition period. Although these three services have long been the direct responsibility of the government, there has been no legal entitlement to them and their availability has been subject to budgetary pressures. Means testing plays an important role in determining eligibility for government financing and the extent

to which the government covers costs, particularly in the case of inpatient long-term care. The NHI law sought to transfer responsibility for these services to the health plans in order to introduce entitlement to them, to improve quality through greater continuity of care and to reduce costs through integration. However, these services have not yet been transferred to the health plans and they continue to be the responsibility of the government.

Several services remain outside the responsibility of both the government and the health plans. These include: complementary medicine, optician services and dental care (Bin Nun and Katz 2001). No serious debate was given to their inclusion under NHI because there were concerns that NHI might be under funded and legislators were therefore reluctant to add new benefits. In subsequent years this decision has been questioned, particularly with regard to dental care.

In 1997 Israel established a formal priority-setting process for the addition of new services to the benefits package. Each year, as part of the annual budgeting process, the government determines how much money will be available to fund new technologies. At the same time, the Ministry of Health solicits recommendations from the health plans, pharmaceutical companies, the Israel Medical Association (IMA), patient organizations and other groups for new technologies to be given priority for inclusion in the benefits package. After the Ministry of Health carries out a cost-benefit analysis, a public committee, made up of health plan representatives, the Ministries of Health and Finance, the IMA, experts in health economics and health policy and public figures from outside the health care system, recommends which new technologies should be adopted (Chinitz and Israeli 1999; Shani et al 2000). Final decisions as to what will be included are made by the Minister of Health. The public committee's recommendations are not legally binding, but to date its recommendations have been fully adopted.

In the first few years of the priority-setting process, most additions to the benefits package were pharmaceuticals. Moreover, almost all of the funds went to life-extending, as opposed to life-enhancing, medications. There is a growing sense that, in future, greater emphasis needs to be given to life-enhancing medications and to non-pharmaceutical innovations.

Between 1998 and 2002, not enough money was allocated to fund new technologies and many cost-beneficial items therefore remain outside the benefits package; 1% of the cost of the benefits package was allocated every year to fund new technologies. This amount was drastically reduced, and almost eliminated, in 2003.

This explicit priority-setting process is considered by many health policy analysts, both in Israel and abroad, to be ground breaking on an international

scale (Chinitz 1999). It certainly constitutes one of the most serious efforts in health care in Israel to base decisions on solid information and a structured decision-making procedure. However, the following criticisms of the process have been noted:

- not enough use is made of cost-benefit analyses, quality-adjusted life years (QALYs), disability-adjusted life years (DALYs) etc, either in the decision-making process or in the background documents prepared by staff;
- not enough has been done to incorporate the priorities, values, views and preferences of the general public;
- the process does not benefit from sufficient input and guidance from the National Health Council, a broadly representative body established by the NHI law to advise the Minister of Health; some have argued that the National Health Council should be setting the broad criteria used to guide the prioritization work of the public committee, while others think that these criteria should be set by the public committee itself;
- some of the data needed to project how many people are candidates for the use of a proposed new technology – a key component of the cost-benefit analyses – is available only to the health plans; the government has not made full use of its right to require the health plans to make that data available to the process, nor does it appear to have the authority to require the health plans to divulge information on the amounts paid for particular drugs; as a result, the health plans tend to share only those data that advance their interests;
- interested parties, particularly the health plans, have too much power on the public committee;
- the Israeli courts have seen fit to mandate the health plans to provide certain benefits not recommended by the public committee.

To some extent these problems may be start-up problems, while others may be more structural and long-lasting (Chinitz et al 1998; Shalev and Chinitz 1998).

From time to time the health plans and others have called for the removal of certain services from the benefits package or for reductions in the number of treatments covered for particular services such as in-vitro fertilization. These proposals have met with strong public opposition and none of them has been adopted. Moreover, none of these proposals has been formally considered by the public committee. In the coming year, the public committee plans to begin to grapple with the challenge of how to go about considering whether items currently in the package should be removed.

Prior to 2001 all funding for ‘new technologies’ was spent on services provided by the health plans. From 2001 there has been funding earmarked for new technologies for services provided directly by the government in areas such as public health, prevention, geriatric care and psychiatric care. It remains to be seen whether these funds will be allocated using a serious prioritization process, similar to the prioritization process for funding new technologies for the NHI benefits package.

Complementary sources of financing

Table 4 presents data on the current sources of revenue of the health plans as a group. The vast majority of the health plans’ revenue comes from the government as part of its obligations under NHI. The next largest source of revenue source comes from cost sharing, primarily for pharmaceuticals.

Table 4. Health plan financing sources, 2000

Source of financing	%	NIS (millions)
NHI-mandated revenue from government	87%	18 237
Temporary ‘safety net’ funding	1%	187
Co-payments for physician visits	1%	281
Co-payments and sales of drugs	7%	1 464
Supplementary VHI surpluses	1%	181
Services outside the benefits package	2%	456
Other	1%	222
Total	100%	21 028

Source: Witowsky 2000.

The health plans also offer supplementary VHI (described more fully below) to all members in exchange for a monthly age-related premium. Supplementary VHI constitutes about 5% of health plans’ revenue. However, this is not reflected in Table 4, which indicates only 1% of revenues emanating from the profits from supplementary VHI due to the fact that supplementary VHI is run as a separate financial entity and only carry-overs to the main account appear in the health plans’ official financial statements.

Table 5 presents data on household expenditure on health in selected years between 1992 and 1999. Household spending on health accounted for 8.3% of total household consumption in 1999, up from 7.1% in 1993 (CBS 2002a). Approximately half of household spending on health was for the health tax, which replaced the voluntary health plan premiums in 1995. The two items of

expenditure that have grown most rapidly in recent years are medications and supplementary VHI premiums (discussed further below).

Table 5. Average monthly household spending on health (NIS in 1999 prices), 1992-1999

	1992/1993	1997	1999
Total household expenditure	8 490	9 427	9 619
Total health expenditure	599	751	794
(as % of total household expenditure)	7.1%	8.0%	8.3%
Health tax (formerly premiums)	328	406	410
(as % of total health expenditure)	54.8%	54.1%	51.6%
Non-tax health spending	271	345	384
–dental care	125	135	126
–medications	46	59	81
–all other health spending	43	58	77
–supplementary VHI	–	19	39
–private physicians	42	53	37
–commercial VHI	15	21	24

Source: CBS 1993, 1997, 1999.

Out-of-pocket payments

Cost sharing has long been a requirement of health care in Israel, including for preventive services at family health stations, visits to emergency departments and inpatient long-term care. Prior to the introduction of NHI, most cost sharing was for services financed by the government. The health plans mainly charged co-payments for pharmaceuticals. Only one of the health plans – Maccabi – charged a fee for visits to physicians. The NHI law required the health plans to freeze the pre-NHI level of co-payments.

In 1998 the Knesset authorized all the health plans, in principle, to charge their members for visits to specialists and community-based diagnostic centres. The health plans were also authorized to raise substantially their co-payment rates for pharmaceuticals. The Knesset stipulated that details of the co-payments would need to be approved by the Ministry of Health.

The new co-payments were part of a ‘package deal’ intended to alleviate the health plans’ financial deficits; other components of the package included increased government funding from general tax revenue and cost reductions by the health plans. It is generally recognized that, at the Knesset level, the primary motivation for the new co-payments was revenue enhancement. However, the Ministry of Finance insists that it pushed the legislation partly to reduce the frequency of unnecessary visits to physicians, with a view to containing costs.

The co-payments are structured as follows:

- visits to physicians, specialized clinics and diagnostic centres: there is a flat-rate charge for the first visit in any quarter; repeat visits within the quarter to the same specialist; welfare recipients are exempt from co-payments; there is also a quarterly ceiling on total co-payments at the household level, which is 50% lower for elderly people; in 2002 the ceiling ranged from NIS 80 to NIS 140, depending on health plan; the ceiling is not a function of family size;
- pharmaceuticals: the three smaller health plans charge a percentage of the purchase price, subject to a minimum co-payment of NIS 12 (in 2002) per item purchased; for most medications, Clalit charges a set fee per therapeutic dose (a standardized amount of medicine, as defined by the health plan).

There is a quarterly ceiling of NIS 200 (in 2002) for co-payments for people with various chronic illnesses. In addition, pharmaceuticals used to treat chronic illnesses such as cancer are exempt from co-payments. At present there are no exemptions or discounts for low-income patients (Brammli-Greenberg et al 2003) or ceilings for households in general.

Health plans' revenue from co-payments have grown markedly in recent years. For example, health plans' revenue from co-payments of all sorts, plus revenues from sales of pharmaceuticals outside the NHI benefits package and from OTC sales, per age-adjusted member rose from NIS 136 in 1993 to NIS 256 in 2000 (in 1999 prices) and increased from 6% to 8% of health plans' total revenue (Witowsky 2000).

There is evidence to suggest that the new co-payments have created financial barriers to access, particularly for people with low incomes (Gross and Brammli-Greenberg 2001). It is not yet known whether these barriers to access have had an adverse effect on health status.

Another important type of out-of-pocket payment is for private physicians' services provided in community and hospital settings. In the community setting there are no legal restrictions on the provision of private care, apart from the stipulation that those physicians who also work in the public sector receive permission from their employer to practise privately. In practice, permission is almost always granted, although often with a limitation on the number of hours that the physician can practise privately. This situation is not monitored closely by the hospitals or the government, but if cases of serious abuse come to light, they are dealt with administratively.

In the hospital setting, physicians can legally practise privately only in private hospitals and in Jerusalem voluntary hospitals. Private services are currently illegal in government and Clalit hospitals. This is primarily due to equity

considerations; at least in public facilities, all patients should receive the same level of care, irrespective of their ability to pay. Nevertheless, some physicians do practise privately in government and Clalit hospitals, in return for under-the-table payments. There is widespread disagreement about the extent of this phenomenon and initial attempts to estimate its prevalence have been beset by major methodological limitations. Policymakers are seriously considering legalizing the provision of private services in government and Clalit hospitals, subject to various regulations and restrictions. For further information on this issue and the current debate see www.jdc.org.il/brooksites/sharap_library.

As discussed in the section on *Financial resource allocation*, most government hospitals have established 'health trusts'. These are distinct legal entities which engage physicians to work after hours, usually on a per-visit or per-operation basis determined by negotiation between the trusts and individual physicians. However, this activity is not primarily 'privately financed' in the sense of being funded by out-of-pocket payments or commercial VHI. Rather, the trusts' revenue comes primarily from the sale of surgical and outpatient clinic services to the health plans during late afternoon, evening and night hours.

Voluntary health insurance

There are two forms of VHI available in Israel: supplementary VHI offered by the health plans and commercial VHI (Brammli-Greenberg and Gross 1999). In essence the situation is characterized by competition between private insurers and public-private hybrids.

Approximately 60% of Israelis have supplementary VHI, which provides partial coverage for services such as visits to private physicians, treatment in private hospitals, complementary medicine, etc. Coverage is always taken out by individuals as opposed to groups. Eighty per cent of Maccabi and Meuhedet members are covered by supplementary VHI, compared to only 50% of Clalit members. Supplementary VHI packages and premium rates must be approved by the Ministry of Health. The Ministry of Health also requires the health plans to offer supplementary VHI to any member that requests it, for a premium determined by age alone (not health status). The health plans are prohibited from excluding pre-existing conditions.

About a quarter of Israelis have commercial VHI and about 20% are covered by both supplementary and commercial VHI. Private insurers are regulated by the Ministry of Finance's Insurance Commissioner, whose main concern is to ensure that they have adequate financial reserves. Consequently, private insurers are free to reject applications on the basis of health status, exclude pre-existing conditions and rate premiums according to health status. In addition to partial

cover of the same range of services covered by supplementary VHI, commercial VHI usually covers dental care. The cover provided by commercial VHI tends to be broader and deeper than the cover provided by supplementary VHI. Premiums are also higher. Approximately half of those with commercial VHI are covered by group policies, which are purchased by employers or unions but paid for by the individuals covered (Gross and Brammli-Greenberg 2001).

During the late 1990s there was a major policy debate about who should be allowed to offer VHI: the health plans, the private insurers or both (Gross and Brammli-Greenberg 1997; Kaye and Roter 2001; Brammli-Greenberg and Gross 2003).

Arguments in favour of allowing the health plans to offer VHI were that:

- it would give the health plans an additional source of revenue and managerial flexibility;
- it would make reasonably priced VHI coverage available to a wider range of people;
- it would make it possible to offer VHI based, at least in part, on solidarity principles.

Arguments against allowing the health plans to offer VHI were that:

- they would have an unfair marketing advantage over the private insurers due to their existing relationship with the members;
- they would favour those who purchased VHI with regard to the NHI benefits package by providing them with faster or more courteous service, thus undermining the NHI's equity objectives;
- they might use public NHI funds to cross-subsidize VHI;
- they had relatively little experience of accumulating and maintaining actuarial reserves and might not have the financial discipline required to avoid spending in the present in order to accumulate reserves for the future – a concern particularly relevant to long-term care insurance.

Currently the government's policy is to allow both the health plans and the private insurers to offer VHI, with the proviso that the health plans do not offer long-term care insurance.¹⁷ In addition, the health plans must operate supplementary VHI under separate financial accounts and may not use public NHI funds to cross-subsidize supplementary VHI. In practice, however, the health plans have used profits from supplementary VHI to help offset deficits in the NHI part of their activity.

¹⁷ The health plans may market long-term care insurance policies offered by the private insurers, but cannot serve as the insurer for these policies.

A key outstanding issue is whether to allow supplementary VHI to provide cover for choice of physician in public hospitals, which are not allowed to take money from patients in return for the right to select a physician. For more on this issue see Brammli-Greenberg and Gross 1999 and Rosen 2001.

In recent years the proportion of Israelis with supplementary VHI coverage has increased markedly, from 37% in 1997 to 51% in 1999 to 65% in 2001. This is primarily due to a recent push on the part of Clalit to increase the proportion of its members with supplementary VHI. Relative to the other health plans, Clalit got off to a late start with regard to supplementary VHI because it was not a major provider of supplementary VHI prior to the introduction of NHI. Furthermore, the government-mandated NHI benefits package included everything that was included in Clalit's basic pre-NHI package, but excluded certain services that were covered by the pre-NHI benefits package of the other health plans. The other health plans were therefore able to say to their members that if they wanted to preserve all their pre-NHI services they would have to purchase supplementary VHI.

The proportion of Israelis with commercial VHI coverage is currently 26%, with 20% of the population having both supplementary and commercial VHI coverage.¹⁸ The demographic profile of people with commercial VHI differs somewhat from that of those with supplementary VHI in that they tend to have higher incomes and better health. In the commercial market for VHI non-price limitations such as coverage limits, waiting periods, risk-rated premiums, the exclusion of pre-existing conditions and the rejection of applications for cover serve as a means of selecting healthier people and rejecting or charging higher premiums to less healthy people (Shmueli 1998, 2001).

An interesting issue recently raised by Brammli-Greenberg and Gross (1999) is whether, and under what circumstances, competition from the private insurers will push the supplementary VHI market into disequilibrium. The concern is that the private insurers will take advantage of their right to apply the non-price limitations mentioned above to select risks (cream skim), leaving the health plans, who are subject to regulations concerning open enrolment and community rating, with an ever higher concentration of people with poor health.

Indeed, in recent years there has been a small increase in the proportion of chronically ill people among those with supplementary VHI, alongside a small decrease of the same among those with commercial VHI, probably as a result of the new regulations requiring open enrolment for supplementary VHI. At

¹⁸ It is not known why so many people maintain both types of VHI coverage. It may be due to a lack of understanding of the extent of the overlap, a strong aversion to risk, the desire to have coverage for as many contingencies as possible or other factors.

the same time there have been no signs of substantial movement of healthier people from supplementary VHI to commercial VHI, probably due to the marketing and distribution advantages enjoyed by the health plans and the fact that their supplementary VHI premiums only constitute a small add-on to the premiums they charge for NHI benefits. However, as the service and premium gaps between supplementary VHI and low-end commercial VHI are narrowing, the threat of cream skimming and disequilibrium is becoming more serious.

External sources of financing

The health care system benefits from two sources of external funding. First, donations from Jews residing in other countries, primarily the United States and Western Europe, often play an important role in funding capital expenditure for new buildings, renovations and the acquisition of major equipment. Second, research grants from foreign governments and pharmaceutical firms play an important role in the financing of clinical and pre-clinic research.

Health care expenditure

As indicated in Table 6, in 2000 Israel spent over NIS 40 billion on health care, amounting to 8.2% of GDP. It is important to note that in the 5 years following the introduction of NHI in 1995, the share of health in GDP was relatively stable in the 1995–2000 period, in contrast to a sharp rise in the preceding decade. The share rose again precipitously in 2001 (CBS 2002a).

Table 6. Trends in total expenditure on health care in Israel, 1985-2002

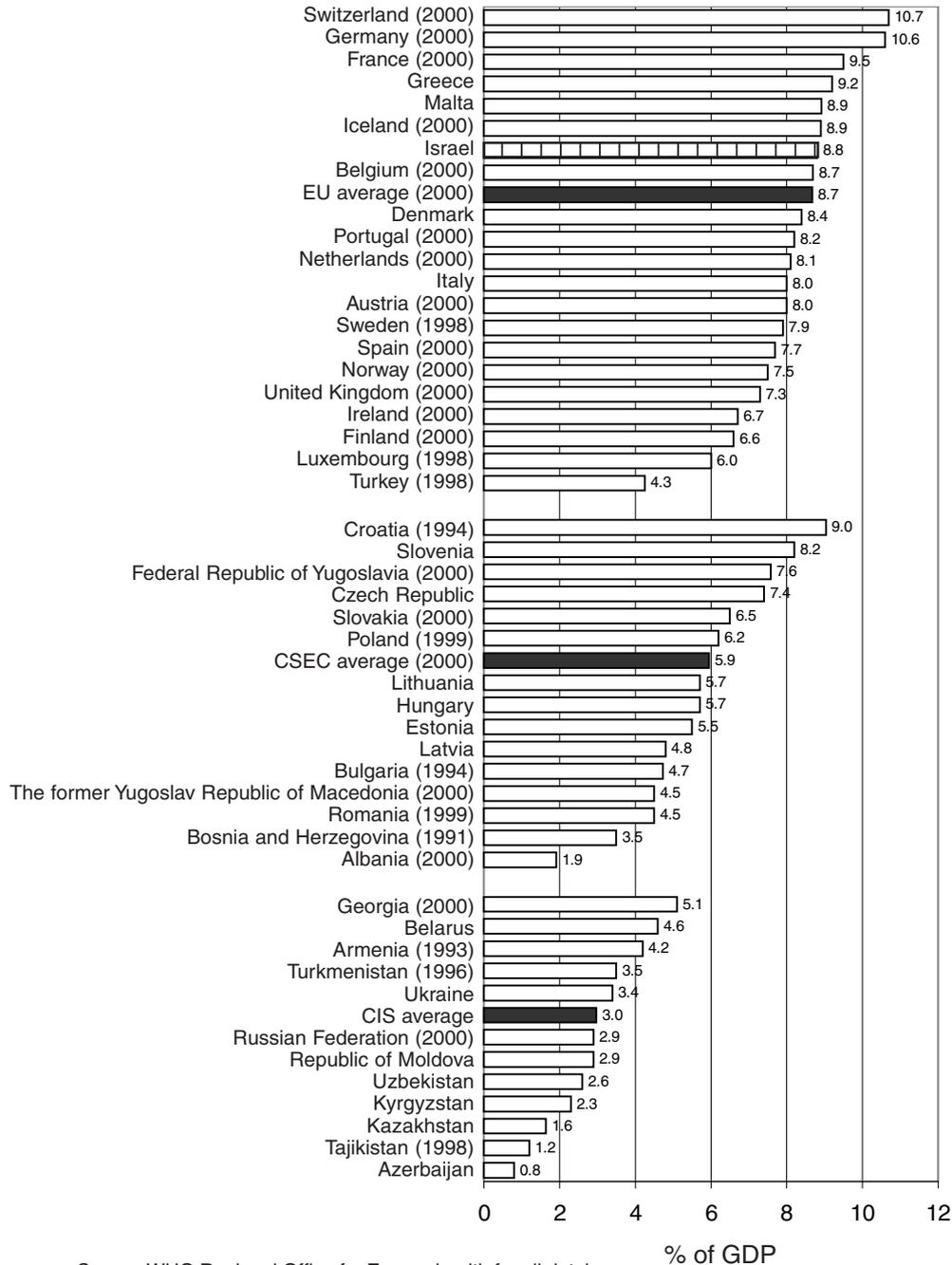
	1985	1990	1995	1997	1998	1999	2000	2001	2002
Value in current prices (billions of NIS)	2 236	8 136	22 417	30 205	33 060	36 511	39 707	42 594	44 850
Share of GDP (%)	6.6	7.3	7.9	8.2	8.2	8.2	8.2	8.7	8.8
Public share of total expenditure on health care (%)	68	65	70	73	73	71	70	69	68

Source: CBS 2002a.

The proportion of Israel's GDP devoted to health is seen in a wider European context in Fig. 4 and Fig. 5. Israel spends 8.3%, which approximates the EU average. Prior to 1994 Israel spent below the EU average.

The level of health care expenditure in US \$ PPP is shown in Fig. 6 and amounts to US \$ PPP 1531 per capita in Israel, which is slightly lower than the EU average due to the fact that Israel's GDP is relatively low.

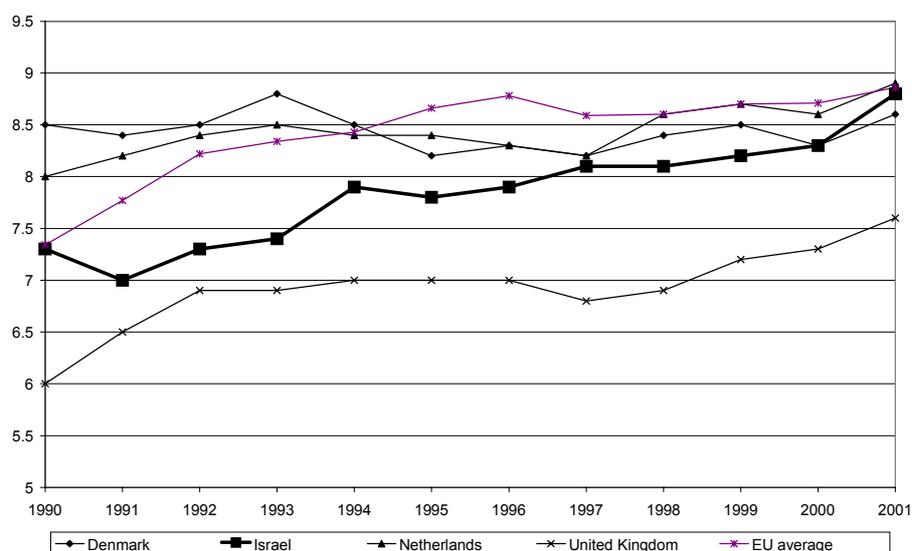
Fig. 4. Total expenditure on health as a % of GDP in the WHO European Region, 2001 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

Note: CIS: Commonwealth of independent states; CSEC: Central and south-eastern European countries; EU: European Union.

Fig. 5. Trends in total expenditure on health as a % of GDP in Israel and selected European countries , 1990-2001



Source: WHO Regional Office for Europe health for all database.

Note: EU: European Union.

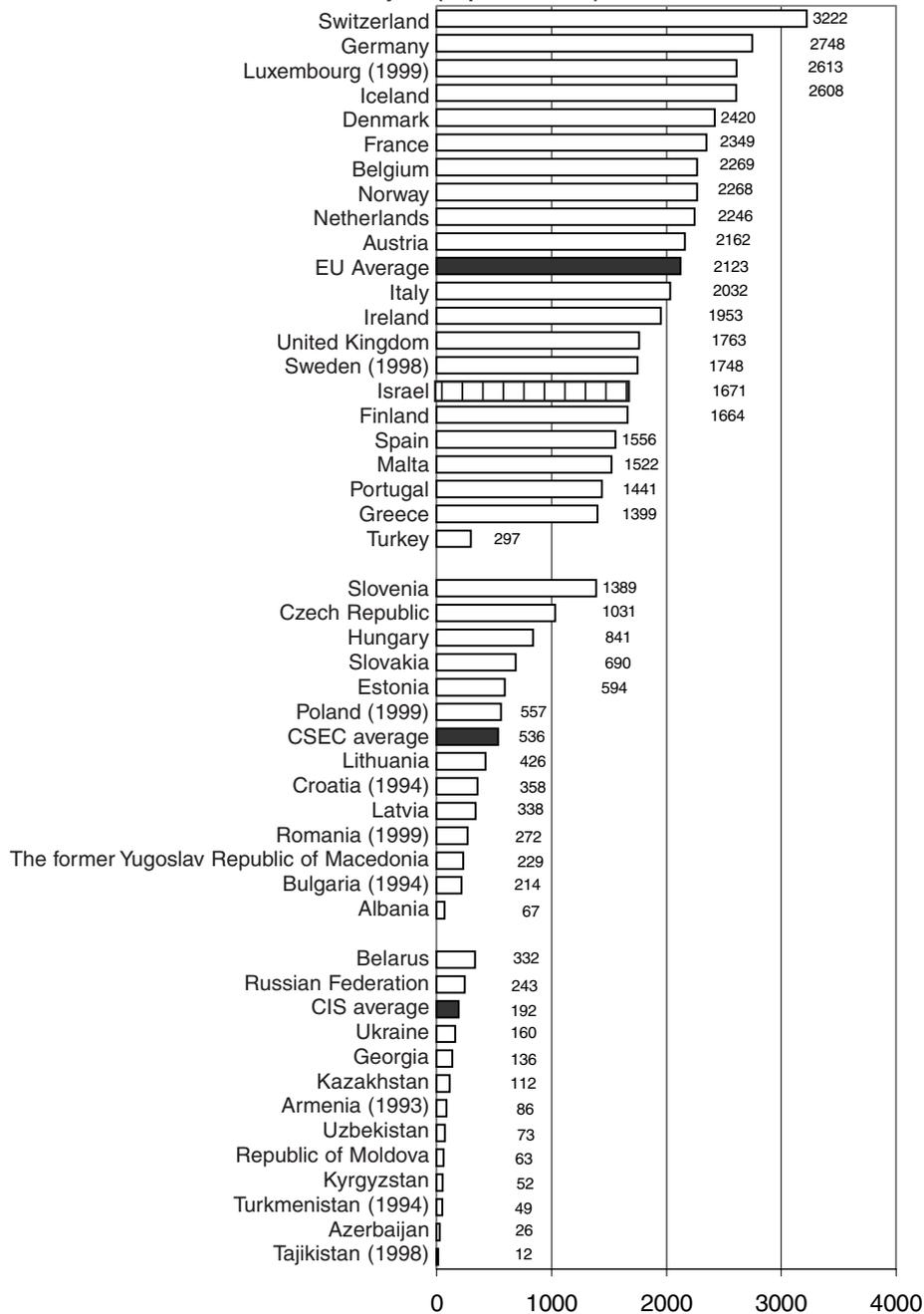
Fig. 7 shows the proportion of total expenditure on health care from government or public sources. With 68% of total expenditure from public sources, Israel is among the lowest of the European region.

1998 is the most recent year for which there are data on expenditure by type and service. In that year fixed capital formation accounted for 4% of national health care expenditure and current expenditure accounted for 96% (CBS 2002a). For current expenditure the breakdown was as follows:

Hospitals and research	41%
Public clinics and preventive care	39%
Dental care	9%
Private physicians	4%
Medicines and medical equipment purchased by households	6%
Government administration	1%

As indicated in Table 7, a decade previously, the share of public clinics and preventive care was a somewhat smaller 33%, while the shares of hospitals and research and dental care were somewhat larger, at 43% and 13% respectively (CBS 2002a).

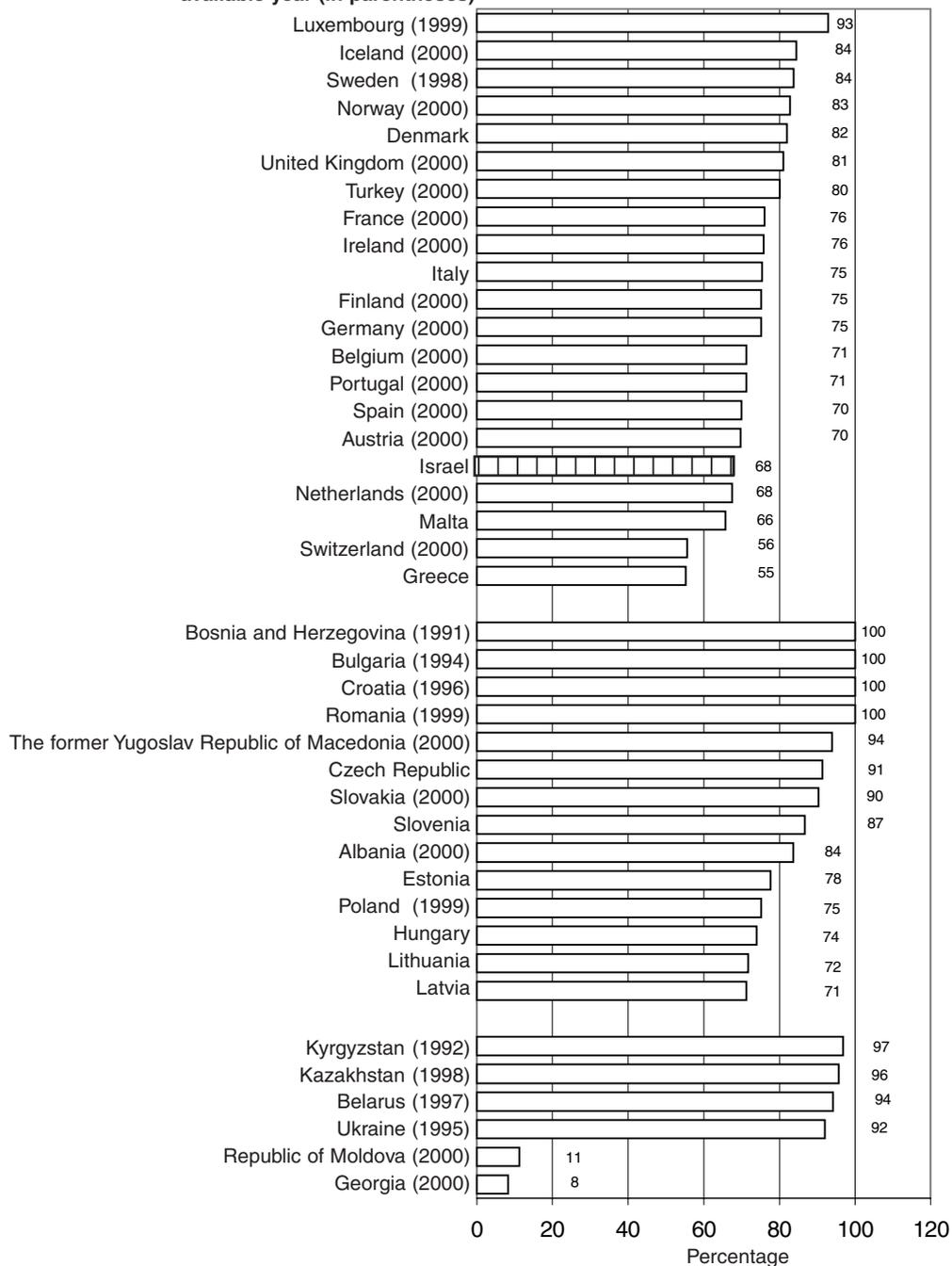
Fig. 6. Health care expenditure in US \$PPP per capita in the WHO European Region, 2000 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database. US \$PPP

Note: CIS: Commonwealth of independent states; CSEC: Central and south-eastern European countries; EU: European Union.

Fig. 7. Health care expenditure from public sources as a percentage of total health care expenditure in countries in the WHO European Region, 2001 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

Israel

The distribution of current expenditure by operating sector was as follows in 1998:

Government and local authorities	22%
Health plans	41%
Other non-profit institutions	12%
Business sector	25%

Table 7. Health care expenditure by type and service, 1988 and 1998

	1988	1998
Hospitals and research	43%	41%
Public clinics and preventive care	33%	39%
Dental care	13%	9%
Private physicians	5%	4%
Medicines and medical equipment purchased by households	5%	6%
Government administration	1%	1%

Source: CBS 2002a.



Health care delivery system

Primary care¹⁹

Primary care is highly accessible in Israel. In three of the four health plans, the cost of primary care visits to health plan physicians is fully covered by NHI where co-payments are limited to specialist visits. There are over 5000 primary care providers (PCPs) working with the health plans throughout the country. Only 5% of respondents reported having to wait more than 3 days for an appointment with a PCP and two-thirds of respondents visited the PCP on the same day that they called. Sixty per cent of the respondents waited for less than 15 minutes before seeing the PCP. Eighty-nine per cent reported being satisfied or very satisfied with the professionalism of their PCP and 93% reported being satisfied or very satisfied with the interpersonal skills and behaviour of the PCP (Gross and Brammli-Greenberg 2001).

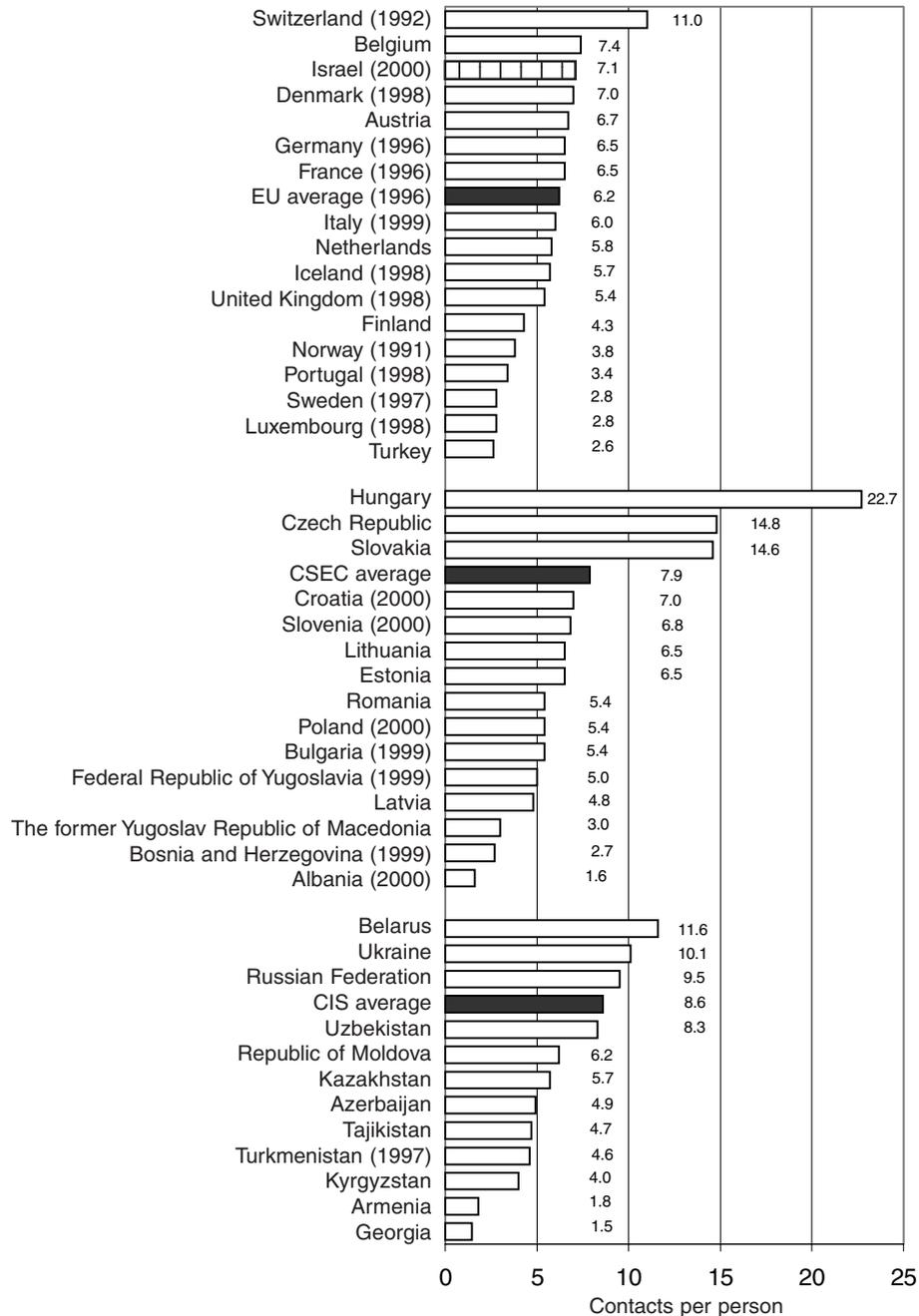
Primary care in Israel has improved substantially in recent decades. Historically, very few graduates of Israeli medical schools pursued careers in primary care. The immigrant physicians who provided the bulk of primary care were not always able to communicate effectively with the population groups among whom they worked. Few of them had specialty training in family medicine or other primary care specialties and there were serious questions about the quality of the care they provided. The clinics tended to be poorly run, under-staffed, characterized by long waits and disputes among patients about whose turn was next and, in some areas, poor facilities.

Israel has had one of the world's highest rates of visits to physicians per thousand population²⁰ (Sax 2001; Shuval 1988), partly because patients' medical

¹⁹ This section was prepared in consultation with Revital Gross.

²⁰ These international comparisons included visits to primary care physicians and specialists, with visits to primary care physicians accounting for the lion's share of the total.

Fig. 8. Outpatient contacts per person in the WHO European Region, 2001 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

Note: CIS: Commonwealth of independent states; CSEC: Central and south-eastern European countries; EU: European Union.

Israel

and psychosocial needs were not being adequately addressed, resulting in repeated visits, but rates have fallen in recent decades. Still, as shown in Fig. 8, the number of outpatient contacts in Israel ranks among the highest in the European Region, with 7.1 per person in 2000, exceeding the European average of 6.2.

Factors accounting for improvements over the past two decades include:

- growing competition among health plans
- the founding and expansion of family practice residency programmes
- the computerization of the clinics
- upgrading of clinic management skills
- giving health plan members more choice among PCPs
- substantial investment in facility upgrading and modernization
- the introduction of appointment systems for clinic visits.

However, although primary care in Israel is, in many ways, stronger now than it was 20 years ago, substantial problems and limitations remain and these will be discussed further below.

The employment structure of primary care physicians

The government does not make NHI funds directly available to individual physicians; all NHI funds are channelled through the health plans. Any PCP who finds employment with a health plan, either as a salaried employee or independent physician (IP), can accept patients under the NHI framework.

Any licensed physician can work as a PCP in the private sector. Some patients visit private PCPs and pay for their services out-of-pocket.²¹ However, this accounted for less than 1% of total primary care visits in 1996–1997 (CBS 1997). Overall, when data from the four health plans are taken together, approximately 40% of Israelis receive primary care from IPs and 60% from PCPs working as salaried employees of the health plans (Zvielli 2002). There is substantial variation across the health plans.

Approximately 80% of Clalit members receive primary care from salaried physicians at Clalit owned and operated clinics. Within their neighbourhood clinic patients are free to choose their PCP and can switch as often as they want. About 20% of Clalit members receive their primary care from IPs operating their own facilities. Most of the Clalit IPs work in solo practices, although there are some group practices. Officially, any Clalit member can choose to enrol with any IP in the region, but this opportunity is often limited

²¹ Generally speaking, the health plans do not allow their physicians to see health plan patients privately.

by the number of IPs in the region and their willingness to take on additional patients (Yuval et al 1991).

Leumit members mainly receive primary care from salaried physicians. IP care accounts for only 25% of members. The two other health plans engage some salaried PCPs in facilities owned and operated by the health plans, but most PCPs work as IPs, caring for about 80% of Maccabi members and 60% Meuhedet members. Most of these IPs will accept patients from different health plans. Both group and individual practices exist.²² In the smaller health plans, patients are free to switch PCP quarterly, though few patients avail themselves of this option.

The most recent comprehensive study comparing IP care with care provided in a clinic setting was carried out in the late 1980s and early 1990s (Yuval et al 1991; Rosen et al 1992), focusing on primary care within Clalit. It found that IP care was slightly (10%) more expensive than clinic care, but was characterized by significantly longer patient visits and more health promotion. Satisfaction with physicians was higher for IP care, but satisfaction with nursing and administrative services was higher in the clinic setting. The study also found a substantially higher concentration of younger and healthier people among IP patients, resulting from both member preferences – that is, younger and healthier people chose the IP option – and channelling on the part of Clalit, which focused its relatively expensive IP programme efforts on those geographic areas and age groups where they faced the greatest competition. Risk selection on the part of the IPs themselves probably also played a role. The process and outcome differences between clinic and IP care cited above remained significant after controlling for patient and physician characteristics. It should be noted, however, that this study was carried out over a decade ago and the health care system has changed in many ways since then; newer studies are needed to assess whether these findings are still valid.

Although IP care leads to increases in patient and physician satisfaction and access to services, it may also present problems (Zvielli 2002) such as: a lack of resources for multiple tasks including gatekeeping, quality control and administration; lower levels of participation in health promotion initiatives organized by the health plans' central offices; a decrease in continuity of care; professional isolation.

The role of nurses in primary care

Most IPs work without nurses. In recent years the health plans in which primary care is provided largely by IPs (Maccabi and Meuhedet) have come to recognize

²² Most group practices consist only of PCPs, but some contract with sub-specialists to provide services within their facility.

the need for a nursing role in primary care and have employed nurses to work in central clinics, which provide various services such as nursing, physiotherapy, laboratory and imaging to supplement the work of the IPs in the service area.

Historically, Clalit made extensive use of nurses in its primary care clinics. The model was that the patient was treated by a primary care team headed by a physician, but also including a nurse and others as needed. In the early years of the State nurses played a vital clinical role in these teams, but over time primary care physicians took on many of these roles themselves, leaving the nurses to play an increasingly administrative role.

In the 1990s the role of nurses in primary care was reduced.²³ The rationale was that if nurses were primarily engaged in administrative work anyway, it would be cheaper and more efficient to reduce the number of nurses and increase the number of clerical staff. Recently, the pendulum has begun to swing back and there is growing realization that nurses and other non-physician professionals can play an important role in working with chronically ill patients, in clinical case management and in strengthening patient education and health education more broadly. Furthermore, many Israeli physicians appear to be delegating more clinical responsibilities to nurses. At the same time the Israel Medical Association (IMA) has adopted a more cautious approach regarding formal, legal changes in the range of activities that nurses are authorized to carry out.

The National Council for Health in the Community²⁴ (Shani 2001) has emphasized the importance of team effort in primary care and the critical role of nurses in the management of chronic illnesses. It has called for the recognition of 'rural nurses' as a new category, with extensive responsibilities and autonomy, somewhat similar to the situation for nurse practitioners in other countries. Indeed, nurses have functioned as nurse practitioners in kibbutz settings for many years and the recommendations of the National Council essentially call for providing formal recognition of the expanded role of nurses in those settings as well as providing a framework for implementing it in other types of small localities.

Israel's nursing leadership would like to see an expanded role for nurses in urban as well as rural areas. For them the National Council's recommendations regarding 'rural nurses' constitute a pragmatic first step in the right direction, made possible by the paucity of physicians in rural areas and the consequent moderation of IMA opposition.

²³ Some observers have suggested that this may have been related to the massive influx of physicians from the FSU during this period.

²⁴ The National Council includes leaders in community-based services from the health plans, the government, the medical associations and the medical schools.

The PCP specialty mix

As of the end of 1998 approximately 55% of PCPs were general practitioners – that is, non-specialist graduates of medical schools – and 45% were board-certified specialists. The most common specialties among board-certified PCPs were family medicine (13%), paediatrics (16%) and internal medicine (10%) (Shemesh et al 2000). Together these three specialties account for 39% of all PCPs and almost 90% of the PCPs who are board certified.

For many years there was considerable dispute among primary care leaders in Israel over whether family medicine or paediatrics and internal medicine training was the best basis for good primary care. While differences of opinion on this issue remain, the debate is not nearly as heated as it was in the 1980s and 1990s. The general, but by no means unanimous, consensus is that paediatrics and internal medicine training can provide a good base for primary care, but only if those training programmes are modified to provide more exposure to primary care settings.

PCPs and gatekeeping

In all the health plans visits to hospital-based specialists require prior authorization, either from a PCP or a community-based specialist. In the smaller health plans members have free access to all plan-affiliated community-based (as opposed to hospital-based) specialists without prior authorization from a PCP. In Clalit the PCP plays more of a gatekeeper role; members have free access to specialists in six areas – ENT, dermatology, orthopaedics, ophthalmology, gynaecology and surgery – but access to other specialists is contingent upon referral from a PCP.

In 1999 a comprehensive study of PCPs as gatekeepers used interviews with doctors and patients and in-depth discussion with leading policy makers to explore the extent and nature of PCP gatekeeping, as well as the extent of interest in expanding the gatekeeping role (Tabenkin et al 1999; Gross et al 2000; Tabenkin and Gross 2000). The study differentiated between three aspects of gatekeeping: coordinating and managing patient care, being the sole referring agent and taking budgetary factors into consideration.

Approximately two thirds of PCPs reported that they coordinated and managed the care for nearly all their patients. Approximately 40% of them indicated that patients usually come to them for referrals to ‘common’ specialties – that is, those for whom Clalit does not require a PCP referral – and approximately 70% reported that their patients usually do so for the less common specialties. Approximately half of the PCPs reported taking cost²⁵ into

²⁵ The questionnaire did not specify which ‘costs’ are involved; most respondents probably understood this to mean the full cost to the health plan of providing care to the patient.

consideration to a great extent and 10% reported doing so to a very great extent. Thus, many PCPs are already implementing substantial components of the gatekeeping role.

Interviews with health plan members, PCPs and policy-makers in the health plans and the government indicated support among all three groups for expanding certain aspects of the PCPs' gatekeeping role.²⁶ While the vast majority of health plan members want to have direct access to specialists, approximately 40% of the members want the PCPs to take on a coordinating role, referring patients to appropriate specialists and integrating the specialists' recommendations. Among policy makers there was an even broader consensus in favour of expanding the role of physicians as care coordinators, although there remained differences of opinion over the issue of requiring patients to have a sole referring agent. Ninety-five per cent of the doctors interviewed supported the view that PCPs should be the coordinators of care.

The study did, however, find various obstacles to the implementation of the full gatekeeper model, such as the culture of health services consumption, the public's desire to turn directly to specialists, a lack of primary care physicians with appropriate professional training, limited accessibility to primary care doctors²⁷ and competition among health plans, "which spurs them to cater to the public and hence keeps them from eliminating direct access to specialists".

In the end, the study's authors make a clear call for implementing the coordination component of gatekeeping. They also call for patient and provider education to encourage voluntary use of the PCP as the sole referring agent. The authors suggest the possible use of incentives such as exemptions from co-payments and shorter waiting times to encourage patients to voluntarily confer with their PCPs instead of directly approaching specialists. Finally, expansion of the cost containment component of the gatekeeping role is presented as a desirable goal, but one that will require increasing physician interest in assuming responsibility. This could be pursued through physician education, greater decentralization of authority and the granting of greater budgetary autonomy to clinics and PCPs.

Current issues in primary care

A recent high-level working group on primary care (National Institute 2001) highlighted the need for better delineation of the PCPs' scope of responsibilities, the role of non-physicians in primary care, how PCPs should be trained and how the PCPs' environment should be structured to best facilitate work.

²⁶ Member support for gatekeeping was strongest in Clalit, where gatekeeping has already been the norm, but even in the smaller health plans there was interest in gatekeeping.

²⁷ There have been changes in the health care system since this study was published, and currently access to primary care is largely accessible.

There is a growing, though by no means unanimous, sense that the PCPs should be expected to do more. There are several dimensions of this, including:

- attention to psychosocial components of care
- active health promotion
- effective handling of a wider range of health problems
- coordination of the work of the patient's specialist physicians
- responsibility for the patient beyond the usual work hours²⁸
- addressing the unique medical, social, cultural and linguistic needs of new immigrants and other vulnerable populations (see Nirel et al 2002)
- addressing the health needs of women
- taking resource constraints into account.

At the same time, there is growing recognition that the conditions needed to realize this vision do not currently exist. Barriers include inadequate training, heavy caseloads, lack of incentives for PCPs and insufficient infrastructure. In order to address the gap between vision and reality, several policy changes have taken place or are under serious consideration. These include:

- the establishment in 1996 of a National Council for Health in the Community (see footnote above), charged with taking a serious long-term look at the challenges facing primary care; as an indication of the seriousness with which this issue is being taken, the Director-General appointed one of the most respected and powerful figures in Israeli health care to chair the council;
- the National Council recommended that by 2003 all the health plans should be required to ensure that their members have 'personal physicians'²⁹ and that by 2007 recognition as a personal physician will require board certification in family medicine, paediatrics or internal medicine or participation in a substantial, carefully specified, upgrading programme for generalists (Shani 2001);
- all the health plans have established various community-based programmes to supplement their members' personal PCPs by making other physicians available for after-hours care³⁰ (Taragin et al 2000; Greenstein and Taragin

²⁸ Unlike in many developed countries, PCPs in Israel are not responsible for the care of their patients beyond the usual daytime work hours.

²⁹ Some primary care leaders endorse the 'personal physician' concept as a desirable goal, but argue that it is not achievable in the foreseeable future. They point to the fact that PCPs are already overloaded and that they have no incentives to assume the additional responsibilities, some of which are seen as conflicting with the PCPs' role as patient advocates.

³⁰ These after-hours services were established by the health plans in part on their own initiative in order to reduce emergency department use and in part in response to a Knesset stipulation that such services be made available to all as part of the NHI benefits package. This stipulation was not accompanied by additional funding.

2001); the health plans also operate 24 hour telephone hotlines staffed by experienced registered nurses; the current challenge is to upgrade these after-hours services and improve their links with PCPs;

- serious efforts are under way to provide better financing for family physician residency programmes;
- health plans whose primary care is based largely on the work of IPs are giving serious consideration to ways of encouraging group practices, improving quality control mechanisms, etc.;
- all the health plans have made major investments over the past decade in the computerization of primary care;
- various pilot programmes are under way to improve communications between primary care practitioners and various vulnerable groups, most notably new immigrants from Ethiopia (Nirel et al 2002);
- a major nationwide effort is under way to improve primary care services for women, which includes the promotion of community and consumer awareness, empowerment through the development of lay women for health promotion in the community and the increase of medical education about women's health;
- management and economics training is being provided (see below);
- efforts have been made at decentralization, quality monitoring and increasing incentives to control costs and meet quality targets;
- the role of the patient ombudsman as a focal point for patient complaints has been expanded;
- increased attention to disease management, particularly with regard to diabetes and asthma; in the case of diabetes, some of the health plans have already documented significant improvements in processes and outcomes.

At the 2001 annual meeting of the health care system leadership – the Dead Sea Conference – various primary care experts pointed out that policy within the health establishment is still predominantly controlled by hospital-based physicians. They contend that this is the case within both the Ministry of Health and the IMA, despite the increasing number of academic family physicians in leadership positions, thus limiting the ability to make serious policy shifts regarding primary care. Furthermore, medical education is still predominantly hospital-based. Internal medicine and obstetrics-gynaecology have minimal community exposure for undergraduates or residents. Paediatrics has made some inroads by instituting a six-month elective in the community and one of the medical schools offers a primary care paediatrics track. Finally, it was observed that patients are becoming increasingly demanding with regard to

legitimate patients' rights and services, treatments and medications that are not called for medically.

Public health services³¹

During the Mandate period the British established a public health system in Israel similar to those it established in its colonies in other parts of the world, with a strong central department of health and field units at the sub-district, district and mandate-wide levels and an emphasis on water, sanitation and food safety. Professional public health officials led the mandatory health department. This structure remains in place today, with the Ministry of Health operating a Public Health Service with national headquarters, which in turn operates regional and district offices and a variety of field units. These units are often staffed by career public health physicians. Several Israeli universities have programmes in place for the training of public health personnel. Two of Israel's seven universities offer Masters of Public Health (MPH) programmes and a third is considering opening an MPH programme in the coming years.

Environmental health activities

One important structural change took place when certain responsibilities were reassigned to the newly formed Ministry of the Environment, established in 1988. This Ministry has lead responsibility for controlling noise levels, air pollution, radiation and waste collection and disposal. The Ministry of Health remains the lead agency for ensuring water quality, regulating water recycling efforts and the use of pesticides in agriculture. There are efforts at coordination between the two ministries, but these are not always as effective as they could be.

The goals of the Ministry of the Environment are to formulate and implement a comprehensive national environmental policy. The Ministry seeks to incorporate environmental considerations into decision-making and planning processes; to implement programmes for pollution control, monitoring and research; to develop and update legislation and standards; to ensure effective enforcement and supervision; to promote environmental education and awareness; and to advance regional and global environmental cooperation. In addition, the Ministry of the Environment has been responsible for the upkeep, cultivation and restoration of Israel's nature reserves and national parks. Local authorities serve as the implementing arm of the central government in carrying

³¹ This section was prepared in consultation with Leon Epstein.

out environmental policy at the local level. Municipalities are responsible for local environmental planning, operation and maintenance of environmental infrastructures such as sewage collection and disposal, waste collection, pest control, street cleaning, preservation of local parks and historic sites, inspection and enforcement of industries and businesses and monitoring of air, noise and drinking water (see http://www1.sviva.gov.il/english/Eng-site/About/about_frame.htm).

Water shortage may be the most crucial environmental problem facing Israel today, exacerbated by the deteriorating quality of water resources due to demographic, industrial and agricultural pressures. The main sources of air pollution in Israel are energy production, transportation and industry. Dense vehicular traffic is a major cause of air pollution, especially in the heavily populated urban centres of Tel Aviv, Jerusalem and Haifa.

Control of communicable diseases

The Ministry of Health takes the lead in efforts to prevent, monitor and control communicable diseases, with important support from the health plans and physicians. On the frontline of the Ministry of Health's efforts are a nationwide system of family health centres. Most of these are owned and operated by the government, although in Tel Aviv and Jerusalem they are run by the municipalities and in some areas they are run by the health plans (see below for further details of the ongoing debate about who should operate these centres). The family health centres were started by Hadassah in 1912 and have focused on services for mothers and children. They are usually referred to as *tipot halav* ('drops of milk').

The family health centres have much in common, irrespective of who owns them. They are primarily staffed by public health nurses, with only a small number of physicians involved, and have developed both the commitment and the capacity to engage in intensive outreach efforts in the areas of immunization and well-child care more generally. Until children reach age 6, outreach efforts are targeted at parents; thereafter, family health centre staff work closely with schools to ensure the success of immunization efforts.

The Ministry of Health's district and regional offices support and monitor the frontline efforts of the family health centres. They receive reports from physicians, clinics and hospitals on conditions reportable by law, which include routine reports and those related to outbreaks of communicable diseases. A highly professional epidemiology unit at the national level of the Ministry of Health uses Geographic Information Systems and other sophisticated tools to identify and analyse suspected outbreaks. It also reports on communicable

diseases in an online monthly report. Reports to the World Health Organization are routinely carried out. In addition, there is a network of school health services providing, among other things, preventive care with an emphasis on risk-taking behaviour. Individual physicians also play an important role in this system, diagnosing and treating patients with communicable diseases and advising patients on steps to prevent further spread of illness within the family and the school system. Physicians are required to report to the Ministry of Health all cases on a legally-specified list of reportable illnesses.

Vaccination coverage in Israel is high – about 90–92% coverage among infants.³² The vaccination programme is updated regularly with the input of an epidemiological advisory committee. Immunizations are given in the family health centres. Until recently vaccination coverage in Israel compared favourably with other developed countries, both in terms of the range of vaccines provided free of charge and the proportion of the population inoculated. As can be seen in Fig. 9, Israel ranks among the top half of western European countries, with a 93% level of measles immunization in 2000.

In recent years the health plans and the Ministry of Health have collaborated on programmes to promote various vaccinations, such as pneumococcal pneumonia and influenza, targeted at adults. Family health centres were not considered the most effective vehicle for reaching this target population. Typically, the Ministry of Health covers the cost of public information campaigns, while the health plans provide vaccines at subsidized prices and are responsible for service delivery at patient level.

Until recently there was very effective cooperation between Israel's Ministry of Health and its Palestinian Authority (PA) counterpart in the area of communicable disease control. The primary types of cooperative activity undertaken were training, research, service development and provision, policy planning and conferences, seminars, dialogues and youth activities (Barnea et al 2000). This has been important to both Israelis and Palestinians because there were substantial flows of peoples and goods between Israel and the PA. Since the *intifada* began in September 2000, cooperation in this area has seriously deteriorated.

The Ministry of Health implements control measures that include air and ground spraying of affected areas with insecticides, with particular attention to animal houses, ponds and mosquito breeding areas. The 2000 outbreak of West Nile fever resulted in 76 hospitalizations and 12 fatalities.

³² Basic coverage of DPT in infancy is followed by a booster dose of DT at school entry. Both live oral (Sabin) and inactivated (Salk) polio vaccine are used routinely. MMR is given at age 12–15 months and followed by a booster dose at age 6. Hepatitis B vaccine is given routinely in infancy (3 doses), as is hemophilus influenza B and, recently, hepatitis A vaccine was added to the programme.

Fig. 9. Levels of immunization for measles in the WHO European Region, 2001 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

A longstanding concern has been the threat of a disease outbreak resulting from biological warfare (Sagi et al 2002). In order to be prepared for such an outbreak the health care system has formulated policies for various biological agents and defined logistical elements for drug procurement. A Supreme Steering Committee has been set up to fill in gaps and upgrade the health care system for an unusual disease outbreak. This committee has established appropriate guidelines, communication routes among different organizations and training programmes for medical personnel. According to estimations of medical corps and home command experts, about 10% of those injured in a biological attack would be seriously affected and in need of intensive care. Another 40% would be in a moderate condition, while half of those exposed to a biological attack would be only lightly affected. The experts further assume that about half of all patients would be children.

In 1994 the Ministry of Health established the Israel Centre for Disease Control (ICDC). Its primary goal is to collect and analyse updated health-related data, with the aim of providing health policy makers with the evidence base necessary for making informed decisions. The ICDC plays important data collection, monitoring and analysis roles with regard to both communicable and noncommunicable diseases.

Screening

Screening is also characterized by the involvement of both governmental and non-governmental actors. All newborns are screened for phenylketonuria and congenital hypothyroidism; those found to be positive are followed up in specialized national centres or in family health centres. The latter also offer pre-natal screening services, but many women prefer obstetricians, many of whom provide care through the health plans, while others practise privately. Family health centres are the primary source of screening for problems in child development and for vision and hearing problems. They also screen pre-school children before this function is taken over by schools.

The health plans have become increasingly active in the area of women's health, including establishing special women's health centres. Screening constitutes an important part of their activities. Some screening tests, particularly those that are new and whose cost-effectiveness has not yet been proven, are provided by the health plans through supplementary VHI. Others, such as screening for colo-rectal cancer, are carried out by the health plans as part of the NHI benefits package. Recently, there was a major nationwide effort to increase mammography rates for women over age 50 and other at-risk women. This was carried out as a joint effort of the Ministry of Health and the health plans.

Screening efforts in Israel are constrained by several factors. First, the health plans do not have a well-developed organizational culture of outreach efforts. Second, publicity efforts can be quite expensive, as Israeli law does not provide for free Public Service Announcements on radio or television. Third, the Ministry of Health has not yet developed effective mechanisms for engaging health care reporters in these efforts.

Health promotion and education

Here, too, a number of actors are involved. The Ministry of Health has an active Department of Health Education whose aim is to enable the population to increase their control over their own health and to improve it. To achieve this aim the department produces educational tools and provides support to aid health-behavioural change at the individual, community, environmental and political level. In addition, a special Health Promotion Committee, reporting directly to the Director-General of the Ministry of Health, fosters collaboration between governmental and non-governmental actors. However, there is a lack of a national policy and no clear definition of what should be included in promotion and prevention programmes.

The health plans are increasingly involved in both patient education in the care of specific illnesses and health education for their members more generally, making use of their physicians and other clinicians, as well as newsletters and other printed materials. For example, Clalit has made a large effort to implement the St Vincent's programme for members with diabetes, which is increasing in Israel and is seen as a major public health problem; studies have shown regional disparities in diabetes-related complications such as amputation of lower limbs.

At the same time, there continue to be serious problems engaging physicians to be active in the area of health promotion. Medical students are rarely trained in health promotion or in the areas of early detection and prevention (Notzer and Abramowitz 2002). Primary care physicians often feel they do not have sufficient time to engage in health promotion and there are no financial or administrative incentives to do so. In a recent survey of the Israeli population (Gross and Brammli-Greenberg forthcoming), very small percentages of respondents reported that their physicians had discussed health behaviour with them; rates were particularly low among women.

Until a decade ago health promotion and education activities were quite rare in Israel. Now they are far more prevalent, but there is a general consensus that additional resources and programmes are needed. In addition, many experts believe that the time has come for a greater emphasis on programme evaluation and on efforts to orchestrate better the many independent initiatives. Indeed, too often people operating related programmes are unaware of one another's

activities and opportunities for cooperation are lost. There are also serious questions about the sustainability of many of the programmes, particularly those financed by soft money and operated by relatively small non-profit organizations.

Recent developments and key issues

A key issue concerns the funding level for public health services. Currently only 0.8% of national health expenditure is channelled through the Ministry of Health's Public Health Service. There is a fairly broad consensus that increasing this share could well lead to substantial gains in population health. However, for a variety of political and bureaucratic reasons, little has been done to shift resources from the curative to the public health sector.

Related to this is the issue of how to prioritize and fund opportunities for innovative public health measures. Prior to 2002 the special government funding for new technologies (see the section on *Health care financing and expenditure*) was set aside for services provided through the health plans. In practice, this meant that what was funded was primarily of a curative nature. In 2002 some of the new technologies funds were set aside for services provided through the Ministry of Health, which has given a boost to preventive care. Some of the funds were used to reduce the fees at family health centres, while others were used to add new vaccinations to the range of services.

Another key issue on the agenda is who should operate family health centres. Currently, most of the centres are owned and operated by the Ministry of Health, although in Jerusalem and Tel Aviv the municipalities operate them. In some areas, mostly those with a high concentration of kibbutzim and other collective settlements, the services are provided by the health plans. Until the mid-1990s Clalit was essentially the only health plan to operate family health centres, but after the introduction of NHI the other health plans began to offer such services in some of those areas where Clalit had previously been the sole provider.

The NHI law called for the transfer of responsibility for family health centres from the Ministry of Health to the health plans by the end of 1998. Proponents of this change sought to advance several objectives: first, to improve continuity between preventive and curative services; second, to reduce costs by eliminating the need for separate buildings – and to some extent, staff – for preventive and curative services. In addition, there was a realization that increasing numbers of upper- and middle-class women were already choosing to go to their health plan physicians rather than the family health centres, particularly for pre-natal care, but for well baby care as well.

Proposals to shift ownership of the family health centres from the government to the health plans provoked strong opposition on the part of a variety of consumer and professional groups who argued, among other things, that the government-run family health centres were doing a superb job. They further argued that the achievements of family health centres in the field of prevention – for example, high immunization rates – would not be matched by the health plans with their curative focus. The argument was that urgent needs would receive precedence and push aside more important, but less urgent, needs. Another concern was that while the health plans might invest energy in providing good services in middle- and upper-income areas, they might neglect lower-income areas, where outreach activities are particularly important. Finally, public health nurses were concerned that their professional autonomy would be reduced, as in a health plan they would come under a traditional medical model, and that the number of jobs for public health nurses would be reduced as well.

In 1998 the Knesset decided to amend NHI and leave responsibility for the provision of preventive care in the hands of the Ministry of Health. In practice, this meant that those family health centres operated by the ministry in 1998 continued under ministry control. However, in those areas where, as of 1998, the centres were operated by municipalities and the health plans there was no effort to transfer the centres to the ministry. At the same time, the ministry did not provide any special funding for the operation of these centres. This has created a complicated and unstable situation.

A third key issue on the agenda relates to the modernization of the family health centre system. Traditionally, family health centres have focused almost exclusively on young women and children. Many analysts believe that they should broaden their target population to include elderly people and, perhaps, the adult population in general. This is motivated in part by the growing awareness of the need for health promotion and health education activities for all age groups; another factor is that the health plans are increasingly assuming some of the traditional responsibilities of family health centres in the care of women and children.

Secondary and tertiary care

Board-certified specialists

In 2000 Israel had approximately 12 400 board-certified specialists, 9800 of whom were below the age of 65.³³ As in other countries, the proportion of specialists among all licensed Israeli physicians is on the rise, reaching 42% by 2000. Of course, not all board-certified specialists engage in secondary care. In 2000, among board-certified specialists up to the age of 65, there were approximately 800 family physicians working exclusively as PCPs, as well as 1600 internists and 1400 paediatricians, many of whom work at least part-time as PCPs. There are no definitive figures on the number of Israeli physicians engaged in secondary care.

The locus of specialist care

While all Israeli hospitals operate outpatient clinics, most specialized ambulatory care has traditionally been provided in community-based settings. In recent years there has been a further shift in the locus of specialist care from the hospital to the community. Indeed, whereas in 1993 23% of visits to specialists took place in hospitals, this figure had declined to 12% by 1996/1997. There are several reasons for this shift. First, the health plans felt that they often lost control of treatment plans and expenditure when their patients were cared for at hospital outpatient clinics. Second, the health plans were able to provide and/or purchase community-based specialty care at costs well below those of the hospitals. Finally, various technological innovations and cultural changes have facilitated the shift from hospital to community.³⁴

The expansion of community-based specialist care involves facilities owned and operated by both the health plans and independents, from whom they purchase services. In many cases hospital-based specialists have begun to work part-time in community settings in order to supplement their incomes, raising both hopes and concerns. The hope is that hospital-community communication, continuity of care, the quality of community-based specialist care and health care system efficiency will be enhanced. The concern is that physicians working in both settings may not be putting enough hours into their hospital jobs and may lack a sense of institutional loyalty to either of their employers.

³³ In some of the statistics that follow it is assumed that physicians over age 65, the legal retirement age, have stopped practising, although of course this is not universally true.

³⁴ There has also been a shift in the locus of emergency-based services. The health plans have developed community-based emergency centres as well as emergency home visit services as alternatives to hospital emergency departments (Taragin et al 2000; Greenstein and Taragin 2001).

The nature of community-based specialist care

All of the health plans work with a mix of employed and independent community-based specialists. In Clalit most of the specialists are employees who work in facilities owned and operated by the health plan, although the plan also works with independent specialists. Conversely, in the other health plans the majority of the specialists are independents working in their own facilities, but the plans also use employed and independent specialists in plan-owned facilities.

Cooperation and communication between community-based specialists and primary care physicians are reasonably good. There are more cooperation and communication problems between the hospitals and the health plans themselves. The hospitals are unhappy with the health plans' efforts to shift more care to community settings and to increase monitoring and control. The health plans do not like what they perceive as hospitals' tendencies to over-treat, repeat tests already carried out in the community and not provide the health plans with full and real-time information on the care of their members.

Not surprisingly, specialists tend to be concentrated in urban areas. This can result in inconvenience and access problems for people living in the periphery and in small villages, although distance does not prevent most residents from visiting specialists. Waiting times for specialists also appear to be reasonable. In 1999, among people who visited a specialist in the preceding three months, 50% reported waiting less than a week, 20% waited 1–2 weeks and 30% waited more than two weeks. Over 80% of respondents reported being able to choose the particular specialist physician whom they visited (Gross and Brammli-Greenberg 2001).

Rates of visits to specialist physicians are substantially lower among Israeli Arabs compared with Israeli Jews (Farfel and Yuval 1999; Greenstein et al forthcoming). This finding is particularly significant in light of the fact that visit rates to primary care physicians and hospitalization rates are higher among Arabs than Jews. The reasons for the large gap in specialist visit rates are not fully understood. A key factor appears to be the time and inconvenience involved in travelling from many Arab villages to urban centres, particularly for mothers of large families and people who do not own cars. Another factor may be the shortage of Arabic-speaking specialists. A third factor may be a greater tendency among Jews than Arabs to insist on being seen by a specialist rather than a PCP, a factor which may in turn be linked to differences in educational and socio-economic levels and urban/rural differences.

Hospitals

In 2000 Israel had 48 general hospitals, with approximately 14 200 beds, 21 psychiatric hospitals, with approximately 5500 beds and 272 chronic disease hospitals, with approximately 18 200 beds. In this section, the focus will be on general hospitals.

Israel's 48 acute hospitals are spread throughout the country. The overall general care bed-population ratio is 2.2. As in other countries, the bed-population ratio is higher in the centre of the country than in the periphery, ranging from 1.6 in the northern and southern regions to 2.8 in the Jerusalem and Haifa regions. Still, the vast majority of the population lives within an hour's drive of a hospital. All the hospitals tend to have up-to-date medical equipment and specialties. There is more variation with regard to the physical buildings themselves, although several major modernization efforts have been undertaken in recent years.

Compared to OECD countries Israel is characterized by a low bed-population ratio, an extremely low average length of stay, a mid to high rate of admissions per thousand population and a high occupancy rate (see Table 8). The low bed-population ratio is the result of deliberate government policy based on the view that resources should be focused on community care and on the assumption that the greater the number of beds the larger the hospitals' share of total health resources.

In recent decades the average length of stay has declined dramatically, from 6.8 days in 1980 to 4.3 days in 2000, while the admission rate has increased dramatically, from 145 per thousand population in 1980 to 175 per thousand population in 2000, and the number of hospital beds per thousand population has declined slightly (see Fig. 10). As the decline in average length of stay has been greater in percentage terms than the increase in admission rates, the rate of patient days per thousand population declined somewhat between 1980 and 2000. The volume of day care and ambulatory surgery has increased dramatically over the past decade. Since the outbreak of the *intifada* in September 2000, hospitals have had to mobilize to care for the casualties, including victims of shock, which requires an increase in both medical and psychiatric services.

Table 8. Inpatient utilization and performance in acute hospitals in the WHO European Region, 2001 or latest available year

Country	Hospital beds per 1000 population	Admissions per 100 population	Average length of stay in days	Occupancy rate (%)
Western Europe				
Andorra	2.5	9.4	6.7 ^b	70.0 ^b
Austria	6.2 ^a	27.2 ^a	6.3 ^a	75.5 ^a
Belgium	5.8	16.9 ^b	8.0 ^b	80.0 ^c
Denmark	3.3 ^b	17.9	5.2 ^a	83.5 ^a
EU average	4.1 ^a	18.9 ^b	7.7 ^b	77.4 ^c
Finland	2.4	19.7	4.4	74.0 ^f
France	4.2 ^a	20.4 ^b	5.5 ^b	77.4 ^b
Germany	6.4 ^a	20.5 ^a	9.6 ^b	81.1 ^a
Greece	4.0 ^b	15.2 ^c	—	—
Iceland	3.7 ^e	18.1 ^f	6.8 ^f	—
Ireland	3.0	14.5	6.4	83.8
Israel	2.2	17.8	4.1	93.0
Italy	4.0 ^a	16.0 ^a	7.0 ^a	75.5 ^a
Luxembourg	5.6	18.4 ^g	7.7 ^c	74.3 ^g
Malta	3.5	11.2 ^a	4.3	75.5 ^a
Netherlands	3.1	8.8	7.4	58.4
Norway	3.1	16.1	5.8	87.2
Portugal	3.3 ^c	11.9 ^c	7.3 ^c	75.5 ^c
Spain	3.0 ^d	11.3 ^d	7.6 ^d	76.2 ^d
Sweden	2.4 ^a	14.9	4.9	77.5 ^e
Switzerland	3.8 ^a	16.3 ^c	10.0 ^a	85.0 ^a
Turkey	2.1	7.6 ^a	5.4	58.8
United Kingdom	2.4 ^c	21.4 ^e	5.0 ^e	80.8 ^c
CSEC				
Albania	2.8 ^a	—	—	—
Bosnia and Herzegovina	3.3 ^c	7.2 ^c	9.8 ^c	62.6 ^b
Bulgaria	—	14.8 ^e	10.7 ^e	64.1 ^e
CSEC average	5.4	17.8	8.3	72.3
Croatia	4.0	13.9	8.9	85.5
Czech Republic	6.3	18.9	8.6	70.5
Estonia	5.1	17.9	6.9	62.3
Hungary	6.4 ^a	24.2	7.0	76.9
Latvia	5.8	18.6	—	—
Lithuania	6.3	21.7	8.0	76.3
Slovakia	6.7	18.8	9.2	70.9
Slovenia	4.2	15.9	6.8	70.5
The former Yugoslav Republic of Macedonia	3.4	8.2	8.0	53.7
CIS				
Armenia	3.7	4.7	9.6	31.6
Azerbaijan	7.9	4.7	15.5	25.7
Georgia	3.9	4.3	7.4	82.0
Kazakhstan	5.4	14.7	11.3	96.5
Kyrgyzstan	4.8	13.9	10.8	87.6
CIS average	7.9	19.1	12.5	85.0
Republic of Moldova	4.7	11.9	10.3	70.7
Russian Federation	9.1	21.6	13.2	85.8
Tajikistan	5.8 ^d	8.9	13.0	54.5
Turkmenistan	6.0	12.4 ^d	11.1 ^d	72.1 ^d
Ukraine	7.1	18.7	12.5	89.5
Uzbekistan	—	—	—	84.5

Source: WHO Regional Office for Europe health for all database.

Notes: ^a 2000, ^b 1999, ^c 1998, ^d 1997, ^e 1996, ^f 1995, ^g 1994, ^h 1993, ⁱ 1992, ^j 1991.

CIS: Commonwealth of independent states; CSEC: Central and south-eastern European countries; EU: European Union.

Table 9. Inpatient utilization and performance in all hospitals in the WHO European Region, 2000 or latest available year, where acute hospital bed data are not available

Country	Hospital beds per 1000 population	Admissions per 100 population	Average length of stay in days
Albania	3.3 ^a	8.8 ^a	6.9 ^a
Belarus	12.6	30.0	13.3
Bulgaria	7.2	15.3	10.7
Greece	4.9 ^b	15.4 ^c	8.3 ^c
Latvia	8.2	20.7	11.3
Poland	5.6 ^a	15.5 ^a	8.9 ^a
Romania	7.5	24.4	8.6
Uzbekistan	5.3	13.8	11.6
Yugoslavia	5.4 ^a	10.6 ^b	11.0 ^b
CSEC average	6.5	17.9	9.6
EU average	5.8 ^a	18.4 ^b	10.0 ^c
CIS average	9.2	19.4	14.4

Source: WHO Regional Office for Europe health for all database.

Note: ^a 2000, ^b 1999, ^c 1998.

CIS: Commonwealth of independent states; CSEC: Central and south-eastern European countries; EU: European Union.

Acute hospital data provide a more accurate picture of utilization and performance, as well as a more reliable basis for comparison across countries, than the data corresponding to all hospitals shown in this table. The all-hospital data shown here is only for countries which do not provide acute hospital data and should be taken as indicative of general trends.

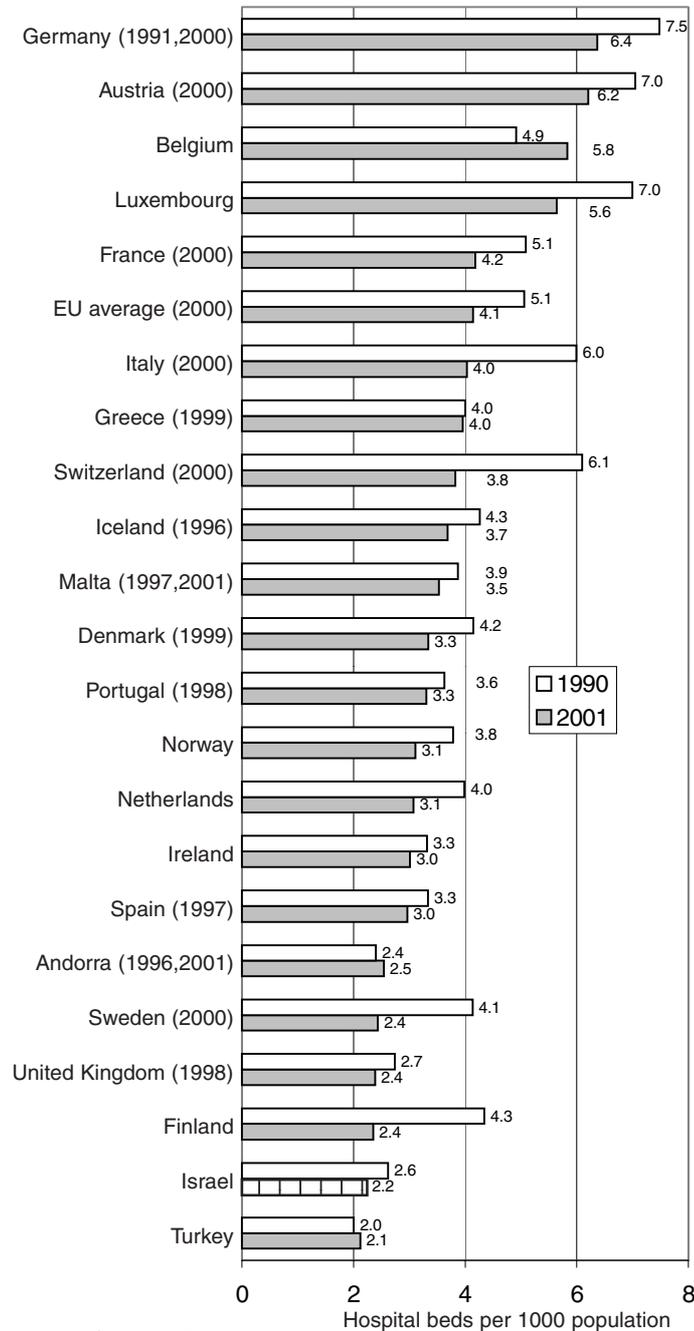
Table 10. Hospital data, 1980-2000

	1980	1985	1990	1995	1996	1997	1998	1999	2000
Acute beds per 1000 population	2.95	2.83	2.53	2.33	2.31	2.29	2.27	2.25	2.23
Latest year data for:									
–discharges/1000	145	148	157	177	179	181	182	180	175
–days/1000	991	911	833	818	793	784	783	776	764
–average length of stay	6.80	6.10	5.30	4.50	4.40	4.30	4.20	4.30	4.30
–occupancy rate	0.90	0.90	0.88	0.95	0.94	0.93	0.94	0.94	0.93
–outpatient contacts per person	–	–	–	–	–	–	–	–	7.10

Source: Ministry of Health 2001c.

Approximately half of all acute hospital beds in Israel are in government owned and operated hospitals. Another third of acute beds are in hospitals owned and operated by Clalit. Approximately 5% of acute beds are in private for-profit hospitals and the remaining acute beds are in church-affiliated and other voluntary, non-profit hospitals. Virtually all hospital physicians are directly employed by the hospitals. The exception is the private for-profit hospitals, in which most physicians work as independents with admitting privileges.

Fig. 10. Hospital beds in acute hospitals per 1000 population in western Europe, 1990 and 2001 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.
 EU: European Union.

While Israel does have a few small ‘single specialty’ hospitals, particularly in the maternity area, the vast majority of the beds are in general hospitals. Almost all Israeli hospitals have university affiliations and operate training programmes for medical students, interns and residents. The range and depth of these university affiliations varies. Of Israel’s 30 general hospitals, 6 have been recognized as supra-regional hospitals and they tend to have the greatest concentration of research and training activities as well as centres for complicated and expensive treatments.

Proposals for hospital reform

The fact that the government owns and operates half of all hospital beds has long been recognized to be a major problem, creating conflicts of interest due to the fact that the Ministry of Health functions both as regulator and competitor in the hospital market. Furthermore, the need to deal with operational issues distracts the attention of top ministry policy makers from planning and quality assurance activities. The situation also makes it difficult to provide efficient and responsive hospital care and the ministry is constrained by civil service regulations and public sector procurement processes. Accordingly, there is a consensus among policy makers about the need for the ministry to extricate itself from the business of providing hospital care.

Over the years two major proposals have been put forward, one to set up government hospitals as freestanding, non-profit hospital trusts, the other to set up a National Hospital Authority, distinct from the Ministry of Health, to which all government hospitals would be transferred.

In the early 1990s the government made a major push to spin off the government hospitals. According to this plan the hospital trusts would be separate legal, non-governmental entities controlled by community boards of directors. Civil service regulations and government procurement requirements would cease to apply. Employees would cease to be government employees and instead would become employees of the individual trusts, with pay tied more to performance and less to seniority.

This attempt failed due to objections from the health care unions, who feared that the reform would decrease job security and pension rights. They may also have been concerned about potential reductions in their own power. In any event, efforts to implement the hospital trust reform were abandoned. However, in its place there has been a gradual process of giving the individual hospitals more autonomy and control, with less and less involvement of Ministry of Health headquarters. One aspect of this has been the establishment of independent ‘research accounts’ or ‘trust funds’ within government hospitals.

Key issues currently on the agenda regarding hospital care include:

- whether public hospitals should be allowed to offer private medical services (see the section on *Financial resource allocation*);
- how quality of care should be monitored and improved;
- whether appointments to department chairmanships should be time-limited and subject to rotation; the current system of open-ended appointments is widely believed to have led to over-concentration of power and to have slowed innovation;
- whether hospital patients should be assigned a personal hospital physician who will coordinate their care; the present situation of 'ward patients' is not conducive to effective communication with the patient and has also raised questions regarding quality and continuity of care;
- the extent to which resources should be invested in expensive and highly sophisticated end-of-life care. In all areas of life Israelis are avid and early consumers of new technologies. In health care this tendency is further strengthened by religious considerations of the sanctity of life. In recent years, however, there has been increasing talk about the need to pay greater attention to quality of life issues, alternative uses of health care resources and the rights of patients to influence how they live and die.

Social care³⁵

This section focuses on services for older people. Responsibility for financing long-term care is shared among households and a number of agencies. These agencies operate within a clearly defined but complex system in which responsibility is determined by type of service, level of disability – classified along a continuum from dependency in instrumental activities of daily living (ADLs) to moderate dependency in ADLs to severe dependency or cognitive impairment – and household financial status.

The responsibilities of these different agencies are as follows:

- the NII or social security administration provides community services for chronically disabled people and mentally frail elderly people under the Community Long-term Care Insurance Law, which is described below;
- the Ministry of Labour and Social Affairs is responsible for financing institutionalization and community care, such as personal care and

³⁵ This section has been excerpted, with the lead authors' permission, from 'Geriatric health care to the elderly in Israel' by Jenny Brodsky, David Galinsky and Amiela Globerson.

housekeeping services for semi-independent and frail elderly people, and for operating day care and sheltered housing frameworks; it does so through a network of local social bureaux, which provide these services on a discretionary basis and within budgetary constraints; eligibility criteria for public assistance are based on an assessment of family situation and a means test;

- the Ministry of Health is responsible for institutional care for severely disabled people;
- the health plans are responsible for elderly people who require medically skilled nursing in institutions.

Institutional care

The rate of institutionalization in Israel is relatively low: about 4.1% of elderly people are in institutions, 1.9% in homes for the aged, which are the responsibility of the Ministry of Labour and Social Affairs, and 2.1% in nursing homes, which are the responsibility of the Ministry of Health.

For the most part, the government has little involvement in the direct delivery of long-term care. Government authorities refer individuals to institutions, some of which are private for-profit and some of which are run by NGOs. The Ministry of Health and the Ministry of Labour and Social Affairs refer about 50% to institutions, and the government participates in the financing of their care; the other 50% self refer to institutions and pay for care themselves. The two major sources of funding for institutional long-term care are elderly people and their families and the government – that is, the Ministry of Health and the Ministry of Labour and Social Affairs. Government assistance is based on a means test. According to the Alimonies Law, which provides for filial responsibility, children are required to contribute to the cost of institutional care, depending on their economic situation and that of their elderly parent.

Professional home care

In addition to providing all acute care the health plans provide professional medical care to disabled people in their homes. This care includes visits by physicians, nurses and physiotherapists and hospice care. With the introduction of NHI and the attendant concern to provide quality service within a pre-determined, limited budget, the health plans are considering providing additional types of medical care in the home. For example, home hospitalization is being examined as an alternative to costly hospital stays.

Non-professional home care: the Community Long-Term Care Insurance Law

Before 1998 home care services for severely disabled elderly people were provided under the auspices of the Ministry of Health and the health plans. The Ministry of Labour and Social Affairs provided home care services to frail elderly people. Provision of services under these programmes was subject to strict means tests. The burden of care rested primarily with the family.

In the 1980s forecasts of a significant growth in the number of disabled elderly people raised fears that the cost of institutionalization would explode unless alternatives were not found. At the same time, uneven distribution of funding for community and institutional services led to the desire for a more appropriate funding balance. Policy-makers realized that they had not sufficiently considered community resources as an alternative way to meet the needs of elderly people. Moreover, there was consensus that elderly people should remain in the community for as long as possible, with institutionalization a last resort. All of these factors led to a range of efforts to develop community services (Habib and Factor 1993).

Despite consensus about the need to expand home care services, a major debate arose as to the best way to develop them. This debate focused on whether the right to home care services should be an entitlement under social security or subject to budgetary constraints. Israel chose to adopt the social insurance approach. In 1980 a 0.2% employee contribution to national insurance was levied to create a reserve fund for implementing the law. In 1986 the Knesset passed the Community Long-term Care Insurance (CLTCI) Law. Full implementation began in April 1988.

This legislation has produced dramatic change in the system of long term care – in the quantity of resources available for home care and in the organization of service provision – and it made a transition from discretionary, budgeted programmes to universal entitlement to benefits. The CLTCI law formally defined the government's legal obligation to provide a minimum level of long-term care to disabled elderly people, based on personal entitlement and clearly defined eligibility criteria. The law thus reflected a commitment to statutory allocation of resources for functionally dependent elderly people.

The basic entitlement is for services in kind, carefully delineated as a benefits package closely related to the direct care functions normally provided by families, such as personal care and homemaking. Benefits may also be used to purchase day care services, laundry services, absorbent undergarments for incontinent people and an alarm system. Actual services are provided according

to benefit levels set at 25% of the average market wage, with severely disabled elderly people receiving an additional 50% of this level, equivalent to 10 or 15 hours of care per week, respectively (Morginstin 1987).

Resources earmarked for community care increased tremendously under the new law, resulting in more balanced allocation of public resources to institutional and community care. Prior to the law 15% of public spending for long-term care went to community services; following the law's implementation, close to 50% of public funds were spent on community care.

Given the small amount of care-giving hours provided under the CLTCI law, families continue to be the primary caregivers (Brodsky and Naon 1993). However, the CLTCI law is an implicit recognition of the economic value of care giving: care by the family is no longer regarded as a free, unlimited resource. The government now shares at least some of the burden of caring for elderly people. The implementation of the CLTCI law has increased the coverage of home care for the total elderly population from 1.5% prior to the law to about 14% today.

There are two sources of financing of the CLTCI law: a special payment to the national insurance institute and general taxation. Contributions began to be collected in 1980 and were set at 0.2% of employee wages, divided equally between employers and employees. As a result of subsequent government policy, the rate for employers has been reduced to 0.06%, with the government paying the 0.04% difference. In addition, government covers elderly immigrants, who would have been ineligible under the earlier twelve-month residency requirement, and housewives who are uninsured under the social security law. This coverage has constituted an increasingly large share of total benefits and now amounts to about 20%.

Other services in the community

Other services in the community include: homemaking services and meals-on-wheels, day care centres and respite care.

The Ministry of Labour and Social Affairs provides homemaking services for less severely disabled elderly people. This is a means-tested discretionary programme that benefits about 5% of the elderly population. In addition, through local authorities and various voluntary organizations, the Ministry provides frail elderly people with two forms of meals: hot meals delivered daily and frozen meals delivered once a week. Elderly people who are unable to cook are eligible and are required to pay the full price of the products used in the meals – half of the total cost. The cost of preparation and delivery are subsidized by the Ministry of Labour and Social Affairs, according to income level.

Day care centres are a significant service that enables elderly people to remain in the community, improves the quality of their lives and releases the family from care-giving duties during the day, freeing them to work and attend to other tasks (Korazim 1994; Habib and Factor 1993). A network of approximately 125 day care centres serves approximately 1.6% of elderly people (Brodsky et al 2001). The number of centres has expanded since the enactment of the CLTCI law, which also provides entitlement to day care services. An estimated 60% of those currently attending day care centres do so under the law. Most centres are freestanding structures, although some are affiliated with other institutions such as sheltered housing, old age homes etc. These centres need to be certified by the Ministry of Labour and Social Affairs.

Day care centres usually operate five or six days a week and offer social and recreational activities, personal care, hot meals, transportation, counselling and health promotion. In addition to freeing the family from some care responsibilities, the centres give elderly people opportunities for social contact and provide them with stimulation that helps maintain their functional and cognitive capacity. Day care centres in Israel differ from centres in other countries as they emphasize social rather than medical care and are therefore relatively lower in cost (Habib and Factor 1993; Brodsky et al 1995).

Another significant development within the day care network has been the establishment of special programmes for cognitively impaired people, including elderly people with Alzheimer's disease and other forms of dementia. This is a result of the forecast increase in the number of cognitively impaired people and of the attendant need for a community-based service that will benefit them and their families. Programmes for this group are run in community centres and other facilities, as well as in day care centres, by specially trained staff. Recently adopted standards for adult day care mandate that all new facilities set aside a special place for cognitively impaired elderly people.

Respite care is a relatively new service that provides a temporary alternative residence for elderly people who usually live at home. It is often used as a transitional residence after discharge from the hospital following an acute event, prior to returning home. It also provides a place for an elderly person to stay if his or her primary caregiver is absent, becomes ill or needs a rest from the burden of care. This service is provided in two ways: in entities designated for respite care and in long-term care institutions. In both cases the service is intended to be short term and institution-based. The Ministry of Labour and Social Affairs subsidizes respite care. Short stay opportunities in long-term care institutions are usually financed out-of-pocket.

Data from a recent study showed that there are only four entities formally providing respite care at present, with a total of 170 beds. Another 150 beds

are available for use in this capacity, but only if they are not in use by long-term care patients. In 1995 approximately 1145 elderly people availed themselves of respite care beds and approximately 1800 took advantage of other available beds. In all some 3000 elderly people – approximately 0.5% of the total – received respite care. The average length of stay in a respite care bed was 24 days (Kahan et al 1998).

Currently, respite care is not sufficiently developed. Policy makers are considering expanding it, particularly for the benefit of families caring for disabled elderly people and those with cognitive impairment caused by, for example, Alzheimer's or dementia.

Other living arrangements in the community

Two other types of community service allow elderly people to 'age in place', and enable their families to care for them within a supportive framework that relieves some of the burden of care giving: sheltered housing and supportive communities.

Sheltered housing was developed in response to the increased demand of elderly people to live independently (King and Shtarkshall 1997). Sheltered housing units are planned and developed by an inter-ministerial team from the Ministries of Finance, Housing, Immigrant Absorption and Labour and Social Affairs. In most units the elderly person or couple lives in a normal apartment with kitchen facilities, in a building that provides an alarm system and offers meals in a dining hall, organized recreational activities and medical and social services. Elderly residents avail themselves of these services according to their preference and need. Some sheltered housing units also have a nursing care wing, enabling residents to remain in the same facility even if their status deteriorates. As of late 1999 there were 156 programmes with 17 286 housing units for elderly people – that is, 3 housing units per 100 people aged 65 and over. On average 1.6 residents inhabit each unit, such that a total of some 25 000 elderly people reside in sheltered housing units.

Supportive communities are an innovative development that encourages elderly people to remain in their neighbourhoods by providing a variety of supportive services to meet their needs – including a crisis and referral system, an emergency beeper system, counselling and guidance and recreational activities – for a monthly fee. Many of these services are coordinated by a 'neighbourhood father' and involve the participation of volunteers, some of whom are younger residents. By the end of 2000 the programme was successfully implemented in some 50 communities around the country, serving about 8800 elderly people, and plans are being made to expand it further. A

new initiative in the supportive community programmes is being developed and implemented on a pilot basis to create better coordination between health and social care. The programme includes adding a nurse to the core team, both to coordinate care and to enhance health-promoting activities within the program.

Human resources and training³⁶

Immigration is one of the most significant factors affecting human resources in the Israeli health care system. As one of its core values, the State of Israel seeks the homecoming of Jews from around the world. Their immigration is actively encouraged and is not dependent on the overall Israeli economic situation, or whether there is a shortage or surplus of workers.

A license from the Ministry of Health is a prerequisite for working in Israel as a physician, nurse, dentist or in other key health professions. Licensure laws have been in place for physicians and nurses since 1948. A comprehensive health professions licensing law is now in the works and will specify licensing procedures for several emerging health professions.

Physicians

While the four medical schools graduate about 280 physicians every year, they are not the only significant source of new physicians in Israel. A number of Israelis become physicians after having attended medical school in other countries, predominantly in eastern Europe. Even more significantly, at various stages in Israel's history, immigration has brought large numbers of physicians to Israel. In 2000 approximately two-thirds of physicians under the age of 65 had been born outside of Israel.

Each wave of immigration has influenced both the number of physicians and the nature of medical care in Israel. For example, in the 1930s the major immigration of German Jews significantly expanded the number of physicians and was a major factor in the establishment of the Maccabi health plan and the growth of independent medical practice, as opposed to the model of salaried group practices operated by Clalit. In the 1970s immigrants from Russia swelled the ranks of physicians. Their immigration was largely credited with improving access to primary care in peripheral areas, but substantial questions arose regarding the technical and communication skills of the immigrant physicians.

³⁶ This section was prepared in consultation with Nurit Nirel and Shoshana Reba.

The most recent wave of mass immigration, from 1989 to 1999, has been from FSU countries. These immigrants included a very large number of physicians. From 1989 to 1993 approximately 12 500 immigrants from FSU countries indicated that they had worked as physicians. The government faced a major policy decision about whether and how to encourage the absorption of the immigrant physicians into the health care system. On one hand, Israel had an interest in promoting continued immigration from the FSU. It was believed that if immigrant physicians had trouble finding jobs this would discourage not only other physicians but also other professionals from emigrating to Israel. On the other hand, there were fears that the training of many FSU physicians was not up to the level of that of western-trained physicians and that mass absorption of them, without substantial investment in professional upgrading, could adversely affect quality. In addition, there were concerns about the potential impact of a major expansion of the supply of physicians on health expenditure.

Key discussion points on the issue included: the extent to which the government would assist immigrant physicians in preparing for licensure examinations, the extent to which prior experience as a physician would be recognized in lieu of passing the usual licensure examination, whether new residency slots and/or retraining programmes for the immigrant physicians should be supported. Without going into detail, the overall policy appears to have been to try to help qualified immigrant physicians improve their skill levels and find work without compromising quality of care and without increasing employment levels much beyond those needed by the health care system.

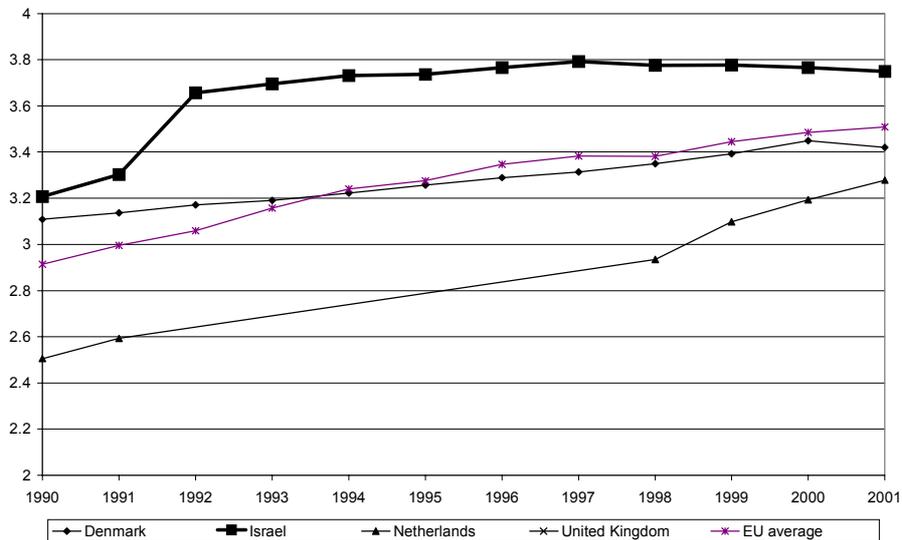
In practice, approximately half³⁷ of the immigrant physicians have found work as doctors in Israel, in contrast to initial projections that only 25% of them could be absorbed.³⁸ The physician-population ratio has risen markedly, but the impact on quality of care is not known. Many of the immigrant physicians were absorbed, at least initially, into soft money positions, but since then a growing proportion of them appear to have moved into regular positions (Nirel 1999). Moreover, their wages have increased significantly.

³⁷ A study carried out in 1999 found that, as of 1998, approximately 70% of those who had applied for licenses had been granted them, and of these approximately 70% had found work as physicians.

³⁸ It was believed that in the 1990s immigrant physicians would face far greater problems finding employment than did their counterparts who immigrated in the 1970s due to lower willingness to sacrifice quality and cost considerations in the interest of encouraging immigration. In addition, in the 1970s Israel faced a shortage of primary care physicians, particularly in the periphery, which the new immigrants helped address; no such situation prevailed in the 1990s. Finally, the social and economic ethos had changed and, in comparison with the 1970s, there was less support, in all areas of the economy, for expanding government-financed employment, and more of a tendency to rely on market mechanisms.

Israel's number of physicians per 1000 population approximates the EU average, while the number of nurses per 1000 population is at the lower end (Fig. 11, Fig. 12 and Fig. 13). Figures from the Israeli licensing bureau show a trend of sharp growth of licensed physicians under the age of 65 per 1000 population between 1990 and 1992, followed by a gradual increase until 1998 and then a slight decrease by 2000 (Fig. 14). In contrast, figures from the labour force survey on employed physicians per 1000 population show an increase from 1990 to 1997, with peaks in 1992 and 1997.

Fig. 11. Number of physicians per 1000 population in Israel and selected countries, 1990-2001

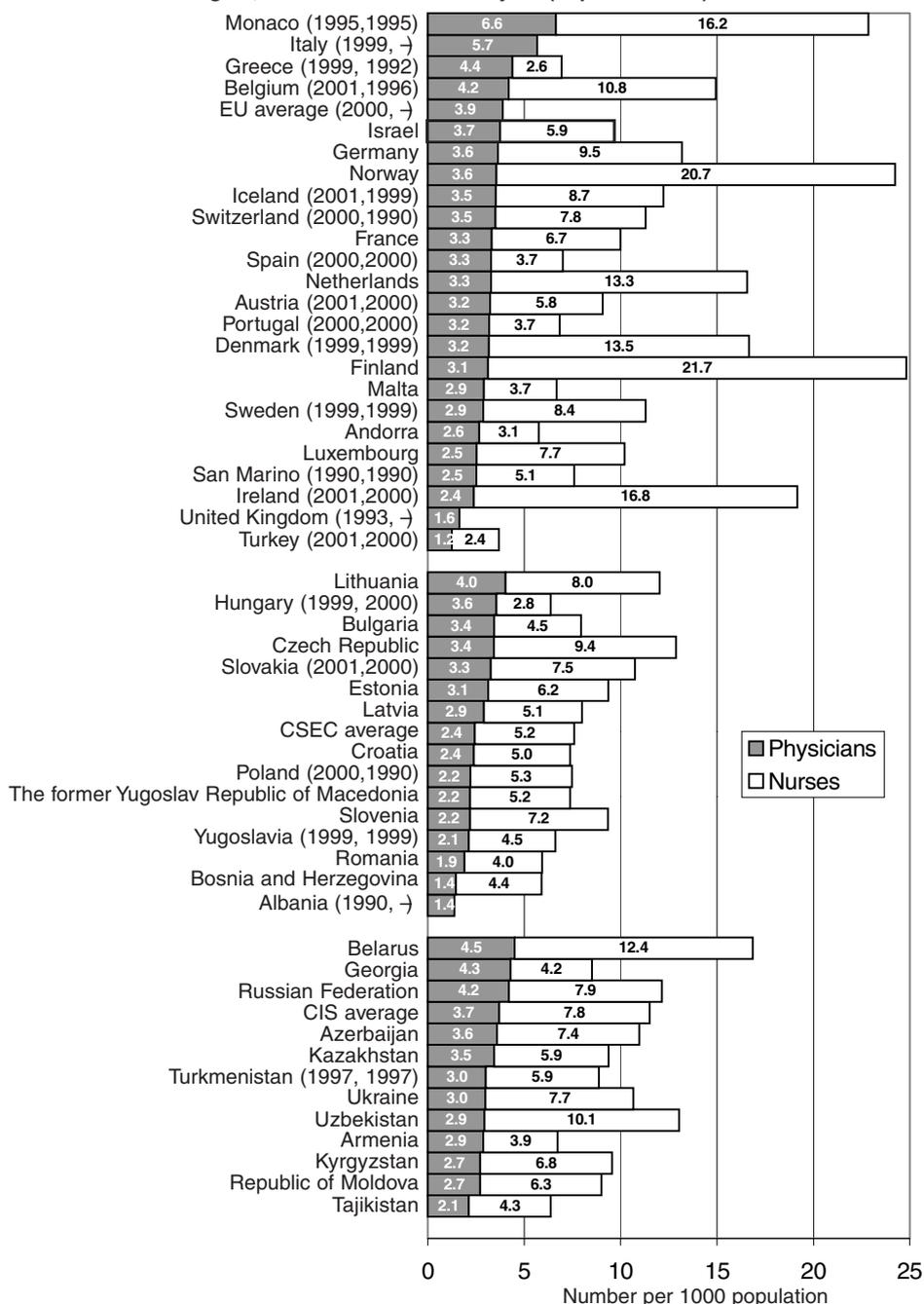


Source: WHO Regional Office for Europe health for all database.

Note: EU: European Union.

The physician-population ratio was generally perceived to be high in Israel, even prior to the 1989 to mid 1990s immigration wave, which caused it to rise markedly. In fact, while Israel's physician-population ratio was among the highest in the world in 1980, its relative ranking declined in the course of the 1980s. During that decade the ratio was stable in Israel, while it increased markedly in many countries (Nirel 1999). Many analysts believe that the ratio is too high and that steps should be taken to reduce it. Proposals include reducing the number of new physicians in Israeli medical schools and using the freed-up capacity to invest more in continuing medical education. In contrast, the IMA has argued that, while there may be enough physicians now, shortages could well occur in the future now that immigration levels have dropped. There

Fig. 12. Number of physicians and nurses per 1000 population in the WHO European Region, 2000 or latest available year (in parentheses)

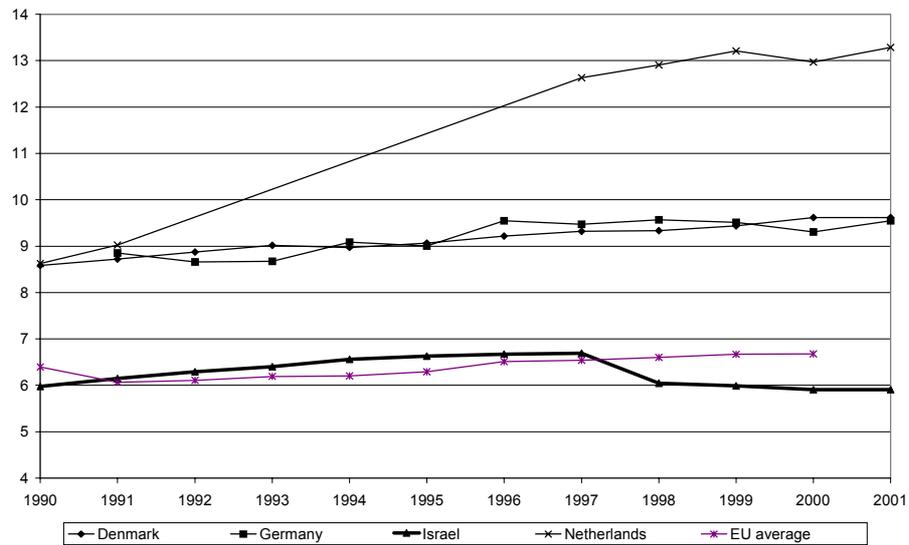


Source: WHO Regional Office for Europe health for all database.

Note: CIS: Commonwealth of independent states; CSEC: Central and south-eastern European countries; EU: European Union.

Israel

Fig. 13. Number of nurses per 1000 population in Israel, selected European countries and the EU, 1990-2001



Source: WHO Regional Office for Europe health for all database.

Note: EU: European Union.

have been recent proposals to consider establishing a fifth medical school, perhaps in conjunction with a medical school abroad, and/or raising the number of students in each medical school.

Aside from the issue of how many physicians Israel needs, there are significant questions about the appropriate specialty mix. During the 1990s many observers believed that Israel had a growing shortage of internists, anaesthesiologists, psychiatrists and geriatricians, because of the difficult working conditions in these fields and the relatively few opportunities for private practice. Some have argued for creating financial incentives to induce more young physicians to enter these specialties; others argue for a greater role for government in planning and guiding the specialty distribution. At present there are no national efforts to project needs by specialty; decisions about the number of residency positions are made largely at the level of individual hospitals and are driven primarily by current needs for residents rather than future needs for board-certified specialists.

As in most other countries, the physician-population ratio is highest in metropolitan areas and in the centre of the country. Physicians in the central regions also tend, on average, to work more hours per week. While it would

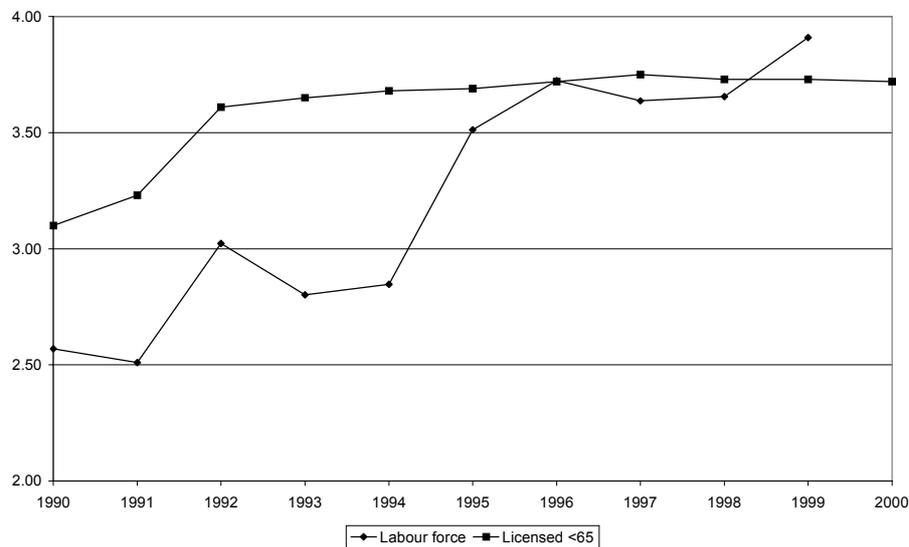
not be correct to say that peripheral areas face an overall shortage of physicians, it is correct to say that some of them, particularly in the south, have difficulty attracting and retaining high-quality physicians in certain specialties, such as orthopaedics and ENT (Nirel et al 2000). Moreover, some of the most important gaps are related not only to region, but rather to settlement size and ethnicity. For example, smaller Arab settlements have relatively poor access to specialists, as well as a problematic shortage of female physicians in both primary and specialist care.

Nurses

Israel does not have an overall shortage of nurses. At the end of 2000 there were 4.4 registered nurses (RNs) and 2.6 licensed practical nurses (LPNs) per 1000 population (CBS 2001).³⁹ Comparisons with other countries are complicated by differences in definitions of what constitutes an RN or an LPN.

A major 1994 study of nursing human resources in Israel found that 60% of employed nurses worked full-time or more, contrary to the prevailing perception that most Israeli nurses worked part-time. The study also found that, on average, Israeli nurses worked 35 hours per week.

Fig. 14. Number of physicians per 1000 population from two sources, 1990–2000



Sources: Israeli Licensing Bureau and CBS 2001.

³⁹ For nurses up to the age of 60, the comparable figures are 3.7 and 2.1 respectively.

Israel is in the midst of a major long-term effort to upgrade the professional level of its nurses. This has involved a policy of:

- shifting away from LPNs to RNs in many settings;
- shifting RN education from non-academic degree programmes to university-based BA programmes;
- encouraging growing numbers of nurses to participate in Masters programmes and advanced specialist training in areas such as intensive care, public health, oncology, midwifery, geriatrics and operating room nursing;
- developing a significant and growing cadre of nurses with doctoral degrees and research capabilities.

The role of nurses in the health plans and hospitals is also expanding. They are playing a greater role in clinical case management, management of drug concentration levels, operation of high-tech clinical equipment etc.

Mass immigration has, of course, had a major influence on Israeli nursing. Overall, approximately half of Israel's RNs and almost two-thirds of LPNs were born abroad. Largely as a result of immigration from FSU countries, the ratio of licensed nurses per 1000 population increased from 624 in 1986 to 733 in 1995. By 1995 approximately 8000 nurses who had arrived from FSU countries since 1989 had been absorbed into the profession. Most of them were initially licensed as practical nurses, but more and more of them are upgrading to the RN level. As a result of this process the share of RNs in the total pool of nursing human resources fell from two thirds in the mid-1980s to half in the mid-1990s, but returned to two thirds by 2000.

There are substantial inter-regional differences in the availability of RNs. In the central region there are more RNs per 1000 population, and they work more hours, on average. If attention is restricted to nurses working in the community, the nurse-population ratios are actually higher in the peripheral regions (Nirel et al 2000), since nurses tend to be given more responsibilities in rural areas, carrying out tasks usually carried out by physicians in urban areas.

Management training

There has been a dramatic expansion and improvement in health care management training over the past decade. Several major universities now offer degree programmes in health care management and the number of staff and students involved has grown substantially. Key employers such as health plans and hospitals are encouraging large numbers of their mid-career employees, including physicians, nurses, administrators and others, to participate in these programmes by offering time off from work to pursue studies and partial to

full coverage of tuition costs. There is also an understanding that this sort of training can improve the employee's career opportunities in the current job and beyond.

Pharmaceuticals and health care technology assessment⁴⁰

Israelis have access to a secure, safe and stable supply of a wide range of pharmaceuticals.

According to the most recently available data, pharmaceutical expenditure in Israel accounts for approximately 15–20% of total health expenditure (Bin Nun 2003). Within the health plan sector they account for approximately 15% of total health plan expenditure (1999),⁴¹ and in household spending for approximately 20% of total household spending on health (1999).

Israel has a large, successful and growing pharmaceutical industry. The major companies include several which are traded on the New York Stock Exchange, most notably Teva, whose market valuation in July 2002 was approximately US \$8 billion. However, it is important to keep in mind that these companies focus primarily on the manufacturing and distribution of generic drugs. The vast majority of patented medications dispensed in Israel are imported from abroad or are produced in Israel under license from foreign pharmaceutical companies. Imports account for approximately half to two thirds of the total market in terms of sales.

As in other countries, the vast majority of pharmaceuticals are dispensed in community settings, as opposed to hospitals. Within the community there are three main types of pharmacies: about 500, usually in clinics, owned by the health plans, about 600 independent pharmacies and about 150 owned by large chains. Pharmacies must receive a license from the Ministry of Health in order to operate. In the past decade, the market share of the large chains has increased markedly.

The government plays several key roles in the pharmaceutical sector, including approving pharmaceuticals for sale, establishing the NHI formulary

⁴⁰ This section was prepared in consultation with Segev Shani, Tal Morgenstern, Philip Sax, David Chinitz, Avi Israeli and Miri Zibzenher.

⁴¹ This figure relates to gross pharmaceutical expenditure as a proportion of total health plan expenditure. The figure usually cited in Israel, 12%, is the ratio of 'net' health plan pharmaceutical expenditure – that is, after subtracting that part of the expense covered by co-payments – to total health plan expenditure minus co-payment revenue.

of drugs all health plans must make available to members, setting maximum prices, licensing pharmacists and regulating the pharmaceutical market.

Under NHI health plan members must make a co-payment for drugs (see the section on *Health care financing and expenditure*). Most community-based pharmaceutical use is provided under NHI and is therefore financed primarily by the health plans and secondarily through co-payments. In addition, individuals purchase pharmaceuticals without contributions from their health plans, especially for over-the-counter (OTC) medications. Individuals cover the full cost of prescribed medications that are not in the NHI formulary and all prescriptions by private physicians.

All four health plans have some pharmacies of their own, but they also have arrangements with the pharmacy chains and independent pharmacists to bill them for drugs dispensed to their members. The role of health plan pharmacies is most pronounced in Clalit. Recently, independent pharmacies have been closing while the pharmacy chains have been growing, and the system is in the end stages of stabilizing itself.

The Ministry of Health establishes maximum prices for all pharmaceuticals approved for sale. These prices serve as ceilings only and are relevant primarily in the case of private purchases by individuals. All the health plans negotiate substantial discounts with manufacturers and importers, which are applied in every type of pharmacy. Various efforts are underway to promote the use of generic medications and the use of lower-cost drugs in particular. For example, the health plans highlight them in various circulars or lists of recommended medications and, in some cases, very expensive patented alternatives can be prescribed only with special permission from supervisors.

Many of the health plans' clinical protocols developed to reduce costs and improve the quality of care are related to pharmaceutical use. Some health plans monitor the prescribing behaviour of individual physicians and groups, by specialty, sending them periodic feedback regarding their prescribing pattern compared with others in the same specialty. Frequent updates regarding suggested prescribing are sent out from the health plans' central offices, based on computerized systems, to register the health plans' prescribing preferences. There are no formal or automatic financial penalties for physicians who over prescribe. Their supervisors may call them in to discuss their prescribing patterns, give them a chance to explain and exhort them to be more careful in future.

In 2000 Israel had approximately 3900 licensed pharmacists under the age of 65, or 0.61 per 1000 population, up from 0.50 in 1990. Just over half of the pharmacists are women. Approximately 20% of the pharmacists are immigrants who have arrived in Israel since 1988.

Most pharmacists are salaried employees. In community settings they sometimes receive bonuses from the owners of the pharmacies, which can be tied to sales volume measured in revenue or the number of prescriptions.

Pharmaceutical services also play a large role in hospitals. The main services provided by hospital pharmacies are production of pharmaceuticals and inventory management. In general hospitals in 1996 there was an average of 1.23 full-time pharmacists per 100 hospital beds and 1.09 positions for other pharmacy employees (Livne et al 2000). Israeli hospitals are a major locus of large, multi-site international clinical trials. This is believed to be due to the high level of medical care and the reputation for careful adherence to study protocols.

Israelis are generally perceived to be eager consumers of medications. Physicians often feel pressured not to end a visit without writing a prescription and there is substantial public pressure to keep adding new medications to the NHI benefits package.

In recent years, the pharmaceutical market has undergone several important changes, including:

- efforts to speed up the licensing process for new pharmaceuticals;
- growth of the pharmaceutical chains;
- increased efforts to encourage the use of generic drugs;
- efforts to make more drugs available on an OTC basis;⁴²
- establishment of a priority-setting process for determining which new pharmaceuticals and other technologies should be added to the NHI benefits package (see the section on *Health care financing and expenditure*);
- repeal of the law requiring that no pharmacy may be established within 500 metres of an existing pharmacy;
- a change from setting maximum prices as a percentage mark up over the importer's FOB price to the 'Dutch method' of setting the maximum as the average price as in Germany, Belgium, France and the United Kingdom;
- a change in Ministry of Health regulations, to allow parallel imports.

This last item is the most significant and controversial. Until 1999 Ministry of Health regulations stipulated that a pharmaceutical could only be imported by the licensee which initially arranged for the drug to be approved for distribution in Israel – that is, a subsidiary or agent of the manufacturer. This

⁴² Note that in Israel OTC drugs are still kept behind the pharmacist's counter and, unlike in several other countries, are not directly accessible to the consumer.

exclusivity arrangement conferred substantial monopoly power to the licensee, that used it to advance the objectives and pricing policies of the manufacturer. In an effort to increase competition and reduce prices the Knesset approved a change in these regulations in 1999, signed into law by the Ministry of Health in 2000. The new regulations permit various non-profit organizations, particularly the health plans, and recognized pharmaceutical traders to import licensed pharmaceuticals from developed countries without approval from the manufacturer or its agent.

The change was vigorously opposed by the large multinational drug companies, their agents and subsidiaries in Israel and Pharma, the association for research-based pharmaceutical companies. They argued that parallel importation violates patent rights and international trade agreements and that there are health risks since some of the medications might be counterfeit or damaged. The battle against parallel imports was waged on two main fronts, legal and diplomatic. On the legal front, the multinationals brought suit, eventually taking the case as far as the Supreme Court of Israel. On the diplomatic front, the office of the US Trade Representative and other organs of the US government put heavy pressure on the Israeli government to disallow parallel imports.

Israel actually began to engage in parallel importation in the beginning of 2001. In mid 2001 the Supreme Court upheld the legality of parallel imports, rejecting claims that it constituted a patent infringement or that it posed health risks, since Israel would be importing only from industrialized countries.

Dental care⁴³

Dental care is not included in the NHI benefits package, except for maxillo-facial surgery in trauma and oncological cases. The Netanyahu Commission recommended that services provided under NHI include maintenance and preventive dental care for children aged 5-18, and maintenance and rehabilitative dental care for elderly people, but these were not included in the NHI law. Serious concerns therefore remain regarding access to care, particularly for vulnerable populations.

In 1997 dental care expenditure accounted for 9% of total health expenditure (CBS 1997), almost all of it in the form of direct out-of-pocket payments.

⁴³ This section was prepared in collaboration with Shlomo P. Zusman. It draws heavily on Kelman 1998 and Berg et al 2001.

About 10% of the population have commercial VHI covering dental care (see the section on *Health care financing and expenditure*). A further 60% have supplementary VHI from their health plans, which provides discounts for a very limited set of dental services. In 1999 the average household spent NIS 126 per month on dental care and NIS 7 per month on commercial VHI covering dental care. These figures accounted for 16% and 1% of household spending on health, including the health tax, respectively. Among households in the lowest income quintile, average spending on dental care was only NIS 86 per month, 40% below the national average, and spending on dental VHI was negligible, despite the greater-than-average prevalence of dental problems in this group.

A 1998 national survey of the adult population (Berg et al 2001) found non-negligible problems in dental health status and in preventive health behaviour such as regular check-ups and brushing. In most areas examined there were significant gaps among various population groups regarding awareness of, and attitudes toward, dental care, preventive behaviour, the frequency of visits to a dentist and self-perceived morbidity. The survey shows that particularly vulnerable populations include people with low incomes and Russian and Arabic speakers. In addition, the study confirmed widespread concerns that cost considerations have led many low-income people to forego medically necessary treatment.

Until about a decade ago almost all the dental care in Israel was provided by independent private dentists. Since then there has been substantial growth in commercial dental chains and the health plans have also become increasingly involved in the provision of dental care, for which they are paid either out-of-pocket or by commercial and supplementary VHI. In 1997 independent private dentists accounted for two-thirds of dental units, while the health plans accounted for 9% and the commercial chains accounted for 15%.

The government also plays an important role in the provision of dental services. The Ministry of Health provides grants to local authorities offering oral preventive services and treatment services for children and needy people. Only 20% of municipalities offer school dental services, which are financed in part by the municipality, in part by the Ministry of Health grants noted above and in part by parents. In addition, the Ministry of Social Welfare runs clinics for disabled people and subsidizes dental care costs for indigent people.

Licensing of dentists falls under the responsibility of the Ministry of Health. In 2000 Israel had 8562 licensed dentists, for a dentist-population ratio of 1.34 per 1000 population – among the highest in the world.⁴⁴ This was also significantly – 64% – higher than the 1989 ratio of 0.94, primarily due to the immigration of over 1200 dentists from FSU countries in the early 1990s.

⁴⁴ In 1998 Israel was third after Sweden and Norway.

There are also 3313 licensed dental technicians, 4345 dental surgery assistants and 757 registered dental hygienists, whose tasks are in the area of dental health education and prevention of dental illnesses.

Another important government role is promoting fluoridation of the water supply. Israel's fluoridation programme began in the late 1970s. In 2000 about 50% of the population benefited from having fluoride in its water. Since the regulations were amended in 1998, it is expected that by the end of 2002 all settlements with more than 5000 inhabitants will enjoy the benefits of fluoridated water.

A number of measures are being considered to improve access to dental care. Widening the scope of the School Dental Service towards more general coverage would be an important step. In addition, consideration is being given to extending dental coverage in the NHI benefits package to ensure access to dental care for those who need it most and can afford it least.

Mental health care⁴⁵

Providers and financing⁴⁶

In 2000 Israel had approximately 5600 psychiatric beds – 1.23 beds per 1000 population over age 14. Only 5% of those psychiatric beds were in general hospitals; 95% were in psychiatric hospitals (Ministry of Health 2002a). The proportion of psychiatric beds in general hospitals is lower than in most western countries, but as in other countries the trend is for a higher proportion of the beds to be located in general hospitals.

The psychiatric hospital network comprises 18 psychiatric hospitals, of which 10 are government owned, 6 privately owned and 2 owned by health plans. In addition, there are 12 psychiatric departments in general hospitals and one in the prison system. The government and health plan psychiatric hospitals treat a mix of long-term and short-term patients, while the private psychiatric hospitals treat long-term patients almost exclusively. Many of the private hospitals are small to medium in size and there are plans to close some of them in the coming years. The government hospitals accounted for two thirds of the beds, 67% of the patient days and 82% of the admissions. The Ministry of Health finances care in government hospitals, private hospitals and psychiatric departments in general hospitals.

⁴⁵ This section was prepared with the assistance of Naomi Shtruch, Israel Sykes, Daniella Nahan and Yehuda Baruch.

⁴⁶ This section draws heavily on Ministry of Health 2002a.

In the community there are a large number of private, independent mental health practitioners and about 90 public mental health clinics.⁴⁷ Over half of them – 55 – are operated by the Ministry of Health and provide services free of charge. Twenty-five belong to Clalit. The remainder are operated by other non-profit agencies. Non-government outpatient services are not government financed, instead relying on fee-for-service payments and health plan funding. No reliable national data are available on the rate of mental health visits in Israel nor on the distribution of those visits across provider types.

The Mental Patients' Treatment Act 1991 empowers the district psychiatrists employed by the Ministry of Health to order compulsory psychiatric examination or psychiatric inpatient and outpatient care. In 2000 approximately a quarter of new psychiatric hospitalizations were compulsory. There are various efforts underway to reduce the powers of the district psychiatrists – for example, by transferring more of the powers to the courts.

In 1990 the Ministry of Health created a Unit for Addictions Treatment within the Mental Health Services Division in order to have an effectively organized administrative system to respond to the complex needs of addiction treatment. Israel currently has 7 ambulatory treatment centres for addiction, with a total capacity of some 1300 patients. It also has 10 methadone maintenance centres and 3 mobile methadone maintenance units – which together care for 1900 opiate addicts – and 6 inpatient care units for drug addicts, with a total of approximately 75 beds. While services for people with addictions are much more available than they were a decade ago, they are increasingly recognized as falling far short of need. The Ministry of Health has targeted this area as a priority for expansion.

It has only recently been recognized that there is a need to develop services for people suffering from both mental illness and substance abuse. These people have traditionally been passed back and forth between psychiatric and addiction treatment centres, being well-treated in neither. There are currently several new programmes targeted at this population, but these, too, fall far short of need.

Recent changes in infrastructure and utilization

Over the past decade the mental health care system has undergone several significant changes. Consistent with international trends, the supply of psychiatric beds dropped from 2.13 per 1000 population age 15 and over in 1990 to 1.23 per thousand in 2000. There has also been a dramatic reduction in the utilization of psychiatric hospitals. Following a rapid decline during the

⁴⁷ These figures include outpatient clinics in psychiatric hospitals.

1990s, inpatient care days per 1000 population fell from 723 in 1990 to 412 in 2000. There has also been a shift in the composition of psychiatric hospitalizations, from long-term to short-term admissions and day care.

During the same period there has been an expansion of community-based mental health services, including both public mental health clinics and rehabilitation services involving hostels, independent housing, social clubs and others. In 2000 approximately 7500 people used these services, comprising some 1.5 million days. Some have argued that this expansion of community-based services has been one of the factors that permitted the reduction of inpatient volume, while others dispute it (Aviram and Rosenne 1998). There was also a deliberate government policy of closing psychiatric beds in order to reduce costs. Advances in the psycho-pharmaceutical domain may also have played a role. In any case, it is generally believed that while the community-based service network has expanded, it continues to fall short of need.

Rehabilitation has been given a significant push recently, with the passage of the Community-Based Rehabilitation of the Mentally Disabled⁴⁸ Act in 2000, and a subsequent increase in government funding. The law grants people with psychiatric illnesses entitlement to a range of rehabilitation services, including: appropriate housing in the community, supported employment, leisure time activities, supplementary education, dental care, family support and case management. Entitlement to specific services is determined on a case by case basis by a regional committee. Individuals use this entitlement to receive services operated by for-profit and non-profit organizations in their area and are financed by the Ministry of Health.

Financing from the Ministry of Health has led, in the past two years, to a rapid expansion of a range of rehabilitation services in the community. However, at present these services are available to only about 10% of the population. Also, some of the services being developed have, to a large extent, targeted people who were previously in hospital, for whom rehabilitation services are being developed as a more cost-effective form of care than long-term hospitalization. The vast majority of individuals with psychiatric illnesses live in the community, often posing a severe burden on families. Rehabilitation services are difficult to obtain for these people.

In addition to financing on the basis of individual entitlement, the 2000 act calls for the establishment of two services to be directly funded by the Ministry of Health. These include a national mental health information centre and regional family support centres. Calls for proposals have recently elicited responses from a broad range of non-profit and for-profit organizations.

⁴⁸ The phrase 'mental disability' is still used extensively in legislation and public debate, despite the fact that its use is believed by some to be contrary to recent trends not to stigmatize mental health problems.

The mental health care system is in the midst of a major reform effort, described in some detail in the section on *Health care reforms*.

Rehabilitation⁴⁹

Rehabilitation is included in the NHI benefits package, so responsibility for its provision lies with the health plans. All rehabilitation services, whether provided in the hospital or in the community, incur a co-payment, which is currently NIS 23 for each quarter of community care. These services include general and geriatric rehabilitation provided in hospitals and ambulatory rehabilitation provided in special community facilities of the health plans.

At the end of 2000 there were 639 general rehabilitation beds in Israel intended for people with neurological or orthopaedic impairment, children or people who had been comatose for an extended time. About half of these beds were in two rehabilitation facilities and half were in the rehabilitation wards of acute hospitals. Most of the beds were owned by the government or by Clalit, while a few of the beds were either publicly or privately owned. The general rehabilitation bed rate has remained stable since the late 1980s and stands at 0.1 beds per 1000 population (Ministry of Health 2001b). However, most of the beds are concentrated in the central region; the rate of general rehabilitation beds is low in the southern and northern regions. There was a trend of decline in the average length of stay in these beds during the 1980s, but it has been stable since the early 1990s. An average length of stay of 40 days was recorded in 2000.

In 2000 there were 955 geriatric rehabilitation beds in Israel. The number of beds increased until the mid 1990s, when a third of the rehabilitation beds were transferred to skilled nursing facilities. Since then a moderate trend of increase has again been noted. By 2000 the geriatric rehabilitation bed rate had reached 3.5 beds per 1000 population age 75 and over. Most of these beds are concentrated in the centre of the country, relative to the southern, northern and Jerusalem areas, where the rate is much lower.

The four health plans operate rehabilitation clinics in the community, offering physical, occupational and speech therapy. In order to receive care at one of these clinics, a patient must obtain a referral from a family physician or specialist, and this incurs a co-payment. The clinics provide neurological and orthopaedic rehabilitation services, as well as child development services. Most

⁴⁹ This section was written by Netta Bentur.

of the clinics contain the latest equipment and are operated by licensed professionals who remain abreast of the changes in their field. To a more limited extent, the health plans also provide rehabilitation services in the home, through the medical home care units.

In 2000 there were about 5700 rehabilitation professionals in Israel: 2400 physical therapists (0.5 per 1000), 1965 occupational therapists (0.41 per 1000) and 1340 speech therapists (0.28 per 1000). Israel has eight schools for the rehabilitation professions, all of which operate within faculties of medicine and health at the country's four large universities. Nevertheless, there is a significant shortage of rehabilitation professionals in both hospitals and the community; the shortage is particularly striking in geriatric rehabilitation services.

The Ministry of Health participates in purchasing some rehabilitation equipment and provides a limited number of devices to the population, such as walkers and vision aids, without requiring a co-payment. Yad Sarah, one of the largest non-profit organizations in Israel, loans a very wide variety of rehabilitation devices to the public, free of charge.

Critical issues facing rehabilitation

One critical issue is the constant shortage and the high turnover of skilled human resources. As in other parts of the world, this stems from the fact that the majority of these rehabilitation professionals are women: some work only part-time, some leave after having children and some leave the profession.

The relatively low salary of these skilled professionals is another incentive for leaving the field and/or the public sector. The salary, especially of speech therapists, is low compared to that of other trained professionals in the health care system, such as nursing personnel or x-ray technicians. Moreover, the high wages paid to rehabilitation professionals in the private sector, where compensation is on a fee-for-service basis, also provide an incentive to leave public sector jobs.

Due to the shortage of human resources, poor physical conditions and other factors, most of the community rehabilitation centres have waiting times of up to months for treatment. Consequently, rehabilitation centres often have two parallel lines: one for acute cases, consisting primarily of younger people after a road or work accident and traumatic-orthopaedic cases, and the other for chronic patients, consisting primarily of older adults who suffer from back pain or neurological diseases such as a stroke or Parkinson's. However, due to the constant pressure on rehabilitation centres, treatment of patients in the

second line is postponed, by months or even more. The shortage of rehabilitation services in the community is a serious issue. The main victims of this situation are the older, chronic patients. In the absence of appropriate provision, frequency and scope of rehabilitative care, they suffer from disabilities and limitations that could be treated so as to improve their functioning and, in some cases, even to postpone the need for nursing care.



Financial resource allocation

The section on health care financing described how the benefits provided by NHI are financed and briefly summarised how non-NHI services are financed. This section discusses how the overall level of financing for NHI is set and how the government distributes NHI funds among the health plans, and then describes financial flows further downstream: how the health plans allocate resources across regions and sub-units, how the health plans determine their mix of inputs, how capital investments are financed, how the health plans pay hospitals and how the health plans and hospitals pay physicians and other health care professionals.

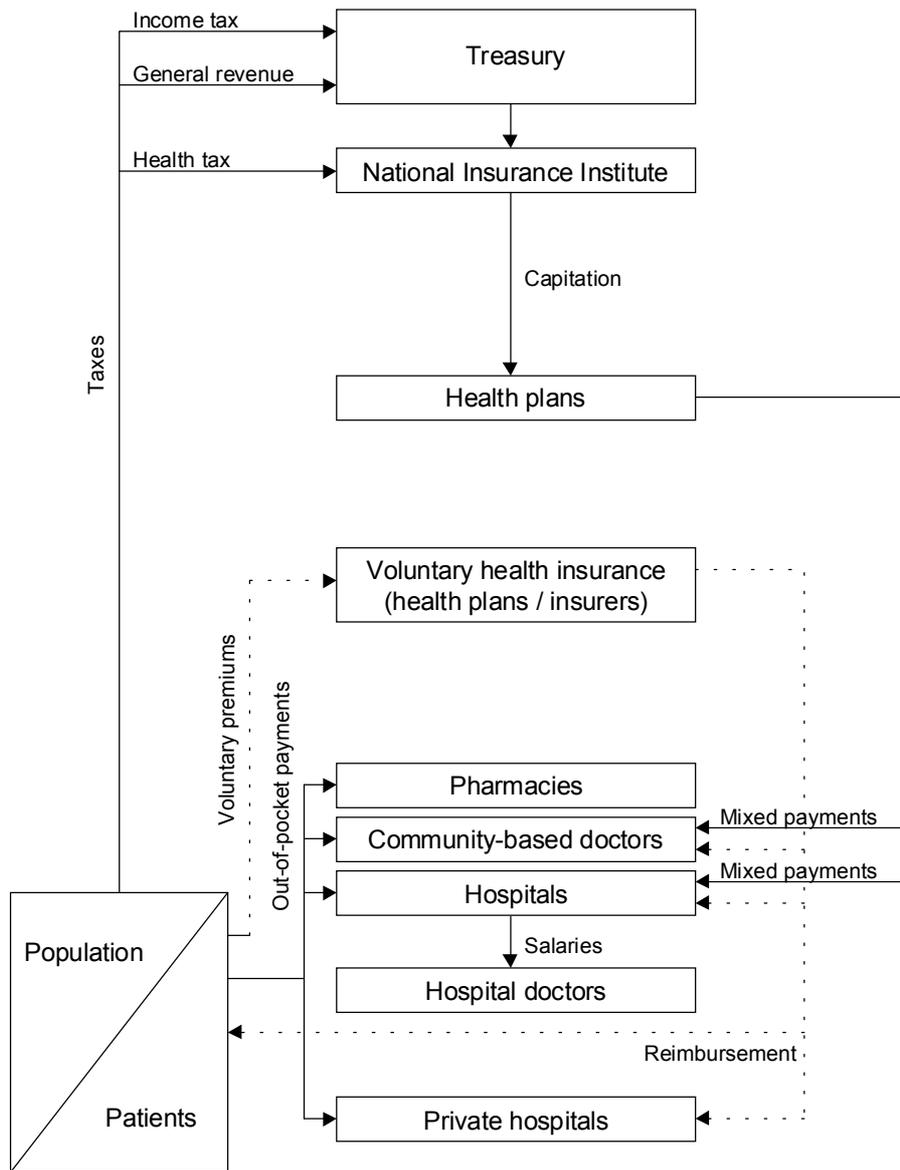
Third-party budget setting and resource allocation

Setting the overall level of NHI financing

Each year the government determines the level at which the NHI system will be funded. The funding level must be at least equal to that of the previous year plus an adjustment for inflation. The NHI law also calls on the government to take into account demographic and technological changes when determining the funding level, but leaves the government discretion to determine how best to account for these factors.

This officially determined NHI funding level is financed almost entirely from public sources (see the section on *Health care financing and expenditure*). However, the government also determines the amount of NHI funding that it expects the health plans to raise through cost sharing for pharmaceuti-

Fig. 15. Financial flows



calls and visits to specialists. The difference between these two amounts is the officially determined level of public financing for the NHI system.

There are ongoing disputes about the appropriate level of NHI funding and about how the funding level should be set. First, health care providers and insurers, along with the Ministry of Health, argue that changes in the funding level should be determined by a formula set by the Knesset, while the Ministry of Finance prefers to preserve the current system of annual determination by the government.

Second, there is disagreement about the extent to which the health care system should be compensated for population growth and ageing. The Ministry of Finance argues that there are significant economies of scale that need to be taken into account, while health care system actors contend that such economies of scale are minimal. Furthermore, the Ministry of Finance argues that the funding level should reflect annual savings from increased productivity, similar to those expected from other public service sectors. The health care system actors acknowledge the need for productivity gains, but argue that these are more than counterbalanced by the need to fund technological advances (National Institute 2000).

Third, there are disputes about how the legislatively-mandated adjustment for price changes should be carried out. The current formula involves a weighted average of health sector wages, general public sector wages, pharmaceutical prices, the general consumer price index and the general construction price index. The underlying logic for not using health sector prices alone was to ensure that the Ministry of Health and other key players in the health care system would have an incentive to keep down prices and wages. However, these same players argue that it is not they, but the Ministry of Finance that is the controlling force behind health care system wages. They argue that the NHI health price index should rely solely on health-sector-specific prices, with an emphasis on those inputs consumed by the health plans, most significantly, the hospital per diem rate.

In light of these issues, it is not surprising that the main actors in the health care system contend that the health care system is not only under funded, but increasingly squeezed (Bin Nun 1999). And, in a sense, they are correct. An examination of age-adjusted per capita health plan funding, using an inflation adjustment based on the actual input prices faced by the health plans (see below), reveals a 6% decline between 1995 and 1999. This means that the purchasing power of the health plans has declined markedly, in the absence of efficiency gains. However, as Ministry of Finance officials point out, this is in large part due to the rapid increase in wages and pharmaceutical prices. In terms of

consumer price index-adjusted prices, the age-adjusted per capita revenue of the health plans actually increased by 3% between 1995 and 1999.⁵⁰ Thus, from an economy-wide perspective, the per capita allocation to the health care system was greater in 1999 than it had been in 1995. At the same time, it should be noted that the share of NHI expenditure as a proportion both of total expenditure on health and GDP had fallen in that period.

Allocation of resources to the health plans

Public NHI financing is allocated among the four competing health plans. Approximately 95% of these funds are allocated on the basis of a capitation formula, which takes into account two factors: the number of members in each health plan and their age mix. Consequently, the health plans receive 3.5 times more for people aged over 75 than for the average person. The remaining 5% of funds are allocated among the health plans on the basis of the number of members with one of the following major illnesses:⁵¹ AIDS, Gauche, thalyssemia, end-stage renal disease and haemophilia.

There are ongoing debates about whether NHI has done enough to make various vulnerable groups attractive to the health plans. All would agree that the move to capitation funding has made elderly and poor people more financially attractive to the health plans than they were in the past. However, aside from special payments for the five relatively rare conditions mentioned above, the capitation formula does not take health status into account. Accordingly, it continues to be in the health plans' interest to prefer healthy to ill patients within each age group. There is a large and growing consensus among disinterested parties that a health status parameter should be added to the capitation formula, but there continue to be differences of opinion as to whether existing data sources can support such a move (Hadley et al 2003).

It should be noted that the designers of the capitation formula sought to calculate age weights that accurately reflected differences in health care utilization across age groups. However, many argue that the health plans still lose money on elderly people and that it will therefore only be in the health plans interest to compete for elderly people if the capitation weights are modified to increase more steeply with age. While health plans cannot reject applicants, they can and do influence the mix of members through choices about which services to develop and market most intensively.

⁵⁰ However, while the data tell a different story if a health-specific price index is used, Ministry of Finance officials argue that the increase in health prices in part reflects actions, priorities and choices made by health care system actors; money that is spent for price and wage increases could have been used to increase the volume and quality of care.

⁵¹ These conditions are specified in the NHI law. As such they are decided by the Knesset, based on recommendations from the Ministry of Health.

Poor and elderly people are also less attractive to the health plans because they are less likely than others to purchase supplementary VHI, which is an important source of operating revenue for the health plans (see the section on *Health care financing and expenditure*). Furthermore, while the various discounts and exemptions from co-payments for physician visits and pharmaceuticals granted to poor and elderly people in the 1998 legislation on co-payments serve a socially desirable purpose, because the health plans are not compensated by the government for the lost revenue, the measures reduce the appeal of these groups as potential members.

Another issue that continues to be debated is whether geography should be taken into account in the distribution of resources among the health plans (Habib and Rosen 1998). Some of the interested parties, as well as several university-based policy analysts, have argued that the capitation payment should be greater for residents of small localities and/or peripheral regions. They argue that these areas suffer from below average levels of care, partly because it is more costly – per unit of service – to provide care there. Others argue that, on the contrary, higher capitation payments should be made for people living in the centre of the country and in the large cities, as they tend to demand and use health care more intensively. To date neither of these two groups has succeeded in convincing policy makers, and no geographic parameter has been added to the capitation formula.

Recently, the system has started seriously considering adding a quality parameter to the capitation formula, in order to encourage health plans to invest in quality of care.

Allocation of resources by the health plans across regions and sub-units

While the government has put in place a regional organization of public health services (see the section on *Health care delivery*), it has not established a regional structure for curative services. Each health plan is free to determine how to organize itself geographically and how to allocate the resources at its disposal across geographic areas.

All of the health plans have regional managements to which they devolve resources. Each regional management is responsible for meeting the health care needs of members residing in that region, within a prescribed budget. They are also expected to meet various market share goals in the region. The number of regions ranges from 5 in Leumit to 8 in Clalit and, in general, the geographic borders of the regions differ among the health plans. Some health plans also have management units at the sub-regional or district level to which resources and responsibilities are further devolved.

In allocating resources among the regions, the health plans take into account a number of factors. One major factor is health care need based on the number of people in the region, their age mix, their health status, etc.⁵² Other considerations include the previous year's budget and utilization rates and competitive pressure from the other health plans. Some of the health plans have capitation formulas to determine the allocation of resources; in others these formulas serve as guides only.

Clalit's allocation process is somewhat more complicated as it also operates a network of 8 acute hospitals. Until a few years ago Clalit hospital budgets were largely determined prospectively and were not dependent on the volume of services provided to Clalit regions in that particular year. The accounting between the hospitals and the region in those years was mainly on paper. Several years ago Clalit instituted a 'purchaser-provider split', somewhat akin to, and perhaps partly inspired by developments in the United Kingdom's National Health Service (NHS). As a result, hospital budgets are no longer fully guaranteed and will be decreased, though not in a simple, linear fashion, if they sell fewer services than planned to Clalit regions. Clalit regions, on the other hand, can reduce their payments to the hospitals by purchasing fewer services from them. Here, too, the relationship is not a simple linear one, and central management prescribes limits on the extent to which regions can reduce their purchasing from particular Clalit hospitals. Still, this change has given the regions an increased financial incentive to reduce hospital utilization, either by moving care to community settings when this would be cheaper or by avoiding unnecessary care altogether.

Determining the health plans' mix of inputs

The health plans are largely free to determine their mix of inputs, such as nurses, physicians, purchased services and pharmaceuticals, and how they will allocate their resources among primary care, specialty care, inpatient care and so on. The main constraints are budgetary restrictions and prices. The total funding that a health plan receives from the government is determined by the annual decision on total NHI funding levels, the number of members in the health plan and their age mix. Prices for many of the health plans' inputs are set by the government, collective bargaining agreements or market forces. For example, while the health plan lobbyists can influence the hospital per diem rate and the price of hospital outpatient services, ultimately these are set by the government (see below).

⁵² The focus here is on the prevalence of specific chronic illnesses as measured primarily via the number of patients taking certain medications on an ongoing basis.

Once the budget – particularly the government funding level – and the prices are given, the health plans have a great deal of influence over the volume of each type of input and type of service. And, in fact, the health plans differ markedly in how they allocate resources across different types of services. For example, in 1999 61% of Clalit's spending went to hospital care, compared with 41% in Maccabi, partly because a larger proportion of Clalit's outpatient specialist care is provided in hospital outpatient departments (OPDs). On the other hand, pharmaceuticals, excluding co-payments, accounted for only 10% of Clalit's spending, compared with 16% in Maccabi. This difference is partly accounted for by the larger volume of discounts that Clalit is able to negotiate with pharmaceutical manufacturers and distributors due to its size.

Financing capital investment

In the hospital sector capital investments are funded largely by the Ministry of Health through its capital budget. Philanthropy, particularly from abroad, also plays a major role.

In the health plan and community sector direct capital grants from the Ministry of Health play a much smaller role, particularly in recent years. A great deal of capital spending is financed from operating revenue and/or bank loans, which must be repaid from future operating revenue. This is perceived as a major problem. When the NHI funding level was calculated for 1995, the need for capital expenditure for community services was taken into account, but was not adequately budgeted. In addition, the borrowing ability of the health plans has been constrained in recent years by various 'financial rehabilitation agreements' with the Ministry of Finance. After 1995 per capita spending on capital investments in the health plans at first increased dramatically, but then decreased. The increase was due to the health plans' efforts to increase their market share by improving existing and building new facilities. The 1998 Budget Arrangements Law capped total health plan capital spending at NIS 200 million per year, reacting to wide consensus that much of the building spurt was duplicative and wasteful.

The availability of resources is not the only type of constraint on capital investment in Israel. The Ministry of Health also operates a Certificate of Need programme. Ministry approval is required before purchasing various types of expensive equipment, such as magnetic resource imaging (MRI) scanners, adding hospital beds or opening expensive units, such as transplant, in vitro fertilization or cardiac catheterization. The Ministry is charged with determining whether the applicant has the clinical expertise to operate the equipment or

service at a high professional level and whether the country or region needs an expansion of the service in question.

As in other countries, in practice these determinations are not made purely on the basis of rational planning criteria; political pressures, the availability of philanthropic funds from abroad and other factors also play a role.

Payment of hospitals

Approximately 80% of hospital revenue come from sales of services to health plans. Other sources of revenue include the Israel Defence Forces (IDF) medical corps, private insurers, the National Insurance Institute (NII), for maternity care, and out-of-pocket payments. This section focuses on revenue from the sale of services to the health plans and on arrangements in what are referred to in Israel as ‘public hospitals’, comprising both government⁵³ and non-profit hospitals. In 2001, public hospitals account for approximately 96% of the acute beds and 91% of acute admissions.⁵⁴

Before 1980 historical criteria and top-down budgeting processes mainly determined the revenue of individual hospitals. Over the years hospital revenue has become more and more a function of the sale of services. Currently, the reimbursement of public hospitals in Israel takes place in the form of fees-for-service, per diem fees and case payments, and is subject to a revenue cap.

The fee-for-service charge list

A fee-for-service charge list established by the government regulates payment for hospital outpatient care in ambulatory clinics and emergency departments. Payment for outpatient services account for about a quarter of hospital revenue, a share that has increased markedly in recent decades. Although the charge list has undergone minor revisions from time to time, no major revisions have been undertaken recently. As a result, there is widespread recognition that the charge list has not kept up to date with technological changes and that relative prices for the various items on the list do not accurately reflect differences in resource use. Moreover, the fee schedule is, in general, considered to be over priced, both in relation to the true cost to the hospital and the prices available at competing non-hospital facilities, which has been one of the factors

⁵³ There are no full-scale, independent military hospitals in Israel. Military personnel receive inpatient care in general hospitals. The IDF operates several small hospital-like facilities, which can handle various simple procedures but are much more limited in scope than general hospitals.

⁵⁴ Private hospitals can account for 8% of acute admissions despite the fact that they only provide 4% of acute beds because they focus on less intensive, short stay admissions.

accounting for the movement of secondary care from hospitals to community settings in recent years.

It is important to note that a slightly different system of reimbursement prevails when Clalit regions purchase outpatient services from Clalit hospitals. In such cases the region pays the hospital a yearly subscription fee for each patient who visits a specific hospital department at least once during the year. There is no additional charge for repeat visits to the same department.

A key issue currently on the agenda is whether, and how, to modify the charge list. There is consensus that the prices for hospital OPD services are too high, and that this leads to a great deal of inefficiency. However, there is major disagreement between the hospitals and the health plans regarding how this problem should be addressed.

The hospitals are willing to support a decrease in prices, but in return want the government to increase prices for days in intensive care units (ICUs). Moreover, they want ICU price increases to be such that they will offset price decreases in ambulatory settings, under the assumption that there will be no change in volume. The health plans are willing to accept an increase in ICU prices in return for a decrease in OPD prices, and some of them are even willing to accept the notion that the changes be made with an eye to keeping hospital revenue unchanged. However, they are unwilling for calculations to be based on the assumption that volume will remain unchanged. The health plans argue that if ICU prices increase, hospitals will substantially increase ICU volume and will also pressure the government to approve additional ICU units. As the health plans have little control over ICU utilization rates and as, unlike in the case of OPD services, there is no community-based alternative to ICU care, the health plans fear that they will end up paying markedly higher hospital bills.

This issue remains unresolved, perhaps in part due to the conflict of interest inherent in the Ministry of Health's dual role as regulator and operator of hospitals. The resulting inefficiencies therefore persist.

The per diem rate

Most inpatient admissions are reimbursed on a per diem basis. The per diem is uniform across hospitals and across departments. In recent decades there have been periodic calls to move to a differential per diem, applying a higher rate for ICUs, for example, but no action has been taken due to concerns that they would encourage the proliferation of more costly beds and units.

The per diem rate is set by the government, through a joint Ministry of Health and Ministry of Finance committee, primarily on the basis of information regarding current operating costs in the government hospital sector. Between

1985 and 1995 the per diem rate more than doubled in real terms, whereas since 1995 it has been relatively stable. This may be related to the fact that the introduction of NHI in 1995 made the government responsible for NHI and health plan financing, which has caused the government to be much more sensitive to the financial situation of the health plans. Furthermore, the health plans have been more involved in the process of setting the per diem rate than in the past and currently serve as official observers on the government committee mentioned above. A further factor may be that recent changes in the hospital reimbursement system (described below) have led to changes in hospital behaviour that have slowed the increase in actual per diem costs, not just those of the government-determined prices.

Case payments

Over the course of the 1990s differential case payments were established for about 30 types of admission. In most cases the defining characteristic is the principal procedure carried out rather than the diagnosis. Case payments were established in order to shorten waiting times, primarily for more expensive procedures and for moderately-priced procedures with short hospital stays, for which the per diem compensation was neither fair nor sufficiently attractive. Prior to the introduction of case payments substantial queues had developed for many of these procedures. Since the establishment of case payments, the queues have virtually disappeared. There is even concern that some of the case payments are so high as to encourage unnecessary treatment.

Case payments currently account for about 20% of hospital inpatient revenue in the hospital sector as a whole, but there is great variation among hospitals in the proportion of revenue accounted for by case payments. Shmueli (2000) found that the institution of diagnostic-related groups (DRGs) resulted in reduced lengths of stay, increases in admissions (particularly for those DRGs with the most generous rates), an increase in repeat admissions and no recognizable impact on mortality rates.

The revenue cap

A hospital revenue cap was established in 1995, at the same time as the establishment of NHI, in response to the health plans' concerns that hospitals were inappropriately increasing volume and hence the health plans' expenses. The health plans pointed out that, with the move to NHI, their revenues would be determined largely by the government with little room for their own input (Rosen et al 1998). They also argued that, with little control over their revenue, they needed some protection from potential expenditure increases. Thus the

cap sought to advance two main objectives: reducing the growth in hospital utilization by removing incentives and reducing the health plans' expenditure for services above the cap.

The hospital revenue cap system constitutes the major reform in the system of hospital payment in Israel in recent years. The system is complicated. To understand how it works, two issues need to be considered: what happens to utilization above the cap and how the cap is set. Furthermore, modifications of the cap system have taken place several times since 1995, with the most important revision in 1997. A full detailing of the cap system can be found at www.jdc.org.il/brooksites/interface. This section presents the basic parameters.

What happens to utilization above the cap? In the initial formulation of the cap, from 1995 to 1996, the health plans were fully exempted from paying for services above the cap. Since 1997 the health plans are required to pay 50% of the usual rate for services – also referred to as 'resource utilization' or 'billings' – above the cap. The 50% rate is generally accepted as a reasonable estimate of the proportion of hospital costs that are variable, so the new 50% cap should encourage hospitals to use need, rather than financial gain, as the primary determinant of hospital volume.

How is the cap set? Each year a revenue cap is set by the government for each hospital *vis-à-vis* each health plan. In the first year of the new regime the cap was a function of the previous year's spending plus an adjustment to reflect projected health plan growth for the coming year. At present the cap is based on the previous year's cap with adjustments to reflect health plan growth in the past year and the extent to which the health plan utilized services in excess of the cap in the past year. For the health care system as a whole, the average increase in the cap has been constrained to approximately 1% in recent years.

The cap system has apparently achieved its two main objectives (Rosen et al 2000). Since 1995 the growth in per capita utilization of hospital services has stabilized. Moreover, the cap-related discounts have in themselves generated substantial financial savings for the health plans. However, the cap has come under mounting criticism from several sources:

- the hospitals argue that, even if the cap system makes sense, the cap needs to grow more rapidly than the current 1% national average, in order to reflect growing labour costs and new technology;
- some hospitals argue that the cap system favours those with a high concentration of basic services, where marginal costs are well below 50%, and is unfair to those hospitals with a high concentration of tertiary services with high marginal costs;

- hospitals in areas with relatively rapid population growth argue that the current system is unfair to them as they are particularly prone to exceed the cap through no fault of their own;
- conversely, health plans with relatively low rates of membership growth argue that they are discriminated against by the cap, as competing health plans more readily reach the cap and benefit from cap-related discounts.

By early 2001 there was widespread recognition that changes needed to be made. However, there were differences of opinion among interested parties and among disinterested observers on the nature of the changes required. Some favoured retaining the cap approach and making adjustments to deal with inequities *vis-à-vis* low-growth health plans and hospitals in high-growth areas. Others called for an end to the system of caps and its replacement with a system of UK-like negotiated volume contracts between individual health plans and hospitals. The Director-General of the Ministry of Health appointed a high-level committee to explore these and other proposals. In January 2002 legislation was passed for a hybrid approach. The cap remains in place⁵⁵ as the default reimbursement system, after adjustments of the type noted above. However, the health plans and hospitals are allowed to negotiate contracts which, if both sides agree, take the place of the cap. These contracts also require Ministry of Health approval, to ensure that major external factors are taken into account. In the years ahead it will be important to monitor the extent to which such contracts are concluded, as well as their impact on the health care system.

Both the cap system and the contracts, depending on how the latter are written, involve risk sharing between hospitals and the health plans. For several years health policy analysts, most notably Ofer and Grau (1997), had been talking about the need to put hospitals at some risk for increased utilization.⁵⁶ The discussion centred mainly on making the health plans own hospitals or promoting regional capitation agreements between hospitals and the health plans. While those specific proposals have not been adopted on a wide scale, some of the key principles underlying them have been incorporated in the cap system and the newly-adopted contracting legislation.

Payment of physicians

This section begins with a summary of the main forms of payment for physicians in Israel and then goes on to provide an overview of the collective bargaining

⁵⁵ The cap was determined primarily as a function of average actual utilization in the three previous years.

⁵⁶ At that point the main concerns of policy makers were over supply and over utilization; the queues of the previous decade had been largely addressed by differential case payments.

process for physicians and recent developments in their wage levels, followed by a discussion of several major issues related to physician reimbursement considered by the 'Public Commission' appointed by the Prime Minister in June 2000. Finally, there is a brief mention of two emerging issues in physician compensation that were highlighted at a major 2001 convention of Israel's health care leadership.

Current forms of reimbursement

Primary care physicians

Approximately 80% of Clalit health plan members – that is, 40% of the population – receive primary care from Clalit owned and operated clinics. Within their neighbourhood clinic, people are free to choose their primary care provider (PCP) and can switch periodically. In practice, only a small percentage every year actually switch PCPs.

The clinic-based PCPs receive a base monthly salary, primarily experience-based, and a monthly capitation payment for each member on their list above a prescribed basic number. What counts in determining actual list size and the additional compensation in Clalit is whether the individual is enrolled with the physician. For purposes of compensation, it does not matter whether or not the individual actually visited the physician. In Israel this system is referred to as 'passive capitation'. In determining actual list size, individuals over age 65 or under age 3 count for more than others, reflecting their greater utilization. There is no penalty for caring for fewer than the prescribed number of individuals. A physician's age and years of experience affect his or her monthly salary, the number of hours he or she is expected to work each day and the basic list size, above which there are additional per capita payments.

The base salary, the capitation rate and the prescribed basic list size for clinic-based physicians are all determined in a collective bargaining agreement between the IMA and Clalit. The agreement also calls for special payments for house visits and for special physician-initiated general assessment visits, which are much longer than patient-initiated visits. Physicians working in rural areas or those working split shifts, with a mid-day break, also receive special monthly payments.

Approximately 5–10% of Clalit members receive their primary care from independent physicians (IPs) at facilities operated by the IPs themselves. The IPs are paid a capitation rate set unilaterally by Clalit, reflecting the number of individuals on their list, irrespective of whether or not the individual actually visited the IP.

In the other health plans, most PCPs work as IPs. In some cases they are paid on a passive capitation basis, similar to the Clalit system. In other cases they are paid on a quarterly active capitation basis, where payment is a function of the number of health plan members who visited the PCP at least once in the past quarter, with no additional payments for repeat visits within the quarter. All of the other health plans also engage some PCPs in facilities owned and operated by the health plan. They are typically paid on a salary basis.

While the other health plans do have physicians' associations, and they are consulted regarding possible changes in payment rates and systems, these health plans do not engage in collective bargaining *per se* or sign any formal collective bargaining agreements. It is generally acknowledged that wage levels in the non-Clalit health plans are, to some extent, influenced by changes in the collectively negotiated wage levels in Clalit.

Community-based specialists

Clalit has two main groups of community-based specialists: independent and salaried. Independent specialists provide the lion's share of community-based specialist care. Most of them work in their own offices rather than in clinics owned and operated by Clalit. They are paid on an active capitation basis, but also receive fee-for-service payments, based on a fee schedule, for various procedures. There are limits on the quarterly volume of certain procedures, above which physicians do not receive fee-for-service payments. Clalit also works with a small number of independent specialists who work in Clalit clinics. Some of them receive a flat rate per shift, while others are paid on the basis of the number of visits and/or the volume of procedures performed.

Almost all salaried specialists work in Clalit owned and operated clinics. Their salary is partly a function of their extent of full-time work, professional rank and years of experience. In addition, for each daily session the physician receives an additional payment for seeing more 'first time' patients – that is, those making their first visit in three months – than is specified in the norm for a session, but there is no penalty if the number of such visits is below the norm. The per session norm varies primarily by specialty, but is also affected by the physician's age and years of experience, as well as the season, with lower norms in the summer. Older physicians and those with more experience not only have lower visit norms per session, but also are required to work fewer hours per session. A similar reduction in work hours and visit norms per session applies to all physicians in the summer months. Physicians can get additional payments for procedures on a contractually agreed list, and for initiating a special longer-than-average general assessment visit. Finally, there are special payments for teaching residents and for carrying out administrative duties.

In the other health plans, community-based specialists are typically paid on the basis of a 'point' system which takes into account the number of sessions they work (3–4-hour periods), the number of visits and the number and nature of special procedures performed.

Hospital-based physicians

Salaries constitute the primary component of hospital physicians' compensation. The salary level is primarily a function of clinical/administrative responsibility and years of experience. The salary scale is determined via a collective bargaining agreement between the IMA and the employers: the government, particularly the Ministries of Health and Finance, Clalit and Hadassah. Compensation for active night rotations and on-call duty also constitutes a major component of payment, but the IMA views this as problematic, since such payments are not made during vacations and do not figure in pension calculations.

In addition to a salary, sought-after physicians can earn additional funds in several ways:

- some of them take on private work, either in private hospitals or in community-based settings, typically on a fee-for-service basis;⁵⁷
- most government and Clalit hospitals have established health trusts, which are related but separate legal entities authorized to sell surgical and outpatient clinic services to the health plans during late afternoon, evening and night hours; the health trusts engage sought-after physicians to work after hours, usually on a per-visit or per-operation basis, determined by negotiation between the trusts and the individual physicians;
- the voluntary hospitals in Jerusalem operate *Sharap*, which are private medical services in public hospitals, paid for primarily out-of-pocket and by supplementary or commercial VHI, also on a per-visit or per-operation basis; in one Jerusalem hospital the individual physician sets the rates, while in another they are set by the hospital, in consultation with a committee of physicians;
- Clalit hospitals make special 'per session' payments to senior physicians who work a second shift in the hospital OPDs; these payments, which tend to be generous, were initially instituted to deal with what were perceived to be lengthy queues;⁵⁸

⁵⁷ The scope of private work is limited by contract in the case of physicians employed in government hospitals; however, these restrictions are not always strictly enforced.

⁵⁸ It is not clear whether lengthy queues were ever as widespread as they were perceived to be. It is even less clear whether there are any lengthy queues today.

- some physicians in government and Clalit hospitals take illegal, under-the-table payments that are disapproved of by all key health care system actors; the scope of this phenomenon is unknown and subject to much debate; the physicians are generally paid on a per-visit or per-operation basis, at rates set by themselves.

Collective bargaining, strikes and physician wages

On the employer side of collective bargaining, the dominant force has been the Ministry of Finance, which has usually approached the negotiations with an eye on the agreement's impact not only on the physician wage bill, but also on public sector wages in general. There is a high degree of informal linkage between the physicians' collective bargaining agreements and those of other public sector employees. Accordingly, in those cases where the Ministry was willing to grant a wage increase, it preferred the increase to take a form unique to physicians, such as payment for evening/night rotations and on-call duty, thereby limiting the spill-over effects to other sectors. Recently, the Ministry has taken a broader view of the collective bargaining agreements and is paying increasing attention to the potential impact of these agreements on the overall functioning and efficiency of the health care system.

In the collective bargaining process the Ministry of Health often finds itself caught in the middle between the Ministry of Finance and the IMA. It shares some of the budgetary concerns of the former, but is also sympathetic to the physicians' wage concerns. Because the Ministry also has the lead responsibility for ensuring public health, it tries to avoid strikes and to ensure that the agreements contribute to the quality and accessibility of health services.

As indicated by Yishai (1990), the IMA is a uniquely powerful union, even for Israel where unions in general tend to be quite powerful. This is due to a number of factors, including the high status of physicians, control over access to a life-saving public service and the very large proportion of physicians enrolled in the IMA. The IMA is affiliated with Israel's General Federation of Labour, the Histadrut, but due to the factors listed above it has been able to operate with a fair degree of independence.

The IMA has two major roles: as a physicians' union, seeking to advance their interests in the areas of wages and working conditions, and as a professional association dedicated to advancing the public good through such activities as promoting medical training, ensuring quality standards for physicians, and influencing health policy in general. This section focuses on the first role. Its second role is touched upon in other sections of this report.

Physicians' strikes have been a frequent occurrence in the Israeli health care system, with strikes taking place in 1973, 1976, 1983, 1987, 1988–90

(intermittent) and 1999. Of particular note is the long-lasting physician strike of 1983 in which most of the nation's hospitals were forced to work on a 'week-end basis' for nearly four months. The strike culminated in a hunger strike and mass exodus from the hospitals by many physicians and resulted in significant collective bargaining gains. However, many believe that the strike also damaged public trust in the physicians and their representatives.

Numerous analysts attributed the 1983 strike to the erosion of physician pay levels relative to other public sector employees, particularly for more junior physicians (State Commission of Inquiry 1990; Benjamini and Gafni 1984). However, Sussman and Zakai (1991) argue that a closer look at the data reveals that wages had not eroded in the period preceding the strike. Instead, they attribute the strike to the fact that the rapid growth that characterized the health care system in the 1970s came to an end in the 1980s, thereby substantially reducing opportunities for advancement through the professional ranks. Sussman and Zakai argue that while advancement through professional ranks confers wage and other benefits in all sectors, these effects are far more pronounced for physicians than for other public sector employees in Israel.

The gains of the 1983 strike were largely eroded in the second half of the 1980s, especially for more junior physicians. New wage agreements were concluded in 1991 and 1994. The physicians again received a major wage increase, particularly the senior physicians. These included, for example, special payments for work in the afternoon shift in a national initiative to reduce queues for elective procedures. It should be noted that there are varying opinions about the extent to which these queues were 'real' rather than created by the physicians in their efforts to secure additional income.

Sussman and Zakai (1997) point out that, paradoxically, the pay increases in the 1990s came at a time when Israel was absorbing large numbers of immigrant physicians. The major increase in the supply of physicians did not prevent a substantial increase in physician wages, a development made possible by the fact that these are not determined primarily by market forces. Sussman and Zakai contend that large wage increases and additional opportunities for advancement to the highest paid ranks were granted to the experienced, veteran Israeli physicians in return for their acquiescence in the expansion of work opportunities for immigrant physicians.⁵⁹ The physicians were also expected to support structural reforms in the health care system, such as NHI, the

⁵⁹ Another component of the package, according to Sussman and Zakai, was that the licensure and work absorption processes for the immigrant physicians would be drawn out over several years and that the immigrant physicians would be absorbed primarily in the lower professional ranks and salary grades. However, it is also possible to argue that the lengthy licensure and work absorption process was driven more by quality concerns than by efforts to promote 'guild' interests.

transformation of government hospitals into hospital trusts and efforts to reduce queues, as well as various changes in the public sector wage structure general.

The latest physicians' strike took place in 2000. The physicians called for substantial pay increases, limits on the number of consecutive hours interns and residents are expected to work, the right to private practice within public hospitals and recognition of payments for evening/night rotation and on-call duty as part of the base pay for calculating vacation pay and pensions. The physicians also called for enhanced funding for the health care system as a whole and other financial and structural measures to strengthen the public system.

The strike led to two major developments. First, the IMA agreed not to strike for 10 years and the parties agreed to submit unresolved disputes to binding arbitration. Second, the government agreed to the formation of a blue-ribbon public commission to examine the overall functioning of the health care system, with special attention to the status of physicians. For a full discussion of the work of the public commission, see the section on *Health care reforms*. In addition, some immediate changes were made to physicians' wages and limits were placed on the number of consecutive hours interns and residents are expected to work. The latter has substantially increased hospitals' costs, but at the same time has probably improved the quality of life for physicians-in-training and their families and may also have contributed to the quality of patient care.

There are no current, reliable statistics on how physician pay in Israel compares with other countries. One common measure in the international literature is the ratio of the average physician wage to the average wage in the economy. On this measure, American physicians tend to rank highest, well above physicians in various European countries. Reinhardt (1985) reported that in the mid-1980s the ratio was approximately 5 in the United States, 4 in Canada, 3 in Germany and France and 2 in the Netherlands. The prevailing impression is that, at least until the 1990s, Israel ranked far lower than the United States on this measure and was similar to European countries at the low end of the spectrum. However, as the United States has been the most common site of fellowships for up-and-coming Israeli physicians, the American physicians' particularly high incomes no doubt contributed to Israeli physicians' perceptions that they were being underpaid. However, Israel's relative ranking has probably increased over the past decade, with the position of physicians relative to other workers improving in Israel and declining in other countries, including the United States.

Emerging issues

Two emerging issues related to physician compensation in the community were highlighted at a June 2001 gathering of the Israeli health care system leadership (National Institute 2002). The first is whether quality of care should be taken into account explicitly in physician payment schemes. No concrete changes have taken place and there is a great deal of debate regarding the desirability and feasibility of such a move. However, at least one of the health plans (Maccabi) is seriously considering incorporating quality measures into its reimbursement system, and another (Clalit) supported movement in this direction in its submission to the public commission mentioned above (see the section on *Health care reforms*).

The other emerging issue is whether physicians should be at financial risk for the health care expenditure they generate – that is, whether they should be rewarded for containing costs. Here, too, there is a great deal of controversy. The prevailing thinking at the moment seems to be that, while it might be desirable to give physicians an incentive to control costs at the level of the community clinic, typically a group of 4–8 physicians with nursing and administrative support, it would not be appropriate to do so at the level of the individual physician. Clalit began experimenting with ‘clinic decentralization’ and budget holding over a decade ago (Gross and Nirel 1997) and has begun a nationwide effort to hold clinics accountable for both internal and external health care costs. Clinics that contain costs while meeting various patient satisfaction and quality goals are given additional budgetary resources. However, this does not yet translate into higher pay for individual physicians.

Payment of other health care professionals

Most nurses work as salaried professionals of large organizations such as hospitals and the health plans. The key determinants of their salaries, established through collective bargaining agreements, are their role in the organization, years of experience and level of education. There are additional payments for evening, night and weekend shifts. The last major nursing strike was in the late 1980s, leading to the establishment of the minimum required nurse-bed ratios that are in force today.

Most Israeli dentists work as independent solo practitioners. They are paid on a fee-for-service basis and, generally speaking, are free to set their own fee schedules. Ten per cent of the Israeli population has commercial VHI covering dental care, which is usually sold to groups. An increasing proportion of dentists are working for commercial dental chains or the health plans. Although health plan dentists have several pay scales based on patients’ method of payment –

for example, commercial or supplementary VHI – they tend to be paid on scales similar to those of commercial dentists. It is noteworthy that dental fees have dropped substantially over the past decade, due in part to the influx of large numbers of immigrant dentists and the growth of the dental chains.

The payment of pharmacists who work for the hospitals or the health plans is governed by a collective bargaining agreement negotiated between the employers and the Israel Pharmacists' Association. As usual in the public sector, payment is in the form of salary and depends primarily on a pharmacist's role in the organization and years of work experience. Pharmacists working for the large chains are also paid on a salary basis, but their salary level is set by market conditions. There are sometimes bonuses for large volume, as measured in the number of prescriptions or sales revenue. Independent pharmacists are essentially small businessmen and their compensation consists of the profits from their businesses.⁶⁰ A pharmacy's revenue from any prescription it dispenses is determined by law. The allowable mark up is set as a percentage of the price, ranging from 37% for items less than NIS 38 to 17.5% for items above NIS 193.

⁶⁰ The Ministry of Health sets maximum prices, where the permitted percentage mark up from the wholesale price declines with increases in the wholesale price. These constitute only a maximum, with the health plans and other insurers pressuring the pharmacists for discounts from these prices.



Health care reforms

This section reviews four major reform efforts: the NHI law, the mental health care reform, the hospital trusts initiative and the Patients' Rights Act. Although there have been other reform initiatives in the health care system in recent years, they are not reviewed here due to space limitations. Before discussing the four reform efforts, the section provides an overview of the Netanyahu Commission, which laid the groundwork for much of the reform activity since 1990. Finally, the section presents information on the public commission that was formed in 2000 to examine the overall functioning of the health care system, with special attention to the status of physicians.

The Netanyahu Commission

Most analysts would agree that the modern history of health care reform in Israel starts with the work of the Netanyahu Commission. The section on organizational structure and management described the commission's antecedents, mandate and modus operandi and very briefly summarized its report. This section provides additional details of how the commission viewed the problems of the health care system and its recommendations.

The minority report, written and endorsed by one of the five commission members, called for greater targeting of the reforms on the main areas of health care system dysfunction and for less radical, more evolutionary change.

The commission's findings

The commission highlighted the following problems in the Israeli health care system at the end of the 1980s:

Inadequacies in the services provided to the public

The public system had not responded to rising expectations and standards of living. There was a lack of sensitivity to patients' privacy, time and freedom of choice of physician. Substantial queues had developed while expensive equipment lay idle. Strikes frequently disrupted the provision of services. Some physicians engaged in 'black market medicine' – care provided illegally on a private basis in public facilities.

Constraints on the Ministry of Health

The commission noted that the health care system was fragmented, with the Ministry of Health sharing a great deal of decision-making power with the Ministry of Finance, which determines its budget, and Clalit, the largest health plan. This fragmentation had hindered the ministry's ability to establish and implement a clear and consistent national health policy.

In addition, the ministry was heavily involved in the operation of services – for example, it owns 40% of the hospital beds – which detracted time and energy from policy making and monitoring. Serving as both provider and regulator also entailed real and perceived conflicts of interest.

Moreover, key ministry decisions had been influenced by political and other inappropriate considerations. Finally, due to the lack of an overall policy, important topics had not been given the priority they deserved. Prevention and health education had not received adequate resources. Human resources planning, regulation of technology diffusion and quality assurance activities were deficient. Information systems had suffered from many years of neglect. In this policy vacuum, providers and insurers engaged in competition that produced wasteful duplication. Far too much attention was given to enhancing prestige rather than meeting real societal needs.

Vague financing and budgeting procedures

The Ministry of Health's budget was determined by the Ministry of Finance without a professional analysis of the expanding need for funds in light of population growth and ageing and technological advances. The division of responsibility in the provision of services between the government and the health plans had not been spelled out in legislation. Government spending on health care services was channelled through a variety of ministries, without sufficient coordination. The system lacked incentives for increasing efficiency. Finally, health insurance premiums were set in a way that did not take costs into account.

Sub-optimal organization and lack of managerial tools

The system was overly centralized, especially the Ministry of Health and Clalit. Wage policy was controlled centrally by the Ministry of Finance, which limited responsiveness to local conditions and institution-specific rewards for increased efficiency. In addition, there were no uniform financial or other reporting requirements. Furthermore, the commission found that there was a critical shortage of trained managerial personnel and a lack of continuity between hospitals and community providers.

Low levels of employee satisfaction and motivation

Physicians and other professional groups felt that they were underpaid. In addition, health plan hospitals paid their physicians and other employees substantially more than government hospitals for equivalent work. The commission called for major changes in the organization and financing of health services. Some of these focused on the health insurance system, while others focused on the hospital system; relatively little attention was given to the organization of community-based services.

The commission's recommendations

The Commission made the following key recommendations:

Legislation for NHI

The report called for swift legislation to introduce NHI to ensure universal health insurance coverage, provide free choice of competing health plans, define a minimum benefits package, set maximum waiting times for service provision, define how the health care system would be financed and provide a legal basis for government regulation of the health plans. The proposed benefits package went beyond those then guaranteed by most of the health plans by including institutional long-term care, psychiatric care, additional preventive services, treatment abroad that could not be carried out in Israel and dental services for children and, to some extent, elderly people.

Reorganization of the Ministry of Health

The Ministry of Health would relinquish day-to-day operation of government hospitals, instead focusing on planning, policy making and monitoring, with highly professional units engaged in developing policy on technology diffusion, quality assurance, information system development and health care system financing. A separate National Health Authority responsible for regulating the delivery system would be set up to operate through regional health offices (see below).

Regionalization, decentralization and enhanced competition

Service provision and regulatory functions would be decentralized, primarily on a regional basis. All hospitals, including those of the government and Clalit, would be run as self-financed non-profit entities, with budgetary authority delegated to department heads. The country would be divided into five or six regions, each with an office of the National Health Authority. This regional office would be responsible for certifying and monitoring the regional (decentralized) health plans, hospitals and other providers, according to policy established by Ministry of Health. The regional health plans could be decentralized sub-units of national health plans, but they would have to be financially independent of their parent organizations. Encouragement would be given to the regional health plans and consumers would have free choice of health plan. The health plans would be non-profit entities and would decide where to hospitalize patients. Hospitals would compete to sign contracts with health plans within their region. Patients would be channelled to hospitals outside their region only in exceptional circumstances – for example, for highly specialized services available only at national centres.

A centralized financing system and capitation payments

The public system should be funded primarily by payroll taxes on employers and employees, to be collected by the National Insurance Institute (NII), with supplementary funding from general tax revenue and other sources. The health plans would no longer be permitted to set premium rates or to collect premiums directly from their members. This would largely disconnect the health care system from politically affiliated labour organizations. Funds from all sources would be channelled into a single pool. A small portion of this general pool of funds would be set aside as a government-controlled reserve that would be used to finance major capital expenditure.

The remaining resources – that is, the bulk of the general pool – would then be distributed among regions according to a capitation formula that would take into account various indicators of need and the extent to which a region lacked basic services and infrastructure. Within each region the funds would be distributed to regional health plans on the basis of a capitation formula that would reflect the characteristics of each health plan's membership. Membership of a regional health plan would be limited to residents of that region and funds received by the health plans could only be spent only on providing health care to members in that region.

The introduction of private practice in public hospitals

Private medical services were to be allowed in public hospitals, subject to a series of limitations that would minimize inequity. In return for out-of-pocket

payments, the private medical service would allow patients to choose their physician and better accommodation, but would not permit patients to jump queues for treatment. Private providers would still be allowed to operate, but efforts would be made to ensure that they did not flourish at the expense of the public system. Commercial and supplementary VHI would be encouraged.

Financial incentives to increase productivity and equal pay for equal work

A uniform national wage agreement should be established to remove the previous situation in which Clalit hospital physicians earned more than their counterparts for doing equivalent work in government hospitals. Wage scales would be rationalized and most of the distorting wage supplements would be included in the base salaries. The national agreements would enable efficient hospitals to share savings from increased productivity with employees. Senior managers and professionals would be employed on a personal contract basis.

Information systems and research

The government, the health plans and providers should all invest heavily in information systems and planning. Among the priority areas mentioned were human resources planning, departmental budgeting systems, capitation formulae for distributing funds to health plans and regional levels and quality assurance. A half per cent of the parallel tax collected from employers by the NII would be set aside for general health research. The Office of the Chief Scientist of the Ministry of Health would set the policy for the distribution of these research funds.

Implementation

In its summary the majority report noted that implementation of its recommendation would entail significant legislative and organizational changes. A four-year timetable for implementation was proposed.

NHI

The establishment of NHI sought to address several problems, many of which were highlighted by the Netanyahu Commission, including incomplete insurance coverage, lack of clear delineation of health plan members' rights to services, limitations on free of choice of health plan, cream skimming by health plans, the development of a two-tier system and the health care system's financial instability.

Prior to the enactment of NHI, approximately 5% of the population – about 200 000 people – were uninsured. Uninsured rates were highest among the Arab population (12%), residents of the northern region (10%) and people

aged 15–34 (8%). Lack of insurance coverage was probably a significant barrier to access to health care for the uninsured, but even before the introduction of NHI, Israel's insurance problem was relatively small by international standards; in the United States, for example, over 15% of the population are uninsured. Moreover, the problem of lack of insurance coverage was probably not the primary factor leading to the establishment of NHI; the uninsured proportion of the population had been stable for over two decades and numerous attempts to pass NHI legislation before 1995 had not succeeded.

One factor that may explain the 1995 success was growing public dissatisfaction with the health care system. There were more and more reports of people in need of serious treatment who could not get it from their health plans in a timely way, despite having paid their health plan premiums on a regular basis for years. The media were filled with stories of people paying privately for expensive treatment and of individuals seeking donations to finance organ transplants, cancer treatment and other expensive care abroad. Health plan members' rights to services were not adequately defined, so that when budgets became tight the health plans were able to use their discretion in deciding which services not to cover.

Another key issue was that not everyone had free choice of health plan in practice. Some of the health plans avoided and even rejected ill, poor or elderly people. A 1993 survey (Rosen et al 1995) found that 4% of the adult population had been rejected by a health plan during their lifetime, and that another 8% did not try to switch to a health plan they considered better than their current one because they thought they would be rejected. In many low-income areas Clalit, the health plan owned by the Histadrut, was the only health plan available, resulting in a de facto limitation of choice. Choice was also limited for people employed by Histadrut-owned firms who were required to join the Histadrut and, therefore, Clalit.

Partly as a result of cream-skimming by some of the health plans, the proportion of elderly members varied substantially across the health plans. For example, at the end of 1994 almost 12% of Clalit members were over age 65, while the comparable percentages for Maccabi and Meuhedet were 6% and 5% respectively. Similarly, Clalit had a higher proportion of members with chronic illnesses, even within a given age group, and a higher proportion of low-income members.

Clalit was seriously competitively disadvantaged due to the fact that premiums were related to income, even though a health plan's expenses are of necessity a function of the health care needs of its members. For example, in 1992 the amount of money per age-adjusted member that Maccabi was able to spend was almost 30% higher than that which Clalit was able to spend, which

led to problems for Clalit and its members. For the members it meant that the needs of elderly and poor people, concentrated in Clalit, could not be met as well as those of stronger population groups, who were concentrated in the smaller health plans. Moreover, these more vulnerable populations were not always able to switch to other health plans. Young and middle and upper class individuals who were courted by the smaller health plans could and did switch, however, and Clalit's market share declined from over 80% in the early 1980s to less than 67% in 1993. In addition, due to its high concentration of needy members, managerial inefficiency and the fact that the 'unified tax' – the voluntary membership dues alluded to earlier – went to the Histadrut rather than Clalit, by the early 1990s Clalit had accumulated a debt of over NIS three billion. As Clalit insured more than two thirds of the population, its financial instability threatened the stability of the entire health care system.

In the late 1980s and early 1990s concerns about financial stability, cream-skimming, growing inequality and the lack of a legal entitlement to a defined benefits package led to growing consensus on the need for major change. In its 1990 report to the government, the Netanyahu Commission called for the introduction of NHI to address these problems. This recommendation was taken up both by the Likud government then in power and the Labour government that succeeded it. After much debate about the type of NHI needed, the Knesset passed the NHI law in June 1994 and it came into effect in January 1995.

Key components of the NHI law

The NHI law of 1994, one of the most ambitious pieces of social legislation of the 1990s, contains numerous provisions, each designed to address a different subset of the problems listed above:

- the determination that health care is a right means there is universal coverage;
- the delineation of a legal entitlement, guaranteed by the government, to a defined package of benefits is intended to ensure access to needed services and to clarify the obligations of the health plans to their members;
- the institution of a capitation formula to ensure that the health plans have incentives to compete for elderly and poor people (see the section on *Financial resource allocation*);
- the collection of premiums by the NHI rather than the health plans is meant to ensure that all the funds collected are allocated to health care, to make the premium structure more progressive, to sever the link between Clalit and the Histadrut, to increase the efficiency with which funds are collected and to make it possible to cross-subsidize the care of members of health plans with weaker populations, using funds collected from those with stronger populations; under NHI the health tax collected from the members

could be pooled with the parallel tax collected from employers and distributed among the health plans according to the capitation formula;

- the requirement that health plans must accept all applicants, together with the capitation formula, is meant to eliminate or drastically reduce cream-skimming;
- the government's commitment to fund health services at a level reflecting the cost of the benefits package means that if the earmarked 'health tax' collected from households plus the earmarked 'parallel tax' from employers falls short of the specified level, the Ministry of Finance must make up the difference by drawing on general tax revenue; this provision is meant to ensure the financial stability of the health care system;
- a commitment to monitor the law's impact sets aside 0.1% of the health tax for relevant research coordinated by the Israel National Institute for Health Policy and Health Services Research;
- the transfer of responsibility for psychiatric, geriatric and preventive care to the health plans during a three-year transition period, ending on 1 January 1998.

The passing of the NHI law

Though there had been previous attempts to introduce NHI-type reforms, a number of factors made change possible in the mid 1990s. The passing of the NHI law by the Knesset in 1994 was remarkable in that, over the previous four decades, no fewer than 14 attempts to pass similar laws had failed. What were the conditions and the strategies that made it possible for Israel to introduce NHI in the mid 1990s? The following analysis considers the need for health care system change and its precedents, political factors and pragmatic compromise and the broader social, economic and political developments in Israeli society.

In the late 1980s and early 1990s the Israeli health care system faced many problems and these provided the immediate impetus for reform. The bill's backers invested considerable energy in explaining to the public and to policy-makers that these problems were real, severe and pressing. In retrospect it appears very likely that the legislative effort would have stalled had they failed to make the case for the necessity of immediate action. Nevertheless, these problems could not have been addressed had it not been for the availability of new models for their solution. No previous NHI bill included a call for a capitation formula for allocating resources to competing health plans, an idea that played a key role in health care reforms in the Netherlands and in Israel's recent reform of the parallel tax system. Unlike some of the previous attempts

to introduce NHI, the 1994 reform sought to build on the system of competing health plans rather than to replace them with a single insurer or provider, a far more radical approach that engendered automatic opposition from all of the health plans. Moreover, policy-makers were able to draw moral support from health care reform efforts under way in several industrialized countries in making the case for reform in Israel.

The Minister of Health and his team were able to turn these ideas into legislation partly because of their own skilful political manoeuvring and partly because they were able to take advantage of various political, social and economic developments not of their making. A major potential source of opposition was the Histadrut, which opposed the separation of Clalit from the Histadrut, since it provided substantial funding and a powerful organizational base. The Histadrut old guard tried to bury the reform and would have succeeded if Minister of Health Haim Ramon had not resigned from the government in April 1994 and succeeded in his bid to be elected Secretary-General of the Histadrut.

Many observers see Ramon's action as the pivotal point in the legislative history of NHI. However, in the absence of other favourable conditions this act of individual political courage alone would not have brought about the reform. The story really started with the convening of the Netanyahu Commission, an event of major political significance precisely because the commission was apolitical. Many of the NHI ideas put forward in the Commission's report were incorporated into legislative proposals prepared both by the Labour government's Minister of Health and his Likud predecessor. The reform plan's origin in an apolitical commission made it possible for the Likud to support the NHI bill submitted by the Labour party, conditional on the inclusion of those provisions that would weaken the Histadrut.

The bill also benefited from the political strength of its key backers, the Ministers of Health and Finance. The support of the Minister of Finance was crucial, as otherwise the Ministry might well have blocked the legislation out of concern for its implications for future government expenditure. No less important was the political weakness of those who stood to lose most from NHI – the Maccabi and Meuhedet health plans⁶¹ and the Histadrut. Particularly significant was the declining power of the Histadrut in the decade preceding the passage of NHI.

Ministry of Health professionals responsible for moving the bill through the Knesset were guided by the dictum “the best is the enemy of the good”. In issue after issue they opted for practicality over ideological and academic purity

⁶¹ The shift to capitation financing reduced the resources flowing to Maccabi and Meuhedet and increased the resources flowing to Clalit and Leumit.

and for feasibility over conceptual tidiness. Wherever possible the treatment of time-consuming technical issues was deferred until the end of the bill's 3-year phase-in period and/or left to the Ministries to determine at a subsequent date. For example, in the designing of the capitation formula, the Ministry of Health professionals succeeded in their efforts to ensure that the formula would be a simple one that could be implemented immediately, facing down calls for developing a more accurate and more complex formula that would have required years of further research. They were also successful in ensuring that detailed specification of the benefits package was left to a future date, so as not to hold up the passage of the bill. In addition, they made sure that the costing of the benefits package used a methodology that could be implemented in a relatively short time. Likewise, they decided to provide transitional funding to the smaller health plans, who would lose money due to the institution of the capitation formula, for a period of three years.

The bill also benefited from several broader developments in Israeli society. In the early 1990s the country was in the midst of unprecedented economic expansion, with an average annual growth rate of 6%, making it politically easier to introduce new, and potentially costly, entitlements to health care. Also important was a major trend to replace discretionary funding of public institutions with formula-based funding, a change reflected not only in NHI, but also in reforms of the financing of religious institutions and local governments. Finally, the growing interest in protecting consumer rights and free choice was not restricted to health care but was also evident in many other spheres.

Implementation phase one: 1995-1997

The introduction of NHI immediately increased the number of people with health insurance by approximately 5%, the same as the increase in total health plan revenues, so the total per capita revenue remained roughly constant. However, there were two important changes with regard to the composition of health plan revenues. First, whereas in 1994 almost 10% of health plan revenues came from discretionary government subsidies (primarily to Clalit), in subsequent years this was largely replaced by legislatively mandated government funding. Second, the introduction of capitation financing substantially shifted revenues from Maccabi and Meuhedet to Clalit and Leumit. The government provided short-term subsidies to Maccabi and Meuhedet to aid in this transition in 1995 and to a lesser extent in 1996.

In 1995 the health plan system as a whole was in financial balance. Compared to 1994, per capita revenue and expenditure for the health plans as a group remained unchanged. This situation changed dramatically in 1996 and 1997

and the health plans incurred substantial deficits. Per capita expenditure increased by 2%, while per capita revenue declined by 6%.

This period was also characterized by an ongoing argument between the Ministry of Finance and the Ministry of Health regarding the principles that should govern health care system funding levels and the mechanism for setting the annual funding level. The Ministry of Health argued that the funding level should be a function of need and called for a formula to set it as a function of population growth, age mix, input prices and technological advances. The Ministry of Finance maintained that, as in other areas of public activity, health care system funding levels should reflect health needs, but also macro-economic developments and competing budgetary pressures. Accordingly, the Ministry of Finance objected to setting funding levels by formula and instead favoured leaving the priority setting and budgeting decision to policy makers.

In phase one the health plans invested substantial efforts in improving their service levels and upgrading their facilities, mainly in order to attract new members. These efforts resulted in substantial improvements in member satisfaction levels and in various dimensions of the accessibility and availability of services, particularly in Clalit. They probably also contributed to the increase in per capita expenditure levels.

The same period was also characterized by significant marketing efforts and expenditure on the part of the health plans to attract new members. Nevertheless, the rate of switching between the health plans remained at 4% per year, similar to the rate in the years immediately preceding NHI.

On the legislative front, several important changes took place towards the end of this period, most of them geared to controlling the growing deficits in the health plans. The government was given increased authority to monitor and control health plan spending. In addition, explicit limits were placed on their advertising expenditure and freedom to establish new competing clinics in small localities. In addition to the limit on advertising expenditure, health plan marketing practices, which had become quite aggressive, were restricted in several other ways. For example, health plan marketing agents could no longer sign up new members on their own; instead, all requests for transfers or enrolments could only be submitted by members themselves at a government-run postal bank.

Of particular importance was the decision at the end of 1997 to allow the health plans to increase co-payments for pharmaceuticals and to begin charging for physician visits. This appears to have been undertaken primarily as a mechanism for increasing revenue and only secondarily as a mechanism for reducing utilization levels and expenditure.

Another important change was the 1997 cancellation of the health tax on employers. As explained in the section on health care financing and expenditure, the lost revenue was ostensibly made up by increased funding from general tax revenue. However, many observers believe that the loss of this earmarked revenue reduced the bargaining power of the Ministry of Health in annual budget battles.

Little progress was made in easing the Ministry of Health out of its role as a direct provider of services. As described in the section on health care delivery, a major effort was undertaken to prepare for the transfer of responsibility for mental health care to the health plans, but it was abandoned in 1997. In 1999 the Knesset formally decided to amend NHI and leave responsibility for preventive care in the hands of the government rather than the health plans. Finally, the NHI-mandated transfer of responsibility for geriatric care to the health plans was not implemented either, in the midst of continued debates.

Implementation phase two: 1998–2002

This period was characterized by a gradual reduction of the health plans' deficit through various means, including increasing revenue from co-payments, increased government funding levels and cost-reduction measures undertaken by the health plans. The latter appears to have taken a toll in terms of service levels: the biannual JDC-Brookdale Institute NHI Impact Survey indicates that both satisfaction levels and the availability and accessibility of services declined in the 1997–1999 period.

The rate of switching between the health plans has slowed down. While in the pre-NHI and immediate post-NHI period, 4% of the population switched health plan each year, in recent years the annual switching rate has been approximately 1%.

On the financing front, two important developments took place during this period. The Knesset began to designate funds in the order of NIS 150 million a year, or 1% of the cost of the benefits package, specifically for adding new drugs and technologies to the package. In addition, a small portion of government funding to the health plans was made contingent on their meeting designated deficit-reduction targets.

There was a significant increase in the proportion of the population with commercial or supplementary VHI. The main piece of legislation governing the VHI market was passed in 1998, and there have been periodic updates.

In 2000 a three-year contract was agreed upon between the health plans and the Ministry of Health, stipulating the health plans' budget guidelines for 2001–2004. Previously, budget considerations had been dealt with annually. The new

contract included an upward correction of the basic parameters used to determine the long-term health care system funding level. While the contract does shield the health care system somewhat from the recent stagnation of the Israeli economy – as opposed to its rapid growth in the mid-1990s – it is unlikely that the health care system will be fully immune from the major budget cuts expected in 2003.

NHI and equity

NHI was initially expected to enhance equity through several mechanisms, but subsequent developments, several of them related to the 1998 Budget Arrangements Law, are believed to have adversely affected equity.

The two tables below summarize the changes and their expected impact.

Table 11. The expected impact of initial NHI legislation

Change	Expected impact
Universal coverage	Previously 5% uninsured (12% among the Arab population, 10% among residents of the northern region and 8% among people aged 15-34); subsequently 0%
Capitation formula: health plan revenue becomes a function of members' age and numbers rather than income	Increased incentive to attract ill, elderly or poor people or those with large families, including the non-Jewish population
Capitation formula: shift of funds from Maccabi and Meuhedet to Clalit and Leumit	Health plans with weaker populations have more funds with which to meet their needs
Free choice of health plans	Health plans can no longer reject ill or elderly applicants
A health tax replaces premiums collected by the health plans	Contributions become more progressive

Prior to NHI, gaps existed among specific demographic groups in the following areas: insurance coverage, accessibility and utilization of health care, satisfaction with the level of services and the extent of choice of both health plans and services. NHI had the potential to reduce these gaps through extension of insurance coverage, more progressive financing, measures to make the poor and elderly people and large families more attractive and redistribution of funds between health plans.

In 1999 there were still differences among socioeconomic groups with regard to health expenditure, including private health services, medications, dental care and VHI. There were also differences in specialist visits and in choice of health plan among socioeconomic groups and between new immigrants and other Israelis in hospitalizations, primary care and specialist visits and dental

visits. Differences remain between Arabs and Jews for specialist and dental care, choice of health plan and health expenditure including VHI, private physicians and pharmaceuticals.

Table 12. The expected impact of subsequent developments in NHI

Subsequent developments	Expected impact
Co-payments	In the absence of exemptions and discounts co-payments would definitely have placed greater financial burden on poor and elderly people and probably would have also discouraged people from seeking needed care. It is unclear to what extent this has been offset by exemptions and discounts
Growth of VHI	This has probably reduced differences between middle and upper income groups in access to certain services, but also increased such gaps in lower and middle income groups
Regulation of VHI	This has required the health plans to charge the same premium to all applicants of a given age, irrespective of health status
Growth of private options in some governmental hospitals (terminated by the Supreme Court in early 2002)	Two-tier care in hospitals. It is not clear whether this has led to a reduction in service levels for non-private patients

The mental health care reform⁶²

Mental health care is in the midst of a major reform effort. This effort has sought to address several concerns, including:

- the traditional approach to mental health as being very different from and distinct to physical health;
- the segregation of mental health care, which contributes to the stigmatization of people with psychiatric illnesses;
- the lack of a legal entitlement to mental health care;
- the bifurcation of responsibility for general health care (the health plans) and mental health care (the government);
- the lack of continuity, at the patient level, between mental and general health care;
- the dual role of the Ministry of Health as regulator and provider of services;
- the continuing shortage of community-based outpatient and rehabilitation services;
- the sense among some experts that the system continued to be overly reliant on psychiatric hospitals.

⁶² This section was prepared with the assistance of Naomi Struch, Israel Sykes, Daniella Nahan and Yehuda Baruch.

In the late 1980s an ambitious, multi-pronged reform of mental health care was envisioned and became fully endorsed by the Netanyahu Commission report of 1990. Key components of this vision included providing a legal entitlement to mental health care, transferring responsibility for mental health care from the government to the health plans, taking the Ministry of Health out of the business of direct provision of mental health care, reducing the number of hospital beds in proportion to the population and developing community-based care. An important step towards the realization of this vision took place in 1995, with the enactment of the NHI law, which created a legal entitlement to mental health care and called for the transfer of responsibility for mental health care to the health plans within three years.

During the 1995–1997 period an intensive planning effort was undertaken to prepare for that transfer. A detailed benefits package was drawn up. The health plans invested in new information systems and developed operational plans for how they would provide mental health care. A capitation formula was developed for distributing mental health funding among the health plans in accordance with the distribution of mental health needs across the health plans. Plans were drawn up for a special government-run health plan to take responsibility for chronically mentally ill people, due to concerns that they would be neglected by the regular health plans. Prices were established for the sale of psychiatric hospital services to the health plans.

However, these plans were not implemented during the second half of the 1990s. Three times target dates were set and each time they were cancelled. Several reasons have been given for the failure of that effort (Sykes forthcoming), including:

- lack of trust between the health plans and the government;
- failure seriously to engage the health plans in the planning process in a timely manner;
- extremely ambitious target dates for the transfer;
- the Ministry of Finance's unwillingness to increase funding levels for mental health care;
- uncertainty over the potential increase in utilization and costs;
- the concurrent introduction of NHI;
- insufficient attention to the integration of mental and physical health in the relevant spheres;⁶³

⁶³ This may have held up the process in two ways. First, some of the opposition from consumer groups concerned the fact that mentally ill people would fall between the cracks in the delivery system. Second, integration at the service level might produce savings in hospitals that could be used to finance community services.

- the health plans' escalating deficits;
- lack of recognition of the need for psycho-social rehabilitation.

A new effort to reform mental health care was initiated in 2001, seeking to build upon the failures and lessons of the previous effort. Accordingly, it is characterized by:

- much more serious involvement of the health plans and more sharing of information between the health plans and the government;
- a 5-year horizon;
- efforts to consider the changes needed at the insurance, structural, organizational and patient levels;
- willingness on the part of the Ministry of Finance to consider increases in funding;
- consideration of co-payments for the health plan's mental health outpatient services.

This time round the reform effort also benefits from several changes in context. The health care system is no longer preoccupied with the initial assimilation of the NHI law. In the past two years there has been a rapid expansion of community-based rehabilitation services, laying the groundwork for further shifts in care from hospital to community. The volume of care in psychiatric hospitals has also continued to decline, raising the possibility that the increase in ambulatory utilization expected as a result of the transfer to the health plans might be partly funded by the funds freed up by the decline in inpatient volume. At present there is wide consensus that mental health care reform is desirable and optimism that it will succeed.

And yet concerns remain, even among those who support the reform effort. There are concerns that:

- the integration of mental and general health care will further medicalize mental health care, in a country where the medical model already predominates;
- the community-based alternatives to psychiatric hospitalization will not be developed rapidly enough;
- the Ministry of Finance will not allocate sufficient funds;
- the health plans will shift some of the new funds for mental health care to services of greater interest to the general population;
- the administrative split between medical care, covered by the health plans, and rehabilitative care, covered by the Ministry of Health, will contribute to continuing problems of continuity of care.

At a recent symposium of the health care system leadership (National Institute 2002), the reform of mental health care was a focus of discussion, with leaders and professionals from across the health care system expressing continued support for it. Among the key issues emphasized at that symposium were the need to:

- ensure that the reform addresses the unique needs of different population groups;
- simultaneously address organizational and structural issues and insurance issues;
- clarify the division of responsibility between the health care system and other social service systems and develop appropriate coordinating mechanisms;
- specify the mental health benefits package more clearly and in more detail;
- take into account changes in treatment modalities and the trend towards greater consumer involvement in decisions about the course of treatment;
- enhance integration and coordination between psychiatric general acute hospital care;
- change clinical training programmes in accord with the envisioned shift from hospital to community care.

As is evident from the above presentation, the area of mental health care in Israel has been a focus of intense efforts at systemic reform over the past decade. While these met with frustrating setbacks, especially the failure of 1995–1997 efforts to transfer services from the Ministry of Health to the health plans, efforts for change have gained momentum since 2000. This has been the result of a confluence of influences, including increased consumer activism and influence, passage of the Community-Based Rehabilitation of the Mentally Disabled Act and improved collaboration between the Ministry of Health and the health plans. In these and other ways, the groundwork has been laid for positive developments in the coming years. As this report was being finalized in January 2003, the government and the health plans were exploring a possible agreement on the transfer of responsibility for mental health care to the health plans.

The hospital trusts initiative

The fact that the government owns and operates half of all hospital beds in Israel has long been recognized to be a major problem, creating conflicts of interest due to the fact that the Ministry of Health functions both as regulator and competitor in the hospital market. Accordingly, there is a consensus among

policy makers about the need for the Ministry to extricate itself from the business of providing hospital care. Over the years two major proposals have been put forward, one to set up government hospitals as freestanding, non-profit trusts, the other to set up a National Hospital Authority, distinct from the Ministry of Health, to which all government hospitals would be transferred. See the section on *Health care delivery* for further discussion of the hospital trusts initiative.

The Patients' Rights Law⁶⁴

The Patients' Rights Law was enacted in 1996 after five private initiatives were combined into one national proposal. It was proposed based on a widespread feeling that there was a systematic lack of respect for and consideration of patients in the health care system. The Patients' Rights Law emphasized that patients have rights over and beyond the right to health care alone.

The law was the product of cooperation between Knesset members, government offices, the association for civil rights, religious and legal representatives, women's organizations and patient and professional associations. The law defined the rights and obligations of patient-provider relationships, encapsulating the shift from a paternalistic model of care to a patient-centred model emphasizing patient autonomy. The main goals of the law were to ensure care-giver professionalism and quality and to protect the dignity and privacy of patients. In addition, the law included rights that were previously granted in lawsuit verdicts in the realm of medical ethics and social norms: the prohibition of discrimination, informed consent, patient access to medical records and privacy of medical information.

Implementation

The importance of the law is recognized in several domains:

Definition of patients' rights

This includes the anchoring of rights that had previously been legislated for, including informed consent, the right to privacy of information, the right to access one's medical file and the right to receive personal medical information. The law requires patients to be notified of their rights, so the General Director of the Ministry of Health issued a directive that a list of patients' rights be displayed in every institution providing medical services.

⁶⁴ This section was prepared in consultation with Carmel Shalev and Sharon Basson.

Responsibility for honouring patients' rights

In every medical institution a representative has been appointed to be responsible for supervision of institutional adherence to patients' rights. This position includes provision of advice and assistance concerning all aspects of patients' rights, the receipt, investigation and care of complaints and the training of medical and administrative staff with regard to the law. In a study conducted five years after the passing of the law, it was found that various hospitals had different job descriptions for the representative responsible for patients' rights, based on the professional background, strong points and administrative support of the employee (Kismodi and Hakimian 2001). The new legislation and the addition of formal avenues for filing complaints have increased knowledge, as well as the number of grievances, concerning patients' rights.

The establishment of ethical committees

Before the enactment of the law, ethics committees existed in some hospitals, functioning as advisory committees. According to the law, hospital administrative directors are responsible for the establishment of an ethics committee, whose main responsibilities are the transmission of medical information to patients and decisions regarding medical treatment against the patient's will. These committees are multidisciplinary and have the authority to make decisions regarding the patient. Israel is the only country that has legally regulated ethics committees. However, it has been noted that there is a gap between the law's requirements and actual practice (Wegner et al 2002). Despite the legal requirement, in many institutions there is no timely access or referral to ethics committees and protocols are not brought up for discussion.

Inspection and quality assurance committees

Inspection committees are in place to verify patient complaints and exceptional occurrences. One year before the enactment of the law, the Supreme Court ruled that there was no immunity for inspection committee reports. On this basis, the physician's union instructed its members not to cooperate with these committees. In the law, instructions were provided with regard to immunity to the discussions and conclusions of these committees, with a distinction made between inspection and quality control committees. Quality control committees are internal committees of medical institutions, which continually act to evaluate medical activity and improve quality of medical care. The findings and conclusions of these committees are not closed, and are forwarded to the relevant patients and caregivers. In contrast, all written materials produced by these committees are immune, and cannot be used as testimony in legal processes. Despite this, doctors have persisted in refusing to cooperate in quality control committees, even after the law was passed.

The twelve principles of the Patients' Rights Law⁶⁵

The Patients' Rights Law was enacted by the Knesset on 1 May 1996. Its objective is to regulate the relationship between people who require medical treatment and members of the medical staff who provide it. The law has established norms and codes of conduct concerning patients' rights in a binding way on all those practicing medicine. The medical staff and the patient are partners in the medical treatment. The law is based on the assumption that the patient is a cognitive person capable to demand his [sic] right to proper medical care. The opening paragraph of the law states: "This Act aims to establish the rights of every person who requests medical care or who is in receipt of medical care, and to protect his dignity and privacy".

The Society for Patients' Rights in Israel has prepared this leaflet in order to bring to the notice of the public the principles and essence of the Patients' Rights Law.

The right to medical care

The right to receive medical treatment is assured to all. Neither the medical facility nor the clinician administering the treatment may discriminate between patients on grounds of religion, race, sex, nationality, origin etc. Medical treatment should be provided according to existing terms and arrangements in the medical system in Israel. In case of medical emergency the patient will receive treatment without any pre-condition.

Proper medical care

The patient is entitled to proper medical care, which should be provided in the best professional standards and quality. Proper personal relations should also be maintained

Information on clinician identity

The patient is entitled to know the name and professional task of every person giving treatment.

A second opinion

The patient is entitled to obtain, at his [sic] own initiative, a second opinion as to his [sic] medical care. The clinician and the medical facility shall give the patient all the assistance he [sic] requires fulfilling this right.

Right to continuity of proper care

In cases where a patient transfers from one clinician or facility to another, he [sic] is entitled, at his [sic] request, to cooperation between the clinicians or facilities involved, to ensure proper continuity of care.

The dignity of the patient

The dignity of the patient must be assured at all stages of the medical treatment.

The privacy of the patient

The privacy of the patient must be assured at all stages of his [sic] treatment.

Care under Emergency or Grave Danger

Whenever a person is in grave danger or in medical emergency, he [sic] is eligible unconditionally to receive medical treatment. The clinician to whom he [sic] turns or is referred is obliged to examine and treat the patient to the best of his ability. Should the clinician be unable to do so, he [sic] shall refer the patient to a facility that can provide the medical care that is required. If a patient is in grave danger and he [sic] refuses medical treatment, the clinician should administer the required treatment even against the will of the patient. This can be done only after the Ethics Committee has given its permission.

⁶⁵ This material has been excerpted, with permission, from a copyright-protected pamphlet produced by the Israel Society for Patients' Rights.

Informed consent

No medical treatment shall be administered unless the patient has consented to it. Such consent should be 'informed consent', based on all the data on the diagnosis, the nature of the proposed treatment, the risks involved (including pain and discomfort) and the chances and the risks of alternative treatment or the lack of any treatment at all. The clinician shall furnish the information to the patient at the earliest stage of the treatment in a manner that maximizes the ability of the patient to understand the information and make a free and independent choice. The consent to medical treatment may be given verbally, in writing, or demonstrated by the patient's behaviour.

The right to access to medical information

The patient is entitled to receive from his [sic] clinician or from the medical facility information concerning him [sic] obtained from the medical records, including a copy of his [sic] medical records. In cases where such information may cause serious harm to the patient's health or endanger his [sic] life, the clinician may decline to give the patient such information. The Ethics Committee may endorse or change the clinician's decision.

Medical confidentiality

A clinician or any other staff member of a medical facility may not disclose any information concerning a patient which came to their knowledge during their services or in the course of the treatment.

Disclosure of information to a third party

A clinician or a medical facility is allowed to disclose information to another party provided the patient has given his [sic] consent. Information may also be disclosed to specific authorities if the clinician or the facility are so instructed by law, or if the information is needed for continued treatment.

Internal control authorities

To assure the implementation of this law, three committees were established:

Investigative Committee

A committee appointed to inquire into patients' complaints or into exceptional incidents involving medical treatment. The minutes of the Investigative Committee shall not be disclosed to the patient, unless authorized by a court of law.

Quality and Control Committee

An internal committee appointed to evaluate medical procedures in order to improve the quality of medical care. The content of the deliberations of this committee as well as documents prepared and its conclusions shall not be disclosed to the patient, but the factual findings concerning its treatment shall be entered into his [sic] medical record.

Ethics Committee

An internal committee that has to be established in every medical facility. It is appointed by the General Director of the Ministry of Health. The Ethics Committee comprises a chairperson who has the qualifications of a District Court Judge, two specialist physicians, a psychologist or a social worker and one representative of the public or a member of a religious establishment. The law also requires the appointment of a person in charge of patients' rights. The head of a medical facility shall designate a staff member whose responsibilities will include:

- to advise and help patients concerning their rights according to the law
- to deal with patients' grievances. Complaints regarding the quality of medical care shall be referred to the facility's director
- to instruct and educate members of the medical and administrative staff in the facility in all matters relating to the law.

The Public Commission on the publicly financed health care system and the status of physicians

In the year 2000, as part of the agreement with the IMA to settle a major strike by physicians, the government agreed to the formation of a blue ribbon Public Commission to examine the overall functioning of the health care system, with special attention to the status of physicians. One of the key issues considered by the Public Commission was whether to allow government and Clalit hospitals to operate Sharap private medical services, a change which would be lucrative for many physicians. Another key issue was how much physicians in the public sector should be paid and who should constitute their 'reference group'. Other issues on the agenda included to what extent there should be financial incentives for physicians to work in peripheral areas and less popular specialties, which elements of the compensation package should be included in pension calculations and whether physicians should be encouraged to work full-time for a single employer.

Proposals put forward by the IMA

In its submission to the Public Commission, the IMA called for three broad types of changes in physician compensation: a general increase in physician wage levels, additional targeted increases for certain sub-groups of physicians and changes in how physician pension levels are determined.

The general wage level

The IMA argued that physicians' salaries should reflect key aspects of their work, including the many years of training required to become a physician, the importance of their task, their commitment to serving the public, the physical and emotional demands of the job, the exposure to malpractice suits, the health risks involved, the impact of the work on physicians' lifestyles and their opportunities for well-paid employment in other fields.

It noted that despite these factors, physicians today typically earn far less than judges, executives of government companies and ministries and senior university professors, and argued that these low wage levels are not only unfair, but have also resulted in decline in interest among top students in joining the medical profession and that further declines are likely. Accordingly, the IMA argued that the salary of physicians in the public sector should be made the same as that of senior professionals with doctorates in the public sector.

In response the Ministry of Finance argued that no major general increase in physician wages is needed. Physicians are already well paid, and have also received significant increases over the past decade. Moreover, there is no need

to increase the number of people interested in becoming doctors, as the physician-population ratio is already high and there are no convincing signs that large numbers of doctors are leaving the profession to seek higher incomes elsewhere. The Ministry also noted that increasing physician incomes would lead to demands for similar increases from other key groups of public sector employees.

Targeted increases for sub-categories of physicians

The IMA called for targeted increases in wage levels for certain sub-categories of physicians or types of work. For example, it contended that the level of compensation for evening and night rotations and on-call duty should be increased to reflect the heavy work burden involved. It argued that the current payment levels for such work are not only unfair, but also make it difficult to recruit top quality physicians to take on these responsibilities.

Furthermore, incentives should be developed to encourage physicians to work for a single employer. In recent years, in pursuit of additional income, more and more physicians work part-time for a health plan or at a private hospital, in addition to their main job at a public hospital. The IMA contended that this has resulted in both operational inefficiencies and conflicts of interest. While it looks favourably on situations where the same physician works in both hospital and community settings, it believes this situation is best handled by having the physician work for a single employer (for example, a hospital) who can then allocate the physician's time between the two workplaces.

The IMA argued that incentives for work in peripheral areas should be enhanced. At present physician-population ratios are much higher in the centre of the country than in the periphery. Physicians are hesitant to work and live in peripheral areas because they offer fewer opportunities for private work or professional development and educational and cultural advantages for the family.

Concrete steps should be taken to make certain specialties, such as internal medicine, more attractive. The IMA called for a reduction of workload and special financial incentives for these at-risk specialties.

The Ministry of Health supported special payments to physicians working in peripheral areas and in understaffed specialties and called for greater incentives for specialists to take on evening and night rotations and on-call duties. It also agreed with the IMA in supporting additional pay for 'full-timers'. However, the Ministry differed from the IMA in calling for a requirement that physicians punch time clocks to ensure that they actually work the hours called for in their contracts. The Ministry also called for creating financial incentives for participation in continuing education.

The Ministry of Finance agreed that it could be appropriate to use financial incentives to increase the attractiveness of work in certain specialties and regions. However, the Ministry believed that before discussing such incentives a decision must be made on the overall national physician wage bill. After that tradeoffs could be made between special incentives for certain groups in return for reducing the base wage levels of physicians in general.

Neither did the Ministry of Finance agree with the IMA on the issue of ‘full-timers’, taking the position that it is good for the health care system that many hospital-based physicians also work part-time for the health plans, as this reduces some of the communication barriers across organizations and enhances competition in the health care system.

Clalit did not support the move to full-timers, particularly on the basis of the voluntary model proposed by the IMA. Clalit was concerned that those physicians who would choose to work as full-timers were not necessarily those whose full-time service would be most needed by the health care system. Clalit was also concerned that the model would generate over provision of services. Finally, Clalit also questioned whether the existence of full-timers would truly promote the declared goal – better access for the regular non-*Sharap* patient.

Calculation of pensions

At present many components of physicians’ salaries are not included in pension calculations. Most prominent among these are pay for evening and night rotations and on-call duty. The IMA has called for including these components in the pension calculations, arguing that physicians work hard during evening and night rotations, which constitute an important component of their work.

Proposals put forward by Clalit⁶⁶

In addition to responding to suggestions raised by the IMA, Clalit put forward several proposals of its own. The guiding principle was to increase the system’s responsiveness to consumer needs. This would require more flexibility than is made possible in the existing collective bargaining agreements. It would also require physician compensation to be linked more closely to the volume and quality of care provided. Specific proposals included taking patient characteristics into account when determining capitation payments to physicians, tying physicians’ payment to quality of care, reducing physicians’ income for performing below the norms for list size and visits per shift, installing time clocks to monitor physicians’ fulfilment of contractual obligations, increasing pay rates for evening and night rotations and decreasing the on-call rate.

⁶⁶ Note that many of the proposals put forward by Clalit were also endorsed in the submissions of the other health plans.

Key recommendations

In December 2002 the Commission submitted its recommendations to the government. Key recommendations are as follows:

- endorsed almost unanimously, the principle that patients in public hospitals should be allowed to choose their physician,⁶⁷ but split on the issue of whether that choice should be available to all patients, free of charge, or whether it should be available only to those able and willing to pay a special out-of-pocket payment (*Sharap*);
- split on the issue of whether physicians' salaries should be markedly increased, with a slight majority favouring a substantial but unspecified increase to be phased in gradually, taking into account the overall situation of the Israeli economy, the health care system and other factors;
- was unanimous in endorsing other changes in the payment system of physicians, including providing financial incentives to draw physicians to neglected specialties, simplifying the collective bargaining agreements and ensuring reasonable pay levels during vacations and sick leaves;
- called for several changes in the organization of care in hospitals, including: periodic rotation of the heads of departments, grouping departments into divisions, the appointment of term-limited divisional directors and elimination of minimum requirements for physician-patient staffing levels;
- called for moving toward board certification in one of the primary care specialties for all primary care physicians;
- called on the health plans to identify a 'personal primary care physician' for each plan member, who would be responsible for coordinating all the health care provided to the member;
- expressed a preference for most outpatient specialist care to be provided in community settings;
- called on the Ministry of Health to assume a leadership role regarding quality of care and to take various steps to improve quality assurance systems;
- called for uniform licensure exams for all physicians and periodic re-registration of all physicians.

The Commission also made important recommendations regarding the level at which the Israeli health care system should be financed, the nature of the financial arrangements between hospitals and health plans, how VHI should be organized and regulated and how the medical malpractice system should be restructured.

⁶⁷ One member of the commission did not accept this view and called for setting up private hospitals adjacent to major public hospitals and limiting choice of physician to those private hospitals.

As many of the recommendations require additional funding and/or significant changes, there will no doubt be implementation challenges. Some observers believe that implementation will be helped along by the agreement between the government and the IMA to refer to binding arbitration any issues in the upcoming negotiations on wages and work conditions that the parties are unable to resolve by themselves. Other observers have expressed scepticism regarding the implementation of many, if not most, of the recommendations.

Summary and timeline of health care reforms

The 1990s was a decade of continued efforts to reform the Israeli health care system. These efforts were at times intense; occasionally they were also successful. Reforms were kicked off by the report of the Netanyahu Commission, followed by the largely unsuccessful effort to spin off government hospitals. In the mid 1990s attention turned to the successful effort to introduce NHI. Various issues related to implementing NHI were a major focus of the health care system in the second half of the 1990s.

Other important health care reforms in this period included the enactment of the patients' rights law and major changes in hospital reimbursement rules. On the other hand, implementation of several planned changes did not move ahead smoothly, particularly those involving transfer of services from the government to the health plans.

More recently, attention in Israeli health policy has focused on issues related to the public-private mix and to the status of physicians in the health care system. It is still too early to know how these issues will play out.

1988	Establishment of the Netanyahu Commission
1990	The Netanyahu Commission submits its recommendations to the cabinet
1990s	Attempts to spin off government hospitals as independent trusts
1994	NHI Law
1995	Implementation of NHI begins
1995	Institution of hospital revenue caps
1996	Patients' Rights Law
1996–1997	Efforts to transfer responsibility for mental health care to the health plans
1996–1997	Preparation for transfer of preventive care to the health plans
1997	Shift from 100% to 30% hospital revenue cap
1997	Knesset decides that preventive care will remain with the government
1997	Knesset decides to cancel the parallel tax (the health tax on employers)
1998	Imposition of co-payments for physician visits
1998	Legislation related to VHI
1998	Establishment of process for prioritizing new technologies
2001	Establishment of Public Commission on the status of physicians
2002	The Public Commission on the status of physicians releases its report
2003	The government decides, in principle, to transfer responsibility for mental health care to the health plans.



Conclusions⁶⁸

This concluding section first highlights some of the unique and interesting features of the Israeli health care system. It then makes general comments about health reform efforts in Israel and concludes by indicating some key challenges facing the health care system.

Interesting and unique features of the Israeli health care system

The Israeli health care system has many unique and interesting features. This section highlights three that may be of particular interest to international readers.

Health care in Israel is based on regulated competition among health plans. Many health economists have called for health care systems to be organized around the following:

- some sort of synthesis between government and market forces
- organizations that combine funding and delivery functions
- risk-adjusted capitation financing to limit cream skimming by insurers.

Several countries have sought to introduce such features in their health care systems. Israel, however, stands out due to the extent to which its population is enrolled in ‘managed care’ plans, the extent to which those plans are regulated by the government and the extent to which needs-based capitation is central to financing health care. This is not to say that the Israeli system has been successful, but rather to note that Israel provides an important, real world test case of a much talked-about model.

⁶⁸ This section was prepared in collaboration with David Chinitz and Gabi Bin Nun and benefited from the extensive comments of Revital Gross and Jack Habib.

A second feature of note is Israel's ground breaking system for explicitly setting priorities and defining the benefits package (see the section on *Health care benefits and rationing*). The Israeli prioritization system is distinctive in that it applies to the whole health care system, not just to the low-income population, as in the Oregon experiment, and it appears to have public support – or at least has not aroused significant public opposition. Also notable is the integration of professional staff work with decision making, through a group that consists of health care system leaders and public figures from outside the health care system. The priority-setting process has never been problem-free and now faces even greater challenges given the severe cuts in funds for new technology, which are a result of Israel's economic crisis. Still, it seems that it will survive and may even improve over time. If so, it is likely to continue to attract interest from health policy experts around the world.

A third interesting feature is the situation with regard to equity in the Israeli health system. On one hand, Israelis have, for decades, perceived themselves to have an equitable health care system, as indicated by broad insurance coverage, progressive funding and extensive geographic distribution of high-quality primary care services. Moreover, the National Health Insurance Law that came into force in 1995 sought to preserve and enhance equity through the introduction of universal coverage and needs-based capitation financing (see the section on *Health care reforms*).

On the other hand, private health care services have expanded in recent years and there is substantial pressure to allow private health care services to be provided in government hospitals (see the section on *Complementary sources of financing*). As these services – essentially the right to choose a surgeon – would only be available to those who can afford to pay privately, they would reduce equity in the health care system. More broadly, the proportion of health care expenditure that is privately financed is already higher in Israel than in almost any European country and the role of private financing in Israel continues to grow (see the section on *Health care financing and expenditure*). According to the World Health Report 2000, Israel ranks below almost all western European countries, but above the United States, in terms of 'fairness of financial contributions' to the health care system. This low ranking of Israel relative to European countries may be explained by the fact that although health care is highly equitable within the public system, several important components of health care – for example, dental care and institutional long-term nursing care – remain outside the public system.

Reflections on health care reform efforts

The section on health care reforms reviewed Israel's experience with several major reform efforts, including the hospital trusts initiative, the National Health Insurance Law, the Patients' Rights Law, the mental health care reform and recent efforts to change the status of physicians. Some of these reform efforts were implemented. Proponents of both national health insurance and patients' rights have been able to secure the legislation they sought. Other reform efforts, such as the hospital trusts initiative and the mental health care reform, have not been implemented, at least to date.

This raises the question of why some of these reform efforts have been implemented and not others. While it may not be possible to provide a definitive answer to this question, it is useful to try and identify some of the factors involved.

One major factor is whether or not the proponents of a particular reform addressed the needs and concerns of the Ministry of Finance. The Ministry of Finance is an extremely powerful actor in Israeli health care and public policy in general. For example, the mental health care reform, which has broad support from health professionals and the health plans and the leadership of the Ministry of Health, is being held up by the Ministry of Finance's continuing concern that it might substantially increase the demand for mental health care services and therefore lead to a significant increase in health care costs.

Similarly, in the case of the development of the National Health Insurance Law, civil servants in the Ministry of Finance initially opposed the law, fearing its cost implications. However, the new Minister of Finance adopted a position favoring the law, as long as it would be fiscally responsible. At an early stage of the process of developing the legislation, an agreement was reached between the Ministries of Health and Finance to develop jointly the law in such a way as to limit the risks of cost escalation.

The Ministry of Finance did not take an active role in the case of the patients' rights bill, which was perceived as having few implications for health care costs or health care system efficiency.

The broader issue is whether or not the proponents of reform mobilized in an effective way to deal with opposition from groups that stood to lose from any change. Although the prestigious Netanyahu Commission endorsed both the hospital trusts initiative and the National Health Insurance Law, their fates were quite different. The strenuous objections of health unions has certainly contributed significantly to delaying the implementation of the hospital trusts initiative – an initiative that has been endorsed by several Ministers of Health,

to no avail. The unions were never effectively brought into the process, their concerns about the substance of the reform were not addressed seriously and no effective strategy was developed to override their concerns. Moreover, there was internal opposition from some actors within the Ministry of Health who stood to lose power from the hospital trusts initiative, and this opposition was not adequately addressed.

In contrast, opposition to the National Health Insurance Law was dealt with via a successful mixture of cooperation and confrontation. As noted above, the opposition of the Ministry of Finance was reduced through a mix of cooperation and compromise. The other main source of opposition to the National Health Insurance Law was the old guard of the Histadrut (Israel's principal labour union). Its opposition was thwarted by effective confrontation. As discussed above, the main proponent of national health insurance – the Minister of Health – neutralized Histadrut opposition by resigning from the government, announcing his candidacy in upcoming elections for the position of Secretary-General of the Histadrut, succeeding in that bid and replacing the old guard.

Israel's rapidly changing economic and security situation may also influence the fate of various reform efforts. Perhaps it is easier to promote ambitious and expansive health care reforms when the future looks bright, the public and politicians are not pre-occupied with security concerns, the economy is expanding and the government deficit is at manageable levels. This was the situation in the mid-1990s, when national health insurance was adopted. In contrast, recent efforts to implement the mental health care reform and the recent proposals of the Public Commission regarding physicians' wages and working conditions have been brought forward at a much more difficult time for the State of Israel. At the time of writing (2003), the *Intifada*, negative per capita growth and government budget cuts do not bode well for these reform efforts.

Despite the challenging environment, efforts to reform the health system continue. As Israel remains a highly dynamic society, some of these reforms have a good chance of being implemented. However, it is likely that they will mainly be reforms and innovations whose primary objective is cost containment.

Challenges facing the Israeli health care system

Many of the challenges currently high on the agenda of Israeli policy makers are similar to those faced by their counterparts in other countries. These include:

- maintaining service levels in the face of shrinking budgets;
- reducing the role of government in the direct provision of care (particularly hospital care);

- developing systems for measuring and rewarding quality of care;
- finding a better balance between institutional care and community-based care;
- addressing the health needs of foreign workers and their families;
- managing pressures to adopt new expensive technologies.

In addition, health care in Israel continues to face several challenges that are not present in many health care systems. These include:

- addressing the special health needs of large numbers of immigrants, who are encouraged to move to Israel from around the world;
- making effective use of a large number of physicians, itself a result of Israel's commitment to immigration;
- ensuring that the care delivered to the Arab population is responsive to that population's social, cultural and health needs;
- providing emergency treatment and rehabilitative services to a high number of casualties of terrorism and conflict.

Both the achievements and the failings of the Israeli health care system must be viewed against the background of these unique challenges.

Plans to update this report

Health care in Israel continues to be dynamic. During the coming year, for example, the health care system will have to absorb substantial budget cuts. Significant structural reforms are also being considered. This report will be updated periodically in accordance with these and other developments.

Glossary, abbreviations and websites

Glossary

<i>Histadrut</i>	General Federation of Labour
<i>Knesset</i>	Parliament
<i>Sharap</i>	Private medical services in government hospitals
<i>Tipat halav</i>	Mother and child health centre or well-baby clinic (literally ‘drop of milk’)
<i>Tipot halav</i>	Plural of <i>tipat halav</i>
<i>Kupat holim</i>	Health plan
<i>Kupot holim</i>	Plural of <i>kupat holim</i>

Abbreviations

ADL	Activities of daily living
CBS	Central Bureau of Statistics
CLTCI	Community Long-Term Care Insurance
DALY	Disability-adjusted life year
DPT	Diphtheria-pertussis-tetanus
DRG	Diagnostic-related group
FSU	Former Soviet Union
GDP	Gross domestic product
ICDC	Israel Centre for Disease Control
ICU	Intensive care unit
IDF	Israel Defence Forces
IMA	Israel Medical Association
INA	Israel Nurses’ Association
IP	Independent physician

JDC	Joint Distribution Committee
LPN	Licensed practical nurse
MMR	Measles-mumps-rubella
MPH	Master of Public Health
MRI	Magnetic resource imaging
NGO	Non-governmental organization
NHI	National Health Insurance
NII	National Insurance Institute
NHS	National Health Service
NIS	New Israeli Shekels
OECD	Organisation for Economic Cooperation and Development
OPD	Outpatient department (of hospitals)
OTC	Over the counter (medications)
PA	Palestinian Authority
PCP	Primary care provider
PPP	Purchasing power parity
QALY	Quality-adjusted life year
RN	Registered nurse
US	United States
VHI	Voluntary health insurance

Useful websites

Ministry of Health: www.health.gov.il

JDC-Brookdale Institute: www.jdc.org.il/brookdale

Israel National Institute for Health Policy and Health Services Research:
www.israelhpr.org.il



References

- Aviram U and Rosenne H (1998). Mental health policy and services in Israel – the planned reform following enactment of the National Health Insurance Law. *Society and Welfare*, 18:161–190.
- Barnea T et al. (2000). *Israeli-Palestinian cooperation in the health field 1994–1998*. Jerusalem, JDC-Brookdale Institute.
- Benjamini Y and Gafni A (1984). *The Israeli physicians' strike: an inevitable outcome of the structure of Israel's health care system*. Ramat Aviv, Tel Aviv University.
- Berg A, Zusman SP and Horev T (2000). *Social and economic aspects of dental care in Israel in the era of National Health Insurance*. Jerusalem, JDC-Brookdale Institute.
- Bin-Nun G (1999). Costs and sources of the basket of services of the National Health Insurance Law. *Social Security*, 54:35–52 [Hebrew].
- Bin-Nun G (2003). Personal communication.
- Bin Nun G and Katz H (2001). *International comparisons of health systems: OECD countries and Israel 1980–1998*. Jerusalem, Ministry of Health [Hebrew].
- Brammli-Greenberg S and Gross R (1999). *Supplemental and commercial health insurance, 1998: changes in policy, financing, and consumer behavior*. Jerusalem, JDC-Brookdale Institute. [Hebrew].
- Brammli-Greenberg S and Gross R (2003). The private health insurance market in Israel, 2001. Jerusalem, JDC-Brookdale Institute.
- Brammli-Greenberg S, Rosen B and Wood F (2003). *Households, health plans and expenditures for medications*. Jerusalem, JDC-Brookdale Institute.

- Brodsky J, Kaplan E and Barnea T (1995). Experience counts: innovative programmes for the elderly in Israel that can benefit Americans. In: Bard MC, ed. *The American-Israeli Cooperative Enterprise*. Maryland, AICE.
- Brodsky J, Schnoor Y and Be'er S, eds. (2001). *The elderly in Israel: the 2001 Statistical Abstract*. Jerusalem, JDC-Brookdale & ESHEL.
- Central Bureau of Statistics (1993, 1997, 1999). Data taken from Family expenditure surveys. Jerusalem, Central Bureau of Statistics.
- Central Bureau of Statistics (2001). *Labour force survey, 1999*. Special publication #2000/14. Jerusalem, Central Bureau of Statistics.
- Central Bureau of Statistics (1997). *National health survey, 1996-1997*. www.cbs.gov.il accessed July 2003 [Hebrew].
- Central Bureau of Statistics (2000). *National health survey, 1999-2000*. www.cbs.gov.il accessed July 2003 [Hebrew].
- Central Bureau of Statistics (2002a). *National expenditure on health, 1962-2000*. www.cbs.gov.il accessed 4 July 2003 [Hebrew].
- Central Bureau of Statistics (2002b). *Statistical Abstract of Israel*. www.cbs.gov.il accessed 4 July 2003.
- Chinitz D (1999). The basic basket of services under national health insurance: technocracy vs. politics revisited. *Social Security*, 54:53-68. [Hebrew].
- Chinitz D and Israeli A (1999). Rationing: how and why? *The Journal of the Israel Medical Association*, 1(3): 210-4.
- Chinitz D et al. (1998). The second phase of priority setting. Israel's basic basket of health services: the importance of being explicitly implicit. *British Medical Journal*, 317(7164): 1005-1007.
- Dolev T et al. (1996). *An overview of children and youth in Israel: policies, programmes and philanthropy*. Baltimore, International Youth Foundation.
- Farfel M and Yuval D (1999). *Arabs' and Jews' perceptions and use of the health system two and a half years after implementation of the National Health Insurance Law: findings from a survey of the general population*. Jerusalem, JDC-Brookdale Institute.
- Greenstein M, Goldwag R and Farfel M (forthcoming). *Trends in the Israeli-Arab population following the National Health Insurance Law*. Jerusalem, JDC-Brookdale Institute.
- Greenstein M and Taragin M (2001). *Night Services: A new sick fund service mandated by the national health insurance law*. Jerusalem, JDC-Brookdale Institute. [Hebrew].

- Gross R and Brammli-Greenberg S (1997). Alternatives for the organization of the supplemental and commercial health insurance market in Israel following the enactment of the national health insurance law. *Social Security*, 50:40–58. [Hebrew].
- Gross R and Brammli-Greenberg S (2001). *Israel's health care system as perceived by the public: 1995, 1997 and 1999*. Jerusalem, JDC-Brookdale Institute. [Hebrew].
- Gross R and Brammli-Greenberg S (forthcoming). *Israel's health system as perceived by the public: 1995, 1997, 1999 and 2001*. Jerusalem, JDC-Brookdale Institute.
- Gross R and Harrison M (2001). Implementing managed competition in Israel. *Social Science and Medicine*, 52 (8): 1219–1231.
- Gross R and Nirel N (1997). Does budget holding have a long-term effect on expenditure, staff and patients? *Health Policy* 40:43-67.
- Gross R, Rosen B and Shirom A (2001). Reforming the Israeli health care system: findings of a three-year evaluation. *Health Policy* 56:1–20.
- Gross R, Tabenkin T and Brammli-Greenberg S (2000). Who needs a gate-keeper? Patients' views of the role of the primary care physician. *Family Practice An International Journal*, 17(3): 222-229.
- Habib J and Factor H (1993). Services for the elderly: changing circumstances and strategies. In: *Public services under stress: a Canadian-Israeli policy review*. Kruger AM, Morley D, Shashar A, eds. Jerusalem, The Hebrew University, Magnes Press:154–175.
- Habib J and Rosen B (1998). *Discussion of the various requests for changing the capitation formula: a report prepared for the Knesset Labour and Social Welfare Committee*. Jerusalem, JDC-Brookdale Institute, (<ftp://www.jdc.org.il/pub/brook/cap.doc>).
- Hadley J, Rosen B and Shmueli A (2003). *Towards the inclusion of a health status parameter in the Israeli capitation formula*. Jerusalem, JDC-Brookdale Institute.
- Kahan P, Brodsky J and Barancik B (1998). *Mapping and evaluation of respite care in Israel*. Jerusalem, JDC-Brookdale Institute.
- Kaye R and Roter R (2001). *Complementary health insurance in Europe and the west: dilemmas and directions*. Jerusalem, JDC-Brookdale Institute [Hebrew].
- Kelman M (1998). The Oral Health Care System in Israel. *Independent Dentistry*, March:34–38.

- King Y and Shtarkshall M (1997). *Public-governmental sheltered housing projects: residential characteristics and needs, and organizational and operational characteristics*. Jerusalem, JCC-Brookdale Institute.
- Kismodi E and Hakimian R (2001). A Survey of patients' rights representatives in Israeli Hospitals: 1999–2000. *Med Law*, 20:17–36.
- Korazim M (1994). *Day care centers for the elderly in Israel: an evaluation study*. Jerusalem, JDC-Brookdale Institute.
- Livne S et al. (2000). Israel hospital pharmaceutical services: a national survey. *Harefuah*, 138(10): 828–831 [Hebrew]
- Ministry of Health (2000). First national health and nutrition survey (MABAT), 1999–2000. Jerusalem, Government Printing Office [Hebrew].
- Ministry of Health (2001a). *Health in Israel*. Jerusalem, Government Printing Office [Hebrew].
- Ministry of Health (2001b). *Hospital facilities and trends in hospital admissions in Israel, 2000*. Jerusalem, Government Printing Office [Hebrew].
- Ministry of Health (2001c). *Inpatient institutions and day care units in Israel 2000*. Jerusalem, Government Printing Office [Hebrew].
- Ministry of Health (2002a). *Mental health in Israel. Statistical Annual 2001*. Jerusalem, Government Printing Office [Hebrew].
- Ministry of Health (2002b). Smoking in Israel 2001–2002: official report of the Minister of Health. Jerusalem, Government Printing Office [Hebrew].
- Morginstin B (1987). *Response of formal support systems to social changes and patterns of caring for the elderly*. Jerusalem, National Insurance Institute.
- National Institute (2000). *Health care financing*. Yam Hamelach conference for health policy. Hashomer, National Institute for Health Policy and Health Services Research [Hebrew].
- National Institute (2002). *Health services which are the responsibility of the Government*. Tel Hashomer, National Institute for Health Policy and Health Services Research.
- Nirel N (1999). *The employment of immigrant physicians from the former Soviet Union in 1998: summary of findings from a follow-up study*. Jerusalem, JDC-Brookdale Institute.
- Nirel N, Pilpel D, Rosen B, Zmora I, Greenstein M and Zalberg S (2000). *The accessibility and availability of health services in the south of Israel: Has the gap between the south and other regions in Israel been reduced in the wake of the National Health Insurance Law?* Jerusalem, JDC-Brookdale Institute.

- Nirel N, Ismail S and Taragin M (2002). *The effect of the 'Refuah Shlema' intervention program for Ethiopian immigrants on the care and health status of patients with asthma and diabetes*. Jerusalem, JCD-Brookdale Institute.
- Notzer N and Abramovitz R (2002). Clinical learning experiences of Israeli medical students in health promotion and prevention of cancer and cardiovascular diseases. *Israel Medical Association Journal*, 4:149–152.
- Ofer G and Grau I (1997). Bringing the government hospitals into line: the next step of reform in the healthcare sector. *Economic Quarterly*, 4: 521–556 [Hebrew].
- Reinhardt UE (1985). The compensation of physicians: approaches used in foreign countries. *Quality Review Bulletin*, 11:366–377.
- Rosen B (1999). Israel, a case study in equitable health care. *Health Care International*, 2:15–26.
- Rosen B (2001). Sharap Library. (www.jdc.org.il/brooksites/sharap_library)
- Rosen B, Cohen M, Berg A and Nevo Y (1995). *Consumer behavior in the sick fund market*. Jerusalem, JCD-Brookdale Institute.
- Rosen B and Shamai N (1998). *Financing and resource allocation in Israeli health care*. Jerusalem, JCD-Brookdale Institute (<ftp://www.jdc.org.il/pub/brook/resource-alloc.doc>).
- Rosen B et al. (1998). Hospital utilization and expenditure on the part of Israeli sick funds in an era of health care reform: year 1 report. Jerusalem, JCD-Brookdale Institute. (www.jdc.org.il/brooksites/interface).
- Rosen B et al. (2000). Hospital utilization and expenditure on the part of Israeli sick funds in an era of health care reform: year 2 report. Jerusalem, JCD-Brookdale Institute. (www.jdc.org.il/brooksites/interface).
- Sagi R et al. (2002). Preparedness of the Israeli health care system for a biologic war event. *Israel Medical Association Journal*, 4:495–497.
- Sax P (2001). Visits to physicians: a critical review of the literature on ambulatory utilization. *Israel Medical Association Journal*, 3(1):53–58.
- Shalev C and Chinitz D (1998). In search of universality, equity, comprehensiveness and competition – health reform and managed competition in Israel. *Dalhousie Law Journal*, 20:553.
- Shani M (2001). Primary care in Israel: recommendations of the National Council for Health in the Community. *Israel Medical Association Journal*, 3(12):881–882.
- Shani S et al. (2000). Setting priorities for the adoption of health technologies on a national level – the Israeli experience. *Health Policy*, 54(3):169–185.

Shemesh A et al. (2000). *The primary care physician in Israel: demographic and occupational characteristics comparison between HMOs*. Jerusalem, Ministry of Health. [Hebrew].

Shmueli A (1998). Supplemental health insurance ownership in Israel: an empirical analysis and some implications. *Social Science and Medicine*, 46(7):821–829.

Shmueli A (2000). A new reimbursement system for general hospitals: an evaluation. *The Economic Quarterly*, 47: 239–251.

Shmueli A (2001). Inferring capitation rates from aggregate health plans' costs. *Health Economics*, 8(6):547–552.

Shuval JT (1988). *Medical manpower in Israel: political policies and constraints*. Jerusalem, Hebrew University and Brookdale Institute.

State Commission of Inquiry into the Functioning and Efficiency of the Israeli Health care system (1990). *Part 1: Majority Report*. Jerusalem, Government Printing Office [Hebrew].

State Commission of Inquiry into the Functioning and Efficiency of the Israeli Health care system (1990). *Part 2: Minority Report*. Jerusalem, Government Printing Office [Hebrew].

Sussman Z and Zakai D (1991). *Gaps between senior and junior physicians and crises in the public health sector: physician wages between 1974 and 1990*. Jerusalem, Bank of Israel [Hebrew].

Sussman Z and Zakai D (1997). *The large supply of immigrant physicians and the steep increase in the salaries of veteran physicians, 1990–1995*. Jerusalem, Bank of Israel [Hebrew].

Sykes I (forthcoming). *The use of data and information in the decisions whether and how to transfer responsibility and risk for mental health services in Israel from the Ministry of Health to the health plans: a case study, 1995–1996*. Jerusalem, JDC-Brookdale Institute.

Tabenkin H et al. (1999). *The primary care physician as 'gate-keeper': the perspective of sick fund members, primary care physicians, and policymakers*. Jerusalem, JDC-Brookdale Institute [Hebrew].

Tabenkin H and Gross R (2000). The role of the primary care physician in the Israeli health care system as 'gatekeeper' – the viewpoint of health care policy makers. *Health Policy*, 52:73–85.

Taragin M, Milman U and Greenstein M (2000). *After-hours use of urgent care services: who uses them and why?* Jerusalem, JDC-Brookdale Institute.

Wegner NS, Golan O, Shalev C and Glick S (2002). Hospital ethics committees in Israel: structure, function and heterogeneity in setting of statutory ethics committees. *Journal of Medical Ethics*, 28:177–182

Witkowsky Y (2000). Comparative report of the health funds' activity. Jerusalem [Hebrew].

Yishai Y (1990). *The power of specialty: the Israel Medical Association*. Jerusalem: Jerusalem Institute for Israel Studies [Hebrew].

Yuval D et al. (1991). *Independent physicians and clinic physicians in Kupat Holim Clalit: the historical and organizational context*. Jerusalem, JDC-Brookdale Institute.

Zvielli S (2002). Personal communication.



Further reading

- Barnea T and Hussein R (2002). *Separate and cooperate, cooperate and separate: the disengagement of the Palestine health care system from Israel and its emergence as an independent system*. Westport, CT: Praeger Publishers.
- Baron-Epel O (1997). Health education—is it worth it? *Harefuah*, 132(3): 192–198 [Hebrew].
- Bentur N et al. (1998). Health care system and the elderly: the case of Israel. *Journal of Aging and Social Policy*, 10(2): 85–104.
- Berenstien JH and Shuval JT (1982). Nonconventional medicine in Israel: consultation patterns of the Israeli population and attitudes of primary care physicians. *Social Science and Medicine-1982*, 44 (9): 1341–1348.
- Bernstein JH and Shuval JT (1998). The occupational integration of former Soviet physicians in Israel. *Social Science and Medicine*, 47 (6): 809–819.
- Borkan J-M, Morad M and Shavarts S. (2000). Universal health care? The views of Negev Bedouin Arabs on health services. *Health Policy and Planning*, 15(2): 207–216.
- Brammli-Greenberg S et al. (Forthcoming). *Households, health plans, and expenditures for Medication*. Jerusalem, JDC-Brookdale Institute. [Hebrew].
- Brodsky J and Naon D. (1993): Home care services in Israel: implications of the expansion of home care following implementation of the Community Long-Term Care Insurance Law. *Journal of Cross-Cultural Gerontology*, 8, 375–390.
- Brodsky J, Galinsky D and Globerson A (2001). Geriatric health care to the elderly in Israel (unpublished manuscript).
- Chernichovsky D and Chinitz D (1995). The political economy of healthy system reform in Israel. *Health Economics* 4(2): 127–141.

Chinitz D (1994). Reforming the Israeli health care market. *Social Science and Medicine* 1982, 39(10): 1447–1457.

Chinitz D (1995). Israel's health policy breakthrough: the politics of reform and the reform of politics. *Journal of Health Politics, Policy and Law*, 20(4): 909–932.

Chinitz D and Israeli A (1997). Health reform and rationing in Israel. *Health Affairs Project Hope*, 16 (5): 205–210.

Geva-May I and Maslove A (2000). What prompts health care policy change? On political power contests and reform of health care system (the case of Canada and Israel). *Journal of Health Politics, Policy and Law*, 25 (40): 717–741.

Grafstein O and Ellencweig AY (1989). Primary care utilization in Israel – analysis of national data.

Israeli Journal of Medical Science, 25(1):32–37.

Gross M-L (1999). Autonomy and paternalism in communitarian society. Patient rights in Israel. *The Hastings-Center Report*, 29(4): 13–20.

Gross R and Brammli- Greenberg S (2000). *The health and welfare of women in Israel: findings from a national survey*, Jerusalem, JDC-Brookdale Institute, [Hebrew].

Gross R, Rosen R and Chinitz D (1998). Evaluating the Israeli health care reform: strategy, challenges and lessons. *Health Policy*, 54(2):99–117.

Gross R et al. (1998). Primary care physicians in Israel 1997: characteristics and changes in an era of reform. *Bitachon Soziali (Social Security)* 54:152–169 [Hebrew].

Gross R et al. (1999). The health care system following the implementation of the national health insurance law. *Social Security*, 54:11–34. [Hebrew].

Gross R et al. (1999). Primary care physicians in Israel 1997: characteristics and changes in an era of reform. *Social Security*, 54:169–190. [Hebrew].

Grushka T (1968). *Health services in Israel*. Jerusalem, Ministry of Health.

Habib J and Tamir Y (1995). *Jewish aged in Israel: sociodemographic and socioeconomic status*. Jerusalem, JDC-Brookdale Institute.

Haklai Z (2001). *Health in Israel, 2001*. Jerusalem, Ministry of Health.

Haklai Z, Shanon A and Reba S (2001). *Manpower in the health professions – 2000*. Jerusalem, Ministry of Health.

Haklai Z, Stein N and Ozri R (2002). *Israel –selected health for all indicators, 2001*. Jerusalem, World Health Organization and Ministry of Health.

Health Information (2000). *Inpatient institutions and day care units in Israel*. Jerusalem, Ministry of Health. [Hebrew].

- Ishai Y (1990). *The power of expertise –Israel Medical Association*. Jerusalem, The Jerusalem Institute for Israel Studies. [Hebrew].
- Ishay R (1986). *A Doctors strike*. Tel-Aviv, Zmora-Bitan. [Hebrew].
- Kop Y (2000). *Israel's social services*. Jerusalem, The Center for Social Policy Studies in Israel. [Hebrew].
- Mark M, Shani M (1995). The implementation of mental health care reform in Israel. *The Israeli Journal of Psychiatry and Related Sciences*, 32 (2): 80–85.
- Ministry of Health (1989). *National health policy in Israel: targets for the year 2000*. Jerusalem, Ministry of Health.
- Ministry of Health (2001). *Public health annual report*. Jerusalem, Public Health Services Unit [Hebrew].
- Ministry of Health (2001). *Staff in the health professions*. Jerusalem, Government Printing Office [Hebrew].
- Modan B (1985). *Medicine under siege: The doctors' strike. The crisis of Israeli medicine*. Jerusalem, Adam Publishers, 1985. [Hebrew].
- Morginstin T et al. (2000). Herceptin. *Harefuah*, 138(6):459–464.
- Nirel N and Pariente M (1999). Nursing manpower at a time of immigration and of reforms in the health care system. *Bitachon Soziali*, 54: 110-129 [Hebrew].
- Nirel N, Pariente M, Haklai Z (1997). *Trends in nursing manpower: 1986–1995*. Jerusalem, JDC-Brookdale Institute.
- Penchas S and Shani M (1995). Redesigning a national health care system: the Israeli experience. *International Journal of Health Care Quality Assurance*, 8(2):9-17.
- Pilpel D et al. (2000). *The primary care physician in Israel: primary physician workforce and estimation of potential candidates*. Jerusalem, Ministry of Health. [Hebrew].
- Porter B (1986). *Relation of improved primary care services to hospital emergency room utilization and hospitalizations in an Israel paediatric population*. Jerusalem, Hebrew University Press.
- Remennick LI, Ottenstein-Eisen N (1998). Reaction of new Soviet immigrants to primary health care services in Israel. *International Journal of Health Services*, 28(3):555–574.
- Reuveni H, Shvarts S, Meyer J, Elhayany A and Greenberg D (2001). Newspaper advertising by health maintenance organizations during the reform of health care services in Israel. *The Israel Medical Association Journal*, 3(6):422–426.
- Rosen B (2001). English translations of materials submitted to the public commission. (www.jdc.org.il/brooksites/public_commission).

Rosen B et al. (1992). Independent physicians and clinic physicians in Kupat Holim Clalit: the impact on health care expenditures. Jerusalem, JDC-Brookdale Institute.

Sax P (2001). Changes in drug economy in Israel's health maintenance organizations in the wake of the National Health Insurance Law. *The Israel Medical Association Journal*, 3(8):605–609.

Shalmon B et al. (1997). Specialty medicine - hospital versus community. *Harefuah*, 133:115–121. [Hebrew].

Shani S and Shemer, J (1999). The Israeli pharmaceutical market. *Harefuah*, 137(1-2):1–4,88.

Shani S and Shemer J (2000). Role of the pharmacist in a modern health care system. *Harefuah*, 138(4):327–330.

Shermer J (1999). The need for a post-marketing surveillance programme in Israel. *Israel Medical Association Journal*, 1(2):98–99 (1999).

Shemer J (2000). Consensus conference as a tool for national health service policy: the case for osteoporosis. *Israel Medical Association Journal*, 2(5):375–376.

Shirom A (1995). The Israeli health care reform: a study of an evolutionary major change. *International Journal of Health Planning and Management*, 10(1):5–22.

Shirom A (2001). Private medical services in acute-care hospitals in Israel. *International Journal of Health Planning and Management*, 16:325–345.

Shmueli A (2001). The effect of health on acute care supplemental insurance ownership: an empirical analysis. *Health Economics*, 10(4):341–350.

Shuval JT (1992). *Social dimensions of health: the Israeli experience*. Westport and London, Praeger.

Shuval JT (1996). Two waves of Russian immigration: comparative reference groups. *The Israeli Journal of Psychiatry and Related Sciences*, 33(1):2–4.

Shuval JT (1998). Credentialing immigrant physicians in Israel. *Health and Place*, 4(4):375–381.

Shuval JT and Bernstein J (1996). The dynamics of professional commitment: immigrant physicians from the former Soviet Union in Israel. *Social Science and Medicine*, 42(7): 965–974.

Shuval JT and Bernstein JH (1997). *Immigrant physicians –former soviet doctors in Israel, Canada, and the United States*. Westport and London, Praeger.

- Shvarts S et al. (1999). From socialist principles to motorcycle maintenance: the origin and development of the salaried physician model in the Israeli public health services, 1918 to 1998. *American Journal of Public Health*, 89(2):248–253.
- Shvarts S (1998). Health reform in Israel: some aspects of seventy years of struggle (1925-1995). *Journal of the Society for the Social History of Medicine*, 11(1):73–88.
- Society for Patients' Rights in Israel. <http://www.patients-rights.org/>.
- Sussman Z and Zakai D (1992). *Wage gaps between senior and junior physicians and crises in public health in Israel 1974-1990*. Jerusalem, Bank of Israel.
- Sussman Z and Zakai D (1997). *Paradox: the abundance of immigrant physicians and steep increase in wages for veteran, non immigrant physicians, 1990 to 1995*. Jerusalem, Bank of Israel-Research Department. [Hebrew].
- Swirski B, Kanaan H and Avgar A (1998). Health Care in Israel. *Adva Center*, 9.
- Wilf-Merom R et al. (1999). Newly implemented health care system reform in Israel: physicians' attitudes. *Health Policy*, 49(3):137–147.
- Yahalom Z and Shani S (1999). The Israeli law of freedom of information, 1998- implications with respect to the health care system. *Medicine and Law*, 18(4):589–599.

The Health care systems in transition profiles

–A series of the European Observatory on Health Care Systems

The Health care systems in transition (HiT) country profiles provide an analytical description of each health care system and of reform initiatives in progress or under development. They aim to provide relevant comparative information to support policy-makers and analysts in the development of health care systems and reforms in the countries of the European Region and beyond. The HiT profiles are building blocks that can be used:

- to learn in detail about different approaches to the financing, organization and delivery of health care services;
- to describe accurately the process, content and implementation of health care reform programmes;
- to highlight common challenges and areas that require more in-depth analysis; and
- to provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policy-makers and analysts in countries of the WHO European Region.

How to obtain a HiT

All HiT country profiles are available in PDF format on www.observatory.dk, where you can also join our listserve for monthly updates of the activities of the European Observatory on Health Care Systems, including new HiTs, books in our co-published series with Open University Press (English) and Ves Mir (Russian), policy briefs, the *EuroObserver* newsletter and the *EuroHealth* journal. If you would like to order a paper copy of a HiT, please write to:

observatory@who.dk
or call us on (+45) 39 17 17 17.



The publications of
the European Observatory
on Health Care Systems
are available on
www.observatory.dk.

HiT country profiles published to date:

Albania (1999, 2002^{a,e})
Armenia (1996, 2001^e)
Australia (2002)
Austria (2001^c)
Azerbaijan (1996)
Belarus (1997, 2002)
Belgium (2000)
Bosnia and Herzegovina (2002^e)
Bulgaria (1999, 2003)
Canada (1996)
Croatia (1999)
Czech Republic (1996, 2000)
Denmark (2001)
Estonia (1996, 2000)
Finland (1996, 2002)
Georgia (2002^e)
Germany (2000^c)
Greece (1996)
Hungary (1999)
Israel (2003)
Italy (2001)
Kazakhstan (1999^e)
Kyrgyzstan (1996, 2000^e)
Latvia (1996, 2001)
Lithuania (1996)
Luxembourg (1999)
Malta (1999)
Netherlands (2002)
New Zealand (2002)
Norway (2000)
Poland (1999)
Portugal (1999)
Republic of Moldova (1996, 2002^e)
Romania (1996, 2000^d)
Russian Federation (1998, 2002^e)
Slovakia (1996, 2000)
Slovenia (1996, 2002)
Spain (1996, 2000^f)
Sweden (1996, 2001)
Switzerland (2000)
Tajikistan (1996, 2000)
The former Yugoslav Republic of Macedonia (2000)
Turkey (1996, 2002^e)
Turkmenistan (1996, 2000)
United Kingdom of Great Britain and Northern Ireland (1999^e)
Uzbekistan (2001^d)

Key

All HiTs are available in English.
When noted, they are also
available in other languages:

- ^a Albanian
- ^b Georgian
- ^c German
- ^d Romanian
- ^e Russian
- ^f Spanish