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HOW TO IMPROVE ISRAEL'S HEALTH-CARE SYSTEM

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By Philip Hemmings

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ABSTRACT/RÉSUMÉ

How to improve Israel's health-care system

Israelis enjoy higher life expectancy and have a much younger demographic profile than most OECD countries. However, the demand for health care is expanding rapidly due to population growth and ageing. Also, the country's wide socio-economic divides are reflected in differences in health outcomes. To date the health-care system, centred on four health funds, is widely acknowledged as providing a basket of universal services, with good quality primary and secondary care, while also accommodating demand for private health care. However, there are challenges and tensions in the system. Currently the authorities are having to rapidly expand the number of places in medical schools and nurse training because large cohorts of health-care professionals are heading for retirement. More broadly, there are concerns that the core notion of a universal basket of services is being eroded by co-payments and the increasing demand for the additional services and options provided by private insurance. Although the quality of care is generally good, in hospital care there is room to improve data and concern that overcrowding may become chronic. This Working Paper relates to the 2013 *OECD Economic Review of Israel* (www.oecd.org/eco/surveys/economic-survey-israel.htm).

JEL classification codes: H75, I11, I13, I14, I18

Keywords: Israel, health care, hospitals, physicians, doctors, nurses, primary care, preventative care, life expectancy

Comment améliorer le système de santé d'Israël

Israël se singularise par une espérance de vie plus élevée et une structure démographique nettement plus jeune que la plupart des autres pays de l'OCDE. Néanmoins, la demande de soins de santé augmente rapidement en raison de l'accroissement et du vieillissement de la population. Par ailleurs, les larges fractures socioéconomiques qui caractérisent le pays se traduisent par des disparités sur le plan de la santé. Pour l'heure, le système de santé, qui s'articule autour de quatre organismes d'assurance maladie, offre un ensemble de services universels, recouvrant des soins primaires et secondaires dont la qualité est largement reconnue, tout en satisfaisant la demande de soins de santé privés. Néanmoins, ce système est en proie à des difficultés et des tensions. Aujourd'hui, les autorités doivent rapidement accroître le nombre de places offertes dans les facultés de médecine et les formations aux soins infirmiers, car des cohortes nombreuses de professionnels de la santé se préparent à prendre leur retraite. De manière plus générale, certains craignent que le principe fondamental d'universalité des soins correspondant à un ensemble de services ne soit en train d'être remis en cause par le système de participation aux frais médicaux, et par la demande croissante de services et options supplémentaires offerts par des assurances privés. Bien que les soins soient globalement de bonne qualité, il serait possible d'améliorer les données concernant les soins dispensés dans les hôpitaux et certains craignent que leur surpeuplement ne devienne chronique. Ce Document de travail se rapporte à l'*Étude économique de l'OCDE d'Israël 2013* (www.oecd.org/fr/eco/etudes/israel-2013.htm).

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Mots clefs : Israël, les soins de santé, les hôpitaux, les médecins, les infirmières, les soins primaires, les soins préventifs, l'espérance de vie

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How to improve Israel's health-care system

By

Philip Hemmings¹

Health-care services absorb a substantial share of economic resources in all OECD countries; in Israel they account for around 8% of GDP, a little below the (unweighted) OECD-wide average of 10%, though this difference partly reflects relatively the country's youthful population. As in most developed countries the system guarantees universal access to a basket of services but also allows private provision. Many aspects of the Israeli system are in good shape, and indeed some are exemplary. However, there are challenges. As elsewhere, technological advances in pharmaceuticals and treatments bring both opportunities but also demands on resources while population aging is adding pressure on the system. Policymakers in Israel are also facing particularly significant difficulties in ensuring an adequate supply of health care professionals and in dealing with socio-economic divides in health outcomes.

Key features of health outcomes and the health-care system

Key aspects of health status and the health-care system are as follows:

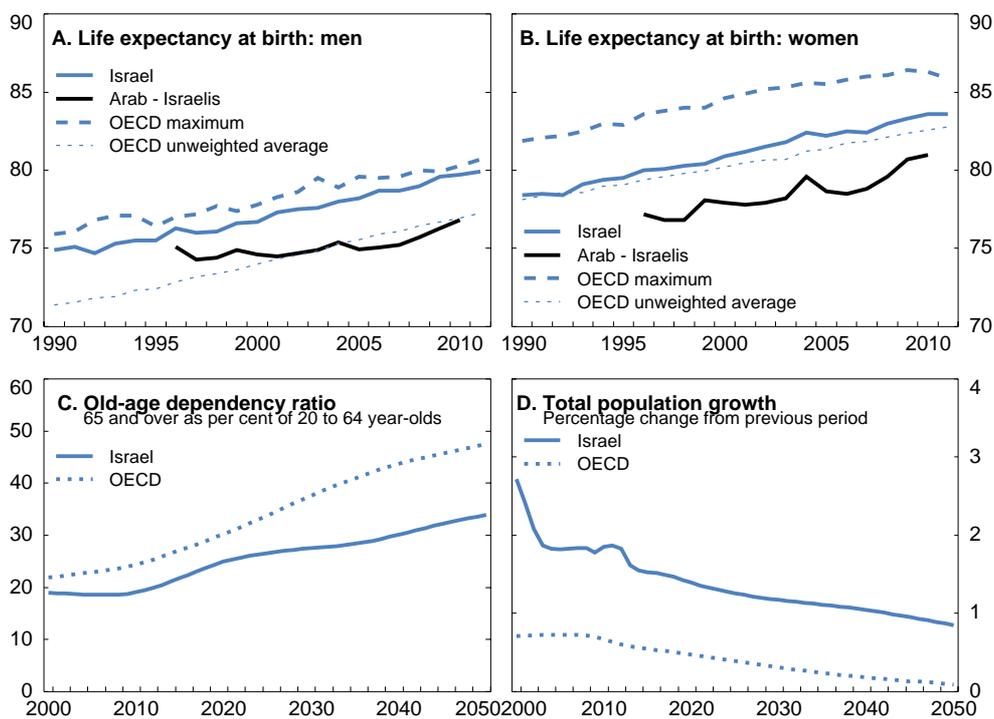
- **The health status of the population overall generally ranks well.** Average life expectancy at birth among men is among the highest in the OECD, while that for women is a little less impressive but nevertheless above the OECD average (Figure 1, Panels A and B). Furthermore, Israel has a relatively young population; only around 10% of the population is aged over 65, one of the lowest shares in the OECD area (the OECD average is around 15%). This implies a lower proportion of health conditions (and health services) related to old age and a larger proportion related to childbirth, infants and children compared with many OECD countries.
- **Population growth is, however, relatively high and ageing is well underway.** Israel's comparatively rapid population growth contributes to baseline growth in the demand for health care, although the pace of increase is diminishing (Figure 1, Panel D). Also, the old-age dependency ratio is rising rapidly (Panel C). This implies a need for substantial and continuous adaptation in resources, treatments and care related to old age. Coping with this

1. Philip Hemmings is a senior economist in the Country Studies Branch in the Economics Department of the OECD; e-mail: philip.hemmings@oecd.org. This paper was prepared for the OECD *Economic Survey of Israel* published in December 2013 under the authority of the Economic and Development Review Committee. The author is thankful to Andrew Dean, Bob Ford, Peter Jarrett and Israeli government officials for their valuable comments and suggestions. Special thanks are due to Françoise Correia for excellent statistical assistance and Mee-Lan Frank for technical preparation.

challenge will be helped somewhat by the fact that the old-age dependency ratio is projected to remain substantially below the OECD average.

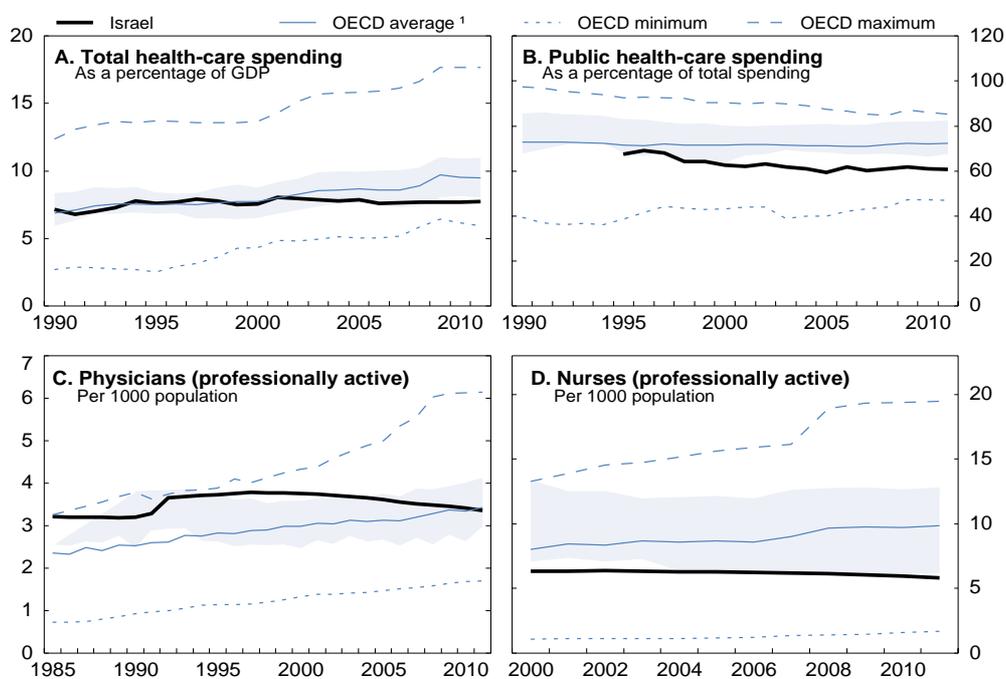
- **There are significant socio-economic divides in health status.** Most notably the health status of Arab Israelis is poorer than for the rest of the population, as exemplified by their lower average life expectancy (Figure 1, Panels A and B). This is in part due to non-medical issues: on average, Arab-Israeli men smoke far more than the rest of the population, and the incidence of obesity is relatively high among Arab-Israeli women (see below). Also, within the Arab population, the Bedouin community raises particular concerns, for instance, infant mortality remains very high (Chernichovsky, 2011). These gaps in health outcomes link to wider socio-economic issues. The Arab-Israelis, along with the Ultra-orthodox Jewish community (the Haredi) account for a significant share of the country's high rate of poverty. Furthermore, these communities are growing faster than the population at large: they account for about 30% of the total population but around half of children entering primary school.
- **Universal provision ('national health insurance', NHI) via four health funds forms the core of the health-care system,** operating in tandem with private health care via voluntary health insurance (VHI) (insurance policies are offered by the funds and by insurance companies). As in many areas of Israeli policy the system reflects both European and US influences. The insurance format resembles that found in Germany and some other European countries, while the fund-based delivery structure has echoes of the US system (see Joumard et al., 2010). The NHI structure has many welcome features, including: choice of provider, checks on cream skimming and funding arrangements that incentivise efficiency. Take-up of VHI is extensive. About 75% of the population purchase supplementary insurance offered by the health funds, and about 40% hold policies offered by insurance companies (a sizeable minority hold both types of policy). In broad terms the system receives favourable reviews by experts. For instance, the OECD's review of the quality of Israeli health care (OECD, 2012) praised several aspects of the system and a biennial survey (run by the Myers-JDC-Brookdale Institute) reveals consistently high levels of satisfaction with health services, with only narrow gaps between members of each fund (Brammli-Greenburg et al., 2011).
- **The total resources devoted to health care as a share of GDP have remained relatively constant, in contrast to a rising trend in other OECD countries** (Figure 2, Panel A). Indeed, the resources devoted to health care in Israel are now relatively low compared with most OECD countries. Furthermore, the share of public spending has fallen from around 70% in the mid-1990s to around 60% today (Panel B). This shift reflects that fact that private care is playing a larger role; spending on private health insurance premiums has increased considerably. The relative merits of these developments are hotly debated.
- **Large numbers of health-care professionals are heading for retirement, and this is posing a substantial challenge.** Israel's massive wave of immigration in the early 1990s included significant numbers of doctors and nurses, boosting the supply of professionals (Figure 2, Panel C). However, these cohorts are close to retirement. Declines in the numbers of physicians and nurses per capita have been underway for some time.

Figure 1. Life expectancy, ageing and population growth



Source: CBS; United Nations database; and OECD Health database.

Figure 2. Health-care resources



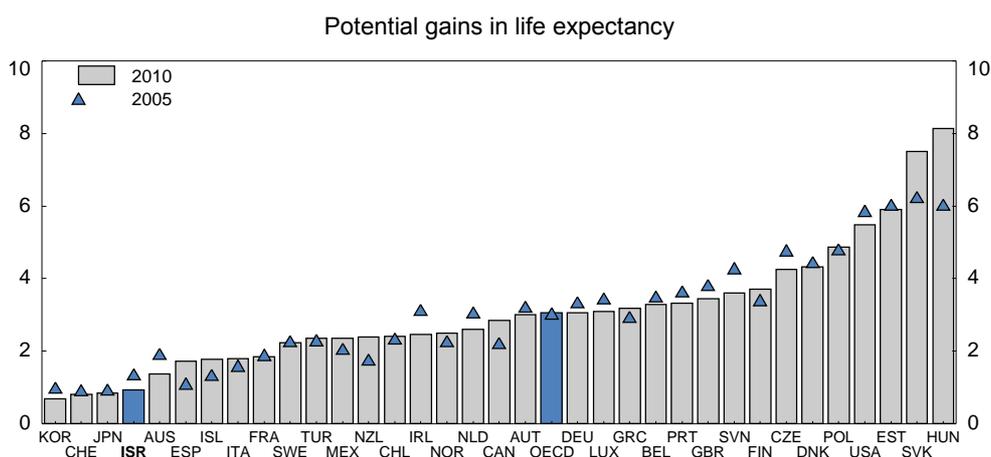
1. The shaded areas are the 25th to 75th percentile range of available OECD countries.

Source: CBS and OECD Health database and OECD Economic Outlook 94 database.

- **As regards the efficiency and quality of health-care services**, relatively high life expectancy combined with modest spending suggests the Israeli system is in general terms “efficient”, and this is confirmed by favourable scores in measures based on data-envelope analysis (Figure 3). As regards specific sectors, primary care is generally judged to be exemplary, but hospital care, although good, is seen as requiring some attention, with notable worries about overcrowding (OECD, 2012). In addition, there are concerns about whether the current system of long-term care is capable of dealing with the expansion in demand from population aging.

Thus, while the health-care system is in reasonable shape today, there are specific areas where improvements can be made and there are risks of general decline if the challenges outlined above are not properly dealt with. Training, recruitment and retention of professionals are among the most immediate issues. On other fronts, pressures for savings in public spending on health care are unlikely to lessen in the coming years, and neither will cost pressures from ageing and technological development. Making the best of the strengths of the health-fund system and addressing its weaknesses will be crucial if it is to offer the same scope and quality of universal care for the future and if there is to be progress in narrowing gaps in health outcomes. Healthy competition should be encouraged, financing systems need to offer the right incentives, and better monitoring of the efficiency and quality of frontline services is required.

Figure 3. **Output efficiency**¹



1. Data envelopment analysis (DEA) was performed with one output (life expectancy at birth for 2010 and 2005) and two inputs (a composite indicator of the socio-economic environment and lifestyle factors for 2010 or 2005 and healthcare spending). Averages over the periods 2006-10 and 2001-05 were used for expenditure to capture its effects on performance and smooth its developments. Potential gains are measured if efficiency in a country were to be raised to the level implied by the estimated efficiency frontier while holding inputs constant and under the assumption of non-increasing returns to scale.

Source: Hribernik, M. and R. Kierzenkowski (2013), “Assessing the Efficiency of Welfare Spending in Slovenia with Data Envelopment Analysis”, *OECD Economics Department Working Papers*, No. 1058, OECD Publishing.

Background to the current health-care system

Major reform in the 1990s brought national health insurance

As in many areas of Israeli economic and social policy, today’s health-care system is largely the product of reforms initiated in the 1980s and implemented in the 1990s. Prior to reform, health care had evolved in a largely ad hoc way that was mostly funded via a handful of health funds with provision by a mix of government-run, health-fund owned and independent providers. Reflecting the then dominant ‘corporatist’ economic model that pervaded all areas of policy, most health care was provided by a single

health fund, Clalit, which had strong links to the Labour Party and Histadrut (the main trade-union umbrella organisation). Some of the other health funds also had political affiliations. During the 1980s there was substantial labour unrest, the quality of care deteriorated, and problems of cream-skimming and ‘black-market’ medical services (Rosen and Samuel, 2009).

In response to these problems the authorities did not abandon the health-fund system but instead re-shaped it, bringing universal health-care provision (for a specific basket of treatments and pharmaceuticals), while also encouraging consumer choice and competition among the funds. The reform largely followed the recommendations of the 1988 Netanyahu Commission, in particular with the passing of the National Health Insurance Law in 1995, which introduced the universal health coverage. Some issues raised by the Netanyahu Commission remain relevant today. For instance, it recommended making government-owned hospitals more independent by transforming them into hospital trusts, but to date all attempts to do so have failed.

Features of the current system

Today, four health funds are responsible for the majority of health care (Table 1). They are the sole providers of the universal basket of health services established in the 1995 reform (the NHI basket), and all (eligible) residents must join one of these funds.

About 75% of the population buy health-fund VHI, which is called Shaban (each fund offers a ‘standard’ and ‘superior’ product, see Box 1). In addition, a sizeable minority purchase health insurance from commercial insurance companies, often in addition to the Shaban. Probably the most highly valued elements of VHI are the options allowing choice of surgeon (the patient has no such choice under the NHI basket of services). The insurance packages also include a wide range of supplementary services (such as ‘comfort services’ for hospital stays) but also complementary services, notably dental care for adults (which is not included in the NHI basket of services). Though more households are signed up for the Shaban than for the commercial insurance, the latter is a bigger business financially. For example, in 2011 household spending on premiums and deductibles was about NIS 3 billion for the Shaban but NIS 7 billion for commercial health insurance, though the latter figure includes spending on long-term care insurance, which does not feature in Shaban products.

Frontline provision largely comprises facilities owned and operated by government or the health funds with, in addition, independent operators. In the hospital sector about half of all acute beds are in government-owned and -run hospitals (operating under contract with the health funds), and the remainder are in either hospitals owned by the health funds or independent hospitals with either non-profit or for-profit status. There are in effect two hospital systems in operation. In the Jerusalem area the hospital operators are non-governmental organisations (NGOs), and they provide both NHI treatment and private treatment. Elsewhere in the country NHI treatment is largely performed by government-owned hospitals, which under current regulation are not allowed to perform private treatment, so this is carried out in separate facilities. The merits of Jerusalem’s ‘mixed’ hospital system versus the ‘separated’ system operating elsewhere is a key issue in the wider debate on the balance between public and private health care. In the primary sector, a large share of the population (about 40%) uses clinics run directly by Clalit, while the other funds rely more heavily on contracts with independent practitioners and clinics. Vertical integration also extends into the hospital sector: for example, Clalit owns and operates a number of facilities.

Table 1. **Key features of the current health-care system**

The insurance system	
Health funds	Four health funds (market shares as of January 2013 in parentheses) – Clalit (52%), Maccabi (25%), Meuchedt (14%) and Leumit (9%) – provide all NHI services. Each fund offers two VHI packages (Shaban) standard and superior. Coverage and premiums in the Shaban are regulated but subject to change (i.e. they are not guaranteed). The Shaban are supervised by the Ministry of Health.
Commercial health insurance	Subject to insurance legislation and supervised by the Capital Markets, Savings and Insurance Division at the Ministry of Finance. 'Individual' insurance must, unlike the Shaban, guarantee both the coverage and the premium for the entire life of the subscriber (though this does not apply to 'group' insurance, which is more common). There are also fewer deductibles than with the Shaban.
Provision	
Primary care	A mixture of individual practitioners and clinics either operating under contract or paid (or run) directly by a health fund. About 80% of Clalit's membership (i.e. about 40% of the population) receive health care from Clalit-owned and operated clinics. The remainder of Clalit's primary-care services and much of that provided by the other three health funds are provided via contracts with independent clinics and individual physicians.
Secondary care	Government-owned and -run hospitals account for about half of acute-care beds. In the Jerusalem area there are NGO-based hospital providers, and some health funds own and operate hospitals.
Mental health care	Most mental health care is currently provided directly by government-run facilities. As of 2015 almost all areas of psychiatric care will be financed via the health funds (a large share of the front-line provision will continue to be provided in government-run facilities).
Dental care	Provided by individual operators or clinics (some with links to the health funds). Non-cosmetic dental care for children was shifted into the NHI basket in 2010; other dental care is covered by VHI.
Long-term care	Public support mostly takes the form of means-tested domestic help often provided by foreign workers.
Public health	Government public-health programmes are operated by a network of regional offices. The larger health funds also run public-health programmes.
Funding	
Government funding	A mixture of earmarked national insurance contributions and general tax revenues fund transfers to the health funds.
Health-fund transfers to providers	Health-care providers bill funds <i>via</i> various mechanisms: fee-for-service, per diem rates and diagnosis-related groups (DRGs).
Out-of-pocket expenses	Co-payments for NHI services (pharmaceuticals, consultations and treatments); voluntary insurance premiums and associated cost-sharing.

Source: OECD.

Box 1. **Shaban insurance: an unusual feature of the health-care system**

The Shaban is an atypical, indeed possibly unique, form of voluntary health insurance. Unlike commercial insurance the health funds, which are the sole providers of Shaban, cannot refuse applications (i.e. there is no underwriting). Indeed, the regulation and supervision is entirely separate from commercial insurance, being conducted by the Ministry of Health, rather than the office of the insurance supervisor, which is part of the Ministry of Finance. In addition, the Shaban are 'tied' to NHI insurance (i.e. an individual cannot register with one fund for NHI insurance and purchase a Shaban policy with another). The absence of underwriting, plus government guarantees on health-fund financing (see main text), and a desire not to let the Shaban dissuade switching means there is a high degree of regulation. The Ministry of Health approves and regulates premium levels and tightly controls what services and pharmaceuticals are covered by the Shaban plans.

Most government funding for health care is channelled to providers via the health funds for the purposes of financing NHI services (Figure 4). The funding partly comes from an earmarked social insurance contribution, but this makes up only about one half of the total government contribution (the remainder is from general taxation) and does not drive funding overall. Households also fund health care directly; some NHI services involve cost-sharing via co-payments and, as mentioned above, many households buy VHI, access to which also typically involves some cost-sharing. Furthermore, in some areas of health care households may pay the full price for services, but this is chiefly in non-critical areas such as cosmetic surgery.

Overall, the government keeps a tight rein on the system. For a start, it provides a large share of the funding. Government also has significant regulatory powers at more or less every other point in the supply chain of services, such as the contents of the NHI basket, funding arrangements between health funds and providers, co-payments and the features of VHI packages. As regards labour relations (and costs) the government's main influence comes through its role as the largest employer in the hospital sector. As in many other policy areas in Israel, the government's role is highly centralised; local authorities have only a minor role as providers of services and do not own health-care facilities.

The four health funds are hybrid bodies, lying somewhere between public service and commercial ventures. The government's tight rein on the system applies very much to them: almost all their activities and finances are regulated in some way. Furthermore, the funds have a particular non-profit status that means deficits are always covered by government. Indeed, the funds can take out only short-term bank loans. And, as they are largely publically funded bodies, under international accounting rules, they are included in the 'general government' account. Despite all these factors, the funds are to some extent commercially driven. Competition over market share is particularly fierce. Management and employees are likely to have a vested interest in expanding market share and ensuring the fund has a good financial position, as this means greater employment security and better remuneration and working conditions. Other motivations may also play a role. For example, health-fund managers are probably motivated by reputational factors, successful management of a fund possibly leading to career advancement.

Main players in policymaking

Clearly the health funds and government play a central role in the health-care system. Within government, the Ministry of Health is both a supervisor and operator (Table 2), which is the subject of some debate. Also, as in other areas of Israeli policy, the Ministry of Finance's powerful position means that it plays a prominent role in reform and management. As in most countries, the professionals (particularly the doctors and nursing bodies) are relatively powerful. Among the other bodies, the parallel system under the Ministry of Defence is worth noting, as the armed forces are relatively large.

Figure 4. Financial flows in the healthcare system

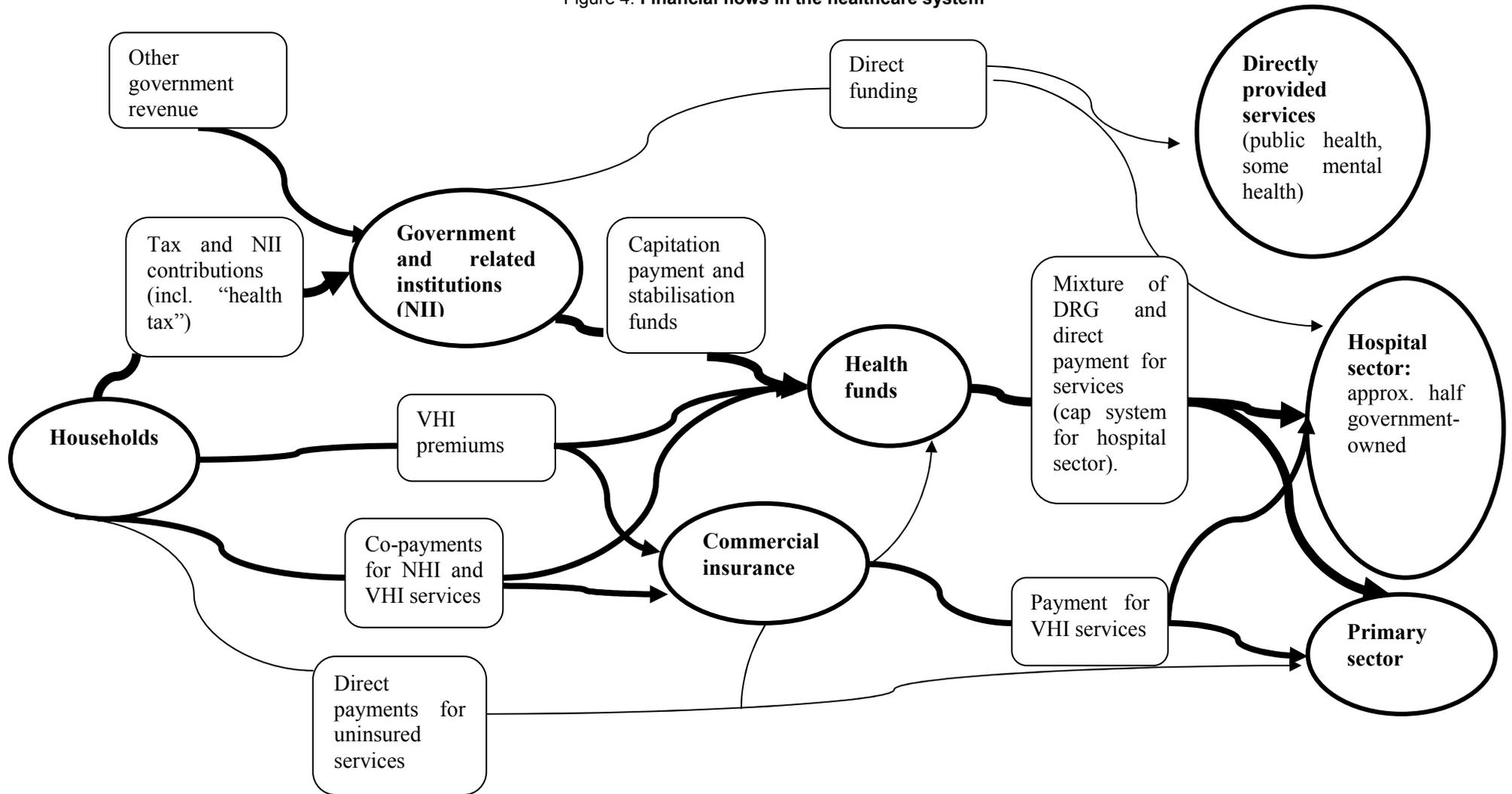


Table 2. **Bodies involved in health-care policies**

Body	Role
Core bodies	
Ministry of Health	Broad responsibilities of supervision and policy development for the sector. In particular the Ministry is both supervisor of the hospital sector and manager of government-owned hospitals. Supervision and regulation of the health funds includes the voluntary health insurance provided by health funds.
Ministry of Finance	Heavily involved in setting the parameters of funding and more generally influential in shaping policy. The Ministry's Capital Markets, Insurance and Savings Division is responsible for overseeing health insurance offered by commercial companies.
Health funds (Clalit, Maccabi, Meuhedet and Leumit)	Responsible for the majority of provision.
Israel Medical Association (IMA)	Representative body of the physicians.
Israel Nurses Association (INA)	Representative body of professional nurses. Note that this body does not represent most of those working in long-term care.
Other	
National Insurance Institute	The conduit for insurance contributions, including the health-care contribution; the latter is imposed only on employees.
Local authorities	Administer along with the health funds and the National Insurance Institute the main mechanism of public support for long-term care in the community (the Long-term Care Allowance).
Ministry of Defence	Funds (and typically also provides) health care for those in the Israeli Defence Force.
National Health Council	Advisory body to the Ministry of Health.

Source: OECD.

Ensuring human-resource challenges are addressed

The supply of health-care professionals is strongly controlled and regulated. As in many countries (Ono et al., 2013) the government determines the number of places available in medical and nursing schools and funds a sizeable share of the costs (students do pay fees, but these cover only part of the cost of training). Also, regulations on professional qualifications and standards, in combination with policy on foreign workers and immigration, mean inflows from outside the country are also tightly controlled. As a result, ensuring sufficient human resources is a highly centralised process.

The nature of the supply challenges

In large part, today's challenges are a consequence of the large wave of immigrants from the former Soviet Union in the early 1990s, many of whom were highly skilled professionals. As a result, from 1989 to 1992, the number of "professionally active" physicians (see Box 2) swelled from 14 400 to 18 700, an increase of nearly 30% (Figure 5, Panel A). To be sure, immigration also boosted the overall population (and therefore the demand for health care), but, proportionally not by as much. Hence, the number of licensed doctors per capita (aged under 65) also ramped up significantly (Panel B). The equivalent data for nurses do not stretch back as far in time but there was undoubtedly a similar boost in numbers. Raw international comparison, such as those shown in Panel C, suggests a relative abundance of physicians (in

per capita terms) compared with other OECD countries even before the wave of immigration, although statistical issues complicate the comparison (Box 2).

Box 2. Issues in Israeli data on health-care professionals

Data on the number of health-care professionals in Israel can be derived either from administrative data on the number of licensed professionals or the labour force survey (LFS). In OECD databases, the administrative data are used as input for datasets on the number of “professionally active” workers, while the LFS data are used to indicate the number of “practising” professionals. In both cases there are important caveats:

- As for a number of other countries, the Israeli administrative data do not fully conform to the preferred OECD definition of “professionally active”. The OECD definition excludes those working in jobs where the relevant qualifications are not required, and those that are unemployed, retired or working abroad. These groups cannot be properly filtered out of the Israeli data; as an approximation the “professionally active” data for Israel represent *all* those aged less than 65 years licenced to practice. For physicians, there is no renewal process in the licensing system, and so many indeed remain licensed when they have left the profession. According to notes in the OECD database, about 10% of Israeli licensed physicians had not been resident in Israel for at least 12 months. At the same time, selecting only those aged under 65 implies undercounting older active professionals; the standard retirement age for men is 67 years (although it remains 62 years for women), and many physicians work beyond that point.
- Conceptually, the LFS-based data accord reasonably closely with the OECD definition of “practising” health-care professionals, but variations due to the relatively small samples means considerable year-on-year change in the statistics. Clearly, this problem gets worse with further disaggregation of the data for instance, the number of professionals by specialty or age group.

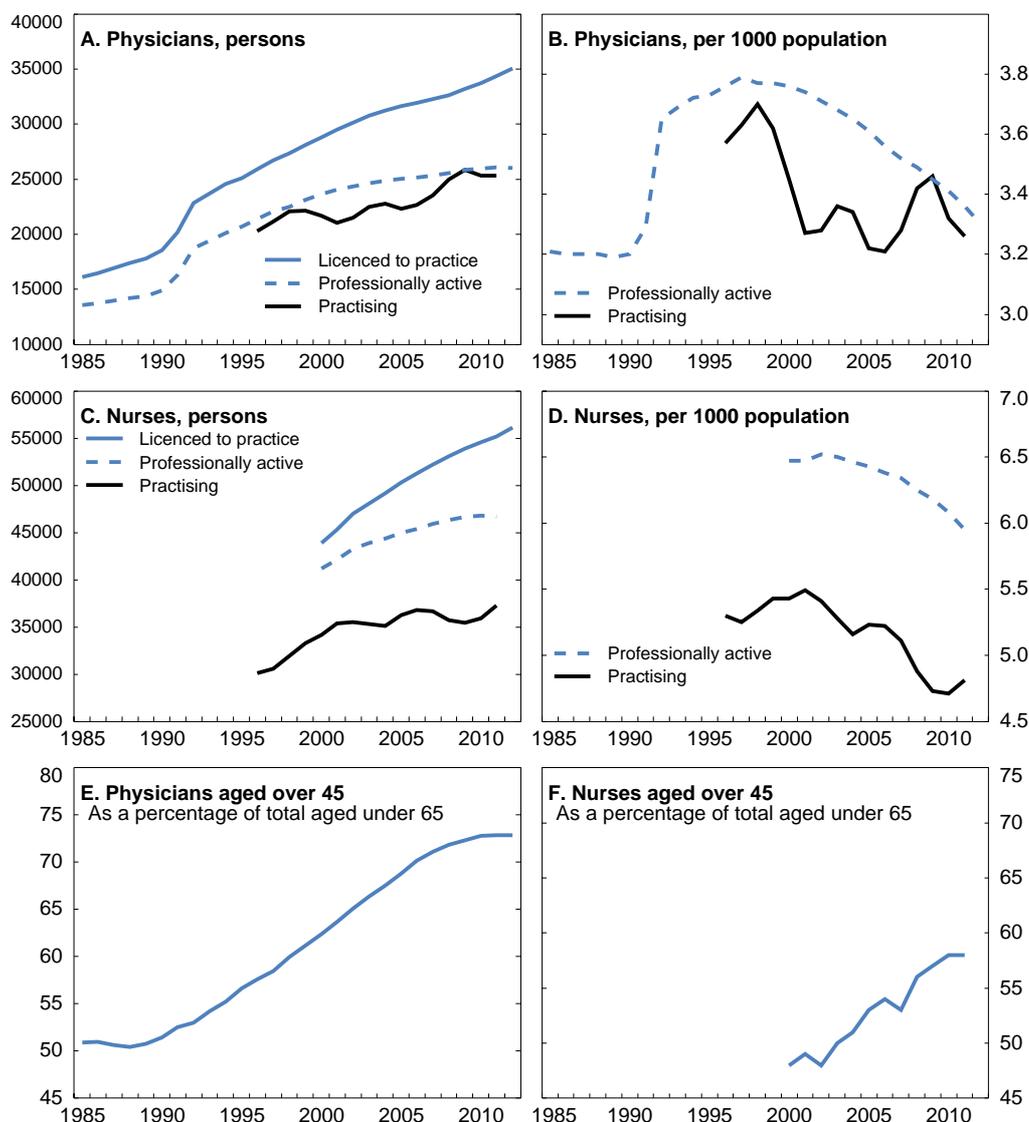
This ‘windfall’ of human capital has been a boon for the health-care system. Without it, more resources (both public and private) would probably have had to be devoted to training, for instance. In addition, this influx of professionals almost certainly put the authorities in a stronger position in bargaining on pay and conditions than would otherwise have been the case.

However, the supply abundance is being steadily worked off as the population bulge works through. The number of professionals per capita has been declining for a number of years (Figure 5, Panels B and D). Indeed, there is a narrowing gap between the number of physicians aged under 65 (i.e. labelled professionally active), and the number inferred from the LFS (“practising”), suggesting a definite narrowing between supply and demand. A further consequence is that the medical professions have aged considerably, partly because the immigrant wave has aged but also because the boon in supply meant less need to train a new generation of physicians and nurses. Today, over 70% of licensed physicians and nearly 60% of nurses are aged over 45 (Panel E and F) as underscored in a number of papers (Israeli Medical Association, 2011; Nirel et al., 2010; Nissanholtz and Rosen, 2011; Toker et al., 2010).

Developments in remuneration and conditions

The tightening markets for health-care professionals have almost certainly been influencing industrial relations and wage agreements. As in many countries, collective agreements play a major role in setting pay and conditions for doctors and nurses, with the government often playing a key role (not least because it is a major employer).

Figure 5. Physician and nurse resources



Source: Ministry of Health and OECD Health database.

As regards physicians, the benchmark wage agreement, which is that between the government and those physicians working in government-owned hospitals, has typically been negotiated once every nine-years. This agreement influences pay deals struck in other hospitals, and pay in the primary sector too (see Box 3). The latest agreement was finalised in August 2011 and covers the period mid-2010 to mid-2019. It includes an across-the-board increase in wages totalling 27% plus additional hikes for certain specialists and for those in the periphery. Also, there are substantial new grants (up to NIS 500 000) for physicians working in peripheral areas, which have reportedly prompted significant interest. Other gains on the employee side included agreement to create an additional 1 000 physician posts in hospitals. From the employer perspective, the government succeeded in getting agreement to a digital ‘punch card’ time system that records when physicians arrive and leave the workplace. The pay rise is spread over the length of the agreement; thus providing considerable certainty on pay for some time to come. However, the wage negotiations have not always resulted in regular increments in wages. For instance, the agreement for the

period 2002 to 2010 was subject to prolonged negotiation; the first instalment of the final agreement was not made until January 2008 and the last in January 2011, resulting in a sharp rise in pay in recent years (Figure 6). According to the latest edition of the OECD's *Health at a Glance* (OECD, 2013) general practitioners in Israel, as of 2011, earned around twice the average wage, a similar ratio to that in many other OECD countries. For specialists the ratio is around three times the average wage, which appears to be somewhat higher than in many OECD countries. However, some caution is advisable in interpreting differences across countries in this instance; sources and methods in data collection differ widely.

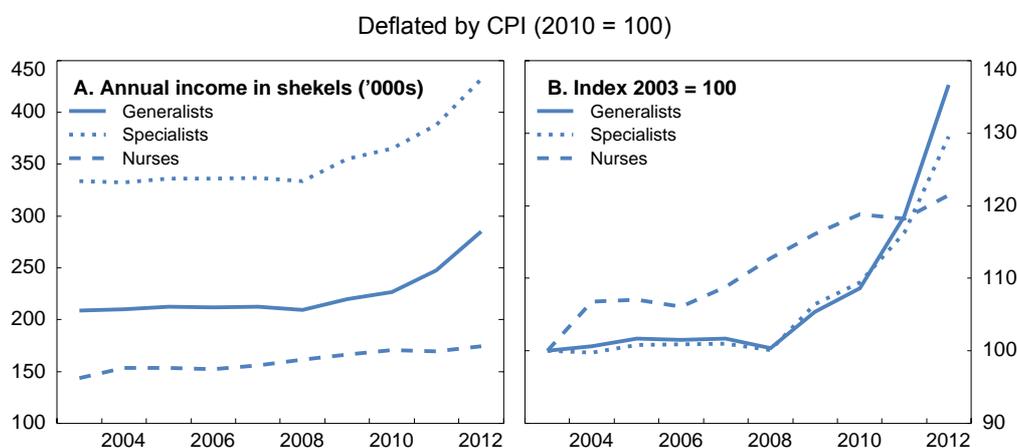
Box 3. Wage setting and remuneration mechanisms in primary care

In primary care, government has rather less influence and control on wages and conditions, but collective bargaining still plays an important role.

As regards physicians working for the Clalit-owned clinics, there is a collective bargaining agreement that serves as a benchmark for pay increases elsewhere. The remuneration mechanism in these Clalit clinics includes a component related to the number of clients ("passive capitation"), but none relating to the number of consultations ("active capitation"). In independent clinics (i.e. those operating under contract with Clalit or the other health funds) there is a mix of "passive" and "active" capitation.

Nurses' pay in primary care in Clalit-owned clinics is set by collective agreement, while elsewhere it is set by individual contract. However, as for physicians, the collective agreement sets the benchmark throughout the sector. A variety of remuneration approaches apply to other professionals in the primary-care sector (community based specialists, dentists, pharmacists).

Figure 6. Remuneration of health-care professionals



Source: OECD Health database.

Nurses' pay agreements run on a shorter cycle than those for doctors (3 or 4 years). Similar to physicians the benchmark agreement is that struck between the government and those professionals working in the public sector. Also similar to physicians, pay rises were relatively modest in the early 2000s but have ramped up in recent years. The latest deal was struck in December 2012 and comprises an across-the-board rise of NIS 1 300 per month (i.e. about USD 366 at an exchange rate of 3.55) for government-sector nurses spread over four and a half years. This increase is in addition to the general wage hikes agreed for the entire public sector (currently 1.5% per year). Interestingly, according *Health at a Glance* as of 2011 hospital nurses' earnings are 140% of the average wage in Israel, which is one of the

highest ratios among OECD countries. This of course does not necessarily imply nurses are ‘over paid’ in Israel as there are wide differences in context between countries and different data sources and methods may also quite possibly be at play.

Specialists in high demand (for example, some types of surgeon) typically divide their time between NHI work and far more lucrative private-sector treatment. Indeed, the recently introduced punch-card system reflects the authorities’ concerns that physicians are not always fulfilling their obligations for NHI practice. Interestingly, some government hospitals are using discretionary funds to offer specialist physicians significantly higher pay than the standard pay grades in exchange for full-time commitment to NHI work. This flexibility in being able to compete for specialists is welcome.

Significant expansion of physician and nurse training is underway

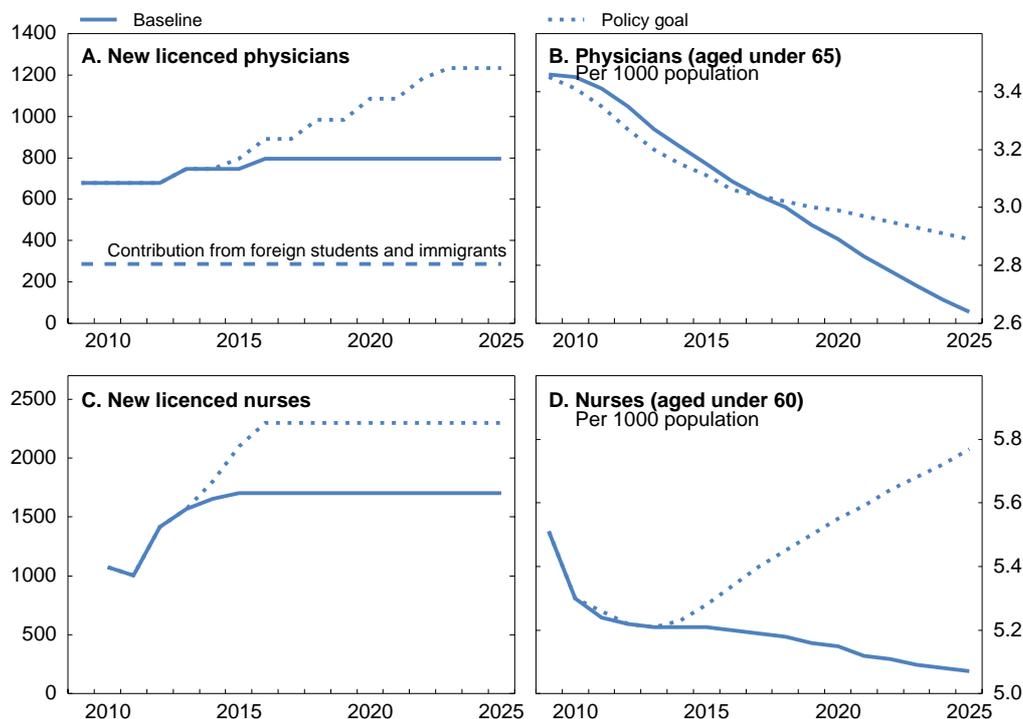
To their credit, the Israeli authorities have long recognised that challenges would emerge once the 1990s cohorts of health-care professionals started to retire. Various committees considered the supply problems in the 2000s and prompted some policy responses (for instance the Pazy Committee 2000, the Halevy and Bin Nun Committees in 2005). The most recent impetus has been provided by a committee set up by the Ministry of Health (the Planning Committee for Medical and Nursing Personnel), which reported in 2010.

The Planning Committee essentially concluded that the physician-to-population ratio could be allowed to fall a little further from the current level of around 3.3 physicians per 1 000 population but that a floor should be firmly established at around 2.9. For nurses the Committee recommended that the downward trend in the nurse-to-population ratio should be turned around, with an interim goal of 5.8 nurses per 1 000 by 2025 and 6.5 in the longer term. The Committee’s baseline calculation and scenarios illustrating the rise in graduate physicians and nurses required to achieve these goals are shown in Figure 7. In international comparison the targets imply staffing levels (per capita) that are around the OECD average in the case of doctors but still below average for nurses (see Figure 2). However, this by no means implies the targets are inadequate, given the wide differences in demand for health care and in the structure of health-care services across countries. Israel’s relatively youthful population plus the emphasis on primary care (which is less staff intensive than hospital care) in particular suggests that optimal staffing levels in Israel lie below those in many other OECD countries.

Further growth in medical and nurse training formed the core of the Committee’s recommendations. This was accompanied by a raft of auxiliary recommendations aimed at improving the recruitment and retention of staff in general and in those physician specialities with particularly acute current or potential supply problems.

As regards physicians, intakes to the four established medical schools are being boosted and a fifth medical school, located in the north of the country, began operating in 2011. In the mid-2000s the intake grew from around 300 to 400 students per year and another wave of expansion is currently underway. The latest committee recommended a total intake of about 700 students by 2012 and to plan a further phase of intake uplifts starting in 2014, so as to generate numbers of new licenced physicians along the lines shown in Figure 7. So far, action on the ground has largely echoed these proposals. By the 2012/13 academic year, the intake to the established medical schools was 760 students (of which 630 in the established medical schools and 130 in the new medical school).

Figure 7. Official projections of the number of health-care professionals



Source: Ministry of Health.

The training of nurses is also being expanded substantially. As of 2014, the Ministry of Health estimates that there will be nearly 1 900 newly qualified registered nurses compared with fewer than 900 in 2011, which is in line with the timeline suggested by the Planning Committee's report. The report also recommended ensuring corresponding growth in nursing assistants, such that they represent 20% of combined nursing staff and greater training for this category of staff. This would appear to be an attempt to address the potential imbalances in the mix of nursing skills. Training courses for 'associate nurses', which was a less advanced qualification compared to registered nurses, were terminated in 2007. This, along with the rapid expansion of training for registered nurses, does suggest a need to enhance the supply of 'lower end' nursing skills.

Avenues for additional reform

While the expansion of medical schools and nurse training should do much to ensure an adequate supply of professionals, additional avenues should also be explored. Indeed, this has been recognised by the authorities, for instance in the Planning Committee's wide ranging recommendations. Despite on-going expansion of training, the system will have to cope with further declines in the numbers of professionals, especially doctors. Also, the health-care professions will remain dominated by older staff for a long time ahead as the expansion of training among younger cohorts will take some time to work through. Finally, events on the ground will inevitably not evolve exactly as projected, perhaps requiring capacities for short-term backstops in addition to long-term solutions to supply difficulties.

The recent pay deals for physicians and nurses will have bolstered recruitment and retention of staff. And specific issues were also addressed, for instance the useful additional pay increases for certain specialist physicians and for those in the periphery. Both for doctors and nurses, pay rises are now set for

some years to come and in any case the deals largely reflect underlying market conditions. However, there are various areas outside the sphere of straightforward staff remuneration that could further help further with recruitment, retention and supply flexibility.

Putting professionals' skills to the best possible use

Improving the use of health-care professionals' time through shifts in tasks could help considerably, in particular:

- *Transfer of tasks from doctors to nurses*, possibly in combination with additional nurse training. Steps along these lines were suggested by the Planning Committee, and there has already been some follow through. Specialist training for nurses enabling them to take over some of physician tasks has already been established in palliative care. And, in December 2012 the Ministry of Health announced plans to extend this programme to chronic and diabetes care, with the intention to eventually include administering anaesthetics.
- *Transfer of tasks from skilled nurses to either lower-skilled nursing staff or hospital orderlies*. Reducing the time spent by registered nurses on tasks that could be performed by less qualified and less costly staff could similarly enhance efficiency. This would clearly be helped if the number of nursing assistants expands in line with registered nurses as recommended by the Planning Committee (which also recommended more formalisation through the creation of a 'nursing assistant' occupation).
- *Transfer of administrative duties* from all health-care professionals to specialised administrative staff, where this is demonstrably more efficient.

Tapping into the international market for health-care professionals

More use could be made of the international market for health-care professionals. Compared with many developed countries, Israel has not tapped heavily into the international market for health-care professionals. There are relatively few foreign physicians practising in Israel, and it is understood that as regards nursing the authorities currently have a policy of employing only Israeli nationals. The Planning Committee recommended encouraging nationals studying or practising abroad to return (fairly substantial numbers of Israelis study medicine abroad, particularly in Italy, Hungary and Jordan), and encouraging the permanent immigration of non-Israeli health-care professionals. However, the latter may not have as much potential as it might appear. In Israel, permanent immigration is almost exclusively only open to Jews under the 'right of return' law and a fairly large proportion of the diaspora live in countries where the incentives to migrate among health-care professionals in terms of earnings capacity and career opportunity are often working in the opposite direction (notably with regard to the United States).

To be sure, under the 2010 World Health Organisation (WHO) code of practice on the international recruitment of health-care personnel, countries (including Israel) are committed to avoiding active recruitment from developing countries that face critical shortages and to being broadly self-sufficient in terms of personnel (WHO, 2010). However, the WHO code certainly does not discourage all international migration of health-care professionals and indeed points out the potential for mutual advantage.

In sum, while respecting the WHO code, channels for foreign health-care workers could be widened so as to supplement the expansion of domestic training and in particular to deal with temporary supply difficulties. However, the size of such potential inflows would be limited by obvious language barriers. As regards physicians, the authorities have opened the door a little more. In January 2013, various changes to medical licensing were agreed, including replacing the present licensing exam with the international

version of the United States Medical Licensing Examination, which is recognised in around 20 countries. However, as regards nursing, there is no sign of any change from the nationals-only policy. It should be noted that permit systems for temporary foreign workers in other sectors of the economy are well established and already provide a substantial share of workers in the long-term care sector (see below). Indeed, foreign nurses were employed (via temporary work permits) in the past, but this programme was abandoned. For instance, bringing in recently qualified doctors for, say, two-year residencies could be one way forward to address supply difficulties while giving them skills that have value for when they return to their home countries.

Ensure physicians remain fully operational and encourage retention

Various steps should be taken to encourage staff to remain professionally active and to update their skills and qualifications. In particular:

- Encourage older health-care professionals to remain active. Even with the growth in student intake, the medical profession will remain top-heavy with older physicians and nurses for many years to come. The Planning Committee, for instance, suggested adjusting pension rules to encourage older staff to continue working. Supply in the nursing profession would be helped in the longer run if agreement were reached to raise the standard retirement age for women in general.
- Reduce exits by younger professionals, for instance through greater flexibility in working hours and contractual arrangements so as to help staff combine work and family life. For example, the Planning Committee recommended establishing day-care facilities for children and more opportunities to combine continued clinical practice with management and research.
- Strengthen requirements on continuing professional development. Mandatory forms of quality assurance should be progressively introduced, for instance: peer-review activities, assessment of professional performance, and continuous medical education. Such mechanisms could be linked to the ending medical licences being awarded 'for life' in favour of a system of licence renewal (as is typical in other countries).

Ensure good returns to subsidised medical training

As in many other OECD countries the public invests a considerable amount in training medical nursing students, suggesting the following policy directions:

- Consider linking the public contribution to the cost of medical training to commitments from graduates to work in the NHI system. For example, medical school fees paid by students could be raised but then partially reimbursed for those who subsequently work in the NHI system or, similarly, a system of bonded scholarships could be established.
- Identify and exploit efficiency improvements in medical training. For example, Tel Aviv University is now offering a four-year medical programme for those with a BA degree in basic sciences. Also, the Planning Committee suggested looking into shortening training paths for specialist physicians.

Governance of the insurance system: 1) Ensuring universal health care remains central to the system

In many respects the health-care system works well; there is no need for a fundamental shift away from the present system that combines universal services (the NHI system) with options for parallel or additional services via VHI. However, given the erosion of the share of public spending that has already taken place, it is important to ensure that universal care indeed remains at the core of the system.

The system for updating the NHI basket is in reasonable shape

The health-care basket requires regular review, largely because new treatment options are continuously becoming available, and the authorities have to assess whether these should be covered by national insurance. In addition, society's views on minimum levels typically rise as living standards increase, and updating needs to take account of this too. Revising the universal health-care basket clearly involves trade-offs. If the basket is expanded slowly in relation to the flow of new developments in treatments and pharmaceuticals (and changing views on acceptable service levels in other dimensions), then, generally speaking, recourse to voluntary insurance (or direct payment for services) will increase, with implications for inequalities in access to health care and health outcomes. Conversely, keeping the basket very close to the technological frontier may imply prohibitively high costs.

Israel's approach to updating the NHI basket is admirably formal and transparent. Each year a specific amount from the central-government budget is allocated to taking on board new treatments and pharmaceuticals. This is then allocated according to the recommendations of a committee comprising representatives from the Ministry of Health, Ministry of Finance, the physicians and health funds as well as experts in health policy and public figures from outside the health system. The committee's recommendations are based on a list of candidates for inclusion in the basket drawn up by the Ministry of Health in consultation with key players (notably the health funds, pharmaceutical companies and the IMA). Changes to the system in recent years include for instance the adoption of a multi-year allocation in 2008 (three years instead of one). However, it should be underscored that even with a good process, the budget allocation still has to be set at the right level.

The scope of the NHI system is being widened

There has been a tendency for the scope of NHI services to widen in recent years. This has arisen partly from additions to the NHI basket. For example, in 2010 dental care for children was included in the basket; previously, as for other dental care, it was provided through VHI. In addition, NHI coverage has been expanded. As of 2015, almost all of the mental-health services, currently managed directly by government, will be put under the responsibility of the health funds, and there have been proposals for long-term care to be shifted into the NHI system too (this is discussed further below).

There is room for some adjustments regarding groups not covered by NHI. Foreign workers on temporary work visas are not covered by NHI and their employers are required to take out private medical insurance. However, the minimum requirements of this private insurance imply narrower coverage than NHI, which contrasts with prevailing practice in OECD countries (OECD, 2011a). Also, given growing numbers, the health-care provision for undocumented migrants needs attention. At present, undocumented migrants (including visa over-stayers) have rights to some kinds of treatment but otherwise rely on local government and non-profit initiatives. Personnel in the Israeli Defence Force (IDF) are also not covered by the NHI, the IDF's Medical Corps being responsible for all medical care. It achieves this via a mixture of own provision and outsourcing; for instance, it purchases all hospital services from the general (civilian) hospitals. Given the pressures for spending efficiency in the IDF, a review assessing the mix of own provision and outsourcing should be considered.

Policy on NHI co-payments

Co-payments for NHI services represent a kind of ‘privatisation’ of public health care. They are welcome in that they reduce the fiscal burden and encourage the responsible use of health-care services. But they are potentially unwelcome in equity terms, especially when they undermine the principle of universal care by dissuading patients from seeking care or placing heavy financial burdens on some households. Reforms in 1998 saw a substantial broadening in the range of co-payments health funds can impose for NHI treatment to include visits to general practitioners, specialist doctors and diagnostic centres in primary-care clinics. However, the authorities have maintained a tight rein on the system: for instance, all co-payments have to be approved by the Ministry of Health. The 1998 reform contributed to a significant increase in the role of co-payments in financing health care; indeed, the motivation for reform was partly budgetary. Key details of the current co-payments are shown in Table 3.

Table 3. **Co-payments: rates, ceilings and exemptions in operation**

Visits to physicians and clinics	Co-payments:
	<ul style="list-style-type: none"> – First visit in a quarter to primary care provider: flat rate charge of NIS 0 to 8 (depending on the health plan). – First visit in a quarter to a secondary care provider: flat rate charge of NIS 23. – No charge for subsequent visits in the same quarter to the same centre/professional.
	Ceilings:
	<ul style="list-style-type: none"> – Quarterly ceiling per household of NIS 122-205 (depending on health plan). – When the ceiling is reached, patients continue to receive treatment without further charge. – For pensioners or households with recent immigrants the ceiling is halved.
	Full exemption from co-payments:
	<ul style="list-style-type: none"> – Pensioners in receipt of the income supplement (see OECD, 2010a). – Patients with end-stage renal disease, cancer, AIDS, Gaucher disease, thalassaemia or tuberculosis (only for their conditions).
Pharmaceuticals	Co-payments:
	<ul style="list-style-type: none"> – Generally 15% (10% for generics) of the purchase price, with a minimum of NIS 15.
	Ceilings and exemptions:
	<ul style="list-style-type: none"> – A ceiling on quarterly pharmaceutical charges for the chronically ill (NIS 870 per quarter, or NIS 290 per month). – This is halved for pensioners and those in receipt of the NII's Income Support programme (see OECD, 2010a).

Source: Based on Rosen and Samuel (2009); the values have been updated to 2013 figures.

While the standard co-payment rates appear reasonable, wider reductions and exemptions from co-payments should be considered – if possible within the current resources of the health-care system – in the interests of adequate access to health care for low-income groups. For most households the NHI co-payments are probably easily affordable. For instance, visits to primary care providers are free in three of the health funds and only NIS 8 (about USD 2.25) in the fund that does charge. However, for low-income households with relatively heavy health-care needs such costs can accumulate. Research using a household expenditure survey (Navon and Chernichovsky, 2012) estimated about 68 000 households spend at least one-third of their disposable income (excluding spending on food) on health care. There has already been some widening of exemptions in recent years, including reduced co-payments for mother and child care and for the elderly. Nevertheless, more may be needed to provide a good enough safety net. One possible weak point is that there is a ceiling only on charges for the chronically ill. Widening this ceiling to the population at large would potentially reduce the risk of low-income households (particularly large ones) from being dissuaded from accessing the health-care system. Finally, co-payments for NHI services

should not be the sole focus as direct payments linked to either Shaban or commercial insurance may well also be significant for those households who spend a substantial share of their incomes on health-care services.

In order to expand discounts it would be necessary to decide how to target those households that are vulnerable. One approach is to base eligibility on whether individuals (or households) receive the National Insurance Institute's (NII's) Income Support benefit (or the Income Supplement in the case of pensioners). Indeed, these criteria already feature in the discounts and exemptions for the co-payments (see Table 3). However, the eligibility criteria for this support are so stringent that a significant share of low-income households does not receive these benefits. Clearly access to health care would be strengthened if access to them was itself widened, as has been suggested in other OECD analysis (OECD, 2010a, 2010b and 2011b).

Finally, the special dispensations for recent immigrants seem unlikely to represent good value for money and should be reconsidered. As in many areas of Israeli social and welfare policy, recent immigrants (typically defined as those who have been in Israel for less than five years) receive special dispensation in the form of a 50% lower ceiling on quarterly co-payments for visits to physicians and clinics. As with many of the other special allowances for immigrants, this is unlikely to have a significant impact on decisions to settle in Israel (a process referred to as *aliya*). Furthermore, its universal application to all immigrants means that it is 'wasteful' in that even well-to-do immigrants benefit from the lower ceiling.

Managing the scope of the VHI sector

The VHI sector widens consumer choice and provides an additional conduit for competition among health funds. However, there is a risk that it 'crowds out' NHI care in undesirable ways, creating an excessively two-tiered health system. For instance, parallel treatment under VHI can mean longer waiting times in NHI treatment because, in the short run at least, the supply of specialist physicians is practically fixed. Also, as with health care anywhere, there is a risk of supplier-induced demand. The combination of commercial interests with the asymmetries in information inherent to health care and the importance individuals attach to good health can lead to overprovision and inflated health-insurance premiums. Reflecting the concern about the relative roles and importance of public and private care, a committee has been established headed by the Minister of Health (Yael German). The committee's examination of the division between public and private healthcare includes analysis of private insurance and assessment of the pros and cons of allowing the further development of medical tourism services.

The risk of 'crowding out' underscores the need to ensure a wider and more flexible supply of health-care professionals as detailed previously. Especially given the supply problems of recent years, it is likely that the demand for medical (and non-medical) services encouraged by VHI has been drawing resources away from NHI treatment. Recent efforts to expand the supply of professionals should significantly reduce this problem and the authorities should take account of likely growth in demand for services via health insurance products in future planning for the training of professionals. It is worth underscoring that the 'crowding out' issue as regards professionals is probably rather more complex than might at first appear. For example, without the additional income that some specialists earn from private work, the 'brain drain' to other countries might be more significant.

In the public part of the health-care system ministerial oversight generally provides significant checks against supplier-induced demand. There is tight regulatory control over the price and content of VHI products (particularly the complementary insurance provided by the health funds, the Shaban) implies providers have to convince the authorities, as well as patients and insurers (or health funds) of the case for particular procedures or drugs. Also, the authorities have regulatory powers that enable them to control the number of beds in private hospitals.

Improving oversight: what to do about government-run hospitals

The health-care system would be improved if the government-run hospitals were not managed directly by the Ministry of Health, for instance by changing them to hospital trusts. As mentioned in previous sections, the government-run hospitals are a hugely important component of provision, accounting for about half of all acute-care beds. However, their status as public-sector entities means there is a fundamental weakness in the governance of hospital care: the Ministry of Health is both a provider and regulator. This conflict of interest can potentially lead to a number of difficulties, such as a tendency to focus on the hospital sector in policymaking and the potential for internal tensions within the Ministry when there are reforms that run counter to the interests of government-run hospitals. Furthermore, as government-owned and government-run entities, these hospitals are subject to civil-service regulations and procurement procedures, which in some cases are not suitable in the context of health care.

Attempts at changing government hospitals' status go back a long way. Proposals have included conversion to 'trusts' (non-governmental entities governed by boards of directors) or transfer of ownership and operation to the health funds. However, to date such initiatives have not progressed far, often successfully headed off by the health-care unions, which are concerned, *inter alia*, about the implications of loss of status and rights as government employees. The authorities have, however, succeeded in taking smaller steps. For instance, the hospitals have been encouraged to establish 'trust funds' comprising receipts from NHI services that have been scheduled outside normal working hours (Rosen and Samuel, 2009). Hospitals have considerable freedom in using these funds, and they account for about 10% of their activity. However, this progress should not be viewed as a substitute for more radical change.

The issue of government ownership and management in the hospital sector is tied to the debate on the relative merits of the Jerusalem 'mixed' system where the NGO-based hospitals perform both NHI and private treatment and the 'separated' system operating in most of the rest of the country, where public and private care is conducted in separate facilities. As yet there is no consensus among stakeholders and policymakers within Israel on this issue. And, international experience does not provide definitive evidence that one approach is superior to another. In Israel, proponents of the wider adoption of the Jerusalem system point to practical advantages, for instance from specialists remaining on site, and that having private-care alongside public care may help support universal provision. Conversely, the chief arguments made against the Jerusalem system is that allowing more hospitals to perform private care will expand the gap in health-care provision between different socio-economic groups, lead to treatment of patients according to their wealth instead of their medical conditions and prompt greater supplier-induced demand in private health care, which will increase private expenditure on health care, further threatening the public system. As regards alternatives to adopting the Jerusalem system, some argue the government-hospital system should remain unchanged, while, for instance, some propose putting these hospitals under the management and control of the health funds. The current set-up does have merit in some dimensions, and reform should endeavour to retain these advantages.

Governance of the insurance system: 2) Ensuring healthy competition

The combination of health funds, universal provision and VHI insurance options in principle allows for a healthy degree of competition, i.e. one which brings efficient provision of the NHI basket but also a range of consumer choice for additional services. As described above, despite this non-profit status and government support in paying off deficits, the funds nevertheless do compete for market share.

The rate of switching is low, but market shares are changing

Under the NHI system individuals can switch between funds on six specific dates each year but can switch only twice a year. Given that a large majority of the population purchase Shaban, then for many the

choice of fund is likely to be governed by a general assessment of the quality of care, in combination with judgement as to which Shaban package offers the most attractive deal. Efforts have been made to ensure there are no barriers to switching in the Shaban regulations, for instance a problem with waiting periods has been resolved (Box 4). In this context the Shaban system is probably superior to allowing the health funds to market regular commercial insurance, which can usually be designed to lock clients in and effectively dissuade them from considering whether to switch funds.

Box 4. Waiting periods in the health funds' complementary insurance (Shaban)

Given that there is no underwriting, as a protection against clients signing up to policies when they are aware of medical problems (moral hazard), the Shaban have 'waiting periods' for certain treatments (generally 6 to 24 months). In other words the individual is not initially covered for certain treatments when they sign up to a health plan. Prior to 2008 the waiting periods applied to clients who were switching funds as well as first-time clients. This was very likely dissuading some from switching funds as it implied spending time without coverage for VHI insurance for some treatments. In 2008 new rules were introduced, such that the client's waiting times are now "carried over" (e.g. if the client had passed all the waiting times under their old fund (which will typically be the case), then no waiting times apply to the new fund), and so this aspect of the Shaban is no longer a consideration for switching funds.

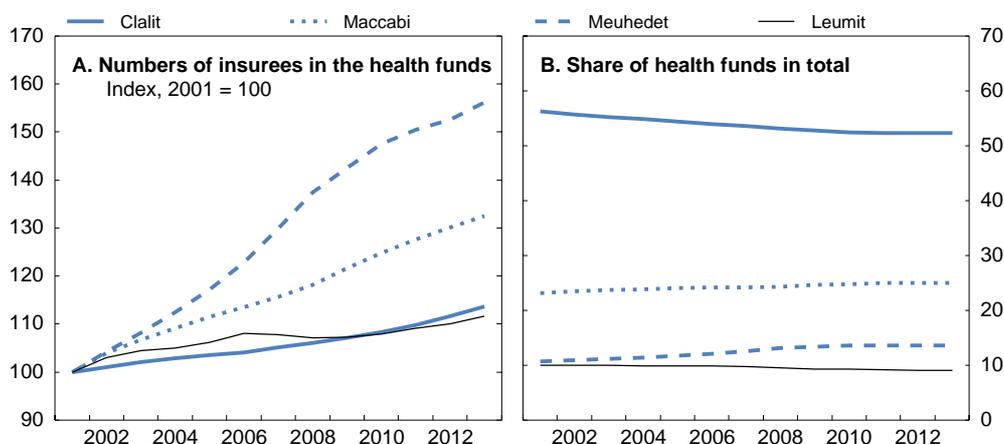
Despite what appear to be minimal barriers, the incidence of switching is low. In the three years following the 1995 reform, about 4% of the population were switching funds each year, but this subsequently dropped to about 1% and has remained at about this level since then. As in other countries with fund choice, switching declines with age. As of 2013, the overall switching rate was 1.6%, but the rate was 2.0% among 15 to 24 year-olds, and only 0.3% among those aged 65 and over. In addition, switching is more prevalent among low-income households; the same study found that the average income of those switching accounts was some 20% below that of those who did not.

However, a low incidence of client switching does not necessarily mean an absence of competition. Indeed, it is interesting that, according to one survey (Gross et al., 2007), 20% of respondents indicated that they had considered changing health funds in the previous year. This suggests that a reasonable proportion of the population is at least paying some attention to their choice of health-care plan. Also, since the introduction of the NHI system, Clalit's dominant position in terms of market share has been eroded (Figure 8), which is perhaps a sign that there are adequate long-term market forces at work.

Combatting unhealthy forms of competition

While the Israeli health-care system does not seem to suffer from endemic cream-skimming, the authorities should nevertheless remain vigilant. Some (for instance Shmueli et al., 2007) suspect the higher rate of switching among poorer households at least in part reflects 'risk exporting', i.e. where funds use various strategies to encourage clients who are high risk in terms of medical care, or in some other sense financially unattractive, to move to another fund. For example, funds might purposefully limit the scope and quality of primary-care facilities in poorer areas and have ways of manipulating waiting lists for treatments; though it is not believed that these techniques are widely used. In addition, funds undoubtedly target their advertising campaigns to preferred audiences.

Figure 8. Trends in health-fund market shares



Source: National Insurance Institute.

In addition, the transparency of insurance products is a cause for concern. There is overlapping coverage between complementary insurance provided by the funds (Shaban) and commercial insurance. In an effort to reduce this, since 2007 the commercial insurers have been required include in their range of health-insurance products insurance plans that are strictly complementary to the Shaban (i.e. they only contain services over and above those in the Shaban). This complementary coverage, for instance, compensates the insured for the difference between actual expenses and the expenses covered by the Shaban plans. However, the commercial insurance funds probably make greater profits out of the more comprehensive plans and are therefore perhaps not making huge efforts to market these complementary products. This underscores the importance of the government's continued efforts to increase product transparency and promote financial awareness in the general population.

The separate supervision of the VHI provided by the health funds and that provided by the insurance companies is an understandable division, but good co-ordination is required. VHI provided by the health funds is supervised by the Ministry of Health, while the health insurance offered by commercial insurance companies is supervised by the body overseeing insurance in general, the Capital Market Insurance and Savings Division, CSMID, a unit within the Ministry of Finance. Supervision of the Shaban within the Ministry of Health makes sense in that it means supervision of all health-fund activities is within one body. Meanwhile, commercial health insurance is more appropriately supervised by CSMID, as it is subject to insurance legislation. However, there does have to be a good deal of co-ordination to ensure the system remains balanced and harmonised.

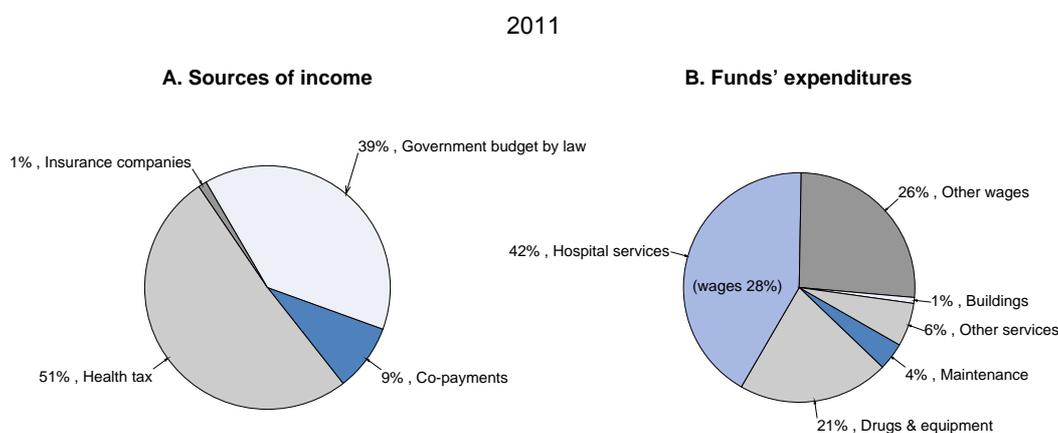
There is room to improve funding mechanisms

The NHI funding system

The core of health-care funding comprises transfers from government to the health funds and reimbursement systems governing transfers from the funds to the providers (Figure 4 above). About 90% of health funds' income for providing NHI services comes from government (Figure 9), about half of which comes from an earmarked component of national insurance contributions (often referred to as the 'health tax'), the rest from general taxation. Almost all of the government-to-fund transfer is through a capitation payment based on the age and sex profile of each fund's client base and a 'remoteness' variable (which was added in 2010 and is discussed further below). In contrast, transfers between the funds and the providers are based on health services provided (or approximations thereof). Hence, in principle, one of the

key strengths of the system is that the health funds have incentives to ensure the efficient provision of services and to engage in preventive measures – a healthy client base means fewer costs through the reimbursement system.

Figure 9. Health-care funds' income and expenditure (relating to NHI services)¹

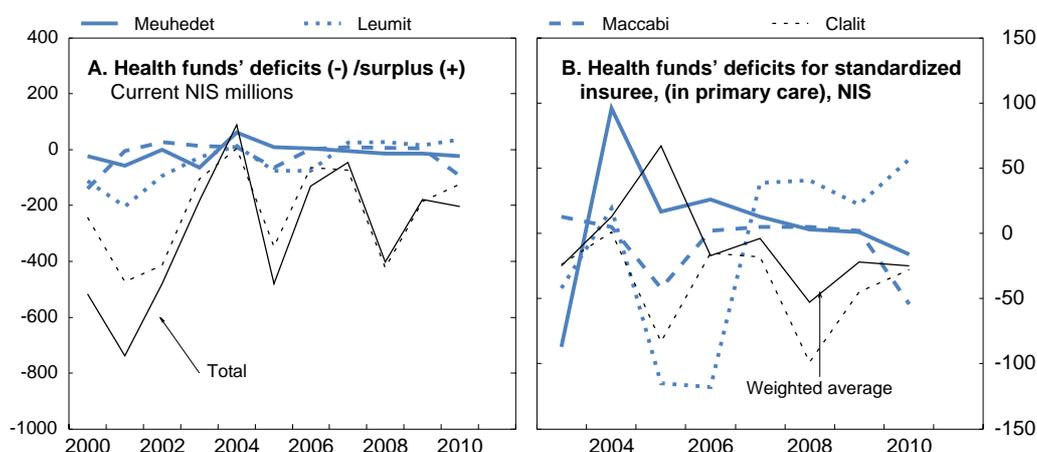


1. The figures shown do not include income and expenditure relating to other activities, notably VHI insurance. In the health funds' accounts these activities are recorded separately.

Source: Ministry of Health

Both the health funds and providers are often in deficit. At least in recent years, Clalit has been in deficit more often and more deeply than the other three funds, both in absolute and per capita terms (Figure 10). Indeed, Clalit's budget balance invariably drives the balance of the funds overall. However, the government responded to health-fund deficits by increasing their financial budgetary resources by NIS 200 million per year starting in 2014. It should be mentioned, that the health providers, such as hospitals, are also often in financial deficit, but these have remained stable over the last five years. This appears to reflect a tacit strategy by the government of keeping the public part of the health-care system on a tight budgetary leash in the belief that this encourages efficiency, while responding to unforeseen changes in demand to safeguard it.

Figure 10. Budget balances of the health funds



Source: Bank of Israel.

Although the lion's share of funding is public, most health services involve some form of out-of-pocket expense. As discussed above, co-payments are required for many services and drugs in the NHI basket. Also, many items in the VHI baskets require some form co-payment (the benefits are commonly advertised as 'discounts' on the price of the service).

Additional variables should be considered for inclusion in the government's capitation payment

There has long been concern that the capitation formula is not sophisticated enough, failing to take adequate account of links between households' socio-economic characteristics and demands on health-care services. The simplicity of the formula has probably contributed to the funds' incentives to cream skim (although of course this can be done only through various back-door approaches, as discussed above). Also, Clalit has long argued that it is in a disadvantageous financial position as it has a greater proportion of low-income and disadvantaged clients compared with its rivals.

Addition of the 'remoteness' variable to the capitation formula in 2010 aimed to address this issue. Using an index constructed by the Central Bureau of Statistics in 2004, the health funds receive more money for clients living in some municipalities. This approach potentially helps funds target disadvantaged communities, which are indeed an issue in Israel, given the strong geographic segregation along socio-economic and cultural lines. Clalit has benefitted most from this change in the formula and the capitation system is in some sense 'fairer' than its predecessor. However, the funds are under no obligation to direct the additional funds from the remoteness variable to deprived areas, so the remoteness variable's impact in this dimension is a little uncertain. Furthermore, the variable is obviously only at best a partial control for differences in socio-economic characteristics. Given this, the impact of the remoteness variable on health-care funding should be closely monitored and consideration given to adding direct, country-wide socio-economic variables to the capitation formula.

Issues in reimbursements to hospitals for NHI services

Hospitals receive payments for services based on a mixture of diagnosis-related group (DRG) funding and per diem mechanisms. Thus, in broad terms therefore there are inclined to accentuate the price and volume of services provided. Of course there are various checks in the system aimed at preventing the providers from taking advantage of the system in this way. There are tight controls on prices in the reimbursement mechanisms, for instance. In addition, a cap system operates on NHI hospital services.

The cap system provides government-set limits on the amount each hospital can receive in compensation for the provision of NHI services. It has been subject to a number of reforms, which illustrate some of the difficulties involved. At one point the health funds were fully exempt from paying any hospital charges above the caps. Subsequently, the system was made more lenient (from the hospitals' perspective); the funds were required to pay half of the hospital charges above the caps (i.e. there was a 50% 'discount' on the additional bill). However, experience with this reform suggested incentives had swung too far in favour of the hospitals. As a result, the discount to the health funds was increased to 70% for hospital charges up to 113% of the cap (and 50% thereafter). As of 2012 some hospital services are subject to a straightforward 80% discount, thus strongly discouraging provision beyond the spending caps.

In addition to the capping system the health funds can, and do, negotiate additional discounts on service costs. In principle, this negotiation process adds a useful market-based element to the health-care system. However, this is somewhat compromised by the limited number of 'market players' on both sides, especially since Clalit's vertical integration means it does not really participate in this process. Alongside the caps which limit the bills presented to the health funds, some 'protection' for hospital financing has been introduced; the capping system for 2014-16 includes a purchase floor equalling 95% of the services provided by the hospital to the health fund in 2012 and keeps the discount rates at their 2012 level.

In general terms, there should be further shift away from input-based charging (such as *per diem* charging for hospital care) and towards, for instance, DRGs so as to reduce the incentives for hospital-induced over provision. Negotiation processes between the health funds and providers should be closely monitored to avoid the risk of collusion on both sides given the small number of players.

Indexing needs to be kept on an even keel

Various indexing mechanisms are used to annually update the financial flows and parameters in the funding system. For instance, separate indexing methods are used for capitation payment, the prices hospitals charge the funds for providing health care (fees for service, DRGs, and *per diems*), and the caps in the capping system. Ensuring this indexing appropriately reflects costs and is coherent helps prevent imbalances in the relations between health funds and providers, for example through the erosion of financial balances of one side in favour of the other.

A recent debate between the Ministries of Health and Finance on indexing of the capitation payment illustrates the issues that can arise. The Ministry of Health's 'health-input prices index' had risen considerably faster than the index used to update the capitation payment, suggesting a need for revision of the latter to avoid a financial squeeze on the health funds. However, the Ministry of Finance argued that the health-input prices index did not accurately represent the health funds' cost inflation and that it would be better to maintain a more conservative indexing of the capitation payment. An agreement between the Ministries on this issue was reached in mid-2013 that will ease the tensions in the health fund budgets by taking greater account of wage increases and population growth in the indexing calculation.

Earmarked funding should remain partial

The funding of NHI care comes partly from earmarked national insurance contributions that are deducted from employees' gross salary at source (prior to 1997 there was also an employer contribution). The employee contribution (often referred to as the 'health tax') is earmarked, in that the revenues go towards paying the government's contribution to services as described in previous sections. As for other insurance contributions, the funds are managed by the NII.

Budgeting works such that, in effect, there is no actual connection between the value of the NII health-care contributions and total public spending on health care. As described above, the total government contribution is driven largely by the capitation formula, and as the NII contributions cover only about half of this amount, the difference is made up from general-government revenues. This weak connection between earmarked revenues and spending is welcome. A strong connection could risk unwanted variation in health-care funding over the business cycle and misallocation of resources over the longer term. This should be borne in mind in assessing calls for a significant hike in the health tax (which has sometimes been suggested by Israeli policymakers as a means of funding reforms). The health tax should never be allowed to drive the amount of public health-care funding. Raising the health tax would also prompt other considerations. Such a move is possibly more marketable politically than many alternatives as politicians and the public are perhaps more willing to accept a hike in a tax with a 'health' label than, say, an increase in more general taxation. But, a hike in the health tax does not score well from a growth perspective, as it raises direct tax on labour. Also, from an equity perspective, while the Israeli NII contributions do have a progressive element (Table 4), it is not as strong as that of personal-tax rates.

Table 4. The earmarked health insurance contribution (the ‘health tax’)

General features of all NII contributions	A two-rate system, the ‘reduced rate’ applies to earnings below 60% of the average wage, the ‘regular’ rate applies to earnings above this threshold.
	<p>The contribution ceiling has changed a number of times in recent years. It is currently five times the average wage.</p> <p>Exemptions: Groups fully exempt notably include: wives (not in paid employment) married to insured persons; recent immigrants (for the first 12 months of residency) who are unemployed and/or on low incomes; those in the armed services (health care is provided by the IDF); foreign workers on temporary work contracts (they are not covered by NHI; their employer has to arrange private medical coverage).</p>
	Where relevant (such as for health care), children are automatically insured and exempt from payment.
Specific features of the health insurance contribution	<p>The health-care contribution is managed in a separate account from other NII contributions.</p> <p>Contribution rates:</p> <ul style="list-style-type: none"> - Salaried employees and self-employed: 3.1% (reduced rate), 5% (regular rate) (there is no employer contribution) - Those not working but with income: 5% at all income levels - Those with no income and recipients of some types of benefit (notably income support) a flat rate of NIS 100 per month. - Old-age pensioners: flat-rate contributions ranging from NIS 100 to NIS 273 (as of 2012) depending on circumstance.

Source: National Insurance Institute (Israel).

Debate about the relative merits of the ‘health tax’ aside, it should be noted that the exemption of housewives (Table 4) from contributions is unusual for a modern welfare system; typically such an exemption would apply to either male or female non-earning partners (who would not necessarily have to be married). As is typical in many areas of Israel policy, there are special dispensations for recent immigrants. In this instance the exemption is sensibly limited to those on low incomes.

The quality of primary care and hospital services

As described above, there is considerable variation in the degree of vertical integration across health funds. Clalit operates its own network of primary providers and runs several hospitals, Maccabi has fairly substantial links with providers, while the two smallest funds have few ownership or control links with providers. Vertical integration certainly brings some advantages. For instance, it is easier to co-ordinate between primary and secondary care. Also, it provides greater opportunity for the funds to distinguish their services from others. For example, with vertical integration the funds have more ways of influencing non-medical aspects of health care (such as reception services for patients and so on). On the other hand, for instance, vertical integration further limits the already narrow market in the negotiation between funds and providers that are not vertically integrated. Also, some argue (for instance, Rosen and Samuel, 2009, p. 181) that separation between the funds and providers is mutually beneficial; independent providers help advance health care because they have incentives to develop and sell new services, while the cost-consciousness of the funds helps ensure this proceeds at a reasonable pace. In sum, the pros and cons of vertical integration do not suggest a clear case to force a shift away from the current mix of separate and integrated provision.

In broad terms, the health funds have gone a long way in exploiting efficiency gains by shifting away from hospital care towards primary care and preventive measures. In the large funds, vertical integration has helped promote the use of primary and preventive care. Also, the funding mechanisms encourage all the funds to look for more cost-effective approaches. Israel’s relatively rapid population growth is likely to

have helped the political economy of adjustment by reducing the need for hospital downsizing and closure. In other countries the latter is often a key sticking point in reform, particularly where there is rural depopulation and when local authorities own hospitals.

Primary care: an exemplary system in many respects

Israel's primary care is widely judged to be of a high standard and to be performing a good gatekeeping role, as underscored in the OECD's review of the quality of Israeli health care (OECD, 2012). Health funds have successfully promoted a shift away from independently operating general practitioners towards team-based care in clinics, and this has been a critical element in improving accessibility and the breadth and depth of services provided. Clalit, as direct operator of primary care services, shifted towards more clinic-based care more or less directly, while the other funds used a combination of dialogue and financial incentives to persuade independent operators to move to clinic-based systems. The economies of scale in clinic-based services have, for instance, facilitated round-the-clock accessibility and capacities for supporting patients with chronic diseases.

Furthermore, primary care benefits from extensive data collection and monitoring. Data on patients collected by primary care providers forms the basis for an electronic database (the Quality Indicators in Community Health Care, QICH, programme) that is one of the most comprehensive in the OECD area (OECD, 2012). The QICH data include basic patient demographics and more than 60 measures across six areas – asthma, cancer screening, immunisation for the elderly, children's health, cardiovascular health and diabetes. The data also flag risk factors and log treatments, drug utilisation and treatment outcomes. The database is not only used by the primary providers, but also by the funds to assess the clinics' performance. There is room for further development in the system. The OECD review recommended expanding the areas covered by the indicators and developing patient-focused measures that draw on multiple indicators (OECD, 2012).

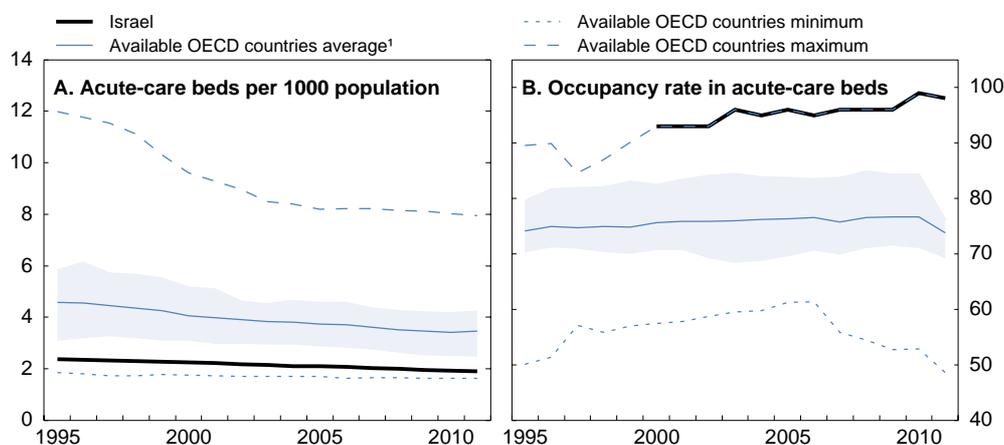
Despite its first-rate credentials, the primary-care sector is not immune to difficulties. As for health care at large, the ageing workforce and related supply problems are a challenge. Furthermore, as in many countries, attracting health-care professionals to work in rural or peripheral areas has proved problematic. In this regard, the substantial grants for physicians to work in peripheral areas (see above) are no doubt having a positive impact, although it is hard to gauge the extent of deadweight loss, i.e. 'wasted' spending in that some of the physicians would have worked in the periphery without the grant, or would have been induced to work there by a smaller grant. In nursing, the risk that up-skilling of the profession creates shortfalls in those undertaking basic caring tasks is possibly greater in primary than secondary care (OECD, 2012). This underscores the need to ramp up the training of nursing assistants, as discussed above.

Hospital care: concerns about overcrowding, quality measurement and governance structure

Hospital care is also judged to be generally of high quality. But there are opportunities for improvement. Given the government's direct involvement in hospital care as owner and operator of about half the acute-care beds, the drive for efficiency gains in this sector is likely to have been strong at times of fiscal pressure. *Prima facie*, the fact that the average number of acute-care beds per capita is relatively low while the average occupancy rate in Israeli hospitals (98% in 2008) is among the highest in the OECD area suggests that the hospital sector is efficient in this dimension (Figure 11). However, the fact that the Australia, Ireland and the United Kingdom consider an occupancy rate of 85% as an appropriate limit is perhaps a sign that bed occupancy in Israel may have been pushed too far. In addition, press reports citing instances of overcrowding, such as patient beds being located in corridors, are fairly frequent. In response, the government began increasing the number of hospital beds in 2011 with a view to adding a total of 1000 (an increase of roughly 7%) by 2016. While this move is undoubtedly helping to resolve this problem,

further investigation of the nature and scale of overcrowding should be carried out, taking into account the earlier decision to boost the number of beds.

Figure 11. Acute care hospital beds



1. The shaded areas are the 25th to 75th percentile range of available OECD countries.

Source: OECD Health database.

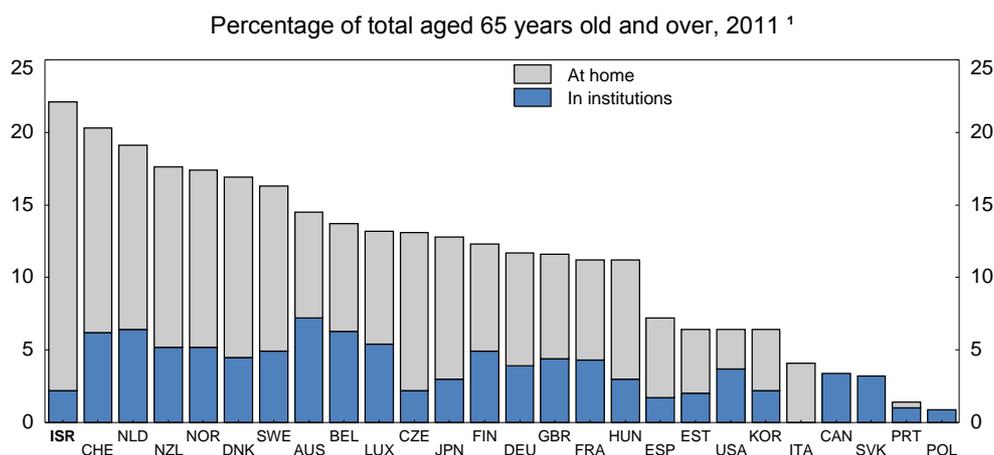
There is room to further develop the collection, processing and dissemination of information on the quality of care in the hospital sector. Monitoring and feedback mechanisms exist, but these have often been the result of individual initiatives in specific facilities. For example, to date the only system-wide and regular information on waiting times is from patients' responses to the Myers-JDC-Brookdale survey. This gives a general impression of the public's experience and perception of waiting times, but lacks the detail and depth that can be gleaned from administrative data. However, initiatives are underway. Under regulations introduced by the Ministry of Health, as of 2013 general hospitals have had to fully computerise applications and processing for elective procedures and, beginning in 2014, will have to submit reports on waiting times based on these data. Also, the health fund Clalit is developing a database of quality indicators for its hospitals. Since 2009 health funds and most general hospitals have been participating in a government initiative to develop sector-wide indicators of the quality of hospital care with an initial focus on general surgery and orthopaedics. The goal is to collect comprehensive data on patient characteristics, treatments and outcomes in all wards, three times per year. The quality indicators include, for instance, surgical site infection, re-hospitalisation, mortality and medical complications. While welcoming such initiatives the OECD's review of the quality of care in Israel (OECD, 2012) urged greater ambition and faster roll-out. The authorities have also been encouraging the adoption of an international hospital accreditation system (the "Joint Commission International", JCI, system), which can only be welcomed.

Delivery of long-term care should be simplified

Policy on long-term care for the elderly and disabled in Israel focuses strongly on providing assistance at home, a welcome approach that OECD countries are increasingly adopting. Indeed, Israeli policy has managed to go further than most in this regard, and the share of the population receiving long-term care at home is the highest in the OECD area (Figure 12). In particular, the state provides means-tested domestic help (provided as hours of help, and referred to as the long-term care allowance) and facilitates the employment of foreign workers as carers through temporary work permits. Households entitled to the in-kind support often top up the hours so that the carer is a full-time live-in helper. Also, many households

take out long-term care insurance (these products are marketed by the health funds, but originate in the commercial insurance industry), which helps fund domestic help. These foreign workers typically come from far afield (many from the Philippines, for instance). Various other forms of community support are provided, some directly by the Ministry of Welfare and Social Services, others by the health funds, which have certain obligations under NHI. Institutional care is supervised by the Ministry of Health and provided by a mix of government-run institutions and facilities run by the health funds.

Figure 12. **Population aged 65 years and over receiving long-term care**



1. Or latest available year.

Source: OECD Health database.

Substantial reforms of long-term care have been proposed but have yet to receive full government approval. In particular, under the previous government the Ministry of Health proposed a reform that included putting both institutional and domestic long-term care under the responsibility of the health funds, and increased subsidies to households, for example through widening the provision of ‘in-kind’ hours of domestic support. Making the health funds responsible for long-term care certainly has some potential benefits; for instance, it could enhance attention to preventive care. Opponents of this move have claimed that the health funds would find it difficult to cope with the long-term care system and that the cost of the reform would be more than estimated by the Ministry.

Whatever reforms are eventually implemented regarding the structure of long-term care support, simplification should be a central theme, including ensuring one-stop-shop universal medical assessment for long-term care needs. The wide range of care requirements among elderly populations means that there are inevitably a number of institutions and processes involved. However, even if some aspects are unavoidably complex, efforts can be made to pare back duplication in processing and to present a relatively straightforward ‘front end’ to the public. There would appear to be room for improvement on this front. For a start, there is wide variation in the assessment of income in the various means tests. In assessing eligibility for domestic help, the NII takes into account only the income of the applicant and spouse, while assessment of assistance for hospitalisation expenses by the Ministry of Health also takes account of the incomes of children, and assessment for community services by the Ministry of Welfare and Social Services takes account of the incomes of the spouses of children too (Bank of Israel, 2012). Elsewhere in the OECD there has been a shift towards ensuring a one-stop-shop system of universal assessment of individuals’ long-term-care needs (i.e. everyone has access to a medical assessment process that advises on the type of care required). This should also be pursued in Israel. Note that universal assessment does not mean universal support. In most systems public support continues to be selective (for instance, assessment

of medical needs may recommend an individual receive 20 hours of domestic help per week but through means testing the government pays for only 15 hours of help).

Adjustments are needed regarding policy on long-term-care workers. The authorities have long been concerned that there are excessive biases in favour of employing live-in foreign care workers, such as Filipinos. The agencies providing such workers are able to profit by charging them quite significant fees. Though there are caps on these fees, they are widely thought to be disregarded. In addition, employment regulations differ. For instance, live-in carers are not covered by the overtime provisions of Israeli labour law. Preventing abusive exploitation of foreign workers (for instance via the fees and payment verification) should remain a priority and will also narrow the gap with Israeli workers and other workers from the region. In a purposeful effort to encourage the employment of locals, the authorities have been providing extra hours of domestic help if households choose an Israeli carer. However, this is thought to have had only a modest impact. Given that there remain substantial pockets of low-skill Israeli labour with hitherto weak attachment to the labour force and plenty of potential carers in neighbouring economies, the continuing heavy dependence on foreign workers from far afield does suggest that further re-balancing is required.

Greater use of health promotion and education is required

Israel's diverse ethnic and cultural mix and wide socio-economic divides means that targeting specific population groups and tailoring communication in health promotion and education is particularly important. Furthermore, health promotion and education has to play a key role in narrowing inequalities in health outcomes, as they are to some extent driven by differences in lifestyle, diet, awareness of medical issues and attitudes towards accessing medical services.

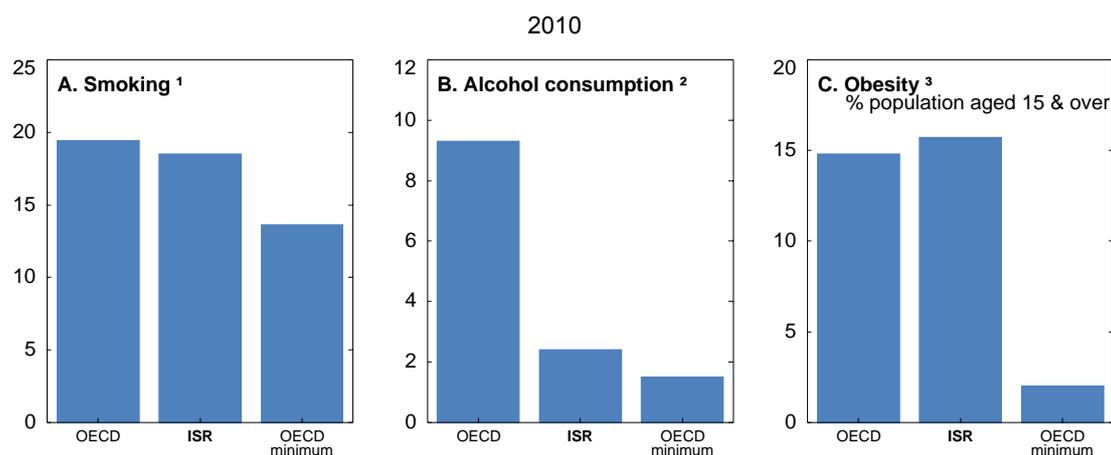
On the whole, the Israeli population scores reasonably in terms of healthy lifestyles. A smaller share of the population smoke regularly than in many OECD countries, average alcohol consumption is among the lowest in the OECD area, and the prevalence of obesity in the population has not reached the worrying levels seen in some OECD countries (Figure 13). But in certain segments of the population unhealthy lifestyles and diets are a significant issue. The most striking specific problems are in the Arab community. Men smoke relatively heavily, and among older Arab women obesity is a concern. And, at least according to a self-reporting survey, both Arab men and women do considerably less physical exercise compared with the rest of the population (Figure 14).

Socio-economic and cultural factors present other issues for health promotion and education. For example, the OECD's report on the quality of health care draws attention to low uptake of cancer screening among Arab and Ultra-orthodox Jewish women (OECD, 2012). This report also discusses the difficult issue of consanguineous marriages. As in many middle-eastern countries, rates of congenital anomalies and recessive disorders resulting from consanguinity are relatively high in the Arab-Israeli population and present particular problems in terms of health promotion and education (some countries offer pre-marital screening to help couples make informed decisions).

Health promotion and education have been key elements in the government's strategy for reducing inequalities in access to health care and health outcomes. Generally, such efforts can only be welcomed. For example, reducing morbidity from cultural and lifestyle differences is a key objective in a Ministry of Health mission statement outlining goals for the 2011-14 period. As regards specific initiatives, the authorities launched the National Program to Promote Active, Healthy Lifestyles in 2011, an inter-ministerial programme aiming to address obesity and its contribution to chronic disease (Kranzler et al., 2013). The programme includes quantitative targets (for instance, one goal is to reduce childhood and adolescent obesity by 20%), and a wide range of practical measures have been taken or are in the pipeline (for instance, legislation banning unhealthy foods in schools). It is worth stressing that, as

discussed previously, the health funds have a vested interest in promoting good health in their client bases. This should be encouraged, alongside the further development of government-led initiatives in health promotion and education. A mix of government and health-fund initiatives can provide a rich source of information on which programmes work best (as long as programmes are monitored and there are opportunities to exchange information). However, getting such a system to work well requires good co-ordination, not only at the central level but also regionally and locally.

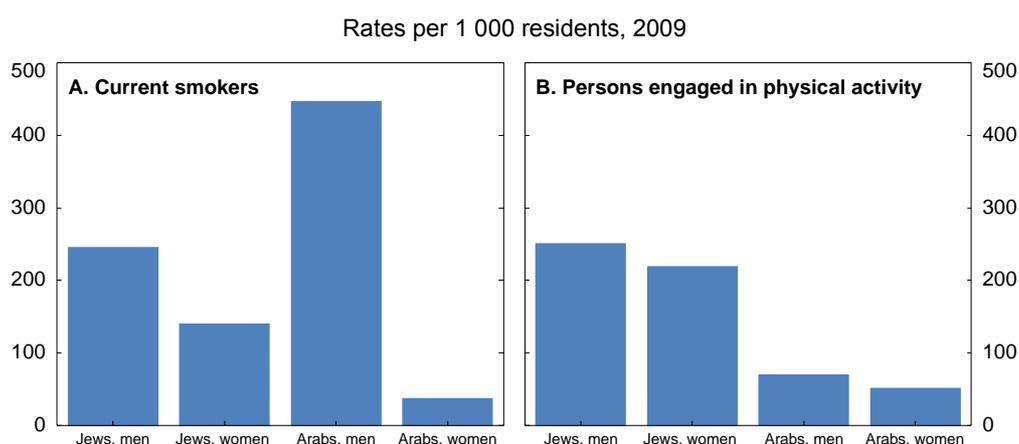
Figure 13. International comparison of non-medical determinants of health



1. Percentage of population aged 15 and over who are daily smokers.
2. Litres per capita in population aged 15 and over; 2007 for Israel.
3. Overweight and obesity are defined as excessive weight presenting health risks because of the high proportion of body fat. The most frequently used measure is based on the body mass index (BMI), which is a single number that evaluates an individual's weight in relation to height (weight/height², with weight in kilograms and height in metres). Based on the WHO classification (WHO, 2000), adults with a BMI from 25 to 30 are defined as overweight, and those with a BMI of 30 or over as obese.

Source: OECD Health database.

Figure 14. Non-medical determinants of health by population group in Israel



Source: CBS (2011), Health Care Survey 2009.

Box 5. Recommendations for health care

Policy towards health-care professionals

Alongside the significant expansion of medical schools and nurse training that is currently underway:

- Further exploit the potential for shifting tasks between professions, for instance from doctors to nurses, so as to make more economic use of capacities.
- While respecting the WHO code, widen channels for foreign professionals as a supplement to the expansion of domestic training,
- Encourage staff retention and skill development for instance by encouraging older professionals to continue working and by providing childcare facilities for staff.
- Strengthen requirements on continuing professional development; consider linking this reform to the introduction of licence-renewal systems.
- Ensure good returns (to the public) and efficiency in medical training: consider some additional commitments to work in the National Health Insurance (NHI) system for those that have benefitted from subsidised medical training; and, investigate avenues for shortening the time taken to acquire qualifications and specialisations.

Governance of the insurance system

- Ensure universal NHI services remain at the core of the system. The system for regularly updating the NHI basket is in good shape and more areas of care have been brought into the basket. However:
 - Widen the scope of reductions in co-payments to low-income households, if possible within the current resources of the health-care system, while reconsidering the special dispensations for recent immigrants.
 - Do not seek to ban or severely limit VHI activity, but nevertheless ensure sufficient checks against the crowding out of NHI-based treatment.
 - Alter the status of government-run hospitals so they are no longer directly managed by the Ministry of Health, for instance through conversion to independent hospital trusts or by putting them in the hands of the health funds. In the process of reform, endeavour to retain the advantages of the current set-up.
- Ensure healthy competition. The fundamental structure of the health-care system lends itself to competition, and this should be encouraged, as long as it does not take undesirable forms:
 - Remain vigilant to back-door cream skimming strategies and to undesirable cross-subsidisation between NHI and VHI activities.
 - Take steps to ensure transparency in insurance products, for instance by ensuring consumers are aware that commercial insurers offer products that are fully complementary to the Shaban.
 - Ensure good co-ordination in the supervision of the Shaban and commercial insurance

Funding mechanisms

- Consider adding further socio-economic variables to the capitation formula that determines government transfers to the health funds.
- Further shift payment mechanisms away from input-based measures (such as *per diem* charging for hospital care) and towards output based formulae, for instance, DRG mechanisms.
- Closely monitor negotiation processes between the health funds and providers, given the risk of collusion due to the small number of market players.

Quality of care in primary and hospital services

- Launch an in-depth study of hospital overcrowding.
- Further develop the collection, processing and dissemination of information on the quality of care in the hospital sector.
- Improve the quality of primary care by expanding the areas covered by the indicator system and developing patient-focused measures that draw on multiple indicators.

Long-term care

- Simplify the long-term care system, in particular as the application processes for public support schemes, and by ensuring one-stop-shop medical assessment for long-term care needs.
- Remove biases that encourage employing carers from far afield, including by further limiting intermediaries' opportunities to charge heavy fees in processing foreign-worker applications.

Health promotion and education

- Press on vigorously with health promotion and strongly focus on those groups with weak health outcomes. For instance, ensure the general campaigns of health promotion are multi-lingual and that specific campaigns are appropriately pitched.
- Encourage the health funds to develop programmes for health promotion, education and to reduce inequality in health outcomes. Ensure good co-ordination with the government-run health-promotion services.

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