TAUB CENTER
FOR SOCIAL POLICY STUDIES IN ISRAEL

The Healthcare System: An Overview

Dov Chernichovsky

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Introduction

In Israel, as in other advanced countries, the challenges facing the healthcare system currently are high on the public agenda. While it is likely that the recurring elections are a contributing factor, there are undoubtedly also objective causes including some that have challenged the system for a long time. It seems that there is broad consensus, at least among patients and their families, that the healthcare system in Israel is faltering, at least when it comes to dealing with stressful emergency situations in a dignified way at the most sensitive interaction points with the public, namely in emergency rooms and internal medicine departments.

There is growing intensity to the public discussion of the healthcare system in Israel, but with respect to the root causes, nothing is new. The healthcare system has reached the current situation as a result of long-term processes that have been written about and discussed in the past.[1] This review, which is based on a wealth of data recently published by the Ministry of Health, the Central Bureau of Statistics (CBS), and the Organization for Economic Cooperation and Development (OECD), seeks to shed light on the issues that policy makers should be aware of if the relatively high level of health of Israel's population is to be maintained. Accordingly, this review deals with the population's health from perspectives somewhat different from the commonly accepted ones: the level of public financing of the healthcare system in Israel, which is low relative to other developed countries, and which raises the question of the system's sustainability even in the short run; the prices of medicine in Israel, which have been increasing due to the changes in the composition of private funding and exposure to market failures; and to long-term challenges to the health of the population in the periphery and with respect to long-term care.

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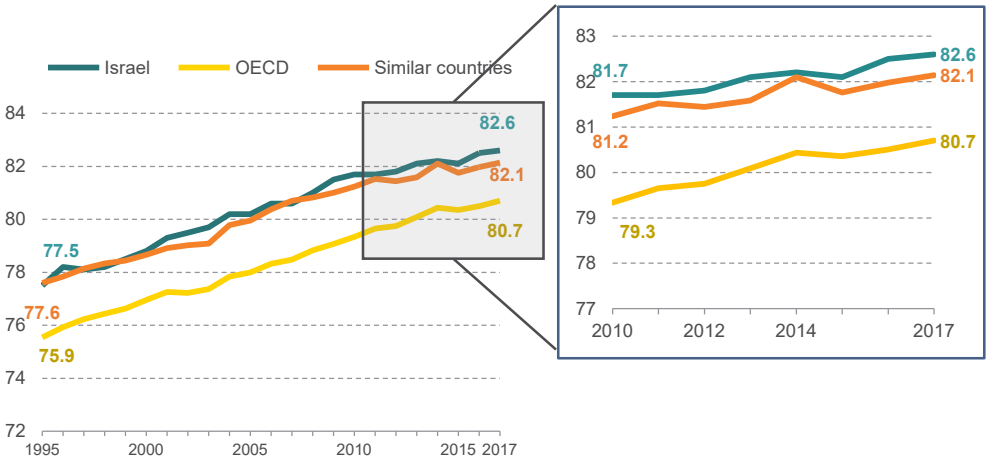
1 See, for example, the discussion later on in this report of the situation of the acute care hospital system, including the situation of the emergency room services and the internal medicine departments, which is a reflection of the changes with which the system is dealing.

The health of the population: New indices for evaluation and prioritization

Life expectancy in Israel continues to rise. In continuation of the major upward trend that began around 1995, it has risen by almost one year during the current decade — from 81.7 to 82.6 (Figure 1). It remains higher than the average of the OECD countries and also the European countries whose healthcare services, like Israel's, are provided by health maintenance organizations or plans (in Israel, Kupot Holim or health funds), including Belgium, France, Germany, the Netherlands, and Switzerland (herein: "similar countries"). Overall, the upward trend in life expectancy in Israel is not significantly different from the average increase in these countries.

Figure 1. Life expectancy at birth



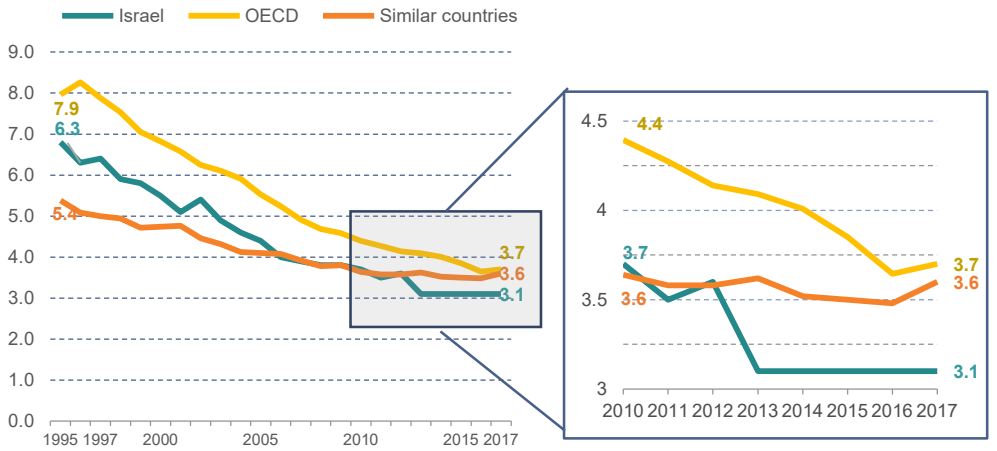
Note: Similar countries: Belgium, France, Germany, the Netherlands, and Switzerland.
Source: Dov Chernichovsky, Taub Center
Data: https://data.oecd.org/healthstat/life-expectancy-at-birth.htm

In July 2019, the Ministry of Health published a comprehensive report on the leading causes of death in Israel from 2000 until 2016 (Haklai, Goldberger, & Aburba, 2019). The relatively positive situation in terms of life expectancy reflects, on the one hand, the low rate of infant mortality, which fell during the current decade from 3.6 to 3.1 per 1,000 births (Figure 2), and, on the other hand, the low rates of age-adjusted mortality per 1,000 population from

the main causes of death, i.e., malignancies[2] and especially cardiovascular disease (Figure 3). Primarily with respect to mortality due to these two causes, Israel is doing well relative to the US and the 15 EU countries.[3]

In contrast, Israel is in a relatively poor position with respect to mortality rates from diabetes, sepsis, and kidney disease.[4] With respect to the ranking of the ailments according to mortality rates, cancer and cardiovascular disease are first and second, respectively, in Israel as well as in Europe and the US. Cerebrovascular diseases rank fourth in Israel and in the US, which is similar to the ranking in the EU countries (third). Diabetes, in contrast, is ranked as the third leading cause of death in Israel, with a similar rate to cerebrovascular diseases, while in the US, it is ranked in eighth place and in the EU countries in ninth.

Figure 2. Infant mortality rates per 1,000 births



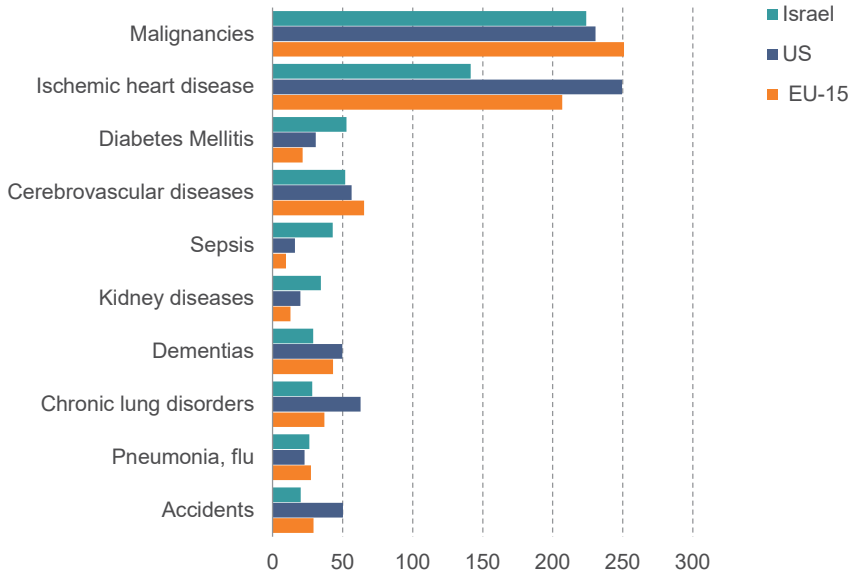
Note: Similar countries: Belgium, France, Germany, the Netherlands, and Switzerland.
Source: Dov Chernichovsky, Taub Center
Data: https://data.oecd.org/healthstat/infant-mortality-rates.htm

2 Malignant growths generally refers to cancer.

3 It is worth mentioning in this context that the data are age-adjusted and, therefore, the relatively young age of the population in Israel is taken into account.

4 A serious infection of the blood that can quickly deteriorate into a life-threatening situation.

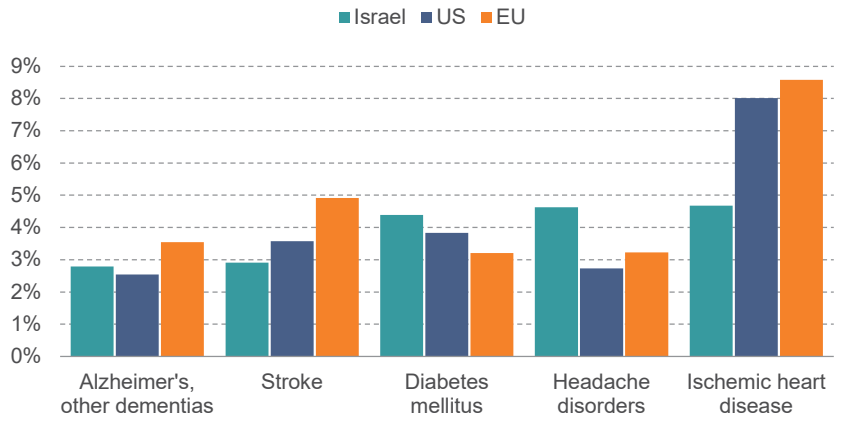
Figure 3. Leading causes of death, 2015
Rates per 100,000 persons



Source: Dov Chernichovsky, Taub Center | Data: Haklai, Goldberger, and Aburba, 2019

The traditional indices for examining the level of health, which also relate to the quality of medical care, are based on mortality rates by age group and on the life-expectancy based on those rates. However, being alive does not always testify to the quality of life or the ability to function, particularly in view of modern medicine's ability to extend life. Therefore, since the 1990s, indices have been developed that try to evaluate a year of life based on its "quality." The Disability-Adjusted Life Years (DALYs), a commonly used measure of overall disease burden, was used for the first time in Israel by Chernichovsky and Bowers (2014) to evaluate the health of the population. The index is the cumulative numbers of years lost due to ill-health, disability, or premature death. In other words, the burden of illness is defined as the gap between the current health situation of the population and the situation in which the population is living to its full potential.

Figure 4. Leading determinants of loss of function (DALYs), 2017
As a percent of all causes of loss of function

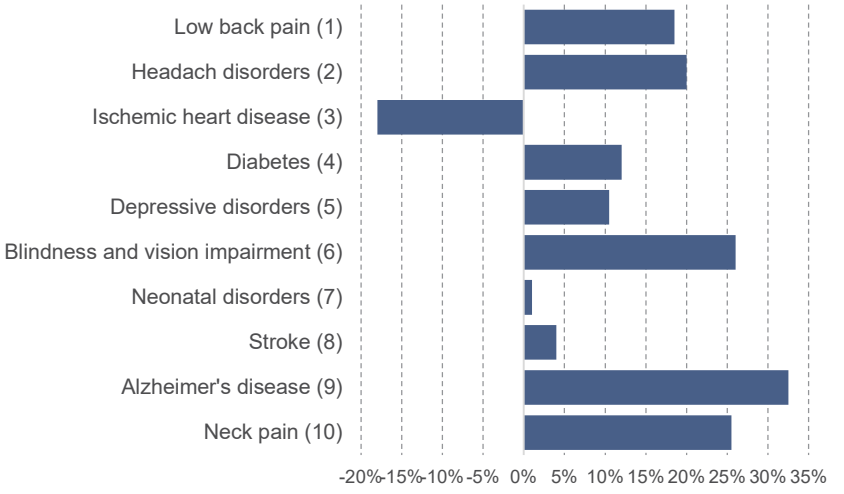


Note: Share of DALYs for a particular cause relative to DALYs for all causes.
Source: Dov Chernichovsky, Taub Center | Data: IHME, 2018

Indeed, when one views the level of health and its determinants in terms of DALYs, then the data of the Global Burden of Disease (GBD) produces a different picture than the one based on causes of mortality as described above. In the case of cardiovascular disease, strokes, and even dementia, Israel's situation is indeed good relative to the US and EU (Figure 4). However, from the perspective of loss of function related to headaches and diabetes, Israel at a relative disadvantage.

In a comparison of changes in the total amount of DALYs in Israel between 2007 and 2017, an increase can be seen in all causes of loss of function, apart from cardiovascular disease (Figure 5). The main causes for the increases are a 21 percent increase in Israel's population during this period and its aging population.

Figure 5. Changes in the leading causes of loss of function or premature death (DALYs) in Israel, 2007-2017



Source: Dov Chernichovsky, Taub Center | Data: IHME, 2018

Spotlight

Palliative care in Israel

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In the case of chronic diseases, pain is cited as the main cause of suffering. This is not a new revelation; nonetheless, more and more individuals are reporting they suffer from pain and are seeking relief. The following two factors are contributing to the upward trend in the incidence of pain:

- Longer life expectancy, which is accompanied by a multiplicity of pain symptoms related to bodily structure.

- A change in the perception of pain. In the past, pain was perceived as "something to endure," while today, in view of higher life expectancy and general higher standards of living — which are reflected in medical advances, on the one hand, and a desire to enjoy life, on the other — people are less willing to accept pain than in the past.

The obvious solution is to develop and promote services for pain management. However, this is occurring at a very slow pace relative to the fast-growing need. In 2011, a sub-specialty of two years was established in pain management at centers recognized for this purpose. Acceptance to this specialty is from almost any other medical specialty. At the end of the internship in pain management, physicians are required to pass exams given by the Scientific Council of the Physicians Association, and those who pass are awarded the title of pain management specialist.

The data from the first clinics to be established within the Clalit Health Services (in 2014) indicate that 80 pain management specialists are caring for 1.9 million patients per year who initially come to their family physician with a complaint of pain. By way of comparison: 161 specialists in endocrinology treat 1.6 million individuals per year who come to their family physicians with high blood pressure, diabetes, etc.; 254 gastroenterologists treat 1.5 million individuals per year who come to their family physician with intestinal problems; and 512 cardiologists treat 0.6 million individuals per year who come to their family physician with heart complaints. The shortage in pain management of headaches is particularly acute. Physicians come to this specialty after an internship in neurology. At the moment, there is no subspecialty for headaches in Israel and the expertise in pain management is primarily aimed at general pain. In Israel, there are currently only three practicing physicians with a sub-specialty in headaches and another four who treat headaches without being specialists. In general, physicians do not tend to get involved in the treatment of pain or the treatment of headaches in particular, a situation that contributes to patient distress. Neurologists do not continue on to a specialty in pain or in headaches, despite the technological progress in this field. As a result, waiting times in pain management clinics are about a year and there are many patients who utilize their supplementary or commercial insurance to access treatment privately. This means that weaker population groups do not necessarily get the treatment they need and certainly not within a reasonable time frame. In view of the nature of the problem and its effect on social welfare, including its economic effect, this is clearly an unacceptable situation. The problem is worse in the country's periphery than in the center.

The Ministry of Health and the health funds have tried to meet the challenge by training nurses to provide initial care for pain. The Israeli Medical Association saw this step as a justification to declare a work dispute and the process was partially halted. The health funds have designated physicians who are not pain specialists to treat pain without any special training and calls them "pain caregivers."

Medicine continues to move in the direction of specialties and sub-specialties. The field of pain itself has already branched into preventative care, specialties in invasive procedures, and headache treatment. The solution to the shortage in pain management specialists includes the following measures:

A. Increasing the number of positions and training centers.

B. Encouraging physicians to be trained as pain specialists by providing incentives, job positions, and attractive wages.

C. Planning of medical manpower according to needs.

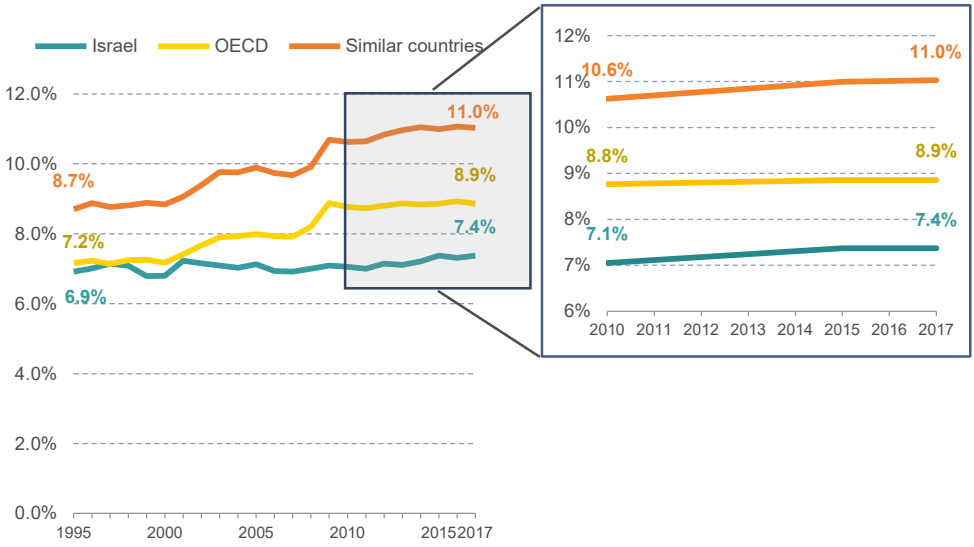
D. Doubling the number of pain management specialists in Israel, which is the minimum necessary to shorten the long waiting lines. This translates into an addition of at least 80 physicians.

E. Sharing of positions with the health funds with the promise that the physician will later move to service in the community (which is already being implemented in part today).

National expenditure on healthcare and its sources of funding: The growing gap between Israel and similar countries

Despite the upward trend in the share of healthcare expenditure out of GDP from 7.1 percent in 2010 to 7.5 percent in 2018 (Figure 6), the share of the state in healthcare expenditure is lower than the average of the OECD countries and more so relative to the average of the countries with similar healthcare systems. As can be seen from the long-term trends, the gap between Israel and the OECD and between Israel and the similar countries has been widening since 1995, primarily due the relative stability in the share of healthcare expenditure out of GDP in Israel.[5] There are indications that the gap between Israel and the OECD is narrowing somewhat, but not the gap between Israel and those countries with similar systems.

Figure 6. National expenditure on healthcare as a percent of GDP



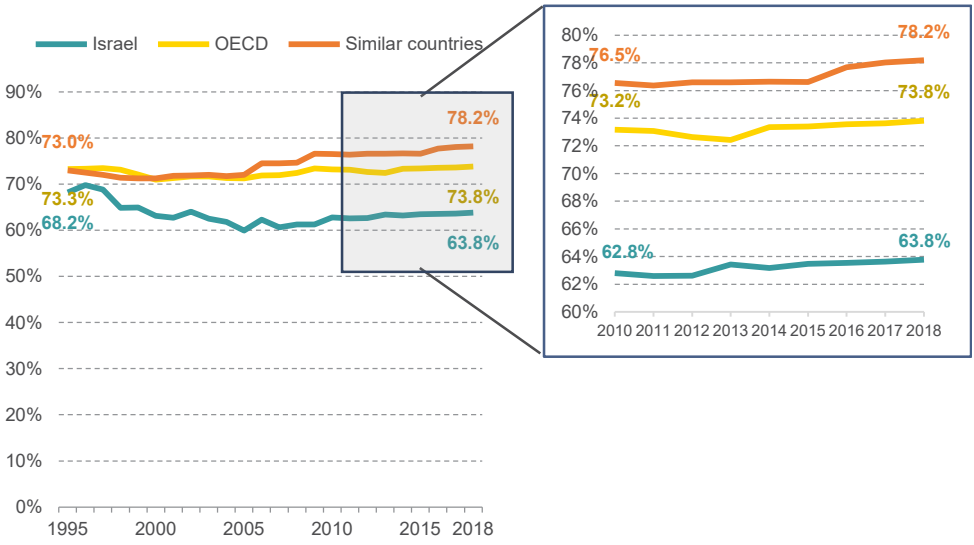
Note: Similar countries: Belgium, France, Germany, the Netherlands, and Switzerland.
Source: Dov Chernichovsky, Taub Center | Data: https://data.oecd.org/healthres/health-spending.htm

5 This is partly due to the relatively rapid growth in Israel's GDP, at least during the past decade. In other words, the expenditure on healthcare is barely keeping up with the growth in GDP.

These rates translate into an average expenditure per capita on healthcare of $5,700 in the similar countries as compared to $2,950 in Israel (as of 2018; CBS, 2019a; 2019b). The gaps between Israel and the similar countries are reduced, though not entirely, when demographic differences are taken into account. Adjusting for demographic characteristics raises the rate of healthcare expenditure out of GDP to about 8.4 percent for Israel, expenditure per capita of $3,300.[6]

The share of public financing within health expenditure in Israel remains relatively low at 64 percent, as compared to 78 percent in countries with similar systems (Figure 7), despite an upward trend in Israel since 2010.

Figure 7. Share of public expenditure in national expenditure on healthcare



Note: Similar countries: Belgium, France, Germany, the Netherlands, and Switzerland.
Source: Dov Chernichovsky, Taub Center | Data: OECD.Stat

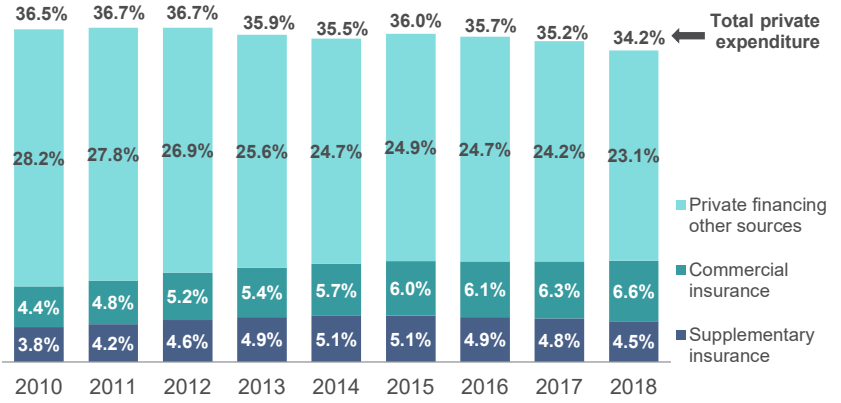
6 With respect to healthcare expenditure as a percentage of GDP, in 2017, there is a discrepancy between the data of the CBS, which reports a figure of 7.6 percent, and the data of the OECD, which reports a figure of 7.5 percent.

The composition of private healthcare expenditure: A cause for concern

The low share of healthcare expenditure out of GDP, as well as the low expenditure per capita, are not in line with the relatively high share of private financing of the healthcare system, since the share of healthcare out of GDP and the expenditure per capita tend to be positively correlated with private expenditure. High rates of private expenditure, in addition to contributing to widening healthcare disparities, expose the system to market failures that manifest as rising prices of medicine and healthcare costs. A prime example is the US, where the share of private expenditure in healthcare spending is particularly high. The increase in private expenditure in the composition of medical financing in Israel is making things increasingly similar to that in the US, and the results are becoming apparent.

The composition of the private financing is changing in favor of voluntary insurance in general and commercial insurance in particular. Between 2010 and 2018, there was an increase in financing by means of voluntary insurance of about 3 percentage points — from 8.2 percent in 2010 to 11.1 percent in 2018 (Figure 8). Of this increase, about 75 percent is due to the purchase of commercial insurance. Moreover, the data show that, since 2014, there has been a relative decline in the share of supplementary insurance (sold and controlled by the health funds) in favor of commercial insurance.

Figure 8. Share of private expenditure out of total healthcare expenditure and the components of private expenditure



Source: Dov Chernichovsky, Taub Center | Data: CBS, 2018; 2019c

At least on the face of it, a drop in the share of private self-financing in favor of voluntary insurance can contribute to greater equality in the system. However, the upward trend in the share of commercial insurance at the expense of the share of supplementary insurance as well as the moderate increase in the share of public financing (Figure 7) is liable to neutralize this effect since supplementary insurance has a cross subsidy element and there is no underwriting requirement. The socioeconomic profile of the insured population supports this neutralizing effect, which leads to more inequality and a loss of efficiency.

An examination of the data on health insurance in the recently published Central Bureau of Statistics *Social Survey* (CBS, 2019c) indicates that commercial insurance is more sensitive to income than supplementary insurance (Figure 9). The share of those insured through supplementary insurance is higher than the share of those insured through commercial insurance and the variance in the share of those with supplementary insurance by income group is lower than that for commercial insurance and for those with both types of insurance.[7] Furthermore, most of those insured, and especially those carrying commercial insurance or both types of insurance,

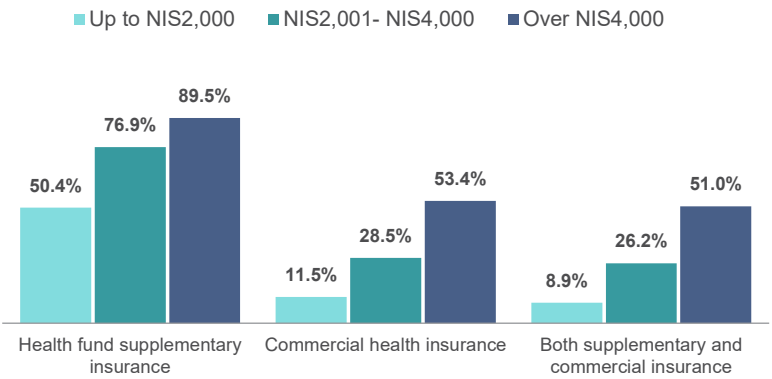
7 An examination of the survey data according to level of education also shows a connection between education and voluntary insurance in general and commercial insurance in particular.

report a better health status than those who carry less insurance (Figure 10). The reasons given for carrying insurance include surgeries, the ability to choose a physician, which in most cases means shorter waiting times, and to cover the costs of medicines not included in the healthcare basket — services whose immediate effect on health can be substantial. In other words, the health status of those with voluntary insurance, and commercial insurance in particular, is superior — both in theory and in practice — to that of individuals without voluntary insurance, and in particular without commercial insurance.

The relative growth in commercial insurance at the expense of out-of-pocket expenditure and primarily at the expense of supplementary insurance is liable to reduce the equity of healthcare and the accessibility to services, including surgeries and medicines, and the situation is liable to worsen as the prices of medical care increase.

Figure 9. The percent of those who report carrying voluntary insurance

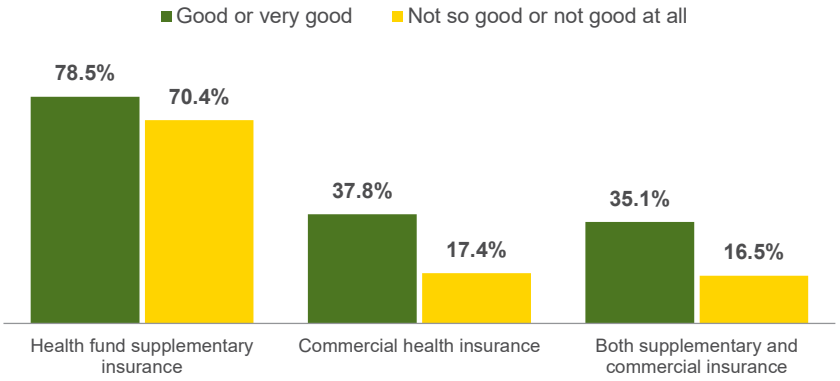
By insurance type and grouping by monthly income



Source: Dov Chernichovsky, Taub Center | Data: https://tinyurl.com/sv4ne4e

Figure 10. Share of those who report carrying voluntary insurance

By insurance type and self-evaluation of health status



Source: Dov Chernichovsky, Taub Center | Data: https://tinyurl.com/sv4ne4e

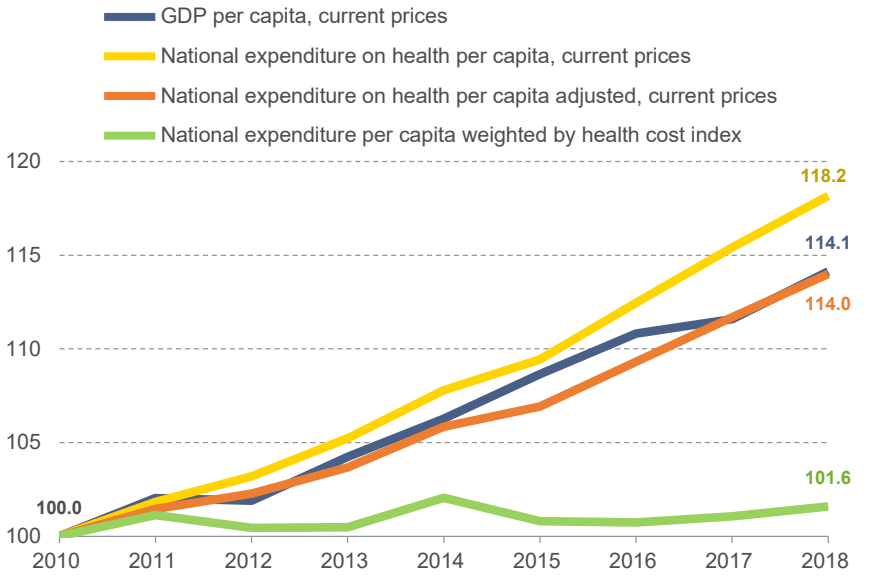
The price of medical care in Israel: Has the dam broken?

As noted, expenditure on healthcare rose from 7.1 percent of GDP in 2010 to 7.5 percent in 2018. This increase beyond the growth in GDP does not imply a real increase in terms of quantity of services or the quality of treatment and service, once the increased needs of the population — due to demographic changes such as aging and high fertility rates — and increasing medical prices relative to the price index of GDP prices are taken into account.

Figure 11 shows that healthcare expenditure per capita has risen by about 4 percentage points more than GDP per capita since 2010. This increase has compensated for the demographic increase in the sense that the increase in healthcare expenditure per standard person was approximately equal to the growth in GDP. When the increase in the price of medical care relative to the rise in GDP prices is taken into account, it appears that the increase per standard person is about 13 percentage points less than when the increase does not take prices into account. In other words, in real terms, expenditure

on healthcare per standard person has actually shrunk due to the relative increase in the price of medical care; which is a likely outcome from a long-term decline in the share of public financing in favor of private financing in which the share of commercial insurance rises.

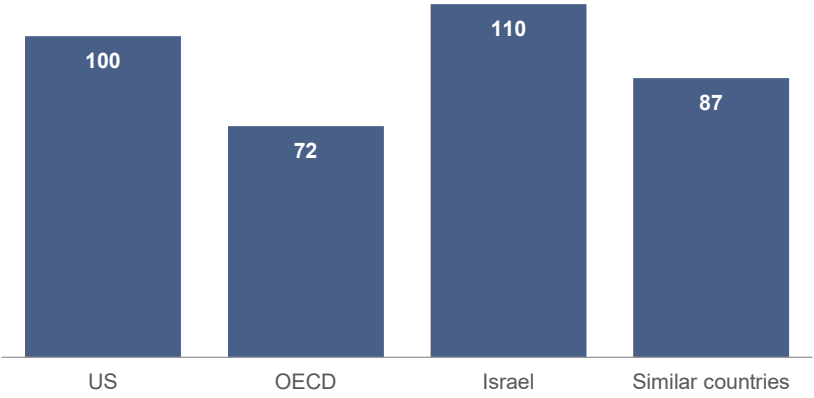
Figure 11. Per capita healthcare expenditure with adjustments for demographic factors and price rises in medical care in Israel
Index year: 2010=100



Source: Dov Chernichovsky, Taub Center | Data: CBS, 2019a

The issue of medical prices in Israel is clearly, and perhaps somewhat surprisingly, reflected in a recent OECD report. The OECD looks at medical care prices in its member countries, including Israel, relative to the US that serves as the basis for comparison. This comparison shows that Israel is fifth-ranked among the OECD countries with respect to the prices of medical care, after Switzerland, Iceland, Norway, and Sweden. In fact, the level of medical care prices in Israel is 10 percent higher than that in the US, 53 percent higher than that in the OECD countries, and 26 percent higher than that in the countries with similar healthcare systems (Figure 13).

Figure 12. Index of healthcare basket prices, 2017
Index: US=100



Note: Similar countries: Belgium, France, Germany, the Netherlands, and Switzerland.
Source: Dov Chernichovsky, Taub Center | Data: Health at a Glance, 2019; https://tinyurl.com/tdd9q8k

Israel faces a challenge from the rising price of medical care relative to GDP prices. We do not have comparative data for these prices relative to other countries over time, i.e., we are not able to compare Israel's rate of inflation in medical costs to those of the similar countries. Nonetheless, the comparison of prices carried out by the OECD shatters the myth that the price of medical care in Israel is relatively low. The reason is related to the public/private mix that as discussed above, and primarily the rising share of voluntary insurance and, in particular commercial insurance, in the financing of the system.

Once again, disparities between the center and the periphery

The CBS recently published its *11th Report on the Face of Israeli Society* that relates to the gaps between the country's center and the periphery, which, of course, favor the center (CBS, 2019d). The report points to gaps in health levels and accessibility to medical services that have been widening over time (CBS, 2019e). The Taub Center has repeatedly warned of these widening gaps and indicated that the current policy is not contributing to a meaningful

solution (Chernichovsky, 2013). At least in the case of medical services the phenomenon is universal. Thus, high-quality medical services tend to be concentrated, for a variety of reasons, in the socioeconomic centers, which is also where political power is concentrated, of the medical establishment as well.

In the absence of a geographical allocation, there is no mechanism to prevent the funneling of financial resources to the center. This is particularly the case in a system like Israel's where healthcare is publicly funded but its physicians are exposed to privately funded demand that is higher in the economic centers of the country, mainly the metropolitan area of Tel Aviv. This type of system feeds on itself. Budgets flow to places where physicians and equipment are found, and they are attracted to privately funded demand in the center, where higher incomes feed that demand in a cyclical fashion and at the expense of areas outside of the center, like the periphery.

Once again, long-term care

In October 2019, the insurance companies in Israel declared that they were no longer selling long-term care insurance policies that are not supplied through the health funds' group insurance. This step pulled the carpet out from under the Ministry of Finance's traditional stance, according to which long-term care insurance in Israel is to be provided in the commercial insurance market.

Chernichovsky, Kaplan, Regev, and Stessman (2017) discuss the issue of financing long-term care in Israel and rule out the commercial long-term care insurance solution because the sector is exposed to the following market failures (Pestieau & Ponthiere, 2010):

- A significant measure of short-sightedness and moral hazard: Individuals tend not to purchase commercial insurance in the belief that someone else (mainly the state) will provide them with long-term care if needed, even if they do not have the appropriate insurance.

- A relatively narrow economic base for the coverage of claims: This is the result of the limited size of the target group, low-income earners cannot afford insurance, while high-income earners may prefer to incur the expense directly rather than purchase an insurance policy, particularly in view of its high price. In addition, although it may become clear ex-post that public alternatives are insufficient, their very existence may reduce the demand for commercial insurance.

- Actuarial problems due to the difficulty in forecasting the growth in the long-term care population and its long-term care needs. This uncertainty also contributes to the relatively high premiums for long-term care insurance.

- The accumulation of insurance reserves over time requires investments that will be exposed to capital market risks.

- There is a fear that adverse selection will ensue. Individuals who are at higher risk, and primarily those whose risk factors are difficult to identify, tend to purchase insurance at a higher rate.[8]

These various factors are interconnected. The fact that the young refrain from acquiring insurance — and especially those who were born into a National Health Insurance system — is the result of both shortsightedness and a lack of awareness of future needs as well as a lack of expertise in the long-term care insurance market (which leads the young to believe that the public service will provide them with sufficient care when the time comes).

A structural problem with long-term care insurance that exacerbates the situation is the lack of symmetry between the insurer and the insured. When the insured individual submits a claim for compensation to the insurance company he is not able to fully exploit his rights without outside assistance.

These basic problems are accompanied by a number of issues that characterize the commercial insurance market in Israel:

- Selective insurance: Since the insurance companies are not obligated to accept every request to purchase insurance, in general, it is the population most in need — the elderly and the chronically ill — who are left without insurance protection. In theory, it could be claimed that the elderly of today should have acquired insurance at an earlier stage; however, the long-term care insurance market came into being only relatively recently and so this claim has no basis. Moreover, as long as there is no formal compulsory universal insurance (also by means of imposing a tax), there will always be individuals who do not acquire insurance at a young age, and when the time comes they will remain

8 There is no consensus regarding the importance of this market failure in the context of life insurance, pensions, long-term care insurance, and inheritance insurance, since the information possessed by the individual is not necessarily superior to the forecast of the insurance company when it has access to the insured individual's full medical records (Handel & Lizzeri, 2003).

without long-term care or will receive long-term care at the public's expense.

- A lack of information with which to make an informed choice: The public does not currently have the appropriate tools to make an informed choice among the various insurance policies, especially with respect to understanding the coverage and the policy terms (exceptions, linkage of compensation to the CPI, etc.). Additionally, the public lacks information on the risk of being in need of long-term care. The extent of the shortfall in information is reflected in the significant share of insured individuals who don't even know if they have long-term care insurance and to an even greater extent have no knowledge of the terms of the policy and the extent of their insurance coverage.

- Limitation on the level of insurance coverage: The insurance compensation is limited by a pre-determined ceiling. As a result, the insured individual is exposed to the risk of an increase in the price of long-term care services and has no guarantee that future insurance payouts will suffice (Gross & Brammli-Greenberg, 2003). Moreover, most of those who have long-term insurance do not have long-term care coverage for the length of time needed and it is usually restricted to between three and five years. Thus, if an individual requires long-term care for a longer period, his family may be forced to finance the cost of care when the insurance allocation period ends. The short durations reduce the insurer's level of risk — and therefore also the insurance premium — but increase the individual's uncertainty regarding his rights to make a claim.

- Interruption of insurance continuity: The problem of insurance continuity arises when someone who is insured through group insurance leaves the group (following retirement, layoffs, etc.) and when the group's long-term care insurance is not renewed at the end of the insurance period. In such cases, insured individuals remain without coverage. This problem is particularly serious for the elderly or the chronically ill, for whom there is only a small probability that the new insurance company will agree to insure them. The instructions of the Supervisor of Insurance are meant to solve the problem of continuity by forcing the insurer to allow individuals to acquire a commercial policy without renewed underwriting. It appears that this possibility has vanished from the market.

Summary and conclusions

The population's health status. Israel's achievements are impressive, particularly in terms of preventing death and extending life, but apparently some of them are the results of past investments in the system and of economic growth in general. When health is examined in terms of loss of functioning as a result of premature death and lowered functioning as the result of disease and disability (DALYs), then the effect of back pain, headaches, and depression on lack of functioning can also be seen, beyond the loss of life due mainly to cancer and cardiovascular disease. In addition, there is a worrying increase in diabetes which affects both mortality and loss of functioning and which is particularly prevalent in Israel relative to other developed countries. The data suggest a need for a discussion about expanding the method used to measure health outcomes to include loss of function and welfare rather than simply discussing mortality prevention. Attention should be given also to pain management, depression, and diabetes.

Financing of the system. The share of healthcare expenditure out of GDP and the share of public financing out of total financing of healthcare are low relative to other countries and relative to the shares in Israel when the National Health Insurance Law went into effect (1995). Underlying the data are also issues of the relative efficiency of the Israeli system until today and the basic question of whether these rates of expenditure and financing are sustainable. Can the system continue to function at its current level — which is high relative to other countries — with a low level of expenditure on healthcare relative to other developed countries? In view of the inflation in medical care prices, which in general is the result of failures in the health insurance market and the medical care market, it would seem that the situation is not sustainable. Such unsustainability extends into social issues like the increasing inequity in terms of access to healthcare that is characteristic of a system that relies on private financing to a large extent.

Allocation to the periphery. The issue of the geographic periphery comes up again and again. The accepted solution in other countries to reducing gaps in accessibility to medical services, particularly in countries that are not federations, is allocation on a geographic basis. This was also the recommendation of the Netanyahu Committee (1990), which laid the foundations for the National Health Insurance Law. It recommended dividing Israel into districts and dividing resources among the district authorities

according to a district index. The health funds, which operate as regional cost centers, would receive financing only in the second stage and according to a capitation mechanism or an accepted allocation, with a correction for existing gaps in infrastructure. The recommendation was not implemented.

Long-term care insurance. In other developed countries, the commercial insurance market has not been part of the solution to long-term care financing. The declaration of the commercial insurance companies in Israel that they are abandoning this type of insurance puts Israel in the same position as these countries. The developed countries (apart from Switzerland and the US, of course) have essentially given up on it. Therefore, Chernichovsky et al. (2017) suggested that Israel institute compulsory national long-term insurance that would provide a resident — possibly according to a means test — with a basic layer of insurance that would rest on publicly financed services and accompanying services. To this basic layer could be added supplementary insurance services according to personal choice.

Long-term care would be financed in part from existing public sources with a need to add additional, new sources of financing. There are two available alternatives: The first is a proposal by the Ministry of Health to increase the health tax by 0.5 percent and to cancel the means test (the "codes") used by the Ministry of Health to determine eligibility for public assistance in institutional care. The second is a proposal by the authors of the Taub Center for independent designated financing of the healthcare system by means of compulsory insurance, taxes, or a combination of the two. Another possible source of financing for expanding public responsibility for long-term care involves raising the retirement age, first for women and then also for men.

In view of the aging of the population and the increase in needs beyond the growth in GDP, there will be a slowdown in the rate of increase in resources that the state will be able to allocate to the financing of long-term care. Therefore, consideration should be given to combining a public mechanism, which is based on taxation or compulsory payments in a pay-as-you-go system, and an additional mechanism of intergenerational regulation that will provide the system with stable sources in the form of payments of compulsory insurance that accumulate over time.

It would be best if all payments to finance national long-term care will be collected by the National Insurance Institute, deposited in a special fund and managed, as is common in other countries, by a single authority that is not part of the healthcare system.

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