

The Israeli Healthcare System: An Overview

Dov Chernichovsky

A chapter from the *State of the Nation Report 2018*

Jerusalem, December 2018

Taub Center for Social Policy Studies in Israel

The Taub Center was established in 1982 under the leadership and vision of Herbert M. Singer, Henry Taub, and the American Jewish Joint Distribution Committee. The Center is funded by a permanent endowment created by the Henry and Marilyn Taub Foundation, the Herbert M. and Nell Singer Foundation, Jane and John Colman, the Kolker-Saxon-Hallock Family Foundation, the Milton A. and Roslyn Z. Wolf Family Foundation, and the American Jewish Joint Distribution Committee.

This paper, like all Center publications, represents the views of its authors only, and they alone are responsible for its contents. Nothing stated in this paper creates an obligation on the part of the Center, its Board of Directors, its employees, other affiliated persons, or those who support its activities.

Center address: 15 Ha'ari Street, Jerusalem, Israel
Telephone: 02 5671818 Fax: 02 5671919
Email: info@taubcenter.org.il Website: www.taubcenter.org.il

 Internet edition

The Israeli Healthcare System

An Overview

Dov Chernichovsky*

Israel's healthcare system could potentially become the victim of its own past success. In international comparisons, Israeli mortality and life expectancy rates are impressive, and to the extent that these can be attributed to healthcare they represent the healthcare system's strong performance. A recent OECD report also testifies to Israel's strong health metrics (OECD 2017). However, present health parameters are the result of the healthcare system of the past, while the outcomes of the system's current activity will only be revealed in the future. Healthcare system outcomes, like life expectancy, years of good health, and functional status, take time to manifest, sometimes over the course of a generation.

As noted in previous Taub Center reports, looking forward, the healthcare system faces considerable challenges associated with an aging population and a greater prevalence of functional impairment. Efforts are needed to prevent the negative effects of smoking and poor nutrition — in particular, obesity and diabetes (Bowers and Chernichovsky 2017; Chernichovsky, Kaplan, Regev, and Stessman 2017). Additionally, the Israeli public healthcare system is characterized by unacceptable waiting times for elective procedures (Bowers and Chernichovsky 2016). The increase in demand for healthcare services is occurring during a period of existing and emerging shortages in healthcare personnel (shortages already exist in long-term care and are emerging among physicians) (Chernichovsky and Regev 2014) and in hospital beds, at least partially because of competition between the private and public systems for the same personnel. Even the system's senior management regard Israeli healthcare's current status and projected future status with worry and concern.¹ Issue-specific approaches such as the Program for Reducing Waiting Times constitute no more than patchwork solutions to these problems.

*Professor Dov Chernichovsky, Professor (emeritus) in the Department of Health Systems Management, Ben-Gurion University of the Negev; Senior Researcher and Health Policy Program Chair, Taub Center for Social Policy Studies in Israel. I wish to thank Roeë Kfir for his comments and clarifications, and Aviv Brill, Hadas Chazan, and Kirill Moskalev for their assistance with the statistical processing and the preparation of material.

1 For a discussion by senior Ministry of Health personnel, see Filut (2018).

This chapter provides an overview of the Israeli healthcare system, including a discussion of the system's funding crisis and an examination of the general challenges in meeting patient needs. This crisis has intensified due to the rising cost of healthcare personnel and rising healthcare prices, which are themselves linked to the problematic way in which the system's public-private mix functions. All of these factors hamper efforts to address future challenges of growing demand for care, foster inefficiency, widen gaps, and lengthen waiting times in the public hospitalization system.

A few measures recently taken by the state indicate potential improvement at the nominal funding level, and an initial effort to regulate the system's public-private mix — which in turn affects real funding through the wage and price systems. However, if the public-private mix issue, which poses a basic structural challenge to the system, is to be addressed, additional measures are required.

1. Health indices: An international comparison

The health of Israel's population looks good by common health metrics. Infant mortality is low (3.1 per thousand births) even compared with healthcare systems similar to Israel's, i.e., those based on health funds and similar entities that compete among themselves: Belgium, Germany, the Netherlands, France — to a lesser degree — and Switzerland (Figure 1). Life expectancy at birth is also relatively high at 82.5 years (Figure 2). Nevertheless, there are signs that, in terms of life expectancy and years of healthy life, Israel's relative status is liable to decline (Bowers and Chernichovsky 2017).

A disturbing finding that appears in Figure 1 is the stabilization of infant mortality since 2013, despite the potential for improvement on this parameter in Israel's periphery (Chernichovsky, Bisharat, Bowers, Brill, and Sharony 2017). The finding may indicate that the system is not making sufficient progress, or preparing properly for the future. This is particularly true if disparities in healthcare access grow due to the increased use of privately funded care and the relationship between access to healthcare services and the ability to pay (see details in Section 3).

Figure 1. Infant mortality
Per 1,000 live births

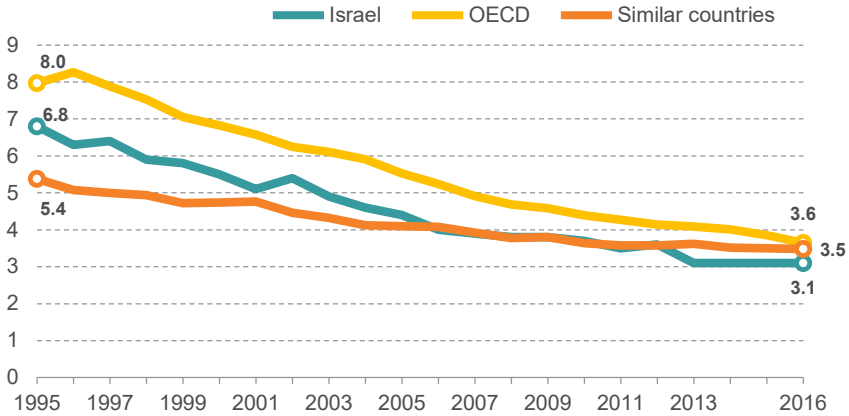
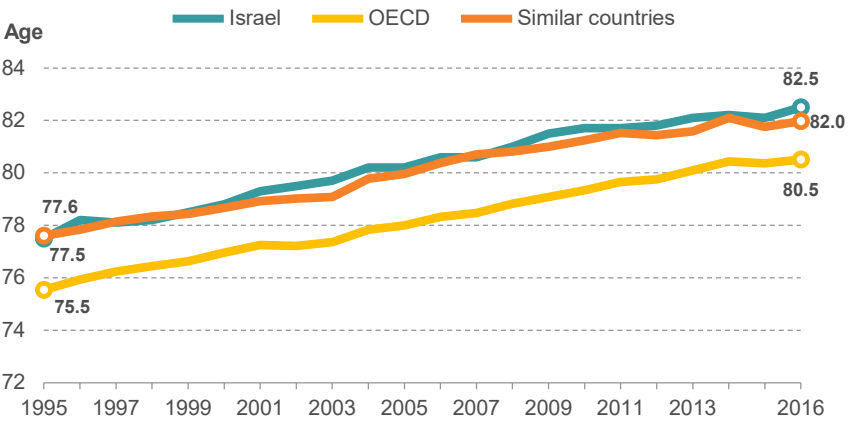


Figure 2. Life expectancy at birth



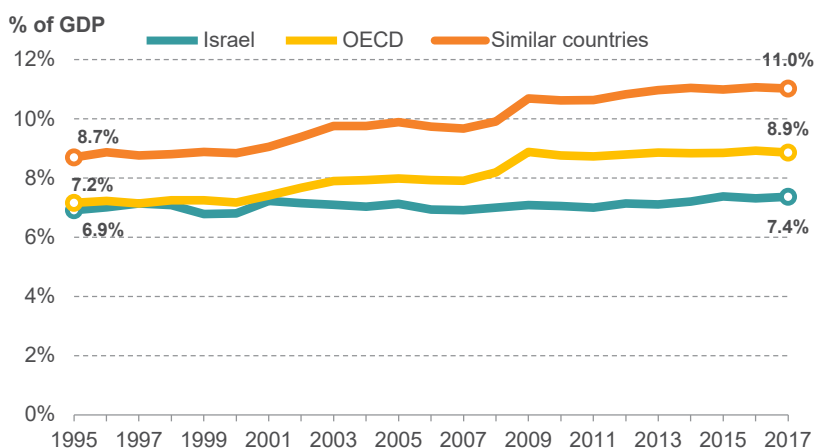
Note to both figures: Countries with a similar healthcare model have managed competition of health funds, plans, and the like (Belgium, France, Germany, Netherlands, and Switzerland).

Source for both figures: Dov Chernichovsky, Taub Center | Data: OECD.Stat

2. Funding sources

As in previous years, an examination of the healthcare system includes an international comparison of the system's funding sources. The basic assumption is that, given the challenges facing the system, Israel cannot afford to remain an outlier when it comes to trends and features of its healthcare funding, and, in particular, public funding. In 2017, current national healthcare expenditure as a share of GDP remained stagnant at a level of 7.3 percent, versus an average of 8.9 percent in the OECD countries (Figure 3).² The gap is even larger relative to countries that, like Israel, provide universal coverage through competing health funds or plans. In these countries, healthcare spending as a share of GDP is 11.0 percent.

Figure 3. Healthcare expenditure as a percent of GDP



Note: Countries with a similar healthcare model have managed competition of health funds, plans, and the like (Belgium, France, Germany, Netherlands, and Switzerland).

Source: Dov Chernichovsky, Taub Center | Data: OECD.Stat

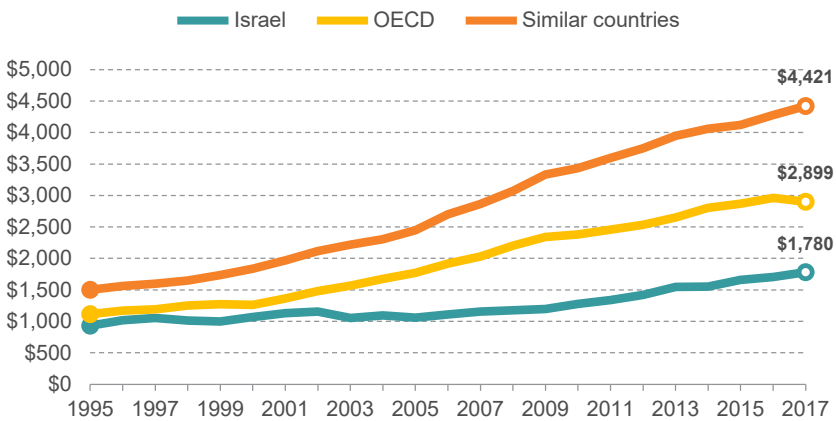
Given Israel's impressive economic growth, the lack of change in healthcare spending as a percentage of GDP does not mean a constant level of healthcare expenditure. Rather, the relatively small increase in Israel's healthcare expenditure per capita is a strong indication of widening gaps between it

² Unless stated otherwise, the data are based on Central Bureau of Statistics (2018a).

and healthcare spending in other developed Western countries. Since 1995, healthcare expenditure per capita has grown 3-fold in those countries with similar healthcare systems, and 2.5 times in the OECD countries on average (including developing countries). Israel's expenditure, however, has barely doubled (Figure 4). As shown in the next section, the situation is even worse than the data suggest, due to the relatively rapid aging of Israel's population, on the one hand, and the relatively large increase in physicians' salaries — which affects healthcare prices — on the other hand.

Figure 4. Healthcare expenditure per capita

In current US dollars

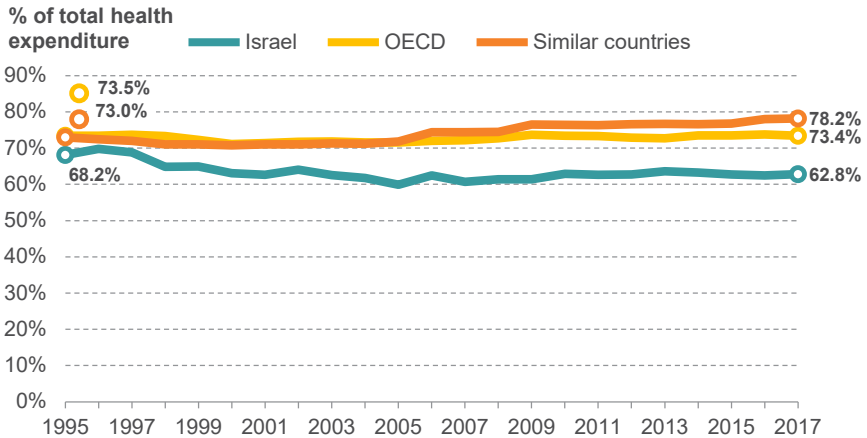


Note: Countries with a similar healthcare model have managed competition of health funds, plans, and the like (Belgium, France, Germany, Netherlands, and Switzerland).

Source: Dov Chernichovsky, Taub Center | Data: OECD.Stat

In Israel, public spending as a share of total healthcare spending is 62.8 percent, versus an OECD average of 73.4 percent, and an average of 78.2 percent in the group of countries whose healthcare systems are similar to Israel's (Figure 5). Worse yet, Israel is distinguished by an increase in private healthcare spending which has negative consequences for equality in health and healthcare accessibility, as well as for efficiency, given existing market failures (see details in the next section).

Figure 5. Share of public expenditure out of total healthcare expenditure



Note: Countries with a similar healthcare model have managed competition of health funds, plans, and the like (Belgium, France, Germany, Netherlands, and Switzerland).

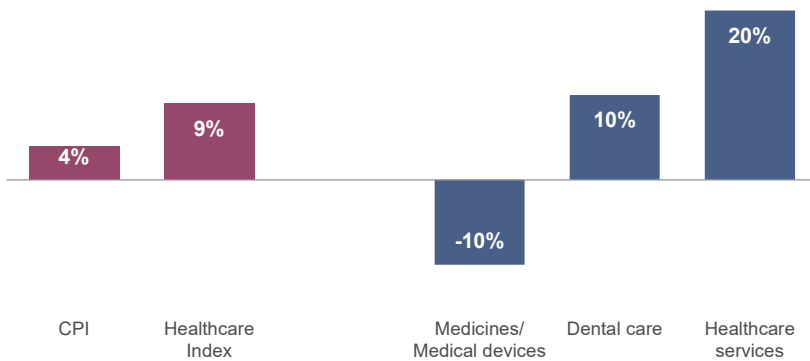
Source: Dov Chernichovsky, Taub Center | Data: OECD.Stat

In 2017, there was a 3.8 percent growth in healthcare expenditure out of the gross domestic product (GDP). However, this increase must be standardized taking into consideration two main factors: (A) healthcare prices have increased more than the general price index; (B) the aging of the population.

With regard to price increases, inflation in the cost of private healthcare services from 2011 to 2018 was over twice that of general inflation according to the consumer price index (CPI): 9 percent versus 4 percent, respectively (Figure 6). The largest single factor contributing to this increase is the “healthcare services” item, which includes co-payments and services purchased through the health funds (supplementary insurance), as well as payments for private insurance and private healthcare. The price rise for private healthcare amounted to 20 percent in the past decade, and its share of healthcare spending is rising steadily.

From a demographic perspective, between 2011 and 2017, the ratio between the number of standardized persons and the number of persons without standardization rose by 2.4 percent (Ministry of Health 2018).³ Taking these changes into account, the increase in real healthcare spending in 2017 amounts to only 1.6 percent.

Figure 6. Price changes in private healthcare services and the CPI
By expenditure category, January 2011 to October 2018



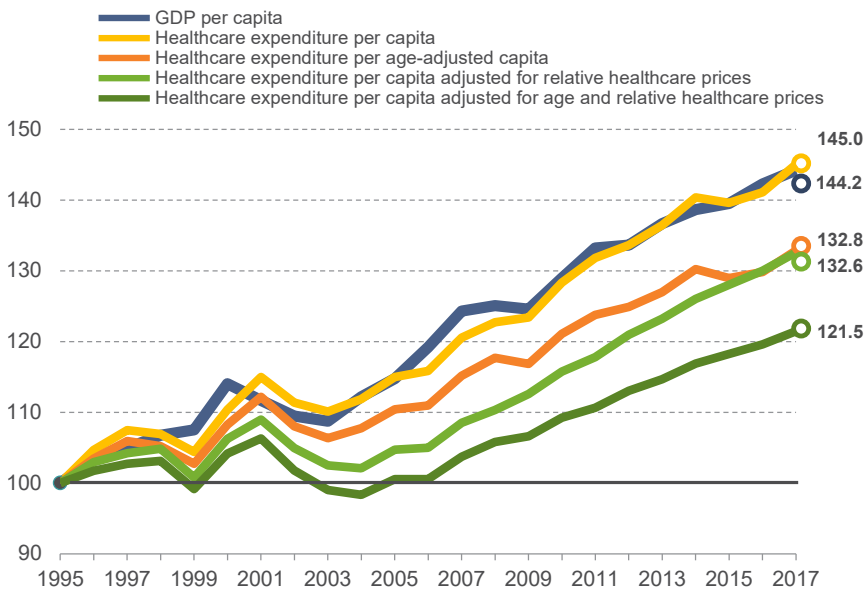
Source: Dov Chernichovsky, Taub Center | Data: CBS, CPI

Figure 7 summarizes the situation over time. Since the National Health Insurance Law was enacted in 1995, there has been a 45.0 percent rise in national healthcare expenditure per capita. This increase is nearly identical to that of the rise in GDP per capita, meaning that healthcare spending as a share of GDP has, in fact, remained constant at about 7 percent. However, these figures do not take into account the two important factors noted above: the development of healthcare prices, and demographic changes.

³ The calculation for standardized persons was performed in accordance with the Israeli capitation formula, which is used to allocate resources to the health funds as per relative client needs. This formula takes into account the age and gender of every resident. Thus, calculating the total number of standardized persons differs from calculating the number of persons based solely on the number of residents.

When considering the relative rise in healthcare prices, the spending increase has eroded by about 12 percentage points (the light green line in Figure 7).⁴ Taking into account demographic changes, which indicate changes in population healthcare needs, the increase erodes at a similar rate: 11 percentage points (the orange line in Figure 7). An index that takes into account the combined effect of these factors (the dark green line in the graph) shows a 23 percentage point erosion in the spending increase, to 21.5 percentage points. This means that while growth in GDP per capita (which also indicates a rise in the standard of living) stands at 1.7 percent per year on average, healthcare expenditure has shown only a 0.9 percent increase per standardized person.

Figure 7. Increase in GDP per capita and healthcare expenditure per standard capita



Source: Dov Chernichovsky, Taub Center | Data: CBS, *Statistical Abstract of Israel*

4 In light of the public-private mix, the system has two relevant price indices: the healthcare price index is relevant to public healthcare and its budgeting, while the Central Bureau of Statistics' health price index is relevant to privately-funded consumption. In order to assess the real national healthcare expenditure, including both public and private spending, the two indices are weighted by means of a scale that reflects the share of each expenditure type in the spending total. For a discussion of the healthcare price index, see Ministry of Health (2018); the CBS health price index is presented in Figure 6.

In order to address the issue of eroded healthcare expenditure, the state has recently taken two steps that are likely to improve future budgeting of the public healthcare system in general, and of the health funds in particular. First, the system of calculating the number of individuals for budgeting purposes has been changed: until 2014, the demographic coefficient in the basket was calculated using a set rate for a period of three years, determined by a government resolution.⁵ Between 2005 and 2013, the rates ranged between 0.9 and 1.2 percent per year. However, since 2014, the demographic coefficient rate has been calculated annually based on the previous year's actual demographic growth, giving greater weight to the changing healthcare needs of the population.

Second, since 2016, the health cost index has given greater weight (61.7 percent, versus 36–40 percent prior to 2016) to the healthcare sector wage index, which has a relatively strong influence on the cost of services. These changes, which reflect the aging of the population and rising physician wages, will lead to public budgeting that more closely matches both the increase in needs on the one hand, and the means required to meet them on the other hand.

Any update of this kind to the public budget has the potential to ease the burden on household budgets. In light of the data, this reduction is indeed necessary: the share of healthcare spending out of household disposable income rose from 3.9 percent in 1997 to 5.9 percent in 2016, while over the same period, the share of public funding out of the total healthcare expenditure declined (Central Bureau of Statistics 2016; Chernichovsky, Bleikh, and Regev 2016).

3. Physician wages

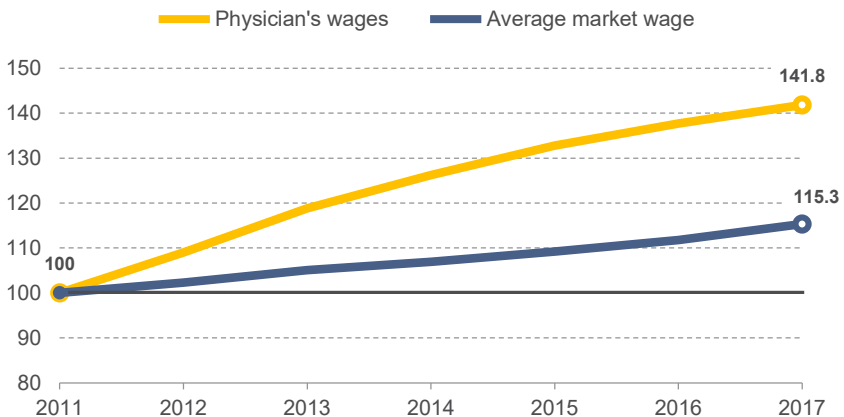
As noted in the previous section, growth in national healthcare spending per capita should be assessed in the light of two factors: demographic developments and the rise in healthcare prices relative to the consumer price index. Unlike the demographic impact, which is unavoidable, changes in prices are a result of policy in two interrelated spheres: physician wages and regulation of the public-private mix (discussed in the next section).

⁵ The demographic coefficient is the population growth rate in standardized persons, according to the Israeli capitation formula. In light of changes in the population's age and gender distribution, the change in the number of standardized persons may differ from the change in the number of residents.

Physician wages in the public sector rose by 42 percent in nominal terms between 2011 and 2017, while the average wage of salaried workers in the economy rose by only 15 percent over the same period (Figure 8). There was also an increase in doctors' income from private healthcare. A Ministry of Finance report notes: "The average wage of a physician employed in the government hospitals, with at least ten years' seniority, was NIS 790,000 in 2016 (annual gross), of which, 29 percent came from private healthcare. This wage reflects a real increase of 76 percent compared with 2007. Out of this, there was an 84 percent wage increase from public healthcare, and a 59 percent wage increase from private healthcare" (Belinsky, Ben Naim, and Hecht 2018). In international comparison, Israel's physician pay increase over this decade is exceptional (Ministry of Health 2018). The share of labor costs in the healthcare services price index currently stands at 70 percent.

Figure 8. Trends in physicians' wages relative to average market wage

Index year: 2011 = 100



Source: Dov Chernichovsky, Taub Center | Data: CBS (2018b)

The nature of services provided by doctors gives rise to an imperfect market. One of the failures touches on the monopoly power of physicians, *ex post facto*, over patients, who place their health in the hands of professionals they trust (*ex post small numbers*). This situation raises the possibility of doctors inducing demand for their services and increasing their incomes in accordance with a patient's ability to pay. This is one of the main reasons for

the state's relatively large-scale involvement in the healthcare system. The purpose of this involvement is, among other reasons, to provide a public counterweight to private healthcare — by means of the government and the health funds — through the group purchase of healthcare services. One expression of this involvement is the wage agreements adopted between the state and public-service doctors, that were also ultimately adopted by the health funds. For this reason, most managed healthcare systems prevent physicians from working in both the public and the private systems — and, all the more so, from referring patients from the public to the private system, where physicians can encourage demand. Another option is to institute a regulated integrated system (see the in-depth discussion of two methods for doing so in the next section).

In Israel, neither public nor private healthcare is the dominant system; together they form an ungainly hybrid. A Ministry of Finance report notes that, “in contrast to most occupations, where there is a very clear distinction between work in the public and private sector, and where transfers from one to the other are actually criticized (sometimes a “cooling-off period” is even required when moving from the public to the private sector), the employment of doctors in both systems simultaneously is not unusual and is actually perceived by the general public as acceptable” (Belinsky, Ben Naim, and Hecht 2018).

Today, physicians who work in the public system can refer patients for treatment to themselves in the private system, usually with payment through supplementary and commercial insurance. In the private system, they charge for treatments, at least some of which can and should be performed within the public system. The private treatments cost more than if the same treatment had been performed in the public system. Moreover, the doctors limit their work hours in the public system to some degree for this purpose. This creates wage pressure and price increases in the public system — a phenomenon that a separation of the public and private spheres or regulated integration of the two could prevent.

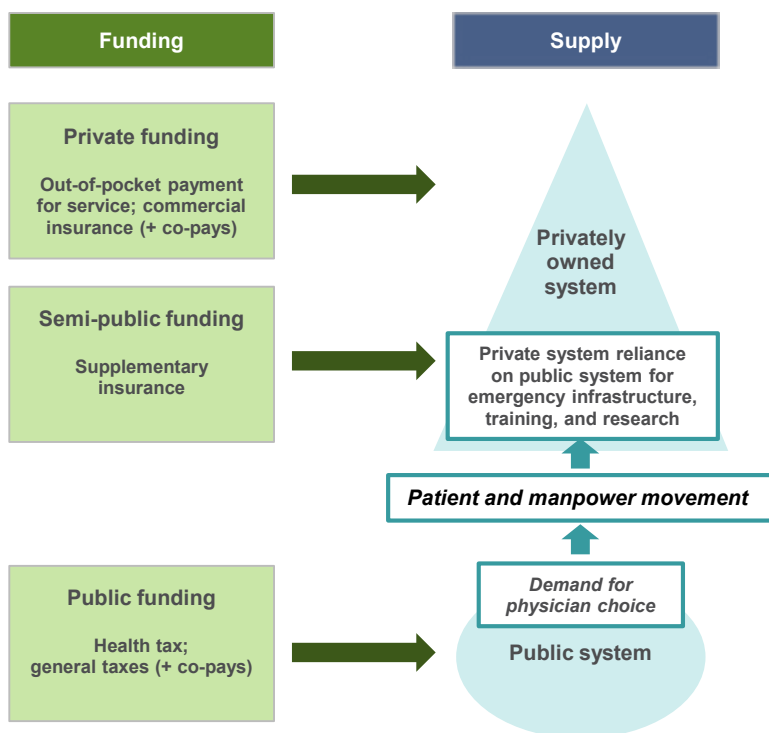
4. Israel's public-private mix conundrum

The complicated public-private mix within Israel's healthcare system is shown in Figure 9. Along with totally private and totally public funding, there is an array of additional voluntary healthcare insurance arrangements, known as supplementary insurance. This supplementary insurance is purchased through the health funds but is not commercial insurance; it is

characterized by group premiums — and is not based on the policy holders' personal health or medical characteristics but rather solely on age and household size. They are not underwritten but they do have a qualifying (waiting) period.⁶

Despite its (semi) public character, supplementary insurance, like commercial insurance and private payments, can fund activity in privately-owned facilities only. Thus, this form of insurance causes some public-system activity to move to the private system: the demand for shorter waiting periods, and for the option of physician choice, is met by a supply of service providers who work in the private system (Figure 9). The public system also provides the private system with other services and, by default, with a safety net in case of complications or emergencies.

Figure 9. Public-private mix of the Israeli healthcare system



Source: Dov Chernichovsky, Taub Center

⁶ Due to these features, they are not supervised by the Commissioner of Insurance in the Ministry of Finance, but rather by the Ministry of Health.

This setup has several undesirable outcomes:

- Wage and price rises (as noted above);
- Private infrastructure, some of it redundant, is created alongside existing public infrastructure that is underutilized;
- Concerns regarding the performance of unnecessary medical procedures.

Even with the private system's relatively high salaries, which continue to rise, profitability continues to rise, as evidenced by a trend of health funds and private insurers buying private medical facilities. Notable examples are Assuta, Naara Medical Center, and Herzliya Medical Center.

The Israeli healthcare system is thus losing control over private healthcare expenditure in the short term, and of all healthcare expenditure in the long term, as is the case for the US. The system is becoming less efficient; households are spending more and more of their disposable income on privately-funded healthcare; and inequality in service accessibility is growing. The advantages of freedom of choice and shorter waiting periods are possible mainly in the private market.

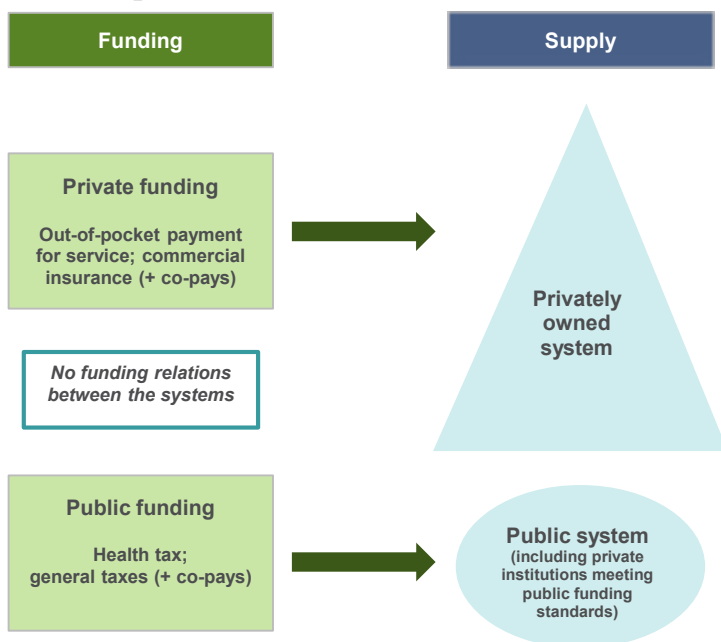
Models for solving the problem: Separation or integration

International experience offers two directions for solving the problem. One model is based on a total separation of the public and private systems; the other, on their regulated integration.

The separated model

In this solution, the two systems exist at separate funding and infrastructure levels. Public funding would be composed of the regular health tax and payments currently transferred to the health funds for supplementary insurance (which is nearly universal with 80 percent of the population insured). The government would fund supplementary insurance for those entitled to government assistance.⁷ Additionally, as is currently the case, the public framework would offer the option of choosing a broader healthcare basket than the basic one. Figure 10 illustrates how this system would work.

⁷ As is the case today, those eligible for income support who do not pay healthcare taxes would receive public insurance.

Figure 10. The separated model

Source: Dov Chernichovsky, Taub Center

In this model, institutions would be designated as “public” based on contracts with, and funding from, the state, regardless of their ownership. In this system, private ownership of healthcare facilities receiving public funding is acceptable; this is a commonplace arrangement worldwide. This means that all hospitals, regardless of ownership, can compete for publicly funded patients. However, institutions that have contracted for public funding will have to meet certain criteria, among them the availability of emergency services, a minimum number of medical departments, and strict regulation of privately-funded treatments, if such treatments are allowed at all. The decision to recognize Assuta Hospital in Ashdod, which is owned by Maccabi Healthcare Services, as a public institution, because it has an emergency room, is a particular important step toward this model. Another major decision in the direction of this system is that, as part of the plan to shorten waiting times, patients (in particular, those belonging to Maccabi Healthcare Services) are also referred to privately-owned facilities with Form 17 — that is, with public funding.

In the private system, citizens can pay for treatment as they choose, through a variety of commercial insurance policies or out of their own pockets. However, unlike today, patients would not be able to switch from the public to the private system in order to continue the same treatment nor would they be allowed to fill privately-prescribed prescriptions at publicly-funded facilities. On a practical level, all patients, before seeking treatment, would have to decide in which system they prefer to receive their care, and this choice would obligate them throughout the course of treatment — as in the publicly-funded healthcare systems of the UK and even the US.

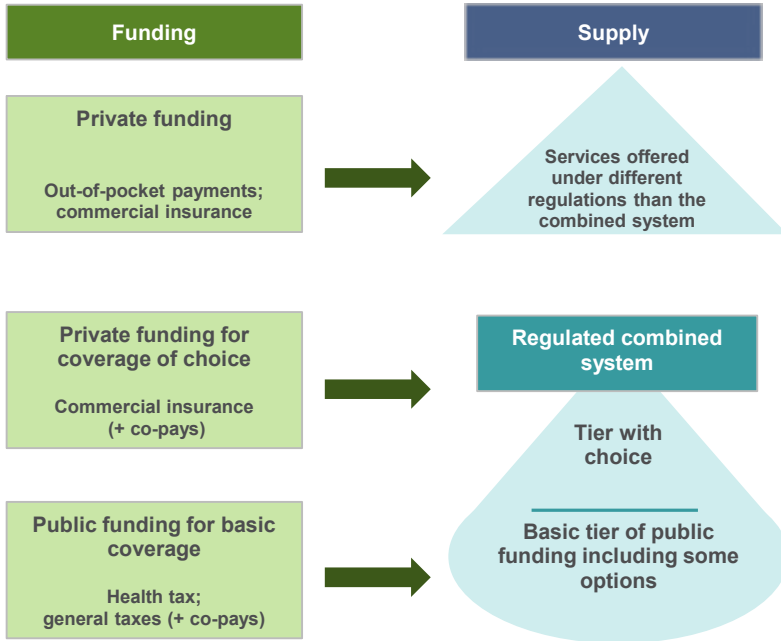
Two additional features of this model are that healthcare workers whose income is based on public funding would not offer private, for pay, treatment, and that emergency services provided by the public system would not support the private system.

The integrated model

In this solution, the private and public systems would be merged (Figure 11). Under this model, every resident would receive basic public insurance, combining today's basic and supplementary coverages as in the separated model (arrangements based on similar principles exist in some European countries, such as the Netherlands). Added to this would be another insurance tier based entirely on private funding, but, in contrast to the separated model, elective services (supplementary and commercial insurance tiers) would be provided as part of the same system that delivers the public services. The integration means that every resident would be able to create a kind of personal insurance policy or basket of services, one based on principles of both public and commercial insurance (Figure 11).

The publicly-funded basket would define eligibility for treatments and would, perhaps, also allow a certain degree of freedom of choice — but not reduced waiting times or “lifesaving drugs.” Services would be provided within a time frame and at a geographic distance specified by law, at institutions designated for this purpose — privately or publicly owned — and treatments from different funding sources would be regulated.

It should be emphasized that, in this option as well, it would be necessary to ensure the existence of an entirely separate private system, in which residents could pay out of pocket or through insurance for treatments or services that are not included in the integrated system's offerings (such as reduced waiting times). To illustrate, the system would be analogous to an airplane in which one might choose between economy class, business class, or first class — or to fly in a separate, private plane.

Figure 11. The integrated model

Source: Dov Chernichovsky, Taub Center

In both options, all institutions receiving partial or full public funding — regardless of ownership — compete for the same activity. Patient choice of physician and shorter waiting times would be available in the framework of specific insurance arrangements.

Conclusion

This chapter examined Israel's healthcare system with a focus on two interrelated issues: (A) funding levels and the distribution of funding between the private and public systems; (B) the private-public mix within the system as a whole. In many respects, these aspects of the system have not changed in recent years, that is, the system is stagnating. This means that there is high probability that the relative health of Israel's population will deteriorate — since achievements like the country's life expectancy

levels indicate past investment and not the system's present status. We (or the next generation) will be able to see evidence of today's stagnation only in the future.

The government is taking a number of steps in the right direction to cope with the system's problems. According to the latest budget, Israeli public expenditure on healthcare is expected to grow by about 7 percent (about NIS 2.4 billion) in 2018, and by about 7.1 percent (about NIS 2.5 billion) in 2019. This is a large increase compared with the anticipated GDP growth for these years (according to an October 2018 Bank of Israel forecast) of 3.8 percent and 3.7 percent (respectively), and state budget increases of 4.7 percent and 5.5 percent (respectively) (Ministry of Finance 2018). Thus, the public healthcare budget's share of GDP and of the budget as a whole should be growing during these years, although the recent decision to institute across-the-board cutbacks does not bode well for such growth.

Regarding the public-private mix, the government has adopted several measures meant to address structural problems in the healthcare system:

1. A six-month cooling-off period, during which a physician may not refer patients to themselves from the public system to the private one.
2. A full-timers regulation — physicians working full-time only in the public system.
3. Integrating into government service employees of healthcare corporations and the Research Fund which have become ways of bypassing regulations and hiring non-state employees to work in state-owned hospitals.
4. Continued implementation and development of the Program for Reducing Waiting Times, which has led, in certain cases, to public funding for shorter waiting times in private institutions as well.

Nevertheless, these measures alone are not capable of ultimately solving the complex problem posed by the Israeli healthcare system's public-private mix. This thorny issue needs to be addressed in a comprehensive manner, including through regulation of the funding distribution between the two systems — a basic basket of publicly-funded services with an additional private elective basket through some sort of arrangement. A new, agreed-upon wage system should also be created for physicians, and they should be employed within a single publicly-funded system, independent of the institution's ownership.

References

English

- Bowers, Liora, and Dov Chernichovsky. *Your Place in Line: Waiting Times in Israel's Public Hospitals*. Policy Brief. Jerusalem: Taub Center for Social Policy Studies in Israel, August 2016.
- Bowers, Liora, and Dov Chernichovsky. *Revisiting Israel's Healthcare Priorities*. Policy Paper 02.2017. Jerusalem: Taub Center for Social Policy Studies in Israel, April 2017.
- Central Bureau of Statistics. "In 2017, the National Expenditure on Health — 7.5% of GDP. Media Release." Israel: Central Bureau of Statistics, August 16, 2018a.
- Central Bureau of Statistics. *Employee Jobs, Total Wages, and Average Monthly Wages per Employee Job – at Current and Constant Prices*. Monthly Bulletin of Statistics, August 2018b.
- Central Bureau of Statistics. *Consumer Price Index*. Israel: Central Bureau of Statistics, various years.
- Central Bureau of Statistics. *Statistical Abstract of Israel*. Israel: Central Bureau of Statistics, various years.
- Chernichovsky, Dov, and Eitan Regev. "Financing and Work Force Issues in Israel's Healthcare System." In *State of the Nation: Society, Economy and Policy in Israel 2014*, edited by Dan Ben-David. Jerusalem: Taub Center for Social Policy Studies in Israel, 2014. 491-503.
- Chernichovsky, Dov, Haim Bleikh, and Eitan Regev. "Private Expenditures on Healthcare in Israel." In *State of the Nation: Society, Economy and Policy in Israel 2016*, edited by Avi Weiss. Jerusalem: Taub Center for Social Policy Studies in Israel, 2016. 365-380.
- Chernichovsky, Dov, Avigdor Kaplan, Eitan Regev, and Jochanan Stessman. *Long-Term Care in Israel: Funding and Organization Issues*. Policy Paper. Jerusalem: Taub Center for Social Policy Studies in Israel, April 2017.
- Chernichovsky, Dov, Bishara Bisharat, Liora Bowers, Aviv Brill, and Chen Sharony. "The Health of the Arab Israeli Population." In *State of the Nation: Society, Economy and Policy in Israel 2017*, edited by Avi Weiss. Jerusalem: Taub Center for Social Policy Studies in Israel, 2017. 325-372.
- OECD. *Health at a Glance 2017: OECD Indicators*. OECD Publishing, 2017.
- OECD.Stat. OECD Database, Online.

Hebrew

Belinsky, Alexey, Galit Ben Naim, and Yoav Hecht. *Salaries of Doctors in Government Hospitals, from Private to Public Medicine – Findings and Trends*. Discussion Paper Set. Israel: Ministry of Finance, 2018.

Central Bureau of Statistics. *Monthly Income and Expenditure for Household Deciles, by Gross Monetary Income per Household, 2016*. Israel: Central Bureau of Statistics, 2016.

Filut, Adrian. “Ministry of Health warning: The system is in critical condition.” *Calcalist*, October 24, 2018.

Ministry of Finance. *Essence of Financial Statements 2019*. Israel: Ministry of Finance, 2018.

Ministry of Health. *Summary Report on Health Fund Activities — 2017*. Israel: Ministry of Health, 2018.