Health Care Services

1. Introduction and Summary

From the standpoints of the public's health and satisfaction with the system, the achievements of the Israeli health care system are impressive. Israel remains one of the world's leaders in high life expectancy and, insofar as the matter may be compared, in public satisfaction with health care services. The credit for these achievements, as has been noted in the past, definitely belongs to the caliber and quality of the system's personnel and also to the public nature of the health care system.

At the same time, though, the rise in the share of private funding in health care and the system's growing susceptibility to conventional market failures have meant that the social and economic achievements of the system are being eroded and there are rising concerns that, ultimately, the public's health will suffer. The private funding of services is claiming a growing portion of the household budget, especially among the low-income quintiles, and is making medical services less accessible due to cost. The cost of services has been rising and the public's satisfaction with the system has been falling. In this chapter, the increase in private funding as a main health care system issue is examined. As in past years, there is also an assessment of several other issues that, if dealt with appropriately, may help the system to function better and to provide more continuity and better coordinated services.

Part 2 of the chapter presents a concise survey of the recent development of the health care system, as illustrated by various statistics. The survey relates to several main levels: a) the level and composition of health care expenditure and changes that

have occurred in this parameter, from the private and the public standpoints, in the economy at large and in the household budget; b) the health of the Israeli population, analyzed from several perspectives, including life expectancy, with emphasis on the unique difference in the situation of Israeli women; c) the effect of the changes in funding on equity in health care, as well as the trend in basic real inputs, e.g., changes in the number of physicians employed in the system and in inpatient beds. Part 2 concludes with a brief discussion of the public's satisfaction with the health care services that it receives.

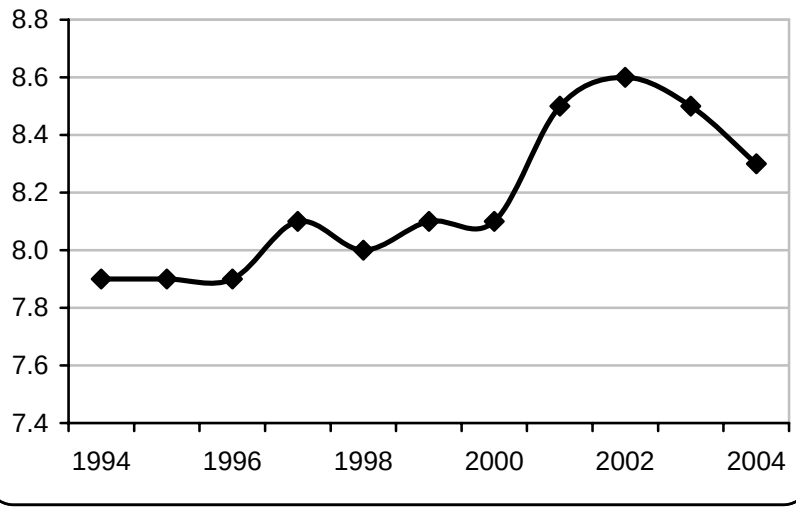
Part 3 discusses several structural issues of the health care system. The first concerns medical personnel and the possibility that Israel is entering a new era in regard to the supply and demand for physicians. (The discussion is based on an article on the topic prepared for the Center by Professors Haim Doron and Dov Chernichovsky.) The second issue relates to the geographic distribution of emergency services, a matter that deserves public debate and policy decisions. The topic was expanded into a separate article by Dr. Koby Peleg and published as a monograph by the Taub Center. The third issue is controversial: the integration of the mother-and-child health services into the general medical services. A longer version of the discussion on this topic, by Professor Chava Palti, has also been published as a separate discussion paper. The subject is related to the broader issues of continuity of care and the ability to place preventive and curative aspects of medicine under a single service umbrella. Continuity of medical care is also linked to another important issue: the relationship between community care and inpatient care. This topic is discussed in a policy paper written by Dr. Yuval Weiss, Dr. Yair Birnbaum, and Professor Shlomo Mor-Yosef published by the Center. This is an important issue and the authors propose a reform in the deployment of Israel's health care services.

2. Trends in the Health Care System

a. National Health Care Expenditure

National health care expenditure, in current prices, was NIS 46 billion in 2004, 8.3 percent of that year's Gross Domestic Product (GDP). This reflects a decline from the proportion in 2003, which also dropped relative to the year 2002, when national spending peaked at 8.6 percent of GDP on health care. In preceding years, there had been an upward trend that became especially steep after 2000 (Figure 1).

Figure 1. National Health Care Expenditure as Percent of GDP, 1994–2004



Source of data on national health care expenditure, here and throughout the chapter: Central Bureau of Statistics (2005), press release 173/2005 (August 8), and CBS, 2004, *National Expenditure on Health 1962–2003*, Special Publication 1236.

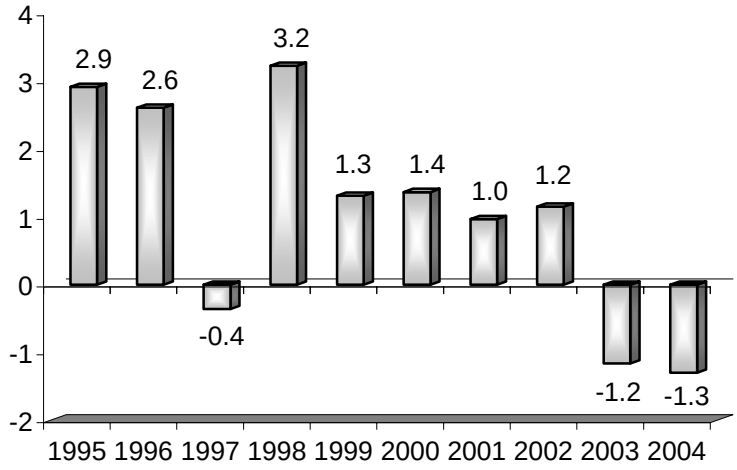
Since the share of national health care expenditure in GDP reflects a combination of changes in average per-capita health care expenditure and changes in per-capita GDP, it is proper to examine the change in expenditure relative to changes in GDP.

National health care expenditure in 2004 declined by one percent in real per-capita terms, following a similar decline in the preceding year (Figure 2). The decrease marked the continuation of a slowdown in the growth rate of real per-capita expenditure since 1995.

Notwithstanding these developments, the general trend in the percent of health care expenditure in GDP since 1995 has been upward. The decrease since 2002 is a "correction" on account of changes in GDP that may reflect the inelasticity of health care expenditure. Thus, national health care expenditure did not decline at the rate of the decrease in per-capita GDP during the non-growth years (2001 and 2002) and did not rise at the pace of the GDP increase that occurred after growth resumed (2003–2004).

Figure 2. National Health Care Expenditure on Per-Capita Average

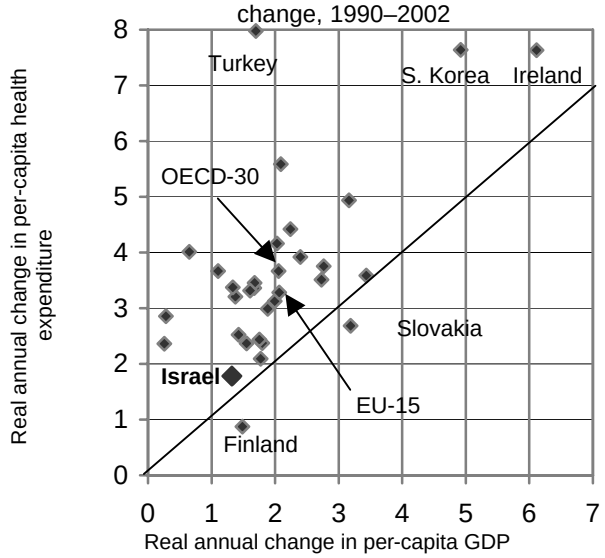
Annual percent change



By and large, Israel's real per-capita health care expenditure in 1990–2002 increased at a slightly higher rate than the increase in per-capita GDP (Figure 3). In the OECD and EU countries, the same general pattern occurred but the rate of increase was even higher. These data should be viewed above all in the context of the growth rate of per-capita GDP, which was lower in Israel than in the other countries. Since the income inelasticity of health care (the sensitivity of health care expenditure to change in income) is greater than one (that is, a given percent of change in national income leads to a larger percent increase in health care expenditure), these statistics come as no surprise even if one overlooks possible changes in the relative prices of medical services as against GDP in the various countries. One would expect per-capita health care expenditure as share of GDP to increase significantly due to rapid growth and the curbing of inflationary tendencies in the health care services. (Finland's ranking is interesting: although the growth rate of per-capita health care expenditure there is slower than that of GDP growth, Finland has one of the best health care systems in the world.)

Even if the existence of a long-term upward trend in the share of health care expenditure in GDP is assumed, the trend should be examined for its real significance. As is shown below, the prices of medical services have been rising more quickly than GDP prices. Thus, some of the increase in the share of GDP devoted to health care has been spent not on a real increase in medical services but on higher prices.

Figure 3. Rates of Change in Per-Capita Health Care Expenditure and Per-Capita GDP, Average percent change, 1990–2002

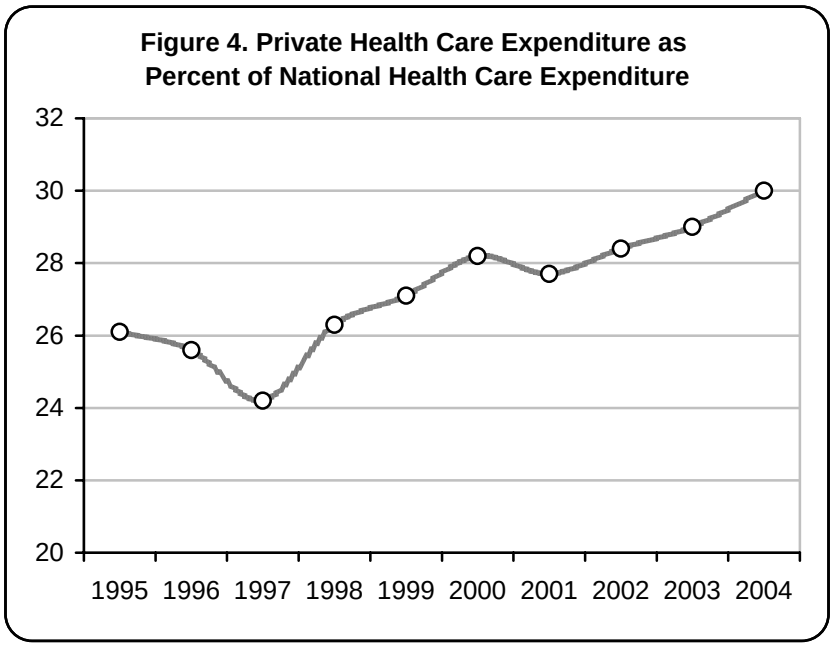


b. Sources of Funding

The share of public funding in the health care system continued to decline in 2004. Private funding covered 30 percent of total national health care expenditure that year (Figure 4), one of the highest proportions among developed countries that have legislated national health care services.

The increase in private funding of health care has left its mark on the household budget. The share of total household expenditure spent on medical services rose from 3.8 percent at the beginning of the decade to 5 percent in 2004. The increase in 2004 followed stability at 4.8 percent in 2001–2003, 4.6 percent in 2000, and 4 percent in 1998–1999. The percentage may double by 2007, marking a decade since the first Economic Arrangements Law opened the floodgates to the main items of

increase in private expenditure: supplemental and other voluntary insurance plans and co-payments.



c. Health of the Population

The life expectancy of Israelis is one of the highest in the Western world. Israel can continue to improve this by tackling two issues: infant mortality and women's health. Taub Center reports in recent years have consistently noted the discrepancy between the Jewish population and the Arab population in infant mortality. Due to this gap, Israel has a relatively high rate of infant mortality compared to other developed countries. Its rate of infant mortality – 4.9 per 1,000 births – lags behind Japan, Finland, Sweden, and Norway, where the level is around 3 per 1,000, and behind France, Spain, Belgium, Germany, and other countries that have mortality rates of around 4 per 1,000.

Nevertheless, Israel has a lower rate than Ireland, Great Britain, Canada, New Zealand, and the U.S.

Another international comparison shows that, relatively speaking, Israeli men rank higher in life expectancy than Israeli women. The life expectancy of Israeli men belongs in the "major league" of countries with the highest life expectancies; Israeli women are in the "minor league." For the years 1999–2003, life expectancy upon birth was 76.9 years for men and 81.1 years for women.[1]

The World Health Organization[2] calculated life expectancy in 2003 on the basis of estimates of mortality tables for each country. Israeli men fell into the group of countries that have the highest life expectancy – Japan, Australia, Sweden, Switzerland, Canada, and Italy – at 78 years. As for women, life expectancy for Israeli women is like that in Germany, Canada, Finland, and Norway (82 years) and falls below that of Japan (85), France and Italy (84), Spain, Australia, Sweden, and Switzerland (83).

Thus, improving the health of women, mothers, and children should be a basic goal in the advancement of health care in Israel. This also has implications for the structural changes that Israel's health care system needs. (See issues discussed in the second part of this section).

d. Equity

As noted, about 5 percent of total household consumption expenditure was devoted to health care in 2004. The breakdown of this expenditure by income quintiles is shown in Figure 5. The rising share of health care in total household expenditure reflects the higher than unitary income elasticity of health care expenditure, especially when the share of private funding in total health funding is relatively high. Thus, any widening of

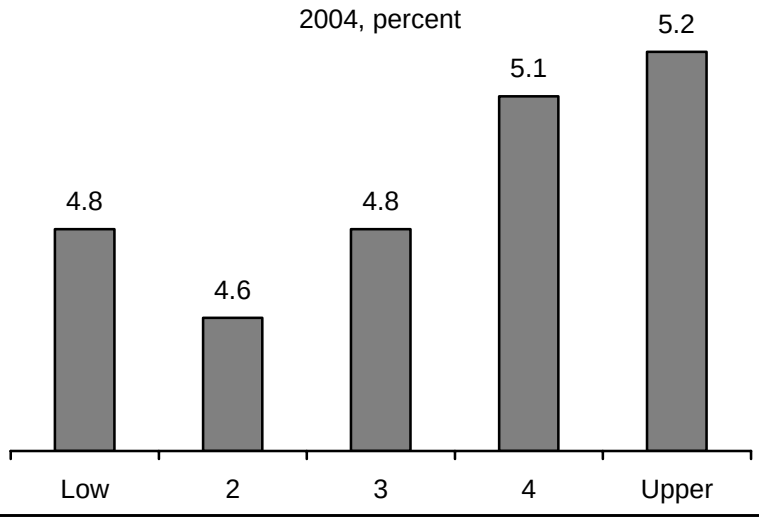
[1] Central Bureau of Statistics, Complete Mortality Tables of Israel, 1999–2003.

[2] World Health Organization, 2005, *The World Health Report, 2005.*

income distribution will result in a wider distribution of health care expenditure. In absolute terms, the expenditure gaps between the uppermost quintile and the lowest quintile have been *narrowing* since 1977. This means that, in terms of health care expenditure, the lowest quintiles have been trying to "keep up" with the uppermost ones: the growth rates of expenditure were 90 percent in the lowest quintile as opposed to 68 percent in the uppermost quintile.

Figure 5. Average Monthly Health Care Expenditure Per Standard Adult, by Income Quintiles

2004, percent



These data show the problematic nature of the increase in private funding of health care services. The narrowing expenditure ratios indicate that the gaps in the access of different income groups to services have been decreasing, meaning that *horizontal* equity has been improving. The same ratios, however, show that health care expenditure is consuming growing portions of income precisely among the weak groups,

meaning that *vertical* equality is worsening. Thus, the data point to an increase in regressive measures – less protection of the budgets of weak households than of those of strong households – in funding the system. This protection is one of the basic goals of a public health care system.

The question of private funding in the context of access to health care services can be examined by asking whether citizens forgo vital medical services due to the added personal cost. This year, for the third straight year, the Taub Center Social Survey asked this question.[3] According to the responses, more than 20 percent of the population each year had to forgo an essential medical service at least once during the survey year. Furthermore, during the past three years the percent of affirmative responses has risen. High rates of "doing without" appeared among the elderly and among immigrants from the former Soviet Union, about one-third of whom had to do without some essential medical service once or more during the year.

The survey findings draw a clear correlation between the level of income and education and the nature of health service use. Some 96 percent of members of the high-income group and 80 percent of those with an academic education never had to do without a necessary medical service. In contrast, 15 percent of the poorly educated and 10 percent of those of low income said that they had to do so "very often."

The findings for 2005 do not point to a further deterioration relative to 2004 but correspond to the general findings in this field. An increase in co-payments, such as this trend in Israel, causes demand to contract temporarily until an adjustment takes place over time. The data on the relative increase in health care expenditure by low quintile households are consistent with such behavior.

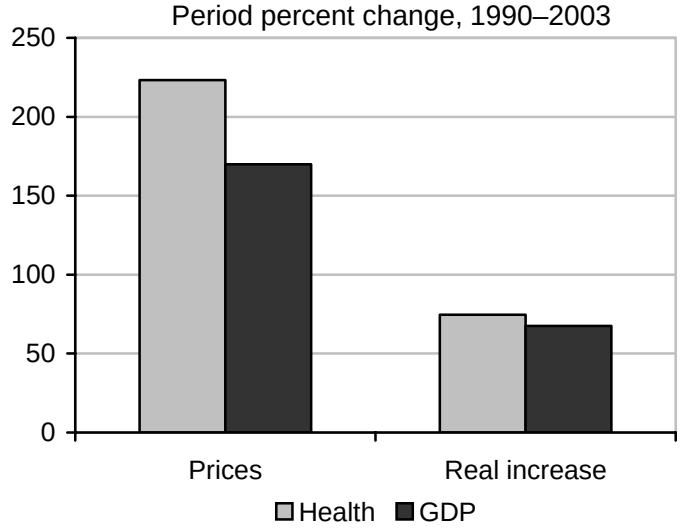
[3] See expanded discussion in the "2005 Social Survey" chapter of this book.

e. Cost Containment

Control of expenditure in the health care system refers to control of the real increase of health care expenditure relative to increase in GDP. In the main, it pertains to the prevention of inflation pressures due to market failures that are identified with private funding.

Figure 6. Real Increase vs. Price Increase in Health Care and GDP

Period percent change, 1990–2003



Source of data on household expenditure: CBS (2005), press release on household expenditure, August.

As noted, average per-capita health care expenditure has been decreasing during the past two or three years, although the general trend over the past decade has been upward (Figure 2). Furthermore, the increase in health care expenditure has approximated or surpassed the rate of GDP growth (Figure 3) although not as quickly as the norm in the OECD and EU

countries, which have experienced strong growth in their GDP. What makes the increase in Israel problematic is that it is evidently becoming less a matter of quantity of service and more a matter of inflation, as Figure 6 shows plainly. Data from the Central Bureau of Statistics on changes in household consumption in 2003–2004 point to price decreases in all consumption groups and the price index at large. Increases were observed in only three components of the index: food, housing, and health care. The increase in health care was second only to that in housing.

f. Public Satisfaction with Health Care Services

The table below presents the responses, in Israel (2000) and in several developed countries (1999), to a series of questions about the need for changes in the health care system. Public satisfaction with the system was higher in Israel than in any of the other countries listed. Israel had the highest percent of those responding that the system needs minimum changes and the lowest percent of those responding that the system has to be rebuilt.

Satisfaction with Health Care Services – International Comparison (Percent)

Changes needed	**Australia**	**U.S.**	**U.K.**	**New Zealand**	**Canada**	**Israel**
Minimal	19	17	25	9	20	37
Substantial	49	46	58	57	56	49
Rebuild	30	33	14	32	23	13

Sources:
Donelan, K., et al., Health Affairs, (1999).
Shmueli, A., Health Policy, (2003).

Since 1999, the Taub Center has been examining the question of public satisfaction with health care services in its annual

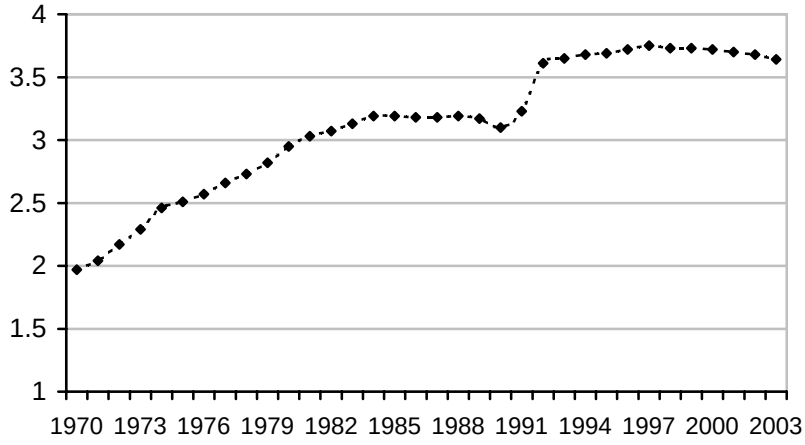
social surveys. (See expanded discussion in the Social Survey chapter of this volume).

3. Structural Issues in the Health Care System

a. Supply of Physicians – A New Era?[4]

Since the 1970s, Israel has had the benefit of a rise in the number of physicians per-capita (Figure 7). The trend stopped in the late 1990s as the number of physicians per thousand population began to level off, and in recent years the number of physicians per-capita has been declining. The new trend may be long-term as the potential sources of immigrant physicians have been diminishing. Thus, a rethinking in the planning of this most basic resource of the Israeli health care system has become necessary.

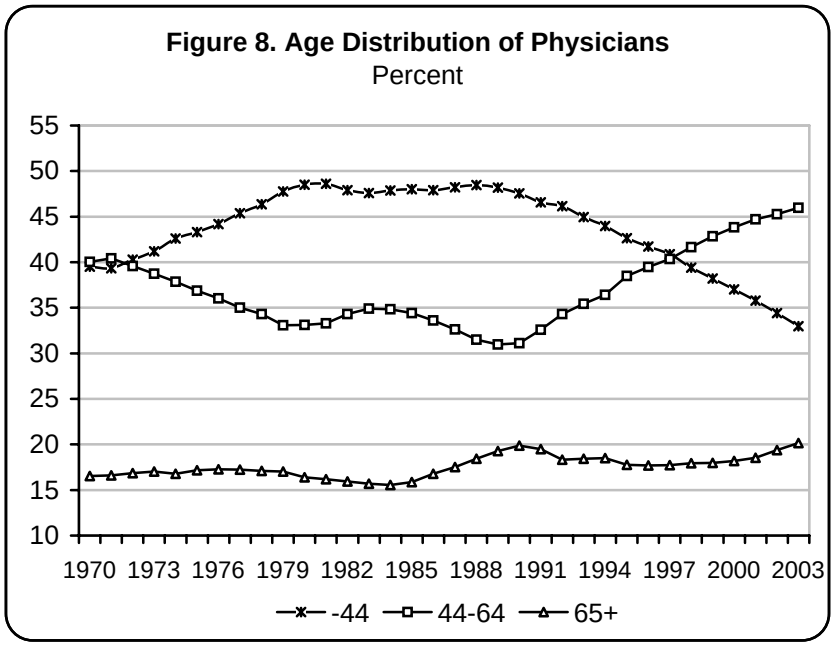
Figure 7. Physicians up to Age 65
Rate per 1,000 of population



[4] Based on Doron, H., and Chernichovsky, D., 2005.

The number of medical licenses issued in Israel mirrors two large waves of immigration: that of the 1950s, after World War II and the establishment of the state, and that of the early 1990s, upon the disintegration of the Communist bloc and the break-up of the Soviet Union. Until 1987, Israel was the only Western country that licensed immigrant physicians without requiring certification tests. Since then, Israel has set minimum standards that every immigrant physician must meet. Today, physicians who studied and trained abroad – including Israeli physicians – must pass licensing examinations; only those who practiced in Canada, the U.S., or South Africa are exempt. The purpose of the licensing reform was to increase the regulation of the quality of physicians. Israel took pride in the large number of physicians among its recent immigrants. The influx allowed it to achieve the world's highest ratio of physicians to population – 4.61 per 1,000 (3.64 up to age 65, i.e. employed physicians). This reality, however, has had two less desirable results: the share of graduates of Israeli medical schools fell to one-third of the population of physicians; and, in a phenomenon stemming from the first, the population of physicians has been aging (Figure 8).

The rising number of physicians did not prevent the continuous need to deal with two basic issues: the geographic distribution of physicians in the population and improvement in their quality. It did, however, enable the system to address these problems under conditions of plentiful supply. Israel's physicians are unevenly distributed around the country. The three largest cities have plenty of physicians, relatively speaking, but areas in the periphery suffer from a shortage. The distribution of specialists is even more uneven. Furthermore, the inverse correlation between the geographic distribution of medical personnel and the mortality rates poses a challenge to the Israeli health care system, and to the country at large.



As far as quality is concerned and in as much as this aspect can be quantified, there is no doubt that Israel has undergone a revolution. In order to employ as many immigrant physicians as possible, it was suggested to many of them – especially those who elected not to obtain specialist certification – to move to primary medicine, traditionally a less coveted field than hospital practice. The data indicate that less than half of the recent immigrant physicians turned to specializations, unlike the majority of Israel-trained physicians. A decisive aspect of the reform process, however, was a change in medical curricula and training, in which many changes were instituted in support of a new philosophy of enhancing the quality of primary care.

The reforms included extra in-service training for primary physicians and, principally, recognition of family medicine as a specific field of specialization. In 1969, the scientific council of the Israel Medical Association approved a four-year

specialization program in family medicine. The program took time to implement because the medical schools and the sick funds responded to it hesitantly. The Amorai Commission noted in its recommendations that further effort is still needed to establish this specialization as a pre-condition for physicians who wish to practice general medicine in community settings.

Family medicine has evolved into a respected specialization that has caught up with other specializations in Israeli medicine. Even as the number of specialists per population has leveled off, the number of residents in internal medicine and, especially, family medicine, has been rising.

The steady increase in the supply of medical personnel definitely helped Israel to cope with the problems of physician distribution and change in the quality of care, at least in respect to everything connected with manpower. The system is also changing in terms of health manpower supply and demand, and is embarking on a new era that will involve some rethinking. Supply is declining in two respects. One, the number of physicians is declining. Two, as the physician population ages, it becomes more difficult for them to adapt to new and changing needs. As for demand, the increase in scope and nature of private funding is fueling demand for specialists, mainly in urban centers.

Israel should make use of the fact that it still has a relatively high physician/population ratio in order to prepare for the new era in an organized manner.

b. Equity and Availability of Pre-Hospital Emergency Medical Services[5]

The system of medical evacuation and rapid and high quality pre-hospital care is one of the most important and influential

[5] The issue is presented briefly here. For an expanded discussion, see Dr. Koby Peleg's monograph published by the Taub Center.

factors in saving lives and preventing disabilities in medical emergencies.

Most of the efforts and services of the pre-hospital emergency medical arrangement deal with four of the five main causes of death in the West: heart attacks, trauma, pulmonary illnesses, and vascular diseases. Many studies around the world indicate that rapid and high quality treatment and evacuation are the keys to saving lives in medical emergencies. Therefore, one of the main emphases in emergency medicine is on the deployment of ambulances, which are usually the first medical response. The quality and swiftness of the actions of the ambulance team do much to determine survival and disability rates.

Efficient and effective organization that fulfills the vast potential of the pre-hospital emergency system helps to save lives and reduce disabilities and loss of working days. At the level of the national economy, it helps to reduce payments for disability, sick leave, days in hospital, medical treatments, lengthy rehabilitation, direct (for the patient) and indirect (for the family members and others) loss of work days, and the departure of the disabled from the labor force. It also reduces lifetime cost significantly, of course. Now, more than ever, medical aspects are being examined from cost-benefit and cost-effectiveness perspectives increasing the importance of these concerns.

In the United States and other Western countries, the economic potential of improving the system of emergency medical services (EMS), as well as its potential in saving lives and maintaining quality of life, is understood. The United States spends more than $100 billion per year on trauma casualties. Improvements and changes in the EMS system have reduced trauma mortality by 30–40 percent. In Israel, too, mortality rates among the severely injured fell by nearly 30 percent in the 1990s, when the recommendations of the Revah Committee

were implemented and a national trauma system was established. Taken together these two factors lead to the conclusion that the system needs to tackle this issue both to cut costs and to save more lives.

Until a few years ago, the countrywide distribution of ambulances was based on historical patterns with modifications and changes over the years, some based on professional considerations and some on political or other reasons. Today's arrangement of services is not necessarily a reflection of or an appropriate response to needs. In different parts of the country there are significant differences in initial response times, and duration and method of intervention (hospital transfer). *Magen David Adom* (MDA, the Israeli "Red Cross") has made major improvements in its deployment of ambulances over the past five years and has also dispersed the system that controls ambulance operation and availability. However, there remains much room for improvement to reach an optimum service distribution.

The main problem is that Israel lacks a clear and consistent policy that includes standards and criteria for the deployment of various types of ambulances countrywide. Furthermore, the method of funding and budgeting of MDA is complex, problematic, and somewhat vague. Although several organizations provide pre-hospital emergency medical services in Israel, MDA is the main one, referring some 85 percent of emergency cases. (Its services are supplemented by several private ambulance organizations, volunteer ambulance organizations such as *Hatzalah* and *Zaka*, and companies with memberships such as *Shahal* and *Natali*).

Due to the lack of clear policies, criteria, and standards for the deployment of ambulances, the situation today with regard to MDA ambulances is typified by basic inequity between localities and a total lack of availability in some localities. One of the most blatant examples is the deployment of ambulances in

the Arab sector. The country has ten Arab localities with populations of more than 20,000. None has an ALS ambulance[6] and only three have a BLS ambulance.[7] In contrast, among the forty-nine Jewish localities with populations of more than 20,000, twenty-seven have ALS and thirty-three have BLS.

Israel finds itself on the horns of a dilemma. If it legislates policy, criteria, and standards, it then must allocate resources for their implementation. As long as it does not establish criteria, it remains in a gray area. This method sometimes leads to problematic decisions: for several years, Israel has been debating an ambulance law. The bill being formulated is based on a method that will not apply to MDA because, it is claimed, MDA functions under a separate law. In practice, this is not the real reason. In fact, the state is not interested in holding MDA to standards that would require a budget increase. This will lead to the absurd situation where only the private ambulances that handle a fraction of emergency cases will be required to meet the criteria established in the law.

Airborne evacuation also presents problems. Today, air force helicopters and crews provide most air evacuation service. The main problem with this is that these services are positioned and tailored to the convenience and utility of the air force and not to the requirements of civilian evacuation. As a result, the difficulty of problematic rescues from *wadis*, flooded areas and so on, continuously arises. This sometimes results in a lengthy response time, with serious consequences. Thus if the costs were measured in terms of loss of life, or disability and its implications (suffering, pain, etc) rather than air force considerations, the scales would tip in a different direction.

The detailed analysis of the issue (see the full article) leads to several policy recommendations:

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[6] An ALS (Advanced Life Support) ambulance is one that is capable of delivering advanced treatments by EMS practitioners.

[7] Basic Life Support ambulance.

* The state should act to provide all inhabitants with service of similar quality, even if this requires differential treatment of subgroups in densely and sparsely populated regions, as is accepted in other countries. To carry this out, explicit policies and criteria for the functioning of the pre-hospital emergency medical system are needed.
* Various ways of improving the method of MDA funding may be considered. Two possibilities are fees for MDA activities and earmarked budget transfers by the sources that finance MDA. It may be possible to arrange cross-funding or even tenders on a regional basis, with compulsory integration between more profitable and less profitable regions.
* Regarding helicopter evacuation, a topic much debated in cost-benefit terms, the current method is not providing an appropriate response in the northern and southern parts of the country. If it is decided not to provide helicopter evacuation services (state-owned or other) in these areas, the inhabitants should be provided with some other reasonable solution.
* In regard to the Arab sector, the Ministry of Health should perform a cost-benefit analysis with reference to the medical implications and expenses of perpetuating the current situation characterized by slow treatment or redundancy of services versus an ambulance service that would provide a quick response.
* As for secondary patient transfer, it is recommended that the Ministry of Health consider establishing a different payment rate for secondary transfer requested by the patient/injured as opposed to that necessitated by medical considerations. (About 40 percent of such ambulance transfers are due to injuries that rate as minor on the ISS scale of severity, and, except for purposes of imaging or admission to a special inpatient ward, the need for the transfer is questionable.)
* Another significant improvement in EMS deployment may be obtained by using optimization models of points of departure

to determine the placement of existing ambulances and by converting ALS ambulances into BLS units, which are about one-third less costly. This measure may significantly improve the quality and speed of the response at no added cost.

c. Preventive Medicine for Pregnant Women and Children[8]

Preventive medicine is the special branch of the medical profession that focuses on the health of specific population groups in order to safeguard and enhance their health and prevent illness, disabilities, and premature death. With respect to pregnant women, the goal is to reach a normal delivery and a healthy baby and to teach the basics of infant care. For the infant, the goal is to insure good health, prevent illnesses, and assure early detection of defects for the purpose of treatment.

Preventive medicine in pre-state Israel was introduced ninety years ago as a basis for the delivery of health care services to the poor population of Jerusalem. The service, established by the American *Hadassah* women's organization and available to the entire population, developed over the years into a network of well-baby centers that provided pregnant women, infants, and schoolchildren with preventive health care services. When the state was established, the service was transferred to the Ministry of Health, which determined the goals, policies, and allocation of resources. The ministry gathered epidemiological information and, practically speaking, provided preventive services to most of the population. Only in *kibbutzim* and *moshavim* (collective and cooperative settlements) were preventive services delivered by the *Histadrut* Sick Fund.

Following the Alma-Ata International Conference on Primary Health Care of the World Health Organization that recommended the integration of preventive medicine and

[8] The issue is presented briefly here. For a full discussion, see Chava Palti's monograph published by the Taub Center.

primary care, various committees in Israel (including the Netanyahu Commission) also recommended the inclusion of preventive medicine in the array of primary health care services that the sick funds provide.

The State Health Insurance Law, enacted about a decade ago, incorporated the preventive medical services into the system of curative health care services. By so doing, it handed responsibility for their delivery to the sick funds. The funds are responsible for the delivery of preventive services that are included in the "basket" of insured services under the Third Addendum of the law. This organizational change was proposed for two reasons: to save on resources and to ensure continuity in care by having the same provider for preventive and curative care. An integrated organizational structure of preventive and curative medicine exists in several countries, including the U.K., Sweden, and Norway.

Since the State Health Insurance Law went into effect, various governmental, professional, and academic forums have discussed the reorganization of the preventive services. Each year, the Ministry of Finance proposes the transfer of the preventive services to the sick funds, i.e., doing away with the well-baby centers, known today as family health centers. The intention is to close down some 600 centers run by the Ministry of Health and sixty others run by the municipalities of Jerusalem and Tel Aviv, which together account for 55 percent of all family health centers and serve 80 percent of infants.

In these discussions, various rationales for and against the proposed change have surfaced.

Expected Advantages of the Integrated Service

* Integration will lead to savings by eliminating redundancies in administration and infrastructure and, possibly, by downsizing the medical and nursing staff.

* There would probably be less use of parallel services. Surveys showed that by the 1980s, pregnant women used several services and only about one-fourth of them made exclusive use of the family health centers for prenatal care. A study in 2000 showed that pregnant women used the services of several physicians and made more visits than were recommended. They preferred sick fund clinics to well-baby centers. The population today has been exposed to the medicalization of pregnancy and is aware of technological advances such as ultrasound, fetal scanning, and genetic tests that the well-baby centers do not offer. Furthermore, women who elect to use the service that provides these tests do not need a referral from the well-baby center or authorization from their sick funds. They regard follow-up at the sick funds as a service provided by the doctor, who is skilled in monitoring the pregnancy, and perceive of the well-baby center as a service that is provided mainly by nurses. It was found that well-educated women, in particular, prefer the services of a doctor.
* Centralizing prenatal medical services at one clinic may reduce the number of visits and the number of care giving physicians and would provide pregnant women with more comprehensive, accessible, and efficient service.
* The integration of the services would assure continuity of care. A regular doctor and nurse would meet all the needs of the infant (child), including monitoring of growth and development, inoculations, early detection of problems, and care in the event of illness. Accordingly, one would expect the large number of visits – twenty-six in the first year and a half of the baby's life – to decrease. Obviously medical problems can be detected during routine visits and growth and development can be monitored during visits related to illness.

* Integration would prevent division of responsibilities and conflicting medical recommendations.
* There would be only one set of medical records, facilitating more comprehensive evaluation of the state of health of the child and/or the mother during pregnancy.

Expected Disadvantages of the Integrated Service

* The staff that is needed to treat both preventive and curative health care issues would not necessarily be as skilled as a staff whose tasks are limited to the special aspects of preventive medicine. The rapid accumulation of medical information has led to a tendency towards specific and narrow specialization, in the belief that no one can possibly amass information and skills in many disciplines. A study among nurses at the *Maccabi Sick Fund*, for example, found they lacked up-to-date information about nutritional counseling for nursing mothers.
* The role of the nurse in preventive medicine includes guidance and training in activities of daily living, phases of development and growth, nursing, accident prevention, promotion of good health for the pregnant woman and the baby, and time and skill intensive support in the event of social problems. One topic that does not receive sufficient attention, for example, is smoking during pregnancy. The proportion of pregnant mothers who smoke has not changed in the past twenty-five years, even though the introduction of prevention programs has been recommended. Smoking during pregnancy is known to have negative implications for the mother's health and the development of the fetus. Babies born to mothers who smoke are born 250 grams lighter on average than babies born to non-smokers. These findings affect neonatal health, the mother's health, the duration of inpatient care needed after birth, and the cost of care. The integrated setting, which would allot eight minutes per visit,

would not provide enough time to administer pro-health programs such as an anti-smoking program.

* There is concern that the prevention aspect, a non-emergency element, would be marginalized within the integrated medical framework. Curative care for infants is generally more urgent and requires immediate attention due to the nature of the illness and the mother's concern.
* In the United States, pediatricians also provide preventive care but devote a minimum of time per visit to it – only an estimated 60–90 seconds.
* Comparative studies of separate preventive care and integrated services found that mothers who use integrated services receive less instruction in matters such as the importance of iron supplements while nursing, laying the baby on his/her back, and other matters.
* The four sick funds provide curative treatment services within the framework of National Health Insurance. It has been argued that the establishment of preventive care centers in one neighborhood or locality by all four funds would be detrimental to the community aspect of a specific geographical region due to the division of responsibilities. Furthermore, the delivery of preventive services by the four sick funds would be costlier than the option of a single service.
* In small localities where the four sick funds did not open preventive services, accessibility to and availability of preventive services were impaired and pregnant women and infants had to travel to large nearby localities to obtain preventive service.
* After the integration becomes a fact, the sick funds will become the providers of medical services at large. As such, they will be responsible for the apportionment of resources between curative and preventive services for the population and for their members. Due to economic constraints and

competition among the funds for potential members, different levels of service delivery may develop, reflected in differential apportionments of resources for prevention and wellness promotion, to the detriment of the preventive services and the standards of preventive care in those fields that are inadequately defined. The clinical guidelines of *Clalit Health Services* sum up the problems of integration in the following words: *"Many difficulties exist in providing preventive care in the primary care setting. Mutually exclusive recommendations, doubts about the necessity of tests, lack of knowledge, lack of encouragement by the employers (time, remuneration), lack of time, and overburdened practices influence the primary physician in the direction of dealing with acute illnesses at the expense of preventive medicine."*

* As for government, its inability to meet all the population's health care needs due to the cost of service delivery may result in impairment to preventive care, because the effects of prevention procedures such as inoculation against viral hepatitis, prevention of smoking, etc., on the state of the population's health usually take years to manifest. Politicians, whose perspective is time limited, tend to give budget priority to problems that can be solved immediately and with high visibility.

In view of the vast sensitivity of the topic and the broader national need to promote health, the Amorai Commission, which was given the task of assessing public medicine and the physician's status, recommended a *modus operandi* that would preserve the budgetary and executive autonomy of the mother-and-child health care system. First, during the year after the publication of the panel's recommendations (2002), the Ministry of Health should consider the need to establish an independent body for the advancement of the health of mothers, children, and adolescents. This entity, if a decision to establish it is made,

should handle all aspects of this population's health care with respect to health education, promotion of wellness, preventive care (including dental health), and instruction in healthy living in a healthy environment. Second, this entity should operate services under its own auspices, through the sick funds, local authorities, and providers such as hospitals (where available) and self-employed physicians, or in some combination, based on considerations of the public's health, availability and accessibility of service, and economic efficiency.

This approach distinguishes between the executive responsibility for the use and finance of services, on the one hand, and the delivery of service, on the other.

In other words, the recommended authority, like the sick funds in general medicine, may acquire services as appropriate in view of considerations of efficiency and the public well-being. Thus, the Amorai Commission recommendations neither rule out nor require the integration of service delivery (least of all in urban centers), instead, they assure that the providers, whoever they may be, receive a separate budget for this activity and be accountable for it.

The above findings lead to the following recommendations, in addition to those of the Amorai Commission:

1. All organizational planning in preventive medicine, whether preventive services are integrated with curative care or delivered separately, should devote more resources and services to population groups at risk and should strive to narrow health disparities by offering wellness advancement programs at the individual and community levels, in coordination with other systems such as education and human services.
2. The efficiency and utility of routine activities in preventive care for pregnant women and infants should be examined in view of the most recent knowledge and new standards should be established.

3. Regarding preventive care for pregnant women and children the emphasis in the twenty-first century should be placed on the advancement of wellness and the improvement of quality of life and not only on the prevention of morbidity and mortality.

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