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Association

THE ISRAELI HEALTHCARE SYSTEM

A brief overview

Prepared by the Israeli Medical Association



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Abbreviations

Central Bureau of Statistics

{CBS}

European Forum of Medical Associations

{EFMA-WHO}

European Union of Medical Specialists

{UEMS}

Israeli Medical Association

{IMA}

Ministry of Health

{MoH}

Ministry of Finance

{MoF}

National Health Insurance

{NHI}

National Health Insurance Law

{NHIL}

National Insurance Institute

{NII}

Organisation for Economic Cooperation and Development

{OECD}

Standing Committee of European Doctors

{CPME}

World Medical Association

{WMA}



The State of Israel – General Background

Israel is a small country located on the eastern shores of the Mediterranean Sea. Its territory stretches over 22,072 sqm, with a population in 2024 of approximately 10 million residents – 73% Jews, 21% Arabs, with the rest consisting of various minorities. Hebrew and Arabic are Israel's official languages; English and Russian are its most common foreign languages.

Israel was established in 1948. It is a democracy with a multi-party parliamentary government system. Every citizen over the age of 18 can vote. The head of state is the president, yet his authorities are mostly ceremonial. The Legislative Branch is called the Knesset, and it consists of 120 Knesset members. Elections to the Knesset take place every four years in national-proportional elections. The Prime Minister heads the Executive Branch (the government), and s/he is usually the leader of the largest party amongst the coalition parties forming the government.

Israel is mostly comprised of urban population. Less than 10% of its population resides in rural settlements. In comparison to other developed countries, Israel's population is relatively young. The share of residents under the age of 14 is 28%, the highest percentage among the member states of the Organisation for Economic Cooperation and Development (OECD). Israel's fertility rate among women aged 15-49 is the highest among member states in the organization, with 2.9 children per woman, compared to a mean of 1.5 in other OECD states. The percentage of elderly in Israel (65 years and older) is 12.4% compared to the mean of 18% in OECD member states.¹

Israel is a developed country, industrialized and technologically advanced. The local currency is the New Israeli Shekel (NIS). In 2023, Israel's GDP (Gross Domestic Product) per capita was approximately 53,400 dollars (in Purchasing Power Parity) – lower than the OECD average of about 59,000 dollars. Israel's economic inequality is high among the OECD member states, rivaled only by eight members countries where inequality is higher.

1 OECD demography statistics. <https://data-explorer.oecd.org/?lc=en&pg=0&fc=Topic>



According to the OECD better life index, Israel is doing relatively well in different aspects of quality of life. Israel is ranked 12th in its population's life satisfaction and 14th in the condition of their health.²

Common health indicators show that the population of Israel enjoys a high level of health, even in comparison with the most developed countries. After a slight decrease during the years of the Covid-19 pandemic (2020-2022), life expectancy is on the rise again and currently stands at 82.8 years, above the OECD average. Much like many other countries, the life expectancy of women is higher than that of men. Concurrently, the infant mortality rate is gradually decreasing and now stands at 2.8 deaths to one thousand births (lower than the OECD average).

The Development of Israel's Healthcare Services up to the Establishment of the State

Before the British occupation in 1917, healthcare of the Jewish community in the land of Israel was mostly the responsibility of charitable and religious institutions, which provided healthcare services as part of their missionary activity in the Holy Land. The contribution of the Ottoman regime to the field of healthcare was minor.

Various European countries and Christian healthcare organizations at the time established institutions to care for the sick, provide for the needs of the pilgrims, care for its non-Jewish population, and gain political foothold in the land. This led, for example, to the establishment of the French, German, Italian and Scottish hospitals. The first Jewish hospital was established in 1854 in the old city of Jerusalem, as part of the Rothschild family's financial aid to the Jewish settlement. Later, other hospitals were established in Jerusalem, including Bikur Holim, Misgav LaDach and Shaare Zedek. The operation also covered medical aid to the farmers of the agricultural settlements, and included another Rothschild funded hospital in Zichron Yaakov for farmers and laborers, which treated Arabs and Jews alike.

2 Please note that methodological limitations and differences in definitions potentially constrain data comparability across countries. For further information please see: OECD (2020), How's Life? 2020: Measuring Well-being, OECD Publishing, Paris. http://dx.doi.org/10.1787/how_life-2015-en



Clalit Healthcare Services was founded in 1911 to guarantee provision of medical services to the workers of the Second Aliyah.³ Later on, additional health funds were established, including Leumit and Maccabi.

In the early 20th century, the Jewish settlement amounted to about 50 thousand people, while the number of Jewish physicians in 1912 was only 32. In January 1912, Dr. Moshe Sherman initiated a gathering at which it was decided to establish the "Hebrew Medicinal Society in Jaffa", whose members would be certified physicians, veterinarians and pharmacists. Similar physicians' societies were founded in additional settlements and, after the First World War, converged into one association – The Hebrew Medical Association, which changed its name after the state was established to the Israeli Medical Association (IMA) and limited membership to licensed physicians. Even early on, the physicians' organization did not consider itself to be just a trade union designed to provide professional protection to its members, but also a professional organization with scientific goals, aspiring to influence the level and quality of medical services provided.

Later, the Hadassah Medical Organization in the United States made a crucial donation for the development of Israel's healthcare services. The organization established hospitals and aided public healthcare, preventive medicine and the eradication of infectious diseases while maintaining professional standards free of political and ideological tendencies.

The large influx of immigrants from central Europe in the early to mid-20th century brought with it many physicians. Upon their arrival, the practice of independent physicians started to develop. Concurrently, hospitals were established across the land of Israel, and a health services network was established by local authorities.

The contribution of the British Mandatory health department to the formation of the local healthcare services was relatively small. The health department of the British rule handled sanitation and other infectious diseases during the years of the Mandate and did not invest in medical infrastructure. The health department served, de facto, as Israel's Ministry of Health (MoH). Once the British Mandate ended and the State of Israel was established, the MoH was formed, inheriting the Mandatory health department.

3 The Second Aliyah refers to the massive influx of immigrants during the years 1904-1914, when approximately 35 thousand Jews arrived, mainly from Russia and Poland.



The Ministry of Health

The MoH was founded in 1948, upon the establishment of the State of Israel. The function of the office is to see to the formulation and execution of government policy on health issues, and to fulfill the ministerial functions that fall on every government office – supervision and control, legislation, planning etc. The MoH carries the overall national responsibility to ensure the health of the residents of the State.

One of the inheritances left by the British Mandate's health department to the State of Israel at its inception was a network of military hospitals and institutions designed to provide healthcare services to the public. The MoH temporarily took upon itself to provide those services, as well as the responsibility for other medical services that were provided by the Hadassah organization, with the intention that these services would later be assigned to local authorities. In practice, this temporary situation turned into a permanent situation accompanying the Israeli healthcare system to this very day.

Essentially, the MoH possesses three key roles:

1. Regulator-including policy, supervision, control, planning, and legislation
2. Service provider – the MoH maintains over a quarter of the hospitalization beds, and half of the preventative medicine services via Family Healthcare Centers (Tipot Halav).
3. Insurer – according to the National Health Insurance Law (NHIL), 1994 (the third addendum to the law), the Ministry oversees providing and financing long term nursing care services, preventive medicine services, rehabilitation and mobility equipment to invalids, and is responsible for a designated portion of the mental health services.⁴

The multiplicity of sometimes competing roles can impair the Ministry's ability to fulfill both its ministerial function and its function as a service provider and is liable to create conflicts of interest. For instance, as a regulator, the MoH sets standards that are meant also to apply to institutes under its ownership. As a financer of services, the Ministry often acquires services from private service providers that it itself supervises. These suppliers compete over the provision of services with the Ministry itself (through the institutes it owns).

4 It should be noted that following the mental health reform, most of the responsibility over these service was assigned to the healthcare clinics, as part of the second addendum to the law.



Additionally, the Ministry's involvement in three functions simultaneously does not always allow it to efficiently fulfill its ministerial role. The MoH is busy dealing with the daily operation of the health services to the individual, and these daily needs can push aside long-term ministerial functions. Some claim that the fact the ministry also owns many of the hospitals results in higher prices for the services it provides.

Almost every committee that dealt with the healthcare system during the past thirty years recommended the need to separate the Ministry's ministerial functions from its operations as provider and financer of health services. Attempts to separate the government hospitals from the direct operation of the Ministry were unsuccessful. Even the establishment of a statutory authority of government medical centers subject directly to the Minister of Health was recently revoked – an authority that was originally established following the recommendation of a consulting committee. Furthermore, there have been several attempts to assign both the financing and insuring of services, currently subject to the Ministry, to the health funds, yet these attempts encountered many difficulties. Nonetheless, recently, most mental health services were assigned to the health funds as part of a complex and controversial reform.

The Israeli Medical Association

The IMA is the representative organization and trade union of Israeli physicians, operating as a professional, independent and nonpartisan organization dedicated to promoting Israeli physicians and medicine. The IMA's principal goals are to advance the professional, scientific, and economic objectives of its members, maintain the proper professional and ethical level of the medical profession and attend to the status of the physician and the medical profession in Israel.

The IMA grew from an association of seven members, those physicians who established the Hebrew Medicinal Society for Jaffa and the Jaffa District on 11 January 1912. At its inception, the IMA was called the Hebrew Medical Society (HMS), but upon Israel's establishment, the organization opened its gates to all physicians, irrespective of religion and nationality. The IMA accepts as members all physicians lawfully licensed to practice medicine in Israel.



As of 2024, the IMA has 29,630 member physicians, comprising most of the physicians in Israel.⁵ The IMA is comprised of 54 scientific associations, each representing a recognized medical specialty in Israel, as well as workgroups and scientific societies whose members engage in interdisciplinary fields and/or various medical fields that are not official specialty fields. In total, there are currently 239 associations, workgroups, and societies in the IMA.

Organizationally, there are seven professional organizations that are members in the IMA: Physicians' Organization of Clalit Health Services, State Physicians' Organization, Hadassah Physicians' Organization, Tel Aviv Municipality Physicians' Organization, Physicians' Organization of Meuhedet Health Fund, Physicians' Organization of Maccabi Healthcare Services, and Physicians' Organization of Leumit.

The IMA is judicially recognized as the sole representative organization of Israeli physicians. This status was gained through efforts on the part of the IMA, beginning with the establishment of the State, to oppose both requests of the state physicians to hold independent negotiations with the employers and the Histadrut Labor Union, which intended to include within its ranks all salaried physicians, and leave the IMA only with the areas of medical ethics and scientific development.

IMA Regulations specify the structure of the organization, its goals and the scope of its activity, subject to change from time to time based on the decisions of the organization institutes. Following are the key IMA institutions:

- The General Assembly –convenes once every four years. The Assembly discusses and decides upon key IMA issues and is entitled to revoke the decisions of the rest of its institutes. Additionally, it chooses the Central Committee, chairperson of the Committee (who is also the chairperson of the IMA), the Scientific Council, and various committees. The assembly is compiled of delegates, who are selected by the professional organizations in accordance with the index representing the relative influence of each IMA organization.

5 Including dentists, interns, medical students and clinical researchers there are currently 32,290 IMA members.



- The Central Committee – This body manages, coordinates and guides the IMA, and acts to implement its goals. The committee supervises IMA institutes, chooses the IMA secretariat and supervises its activity and the work of the organizations, is entrusted with responsibility for collective bargaining, coordinates the fee collection, etc.
- The IMA President– is the chairperson of the Central Committee, who acts as leader of the organization and as its representative vis-a-vis the public and outside organizations. The General Assembly selects the chairperson for a four-year term of office.
- IMA Secretariat – a body elected by the Central Committee, which acts as the IMA's executive arm. The secretariat holds its meetings at least once a month, and its functions include implementation of the policy and decisions of the Central Committee; proposals of new policies and/or amendments to the IMA regulations; supervision over IMA committees and institutes; decisions on policy, economic and organizational topics, etc.; approval of collective agreements; declaring national and local strikes; approving the IMA's budgets etc.
- IMA Tribunal – has 24 members plus a chairperson. The IMA Tribunal adjudicates conflicts between an IMA institute and a member, or between different IMA institutes. The Tribunal also deliberates upon conflicts or allegations of a personal nature of an IMA member against his colleague, which are connected to the medical profession, as well as conflicts between members of the IMA and institutes or people outside it, which are connected to the medical profession.
- The Ethics Committee – investigates complaints of an ethical nature against physicians and formulates ethical rules that guide the work of the physicians. The decisions of the committee are reflected in its Ethical Code and in position papers that are published among the physicians. Committee members include senior physicians from diverse specialty fields.
- The Scientific Council – an independent scientific body designated by law to oversee the training and specialization of physicians in Israel. As part of its activity, the Scientific Council monitors the residency training of over 9,000 medical residents, holds residency exams, and approves the completion of residency in the various medical fields. The Scientific Council also conducts accreditation of residency departments, approves new fields of specialization and fellowships and is involved with continuing medical education.



- The Institute for Quality in Medicine- The Institute for Quality in Medicine is the primary body appointed by the IMA to formulate clinical practice guidelines, which serve as the foundation for optimal medical care. The Institute collaborates with scientific associations and the Scientific Council, and serves as the leading authority for establishing professional and scientific consensus across all fields of medicine in Israel.
- The Institute for Medical Innovation and the Future of Medicine-the Institute is involved in training and equipping physicians with skills required for the future, establishing and advancing projects in medical innovation and entrepreneurship and becoming a dominant and influential player in confronting and engaging with technology companies and health-related startups that are consolidating their power within the healthcare system.
- The Israeli National Academy for Science in Medicine – the Academy, established in conjunction with the IMA, focuses on improving human health and medical care by promoting research conducted by physician-researchers in Israel, with the goal of improving diagnosis and medical care, promoting and developing medical research conducted by physician-researchers as a national priority, fostering and cultivating excellence in physician-led medical research and engaging with institutional, professional, and scientific bodies in Israel and abroad on matters pertaining to medical research by physician-researchers.

The IMA is instrumental in shaping medical and health policy, whether such policy affects physicians, patient rights, public health or the practice of medicine.

The IMA is also an active member of various international organizations such as the World Medical Association (WMA), the Standing Committee of European Doctors (CPME), the European Union of Medical Specialists (UEMS) and the European Forum of Medical Associations (EFMA).

Characteristics of the Israeli Healthcare System

Israel's healthcare system, much like other healthcare systems, is comprised of a mix of public and private services provision and finance. The Israeli healthcare system is mainly public. As of 2022, about 665.% of the national healthcare expenditure came from public finance and designated taxing, with the rest coming from private expenses, both direct payment from households for healthcare services and private



health insurance (including complementary insurance purchased through the health funds and commercial insurance marketed by insurance companies). The national expenditure on healthcare in Israel is 130 billion NIS, and it constitutes about 7.3% of the GDP – a rate considered low compared with other developed countries. About 88% of Israeli citizens currently have some kind of private insurance – a relatively high rate, considering that the state provides a basic healthcare services insurance scheme ("the healthcare services basket") to all its residents.⁶

The NHIL (1994) sets a healthcare basket that is uniform, equal and universal to all of Israel's citizens.⁷ Pursuant to the law, citizens are insured with mandatory insurance in one of the four health funds that act as non-profit organizations: Clalit Healthcare Services, which is the largest healthcare clinic, Maccabi Healthcare Services, Meuhedet Healthcare Services and Leumit Healthcare Services. The healthcare services budget is distributed among the funds by the National Insurance Institute (NII), in accordance with the number of insured in each fund and considering other elements such as members' age, sex, and place of residence (outlying areas verses central district). The health funds' basket includes services such as medications, doctors' visits, hospitalization services, and paramedical treatments. Concurrently, the state funds a separate services basket supplied by the MoH, which includes mental health services, geriatrics, preventive medicine, and rehabilitation equipment. In recent years, the healthcare system has constructed a reform that would assign mental health services to the healthcare clinics. A different reform covers dental health services for children and the elderly as part of the health funds' basic basket⁸.

Israel has 45 general hospitals, of which 11 are government operated, 9 belong to Clalit Healthcare Services, 9 are private and the rest are public institutes affiliated with the Hadassah organization, the Mission, and other organizations. Only 2.8% of the curative (acute) care hospital beds are in private for-profit hospitals – the rest are in government or public hospitals and other health institutions. The number of curative care hospital beds per population has been regularly decreasing since the 1980s, and now stands at about 1.7 beds per 1000 people - lower than in most of

6 OECD health statistics. <https://www.oecd.org/en/data/datasets/oecd-health-statistics.html> [accessed 28 July 2024].

7 National Health Insurance Law, 1994.

8 Ministry of Health. http://www.health.gov.il/Subjects/Dental_health/ChildrenDentalTreatmentsReform/Pages/default.aspx [accessed: 3 June 2020].



the developed countries (although, one should take into consideration Israel's young population as compared to "older" countries).⁹

The non-profit organizations of the third sector also fulfill important roles in Israel's healthcare system. Among them, we find Magen David Adom, which serves as Israel's emergency and rescue service, the Yad-Sarah organization that assists people with disabilities and provides home based medical equipment, and the Ezer Mizion organization, which is the largest organization in Israel in the field of medical and rehabilitation aid to patients and their families.

The IDF's medical corps is also a central component in the provision of medical services in Israel. Other organizations of paramount importance in the health system are the representative organizations of the different healthcare employees – physicians, nurses, pharmacists etc.¹⁰

Common healthcare indexes such as life expectancy and infant mortality indicate that the health of Israel's population is similar to that of other developed countries. The life expectancy is usually increasing and is higher than OECD average. Infant mortality is steadily decreasing, and its rate is similar to OECD average.¹¹ However, there are gaps in these health indexes among different population groups in favor of Jews as compared to Arabs and residents of the central districts as compared to those of the outlying areas. For example, according to the MoH and the Central Bureau of Statistics (CBS), the gap in life expectancy between the residents of Ra'anana in the upscale, centrally located Sharon region and the residents of Rahat in the South is about six years. The inequality is also apparent in the health infrastructure data – the number of physicians and beds in relation to the size of the population in the Southern and Northern districts is lower as compared to the central district, Tel Aviv and Jerusalem.¹²

The national expenditure on health as a percentage of the GDP in Israel is one of the lowest in the OECD.

9 The Ministry of Health: Hospitals and Outpatient Units in Israel 2024 – Part A: hospitalization trends, 2022.

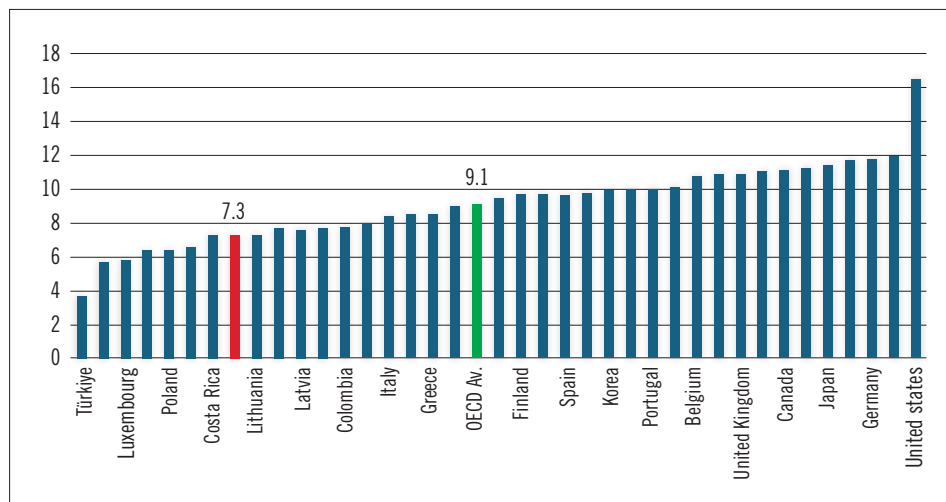
10 G. Bin Nun, Y. Berlovitz, M. Shani, The Healthcare system in Israel, (Tel Aviv, Am Oved, 2010[2005]), 95-110.

11 OECD health statistics. <https://www.oecd.org/en/data/datasets/oecd-health-statistics.html>

12 The Ministry of Health, Inequality in Health, 2024.



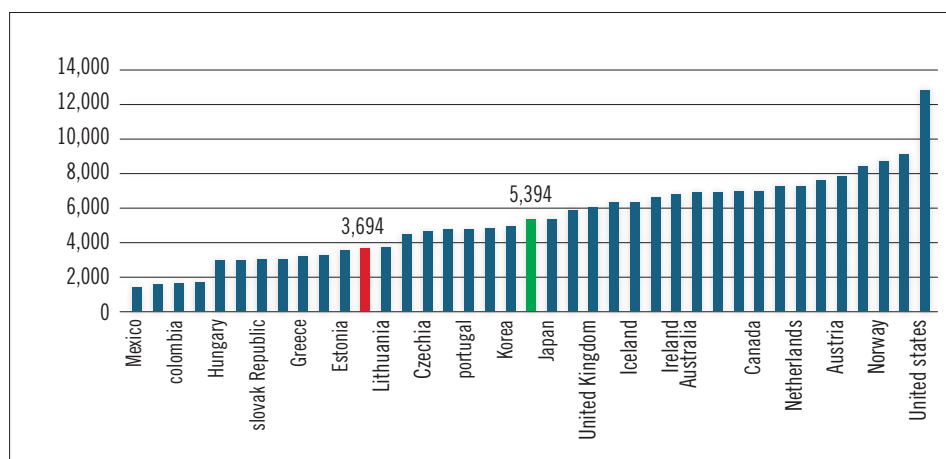
Figure 1: National health expenditure in OECD countries as % of GDP, 2023



Source: OECD Health Statistics (2023 or nearest year)

The total expenditure per person in Israel is also relatively low and constitutes only about 68% of the OECD average. The level of public expenditure per person in Israel is similar to that in Eastern European countries such as Lithuania and Estonia.¹³

Figure 2: Health expenditure per capita in OECD countries, US\$ PPP 2023



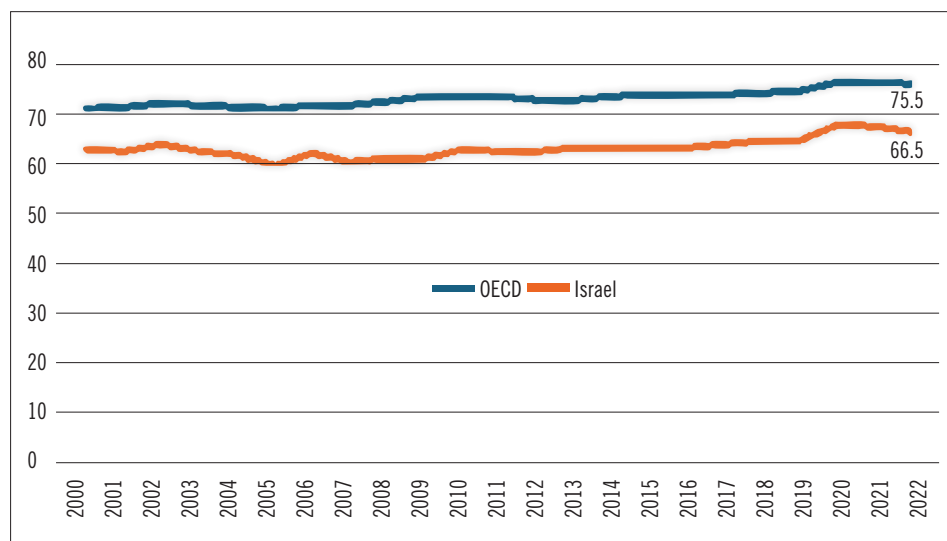
Source: OECD Health Statistics (2023 or nearest year)

13 OECD health statistics.



The following diagram indicates that the percentage of public expenditure of the total health expenditure in Israel is lower than the OECD average. After a sharp increase in 2020 that may be attributed to the Covid-19 pandemic, the share of public expenditure has been steadily decreasing to its former pre-pandemic level.

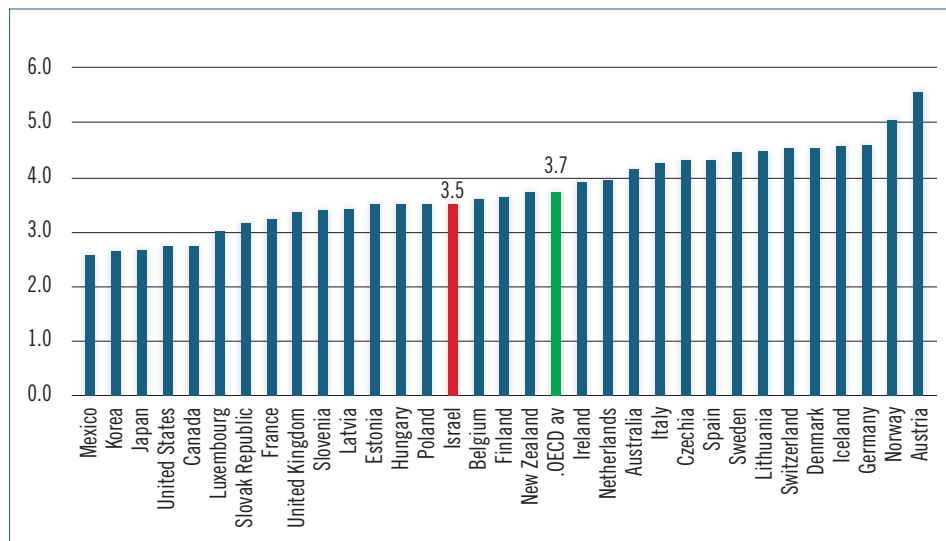
Figure 3: Public expenditure as a share of total health expenditure in OECD and Israel, 2000-2022



Source: OECD Health Statistics

Similarly, the number of practicing physicians per population in Israel is lower than the OECD average.

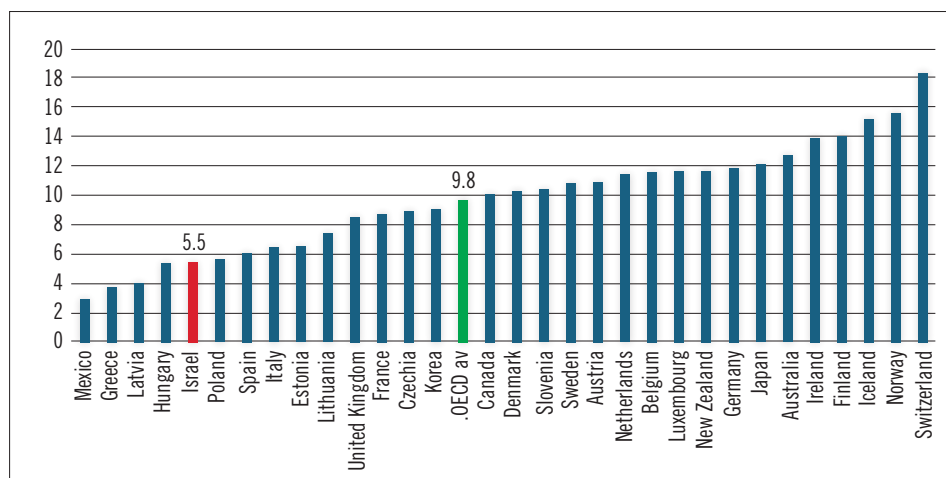
Figure 4: Practicing physicians per 1,000 population in OECD countries, 2023



Source: OECD Health Statistics (2023 or nearest year)

The number of practicing nurses per population in Israel, compared to developed countries, is extremely low, as is indicated in the following diagram. Only four OECD countries have a lower rate of practicing nurses. As a result, the MoH is working to expand training frameworks for nurses.

Figure 5: Practicing nurses per 1,000 population in OECD countries, 2023

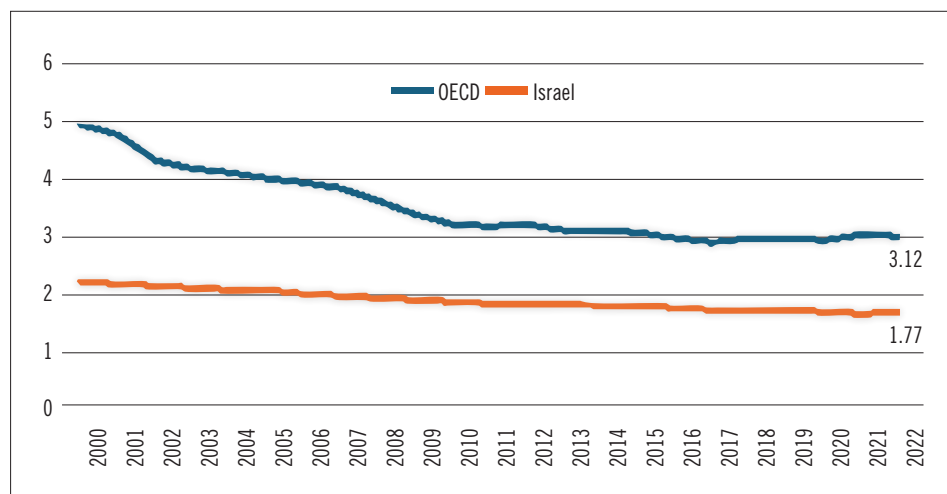


Source: OECD Health Statistics (2023 or nearest year)



The number of acute hospital beds per population is also one of the lowest among developed countries, and despite this, it continues to decrease.

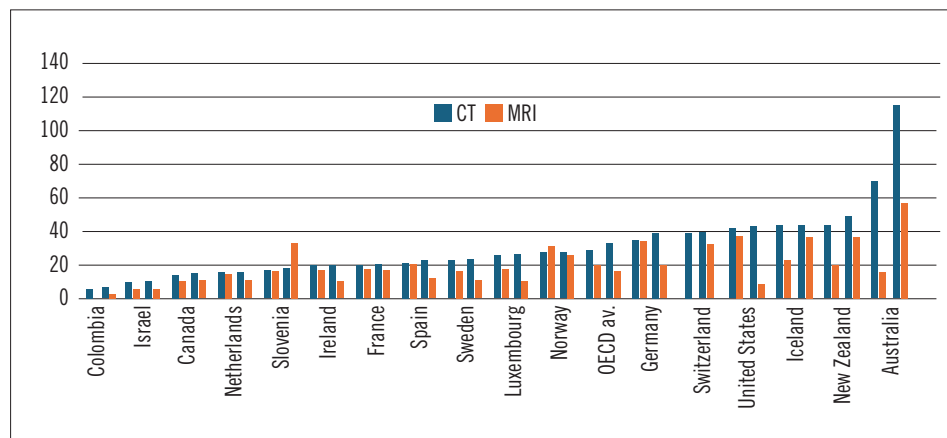
Figure 6: Acute care beds per 1,000 population in Israel and OECD, 2000-2022



Source: OECD Health Statistics

Israel is also characterized by an especially low rate of MRIs, as indicated in the following diagram:

Figure 7: CT scanners and MRI units in OECD countries per one million population, 2023



Source: OECD Health Statistics (2023 or nearest year)



As opposed to other infrastructure measurements, the rate of MRI units in Israel has increased in recent years, yet it is still one of the lowest among developed countries. A similar picture arises when comparing Israel's number of CT scanners per one million people to that in other countries.

In June 1994, the Knesset approved the NHIL, which took effect in January 1995. The law, which states that "National insurance shall be founded on principles of justice, equality and mutual assistance", is the formative law of the Israeli healthcare system. According to this law, all residents are mandated to have health insurance, and each resident is entitled to a defined service basket. The law embraces the insured's freedom to choose his healthcare fund, defines collection apparatuses and allocation of public resources, and determines the state's duty to finance the service basket to which residents are entitled.

Before the law's enactment, health insurance arrangements were voluntary, and although most of the population chose to be insured (95%), there were still about 250,000 residents (5% of the population) who remained without health insurance.

Once the law went into effect, health insurance became mandatory for all residents of the State with no relation to financial means or other conditions. The law also replaced the unofficial and non-transparent mechanisms used to define the service basket and eligibility thereto with a publicly regulated, transparent and controlled system. A determination was added that the health services in the basket shall be "of reasonable quality, provided within a reasonable time, and within a reasonable distance," although this definition is subject to broad interpretation.

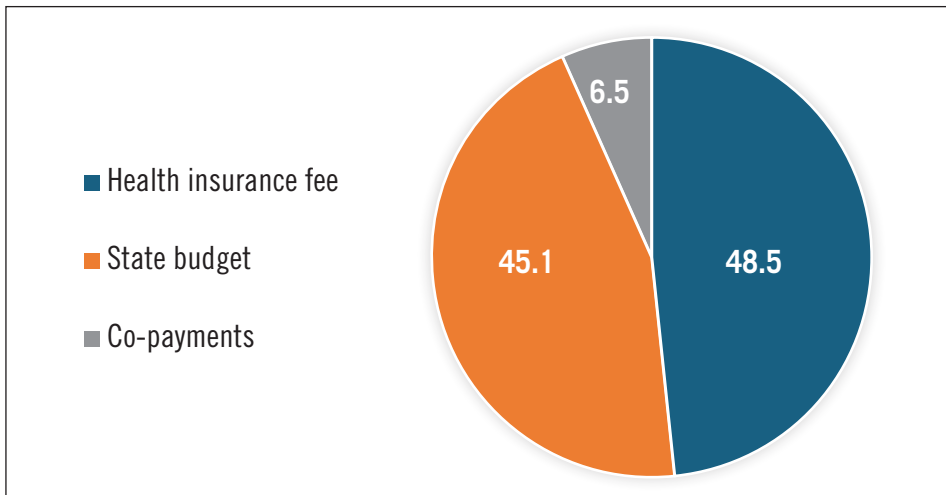
Beyond the basket of services under the responsibility of the health funds, the law also includes a basket under the responsibility of the MoH, which covers psychiatry services, long term care hospitalization, preventive medicine, and rehabilitation devices. Nonetheless, the health fund basket constitutes the lion's share of all health services and in 2022 the cost of the basket was approximately 61.5 billion NIS.



The services are funded through three main sources (see figure below):

1. Health insurance fee – a designated tax collected by the NII.
2. State budget – completion of the basket cost from the general government budget.¹⁴
3. Co-payments – payments by the insured for partial finance of the health services

Figure 8: NHI sources of financing 2022 (%)



Source: Ministry of Health, National Health Insurance Law: A collection of statistical data 1995-2022.

The resources comprising the health care service basket are divided among the four health funds using a designated distribution mechanism known as "capitation", introduced when the law went into effect in 1995. In accordance with the social justice perspective depicted in the NHIL, the capitation mechanism was designed to provide insured members, without respect to their health status, equal opportunities to receive health services, by justly dividing resources among the health funds. The division formula at the core of the capitation mechanism was designed to calculate the portion of the budget required for each fund in accordance with the needs of its members, as much as these can be measured and quantified. This formula creates, in fact, a form of "affirmative action" among the health funds, so that "compensation" is given to a fund whose insured require more healthcare

¹⁴ Until 1997, Israel had a "parallel tax" which was collected from employers to finance healthcare services. After it was revoked, the government increased its participation in supplementing the basket cost.



services, such as a fund with a higher rate of elderly members. Proper allocation is meant to make the fund indifferent to the health risk of the insured, thus barring incentives for unjust allocation of healthcare services or selecting members based on their health condition, age, gender, socio-economic status, or any other relevant factor. However, despite the update of the capitation mechanism over the years, there is still a need to continue to examine and update relevant health, demographic and social-financial criteria on a regular basis, in order to adapt the mechanism to the principles of equality and justice of the NHIL.

The debate over the update mechanism of the healthcare services basket

In 1992, the Ministry of Finance (MoF) gave its consent to promote the national health insurance bill under two conditions:

1. The proposed legislation would not expand the eligibilities in the health service basket beyond the ones existing at the time.
2. The proposed legislation would not increase the burden of payments for health tax.

In exchange for passing the law, its supporters had to relinquish the idea of regularly updating the services in the basket. Thus, the services provided within the NHIL were in fact the services the Clalit Health Fund was providing at the time of the legislation (it should be noted that the law allows the clinics to provide additional healthcare services beyond the basic basket). It was further decided that an automatic adaptation to price changes would be done pursuant to the law, in accordance with the health cost index, while the demographic and technological update would be determined by the government, according to its discretion and subject to the priorities it sets from time to time.

In practice, between 1995–1997, no designated funds were allocated to the addition of services to the basket. In 1998, following heavy public and media pressure, the healthcare services basket was updated with a sum of 150 million NIS, designed to include 17 technologies, most from the field of oncology. Only in 1999, was an organized and methodical process for introducing new technologies to the basic services basket initiated. The updating process is conducted by a professional committee, which includes public representatives among its members. In reaching its decisions, committee members take into account cost-benefit considerations, as well as values and social considerations. However, many practitioners agree that there is a large gap between the allocated budget for the update of the basket, and the budget required to include vital medications and medical technologies.



Implementing the NHIL without introducing appropriate update mechanisms is in fact the main cause of the ongoing disagreement around the basket budget. In addition, the updating mechanism itself needs to be addressed, specifically the three existing update coefficients: the cost of health coefficient; the demographic coefficient (due to population growth and aging); and the technological coefficient (for medications and new medical technologies).

■ Cost of health coefficient

The price coefficients according to which the cost of the basket is updated each year are specified in the fifth addition to the law. There are those who claim that the components of the prices in the health cost index do not accurately reflect the cost increase of the health funds' input. The main conflict, concerning the price of a day of hospitalization, is not included in this index, despite the fact that about 45% of the health funds' expenses are spent on hospitalization services, whose rate of price increase was higher than the health cost index.

■ The demographic coefficient

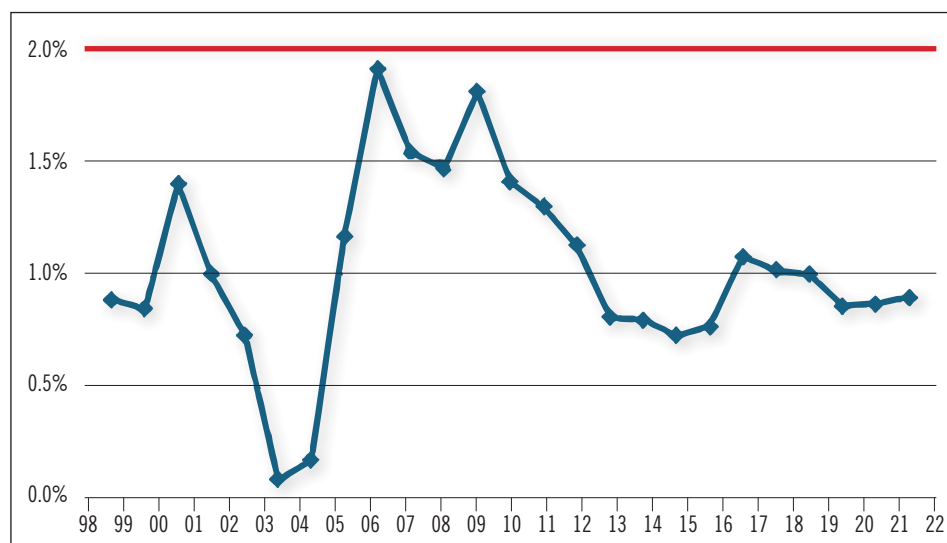
This index is meant to reflect the increased cost in providing services as a result of the population both increasing and aging. The conflict regarding the demographic update coefficient concerns the lack of compensation to the health funds for the demographic increase of Israel's population and its aging factor, exhausting the value of basket per person.

■ The technological coefficient

This index is meant to express the changes to the basket cost as a result of technological improvements in diagnosis and medical care. The increasing tension between the global scientific advancements in the field of medicine and the government's budget limit allocated to closing the technological gap has resulted in an incisive public and professional discussion about updating the basket, with the participation of Knesset Members, the Ministries of Finance and Health, health funds, the medical community and patients' organizations. The media and public interest in the topic reached its peak in 2006 during the demonstrations and hunger strikes held by cancer patients and their families in front of the Knesset and the MoF, demanding to include new oncologic medicines in the healthcare basket. At the same time, there were increased calls to

legislate an automatic update to the budget covering technological advances, which would guarantee the expansion of the services basket by a certain amount each year, without being dependent on a government decision. In practice, the average update of the services basket by the government is only 1% per year. The position of the IMA is that the healthcare basket must be regularly budgeted by law at an increase rate of 2% of the basket cost; this is also the position of patient organizations.

Figure 9: Annual update rate of the health basket for added medication and medical technologies 1998-2022



Source: Ministry of Health

The IMA has, for many years, been warning of the continuous erosion of the healthcare basket. Senior economists support this claim, estimating that in 2014 the healthcare basket suffered from a cumulative shortage of about 4 billion NIS, for the update of new medications and technologies alone. According to a 2022 study, considering the demographic component and the health price change coefficient as well, the cumulative erosion of the basket between 1995-2020 has reached a sum of about 30-40 billion NIS.¹⁵

15 B. Levi, G. Bin Nun and N. Davidovitch. An Examination of the Cost Update Mechanism for the Healthcare Services Basket Between 1995 and 2020. Taub Center for Social Policy Studies in Israel, 2022.



Public-Private Mix

As mentioned above, the NHIL aims to assure uniform, equal and universal healthcare services to all of Israel's citizens. Nevertheless, alongside the public system, a prospering private healthcare market has been steadily growing for many years. Thus, the Israeli healthcare system can be described as a public-private mix.

Section 10 of the NHIL allows the health funds to offer their members complementary insurance, which covers services not included in the basic basket. Each member has the right to join the plan his or her health fund offers, and the membership fees of the complementary plans are uniform to all age groups.

The complementary insurance plans of the health funds include the following key services: reimbursement for life saving transplants and surgeries abroad and other vital treatments, second medical opinions, alternative medicine, periodic checkups, medical equipment and a limited number of medications not found in the basic basket. Additionally, the plans allow choosing a physician, but the choice is limited to private hospitals or the public hospitals in Jerusalem where there are private medical services arrangements.

Another component of the health insurance sector is commercial health insurance, offered by commercial insurance companies that operate for profit. These insurance plans are divided into individual insurance (single insured) and group insurance (through the workplace or for members of different organizations). Unlike complementary insurance, joining the insurance requires underwriting, and the insurance premium is not uniform. In addition, commercial insurance companies, as opposed to the health funds, are not obligated to insure everyone who asks to be insured. About 80% of Israel's residents have complementary insurance. Approximately 40% of them have double health insurance – complementary and commercial. The rate of residents with some type of private healthcare insurance in Israel is one of the highest among developed countries. This indicates the public's lack of trust in the capability of the public health insurance system to provide the proper response when needed, in light of the aforementioned budget crunch.



The Medical Profession

■ Education and training:

In order to become a physician in Israel, one must undergo 6 years of undergraduate education, or 4 years after receiving a first degree. There are currently 7 medical schools in Israel—at Hebrew University in Jerusalem, Tel Aviv University, Reichman University and Ariel University in the center of the country, Ben Gurion University in the South (Beersheva) and the Technion (Haifa) and Bar Ilan University (Safed) in the North. Two additional institutions are expected to open medical schools in the fall of 2025: Haifa University and the Weizmann Institute of Science. Acceptance to medical school in Israel is extremely competitive, and as a result many Israelis choose to study abroad, mostly in European countries such as Italy, Hungary, Lithuania and Romania.

Following the undergraduate education, the student currently performs a year of internship in a designated hospital.

However, a decision was recently made to shorten this period to 9 months and discussions are still underway as to whether to abolish the period totally. At the end of the internship, physicians educated in Israel will receive a license to practice medicine. Foreign educated physicians are required to undergo a licensing exam, unless they come from a country that is exempt from such exam.

■ Residency training:

Although legally eligible to practice medicine with just a basic license, the vast majority of Israeli physicians continue on to 4–6 additional years of postgraduate training in one or more of 32 basic specialties, and often another 2–3 years in one of 27 subspecialties. These are performed in any one of 1,932 IMA Scientific Council accredited departments in Israeli hospitals and clinics.

Approximately midway through residency, the physician will take the Stage 1 residency exam, which is a multiple choice, fact based test of his or her theoretical medical knowledge. Towards the end of residency, the resident will take the Stage 2 oral exam, which tests him or her on the practical application of such knowledge.

Upon completion of the residency period, successful completion of the Stage 1 and



Stage 2 exams and a letter of recommendation from the department head, the resident may apply to the Scientific Council of the IMA to be granted specialty certification. After reviewing his or her file, the relevant professional committee of the Scientific Council will inform the applicant if anything is missing or recommend to the MoH that he or she be granted specialty certification. The actual certification is granted by the Ministry.

■ Continuing Medical Education (CME):

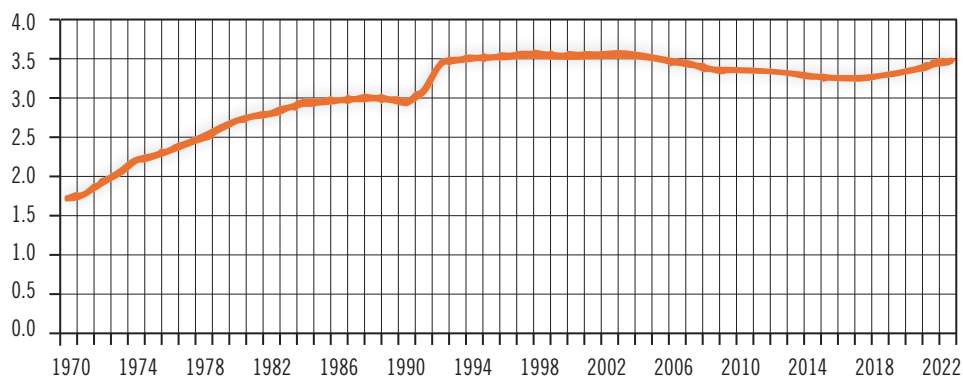
CME in Israel is not mandatory. Nonetheless, each physician is encouraged to continue his or her medical education beyond the years of formal education and to remain current in new medical developments. The IMA issues certificates to physicians who complete a set amount of CME.

Workforce shortage

In recent decades, developed countries have been forced to deal with increasing demand for healthcare services due to far-reaching demographic, social and economic trends. Most countries have difficulty keeping up with this demand increase for several reasons, including the inadequate rate of physician training, reduction of work hours in the field, particularly among young physicians, and a rise in retirement rates.

The ideal percentage of physicians within the Israeli population has been debated over the past decade. In addition to the systematic factors delineated above, there are local circumstances heightening the strain on the Israel healthcare system. The increase in the number of retiring physicians, the sharp decline in the number of doctors immigrating to Israel, and the failure to expand the scope of physician training frameworks in medical schools have all given rise to very real concerns regarding an anticipated physician shortage in Israel, and have generated a reexamining of the scope of medical manpower required by the healthcare system. This state of affairs has led to the establishment of various committees that recommended the expansion of physician training institutions. The establishment of the new medical schools is expected to elavate the number of physicians in the future, but other developments, such as the "Yatziv reform", which takes effect in 2026 and reduces the number of recognized medical schools abroad, is expetced to reduce the nuber of new physicians by 400-600 a year.

Figure 10: Licensed physicians (up to age 67) per 1,000 population, 1970-2022



Source: The Ministry of Health, Human resources of health professions, 2022.

The 1970s witnessed a continuous increase in the number of physicians per 1,000 persons, while in the following decade the rate of physicians remained static due to the decline in immigration to Israel during these years. In the early 1990s there was an accelerated increase in the number of physicians as a result of renewed surges of immigration, but the late 1990s saw the beginning of a downward trend in the percentage of physicians, again due to decreased immigration. Due to a sharp increase in the number of new medical license holders, especially among those who studied medicine abroad, the number of physicians (up to age 67) per population has been steadily increasing since 2018 up to 3.47 physicians per 1,000 population, with a total of 33,558 physicians.

In addition, Israel struggles with health and healthcare disparities between the peripheral and central regions. These disparities are part of the general geographical inequity and imparity with respect to other domains, including employment, education, welfare and transportation etc. One of the most complex problems with health services in the periphery is the difficulty in attracting medical and nursing workforce from central Israel. Central Israel offers physicians – both young and more senior – economic, social, cultural and educational opportunities unavailable in the periphery. As a result, many doctors prefer to concentrate their practices in the center of the country.

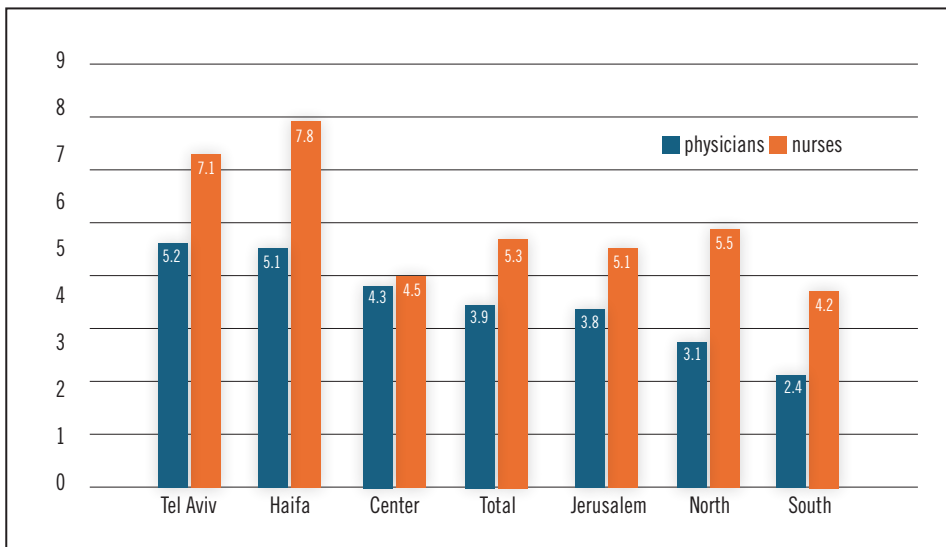
In order to narrow the gap between periphery and center, as well as between the less attractive medical specialties such as anesthesiology and pathology and the more



attractive ones, the physicians' collective agreement signed in August 2011 included financial incentives for medical residents who choose to work in the periphery and in specialties in distress as specified in the agreement. Immediate impact was achieved in the first years after the agreement as medical centers in the south and north of the country experienced an influx of residents. Hospital departments once closed reopened due to the arrival of new medical workforce.

Nevertheless, it is evident from figure 11 that medical and nursing workforce disparities among districts persist. It seems that the long-term impact of the agreement is questionable, as it is unclear to what extent the government is able and willing to continue providing financial incentives to medical residents as a solution to healthcare disparities as a part of the coming collective bargaining agreement.

Figure 11: Practicing physicians and nurses per 1,000 population in different districts, 2020-2022 average¹⁶



Source: Ministry of Health

According to estimates, without significant government intervention to increase the

¹⁶ Please note that the total numbers of physicians and nurses per population presented here, based on surveys of the Central Bureau of Statistics (CBS), differs from the numbers presented earlier based on OECD data. This is due to differences in definitions and data collection between the two sources.



medical workforce, the rate of physicians is expected to drop to about 3 physicians per 1,000 population in 2035 further below the OECD average.¹⁷

It remains to be seen whether governmental measures decided upon such as encouraging the immigration of physicians to Israel and repurposing training frameworks for foreign medical students into training frameworks for Israeli medical students will help to prevent the projected decrease in medical workforce and bring about a sufficient supply of physicians, especially against the backdrop of heavy workloads, ageing population, growing demand for healthcare, and growing retirement rates of an ageing medical workforce (about half of all physicians in Israel are aged 55 and above – among the highest in the OECD).

Prominent recent reforms in health care

Efforts to implement various reforms in the Israeli health care system have notably intensified in recent years. Some of these reforms have been, or are in the process of, being implemented. Others have not been realized yet. Four recent and prominent reforms are reviewed here.¹⁸

■ Mental health reform

Israel's NHIL, adopted in 1994, stipulated that the legal responsibility for the provision of mental health care should be transferred from the government to the health funds within three years. Shortly after that, the planned transfer was officially put on hold. Subsequently, several attempts were made to pass the legislation needed to affect the transfer, but these were all unsuccessful. Accordingly, Israel's mental health system continued to function separately from its physical health system in terms of financing, planning, organization and practice setting. The government was responsible for the provision of mental health care, while the health funds were responsible for physical health care.

17 N. Shapiro et al. The number of physicians in Israel: trends and policy options. Ministry of Health, 2021.

18 Most of this review is based on the following publication (with minor adjustments): B. Rosen, R. Waitzberg and S. Merkur, "Israel: health system review", Health Systems in Transition 17, no.6 (2015): 1–212.



In April 2012, the Israeli cabinet decided to move ahead with the transfer of responsibilities, stipulating that implementation would be gradually spread over a three-year period. The transfer of responsibility is often referred to as the “mental health insurance” reform, conceived in the context of broader mental health reforms that included efforts to reduce the number of inpatient beds and to develop community-based rehabilitation services. In July 2015, mental health services were added to the set of services that the health funds must provide to their members within the framework of the National Health Insurance (NHI). As such, mental health care became a legally guaranteed right of all Israeli citizens, rather than a service where availability is highly dependent on available budgets. The government specified the set of mental health services that must be provided and substantially increased the level of funding to cover the costs expected to be incurred by the health funds in light of this new responsibility.

Nonetheless, there is some controversy over this reform. Concerns were raised that the quality of services delivered by the health funds would be compromised as a result of budgetary considerations. Furthermore, no mechanism was set to ensure that the resources allocated for mental health services would be used for this specific purpose only and not diverted to other services, particularly in light of the tight financial constraints under which the funds operate.

■ Long-Term Care reform

Israel’s Long-Term Care (LTC) system is seriously fragmented. MoH planners and many independent analysts took the view that this fragmentation was resulting in service gaps, duplication, inefficient incentives and inadequate investment in prevention and rehabilitation. In 2011, the MoH put forward a detailed plan for a major, three-phase reform of the LTC system. The reform sought to situate overall responsibility for LTC with the health funds within the framework of NHI. In the first phase, the NII was expected to increase the benefit levels for community-based LTC services and the health funds were expected to assume professional oversight of those services. In the second phase, the legislature was expected to add institutional LTC to the set of benefits for which the health funds are responsible under the law. In the third phase, the health funds were expected to assume financial responsibility for community-based services as well. The reform also sought to increase the level of government financing for LTC – both in institutional and community settings.



The reform plan had several objectives, one of which was to increase efficiency by having a single government agency (MoH) and a single set of insurer/providers (the health funds) responsible for all the aspects of LTC. The proposed integration would have provided incentives for health providers to place those in need of LTC in the most cost-effective setting. In addition, the reform sought to reduce the financial and care burden on the families of people needing LTC.

By mid-2015, the reform plan had not been adopted and implemented. The MoF raised concerns about the Israeli government's capacity to absorb the additional budgetary obligations. The NII and the Ministry of Social Welfare (whose roles in LTC would have been reduced by the proposed reform) voiced concerns about the potential for over-medicalization of LTC. As a result of resistance from these and other groups, the reform effort has been on hold since 2013.

■ Dental care reform

When Israel adopted NHI in 1995, dental care was not included in the benefits basket, other than maxillofacial surgery for trauma and oncology, and dental care for oncology patients. The 1990 Netanyahu Commission had recommended that services provided under NHI include maintenance and preventive dental care for children aged 5–18 years, and maintenance and rehabilitative dental care for elderly people, but these were not included in the NHI Law. This changed in 2010, when the NHI benefits basket was extended to include preventive and preservative dental care for children up to age 8. The age limit was later extended to 12. Care is provided by the four health funds, with free preventive services and preservative services provided with small co-payments. A survey conducted in 2013 found that 45% of children aged 2–12 years used the publicly funded services.

Although access to dental care for children up to age 12 has been secured, serious concerns remain regarding utilization in this age group, particularly for vulnerable populations. Dental treatment for specific groups of patients with congenital syndromes competes with other new medical technologies to be added to the NHI. Because of budget limitations, only a few of these groups receive publicly funded services. Recently, two additional measures were introduced: the extension of dental coverage for children up to age 18 and to the elderly (75 and above), in order to ensure access to dental care for those who need it most and can afford it least.



■ Physician Assistant (Associate)¹⁹

A physician assistant or associate (PA) is a medical professional who practices medicine under the supervision of a physician. Originated in the US in the 1960s, a PA focuses on prevention, diagnosis, and medical care using a wide variety of health services that traditionally were provided by a physician. The training programs for PAs are closely linked to the medical profession. The training of a PA is relatively short and the cost of employing one is lower than that of employing a physician. Thus, a PA can provide an immediate and low-cost solution to the shortage in medical workforce. However, there are indications in the professional literature that a lack of possibilities for professional promotion may lead to dissatisfaction and burnout among PAs. A study conducted in Israel among graduates of the first PA training program showed a high degree of satisfaction with their new career and that they had successfully integrated into emergency medicine wards. However, the survey found disappointment among some of the graduates resulting from the gap between their expectations and the actual tasks assigned to them.

In view of the continuing shortage in the medical workforce, the MoH has been working over the past decade to formalize the status of the PA profession in Israel. In July 2023, the MoH completed the legislative process to create this role in Israel as part of the Regulation of the Practice of Health Professions Law, 2008. According to the legislation, the name of the role (in Hebrew) was changed from physician assistant to physician associate. The law provides a PA with the authority to prescribe medications and decide on the conditions for providing a prescription for a dangerous drug (which has also been granted to nurse practitioners). The law specifies the education of a PA and practical training, including a master's degree and passing licensing tests given by the MoH. After receiving a license, the PA can work in any branch of medicine, but no residency training programs were defined. With respect to supervision, a PA will work according to personal authorization from a specialist and carry out medical tasks within the expertise of the physician under their supervision.

Currently, there are about one hundred PAs, most of them former paramedics, who are working in emergency medicine. In the future, the PA role is expected to expand to additional areas of medicine.

19 This section is based on: N. Davidovitch, N. Lev & B. Levi, The Healthcare System in Israel: Between the New Normal and the Old Normal, Taub Center for Social Policy Studies in Israel, 2023.



Quality improvement in the Israeli healthcare system

In recent decades, many countries have devoted considerable efforts in an attempt to improve the performance of their health care systems. These efforts can be seen in a range of scientific, organizational, administrative and financial activities grouped under the heading of “quality assurance” or “quality improvement”. Policy makers, health authorities, health providers, insurers, associations of physicians and other health workers, as well as private and public bodies, are involved in continued and complex processes whose purpose is to ensure the quality of clinical treatment in particular, and the function of the health system as a whole.

Quality improvement can take many forms. For instance, the production of clinical guidelines has become an increasingly common part of clinical practice. Clinical guidelines are systematically developed statements designed to assist practitioner and patient decisions about appropriate treatment in specific clinical circumstances.

In Israel, as in many other countries, the responsibility for preparing clinical guidelines rests with professional scientific societies. The IMA's Institute for Quality in Medicine reviews the guidelines and assists with their preparation, publication and distribution to physicians in Israel. In addition, the Israeli MoH prepares clinical guidelines, in the form of circulars, through its advisory National Councils. The health funds also formulate their own internal guidelines.

Another example of quality improvement activity is Continuing Medical Education (CME). As opposed to many other healthcare systems where CME is a mandatory requirement from practitioners, linked to re-licensure or re-accreditation, in Israel, as noted earlier, CME is undertaken on a voluntary basis. The health funds, hospitals, and scientific associations run professional refresher courses and workshops, and the IMA is responsible for granting credits for recognized activities. However, only a small minority of physicians routinely engage in formal CME activities.

Quality measurement is another example of the development of quality improvement mechanisms in Israel. There is an ever-growing demand from the public, healthcare providers, regulatory agencies and the government, for evidence-based quality measurement. Quality improvement has become part of the everyday routine of many healthcare professionals. The MoH runs a national quality measurement program in the community with the cooperation of the four health funds. In addition, the Ministry has developed a project to measure the outcomes of hospital care. This program is



managed by a review committee appointed by the Director General of the MoH. The IMA and its scientific societies serve as advisory bodies in these quality measurement initiatives.

The Covid-19 Pandemic²⁰

The Covid-19 pandemic originated with the novel coronavirus (Sars-CoV-19) outbreak in Wuhan city of China in December 2019. On January 27, 2020, the Minister of Health, Yaakov Litzman, signed the “People’s Health Ordinance Decree to expand the Ministry’s powers to deal with the Coronavirus”. The first verified case of Covid-19 in Israel was detected in February 2020. According to the Israel Institute for Biological Research, the Coronavirus spread rapidly in Israel due to the Purim festival gatherings that were held in March 2020 without social distance or any other restrictions. With the increase in morbidity, and around the time that the World Health Organization (WHO) declared Covid-19 a global pandemic in March 2020, Israel began to take various measures to prevent the spread of the disease according to the Emergency Regulations.

Firstly, all leisure and cultural activities were cancelled, and the education system switched to remote learning. Next, emergency was declared on the public and private sector and further stay-at-home restrictions were imposed. Further restrictions included the reducing of public transportation and mandating mask wearing covering the mouth and nose whenever outside home.

The Covid-19 pandemic in Israel was characterized by waves of infection followed by restrictions and lockdowns. Since the outbreak of the pandemic from the end of February 2020 to March 2021, there were three waves of morbidity followed by severe lockdowns. During this period 800,000 new Covid-19 cases in total were detected in Israel. On the third wave from December 2020 to March 2021 about 478,000 new cases were detected, accounting for about 60% of the morbidity of the the entire period, followed by another lockdown and a pick of new cases in January 2021.²¹ During this period, about 6,400 people died from Covid-19 and 21,500 were hospitalized in serious condition, including on ventilators.

20 This section is mostly based on: Eidelman L, Borow M, Levi B, Rayn-Aloni, T, Israel’s Coronavirus Vaccine Program, World Medical Journal (2021), vol. 67: 3-7.

21 CBS, The Covid-19 pandemic in Israel: a socio-economic snapshot, 2020. <https://www.cbs.gov.il/he/Statistical/stat190.pdf>



With the onset of the pandemic the hospitalization system operated with shortages and great burdens. To cope with the challenges of the pandemic, hospitals opened designated Covid-19 units and had to reduce the activity of existing departments (mainly internal medicine departments) and elective surgeries. According to MoH data, until the end of 2020, 2,747 hospital beds were added to the Covid-19 units. In addition, the MoH assigned additional staffing standards for the treatment of Covid-19 patients, which included 600 physician positions, 1,550 nurse positions and another 3,350 positions for medical and nursing students. In the primary healthcare, HMOs encouraged patients to switch to telemedicine services, and indeed, the proportion of telemedicine usage grew rapidly during the pandemic; for example, in Leumit Health Services, telemedicine usage in general medicine increased from 22% in January-February 2020 to 53% in April 2020.

In December 2020, the U.S. Food and Drug Administration (FDA) granted the first emergency permit to Pfizer and its partner BioNTech for a vaccine they had developed against the virus. Shortly afterwards, an emergency permit was also issued for a vaccine developed by Moderna. The Israeli government was quick to announce that it had entered into agreements with both Pfizer and Moderna to ensure an adequate supply of vaccines for Israeli residents. Most Israeli residents were vaccinated using the Pfizer vaccine.

Israel was one of the first countries to vaccinate against Covid-19 with an immunization program that began in December 2020. The percentage of Israelis vaccinated with two doses of the vaccine rose sharply until the end of March 2021. By this time, half of the Israeli population (50.9%) was vaccinated. Afterwards, the rate began to slow down. By the end of 2022, the rate of vaccination in Israel with the third dose was 59%, compared to 60.6% vaccination rate among the population of the EU and an average of 33% worldwide. However, data reveals vaccination gaps within Israeli society: 88% of Arabs and 84% of the ultra-Orthodox above the age of 60 were vaccinated with the first dose, compared to 97% in the general population. Another downward trend was observed until the fourth vaccination.

Despite the immunization program and the high response of the Israeli public, two additional waves of infections broke out in Summer 2021 and winter 2021-2022. The sixth and last wave in Israel broke out in summer 2022. These waves were different since most Israeli citizens at this point were already vaccinated against Covid-19. By the fourth wave, data shows that most of the seriously ill patients were



people who were unvaccinated or had background health problems. During these waves no lockdowns were imposed, only restrictions related to wearing masks and presenting the Green Pass- an entry permit to facilities for recovered Covid patients and vaccinated people. The sixth and last wave of Covid-19 was characterized by infections of different variants, even among those who were recovered or vaccinated. With the spread of the sixth wave, health authorities in Israel recommended the fourth dose of vaccination for high-risk populations.

In May 2023 the WHO declared the end of the global health emergency. The consequences of the pandemic, however, still pose a serious burden on healthcare systems in Israel and worldwide. One of the most severe side effects of Covid-19 is the “long Covid” phenomena, characterized by lingering symptoms of the disease and damage to internal organs in some cases. A MoH survey from April 2023 shows that half of the recovered patients in Israel suffer from side effects of long Covid. This phenomenon burdens the healthcare system with additional difficulty, alongside the challenges of providing appropriate treatment for a new and unfamiliar syndrome. Despite the decrease in morbidity, new Covid-19 cases are reported in Israel every day, including children, as of this writing. The WHO warns that the world is no longer in a state of medical emergency, but the virus is still here and the level of vaccination of the world's population is fading. Since the healthcare system in Israel was unprepared for the pandemic and generally operates under great burden, a report from 2021 of the Israeli State Comptroller emphasised the importance of policy lesson learning and better preparedness for future health crises of this magnitude.

The health system since October 7 and the "Swords of Iron" war

On October 7th, 2023, thousands of terrorists from the Gaza Strip infiltrated into the Western Negev region in Israel and massacred civilians and soldiers, cruelly murdering about 1,200 people and taking more than 250 Israeli hostages into the Gaza Strip. These events started the "Swords of Iron" war, which continues today, as of the writing of these words.

On October 7, hospitals in Southern Israel operated in disaster mode, providing medical support for mass casualties. Within days, the health system recruited health workers, volunteers, and medical and nursing students to support the hospital teams. Blood donations were collected and free of charge resilience centers and care clinics for anxiety victims were opened. Later, the MoH published an outline for the recruitment



of salaried mental health therapists and opened medical clinics for evacuees. In addition, hospitals made special preparations for the treatment of hostages freed from Hamas captivity.²²

These events demonstrated the strength of the Israeli health system and its ability to quickly switch into emergency mode, and in particular, the professionalism and dedication of its health teams. However, they have also revealed its weaknesses, mainly the shortage of human resources and infrastructures in the public health services, especially in mental health, rehabilitation medicine and forensic medicine. For example, mental health services in Israel were already operating with a shortage of physicians and other health practitioners, poor infrastructure, and long waiting times before the outbreak of the war. Now, the mental health system is facing an extreme surge in demand. The extent of mental health damage is difficult to estimate; however, experts present a wide range of up to 600,000 people expected to suffer mental harm due to the events of October 7 and the subsequent war.²³ In other areas, such as rehabilitation medicine, there is a shortage of hospital beds, medical specialists, and health professionals in physiotherapy, nursing and occupational therapy. Since the beginning of the war, thousands of soldiers and civilians have been wounded with various degrees of severity. Many of them will need long-term care and rehabilitation, and this requires significant reinforcement of the national rehabilitation system.²⁴

22 The Citizens' Empowerment Center in Israel (CECI). Special monitor report: War of iron swords - the health system at war. [Internet]. 2023, November 11. [cited 2024 September 11]. Available from: <https://www.ceci.org.il/monitor/%D7%93%D7%95%D7%97-%D7%9E%D7%95%D7%A0%D7%99%D7%98%D7%95%D7%A8-%D7%9E%D7%99%D7%95%D7%97%D7%93-%D7%9E%D7%9C%D7%97%D7%9E%D7%AA-%D7%97%D7%A8%D7%91%D7%95%D7%AA-%D7%91%D7%A8%D7%96%D7%9C-%D7%9E-2/> [Hebrew]

23 Beit-Or Yasur, M., The consequences of the war on mental health are revealed: "up to 625 thousand people are expected to suffer". Israel Hayom. [Internet]. 2023, December 27. [cited 2024 September 11]. Available from: <https://www.israelhayom.co.il/health/article/15011573> [Hebrew].

24 The State Comptroller: There is a significant shortage of doctors treating the disabled in the IDF and delays in treatment. Doctors Only. [Internet]. 2019, May 7. [cited 2024 September 11]. Available from: <https://publichealth.doctorsonly.co.il/2019/05/164758/> [Hebrew]



Similarly, forensic medicine services in Israel have already operated under great burden and suffered from a medical workforce shortage even before the war.²⁵ Since the outbreak of the war, the staff of the National Center of Forensic Medicine has been facing an unprecedented workload, while being exposed to extremely difficult sights. Three physicians at the National Center announced their intention to resign in March 2024.²⁶ In order to improve work conditions, the MoH assigned additional positions for physicians at the National Center. However, they remained vacant, mainly due to the relatively low attractiveness of this medical field among physicians.²⁷

The massacre of October 7 and the Swords of Iron war are highly challenging for the Israeli health system- there is an urgent and ongoing demand for medical care for the survivors of the massacre, hostages freed from captivity, war casualties and the public in general. Despite the existing challenges, times of crisis such as this may render a historic opportunity to overhaul the ongoing deficiencies in the Israeli health system.

Recent ethical issues in the Israeli healthcare system

Like all health systems worldwide, the Israeli system is faced with an array of ethical issues. Many of these issues end up on the desk of the IMA Ethics Bureau. Comprised of senior physicians from various fields of medicine in Israel, the Bureau convenes monthly to discuss ethical issues arising in the field, and to approve fundamental decisions concerning medical ethics.

25 Ministry of Health. Committee recommendations to examine the state of forensic medicine in Israel. [Internet]. 2018, March. [cited 2024 September 11]. Available from:

<https://foi.gov.il/sites/default/files/%D7%94%D7%9E%D7%9C%D7%A6%D7%95%D7%AA%20%D7%94%D7%95%D7%95%D7%A2%D7%93%D7%94%20%D7%9C%D7%91%D7%97%D7%99%D7%A0%D7%AA%20%D7%9E%D7%A6%D7%91%20%D7%94%D7%A8%D7%A4%D7%95%D7%90%D7%94%20%D7%94%D7%9E%D7%A9%D7%A4%D7%98%D7%99%D7%AA%20%D7%91%D7%99%D7%A9%D7%A8%D7%90%D7%9C%20-%20%D7%9E%D7%9B%D7%95%D7%9F%20%D7%9C%D7%A8%D7%A4%D7%95%D7%90%D7%94%20%D7%9E%D7%A9%D7%A4%D7%98%D7%99%D7%AA%20%D7%A9%D7%A0%D7%99%202018%20610396.pdf>

26 Yanko, A. On the brink of collapse: three doctors at the pathology institute threaten to resign, Dr. Chen Kugel will be left almost alone. Ynet. [Internet]. 2023, March 17. [cited 2024 September 11]. Available from: <https://www.ynet.co.il/health/article/b1jhj54rp>

27 Cohen, A. A doctor at the Institute of Forensic Medicine: "I worked 524 hours this month. We are already well past the stage of despair". The Marker. [Internet]. 2023, November 14. [cited 2024 September 11]. Available from: <https://www.themarker.com/news/health/2023-11-14/ty-article/0000018b-ce03-df9a-ab8b-decb594f0000>



One recent issue is the consent to treatment of minors. The law in Israel states that a person who has not yet turned 18 is a minor, and his actions require the consent of his representative (his parents are the natural guardians, but there may be cases in which another guardian is appointed). For some medical issues, the law in Israel grants minors independence to make their own decisions without consent, such as HIV testing from the age of 14 and psychiatric hospitalization from the age of 15 (with the consent of the minor or a court order). Over the years, the number of minors seeking medical treatment without parental accompaniment has increased. As a result, in 2004 the MoH issued new guidelines for unaccompanied minors visiting HMOs. After a discussion on the subject in February 2025, the IMA Ethics Bureau established the following rules: First, the doctor will always act in the best interest of the minor. Second, in certain situations, depending on the doctor's individual discretion, medical treatment can be provided to a minor without parental consent, but only after three cumulative conditions are met: (1) the doctor believes that the minor is mature enough (2) this is in the best interest of the minor and (3) the medical treatment is necessary.

New technologies using artificial intelligence (AI) is another issue with far reaching medical and ethical implications. In recent years, with the emergence of treatments that can cure patients suffering from hepatitis C, a national program was launched in Israel to detect carriers of this viral disease. One of the HMOs in Israel launched a tool based on a smart algorithm that can identify people in a risk group, and automatically update a referral in the HMO's systems, so that the next time a patient has a blood test, a blood test for hepatitis C will also be taken, albeit without the patient's consent. The IMA Ethics Bureau discussed this issue recently and made the following statement: The use of new technologies in general, and artificial intelligence (AI) in particular, can assist the doctor's work, reduce bureaucracy and inequality, identify populations at risk, and even save lives. Therefore, the use of new technologies should be encouraged, subject to scientific proof of their effectiveness and safety. However, vigilance is required to ensure that these technologies do not violate the principles of medical ethics. The Bureau also stated that artificial intelligence and machine learning systems will not replace the doctor's judgment and that patients have the right to be partners in making decisions regarding their medical care.

A third issue recently brought to the IMA Ethics Bureau involved a personal interview conducted with a patient in front of the entire extended department staff of a psychiatric department. The patient refused the interview in those circumstances; however, the interview continued under the claim that "there is an obligation to teach despite the patient's refusal". The Bureau discussed this sensitive case and



concluded that physicians need to exercise judgment when balancing between the need to be sensitive and understanding towards patients and the duty to teach.

Medical Innovation in Israel and IMA - a short review

Technological advancements have been rapidly changing medicine and healthcare in recent years. Although there is no generally accepted definition for innovation and interpretations for innovation in healthcare are myriad, medical innovation can relate to new technologies, processes or products that are designed to improve the way healthcare is delivered or treated. Examples of prominent domains of medical innovations are telehealth, big data, artificial intelligence (AI), 3D printing, CRISPR gene editing, virtual reality, and Smart bandages.

Beyond its medical value, medical innovation has also tremendous financial value. Global digital market size has been estimated today to value at more than USD 300 billion and continues to grow fast: It is estimated to achieve a market size of USD 2 Trillion by 2034. Digital health ventures are expected to have significant market power in the global economy and in health systems.²⁸

In the past decades Israel has established itself as a prominent leader in digital health and health technologies. Israel is ranked first in the world for R&D expenditure as a share of GDP and has the highest number of startups per capita. Health Tech is the largest sector in the Israeli startup ecosystem, and in AI. For example, there are more than 500 hi-tech startups today in Israel according to current data.²⁹

One of the reasons Israel excels in digital health and health technologies in general is related to its high-quality health system. Thanks to its public healthcare system, which is based on full national coverage and the accumulation of high-quality health data in four HMOs, Israel has become an ideal hub for developing data-driven high-end

28 Estimates according to GMI, 2025 (Global Market Insights)

29 Stated in The Marker (2024): <https://www.themarker.com/labels/technologicalinformation/2024-04-07/ty-article-labels/0000018e-93f7-d4de-afee-f3ff7a4b0000>



solutions in biotech.³⁰

These factors and more also contributed, for example, to the rapid administration of the Covid-19 vaccinations in Israel, which was praised as one of the most effective in the world. The success of the vaccination program is the result of the same factors that contributed to Israel's startup nation status: Israel's culture of innovation with the ability to make rapid adjustments in response to changing circumstances.³¹

Some of the leading healthcare startups in Israel today, which engage among other things in digital health, healthcare big data and quick AI diagnostic screening, have accomplished remarkable achievements and gained worldwide reputation. These companies are examples of the success of the Israel innovation in digital health.

The IMA is active in promoting involvement and leadership of physicians in the medical technology industry. Among its many activities, it is worth mentioning the Basic Science Program for medical residents in medical start-up companies and the Board of Directors Training Course for leading physicians. This course provides financial, legal, and management training in cooperation with the Hebrew University in Jerusalem and 8400 The Health Network, an organization of Israeli leaders across all Health-Tech functions. The IMA has also recently launched the health-tech peer training for specialist physicians, an initiative of the Israeli Society for Health-Tech, and the Online School for Medical Professions.

In conclusion, medical innovation holds the potential to achieve clear medical and economic benefits. Israel has established itself as a prominent hub of medical innovation and entrepreneurship. The IMA has set itself the goal of becoming an influential body in the realm of medical innovation nationwide.

30 Israel's Health Tech Ecosystem. Startup Nation Central (SNC). [Internet]. 2023 April. [Retrieved 1 April 2025]. Available from: <https://startupnationcentral.org/hub/blog/israel-health-tech-ecosystem/>

31 Rosen B, Waitzberg R, Israeli A. Israel's rapid rollout of vaccinations for COVID-19. *Isr J Health Policy Res.* [Internet]. 2021 Jan 26. [Retrieved 1 April 2025]. Available from: <https://pubmed.ncbi.nlm.nih.gov/33499905/>





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