European Commission

State of Health in the EU

The Netherlands

Country Health Profile 2019

OECD
BETTER POLICIES FOR BETTER LIVES

European Observatory on Health Systems and Policies
a partnership hosted by WHO

The Country Health Profile series

The *State of Health in the EU*'s Country Health Profiles provide a concise and policy-relevant overview of health and health systems in the EU/European Economic Area. They emphasise the particular characteristics and challenges in each country against a backdrop of cross-country comparisons. The aim is to support policymakers and influencers with a means for mutual learning and voluntary exchange.

The profiles are the joint work of the OECD and the European Observatory on Health Systems and Policies, in cooperation with the European Commission. The team is grateful for the valuable comments and suggestions provided by the Health Systems and Policy Monitor network, the OECD Health Committee and the EU Expert Group on Health Information.

Contents

1. HIGHLIGHTS 3
2. HEALTH IN THE NETHERLANDS 4
3. RISK FACTORS 8
4. THE HEALTH SYSTEM 10
5. PERFORMANCE OF THE HEALTH SYSTEM 13
   5.1. Effectiveness 13
   5.2. Accessibility 16
   5.3. Resilience 18
6. KEY FINDINGS 22

Data and information sources

The data and information in the Country Health Profiles are based mainly on national official statistics provided to Eurostat and the OECD, which were validated to ensure the highest standards of data comparability. The sources and methods underlying these data are available in the Eurostat Database and the OECD health database. Some additional data also come from the Institute for Health Metrics and Evaluation (IHME), the European Centre for Disease Prevention and Control (ECDC), the Health Behaviour in School-Aged Children (HBSC) surveys and the World Health Organization (WHO), as well as other national sources.

The calculated EU averages are weighted averages of the 28 Member States unless otherwise noted. These EU averages do not include Iceland and Norway.

This profile was completed in August 2019, based on data available in July 2019.

To download the Excel spreadsheet matching all the tables and graphs in this profile, just type the following URL into your Internet browser: http://www.oecd.org/health/Country-Health-Profiles-2019-Netherlands.xls

Demographic and socioeconomic context in the Netherlands, 2017

Demographic factors	The Netherlands	EU
Population size (mid-year estimates)	17 131 000	511 876 000
Share of population over age 65 (%)	18.5	19.4
Fertility rate[1]	1.6	1.6
Socioeconomic factors		
GDP per capita (EUR PPP[2])	38 400	30 000
Relative poverty rate[3] (%)	13.2	16.9
Unemployment rate (%)	4.9	7.6

1. Number of children born per woman aged 15-49. 2. Purchasing power parity (PPP) is defined as the rate of currency conversion that equalises the purchasing power of different currencies by eliminating the differences in price levels between countries. 3. Percentage of persons living with less than 60 % of median equivalised disposable income.
Source: Eurostat Database.

Disclaimer: The opinions expressed and arguments employed herein are solely those of the authors and do not necessarily reflect the official views of the OECD or of its member countries, or of the European Observatory on Health Systems and Policies or any of its Partners. The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

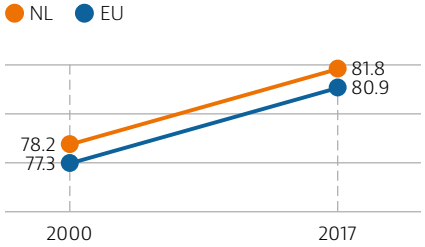
This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Additional disclaimers for WHO are visible at http://www.who.int/bulletin/disclaimer/en/

© OECD and World Health Organization (acting as the host organisation for, and secretariat of, the European Observatory on Health Systems and Policies) 2019

1 Highlights

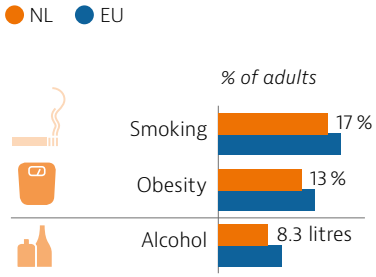
The Dutch health system features a mix of competitive insurance for curative care, a single payer system for long-term care and locally organised tax-funded systems, in which the government plays a strong role. Government regulation guarantees universal and equal access to quality care, covering about 99.9 % of the population. The system has lived through two major reforms in curative care insurance and long-term care since the mid-2000s. Various elements of these reforms remain a work in progress and will require fine-tuning in the foreseeable future.



Life expectancy at birth, years

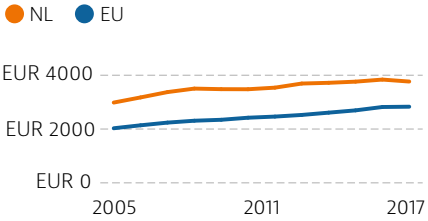
Health status

Life expectancy at birth in the Netherlands is higher than the EU average. However, life expectancy at birth for men was about two years higher than the EU average, but approximately one month less for women (2017). A recent slowdown in life expectancy gains was caused by an increase in mortality rates among the very old, which has been driven by rising mortality rates from Alzheimer's disease. Lung cancer is the leading cause of death, but stroke and ischaemic heart disease are also significant causes.



Risk factors

More than one third (36 %) of all deaths in the Netherlands can be attributed to behavioural risk factors, compared to 39 % in the EU. In 2017, 17 % of the Dutch population smoked daily, below the EU average. Dutch teenagers also smoke less than their European counterparts. In 2017, 13 % of adults in the Netherlands were obese. Although this is below the EU average, obesity prevalence has increased in recent years. Alcohol consumption in 2016 was also below the EU average, at 8.3 litres per person compared to 9.9 in the EU.



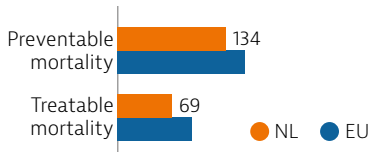
Per capita spending (EUR PPP)

Health system

Health expenditure in the Netherlands is relatively high. Per capita spending in 2017 was EUR 3 791, compared to the EU average of EUR 2 884. The public share of total health spending (81.5 %) is above the EU average, while out-of-pocket spending (11.1 %) is comparatively low, partly because a large Voluntary Health Insurance sector helps limit this expenditure. The Dutch spend the most of all EU countries on long-term care.

Effectiveness

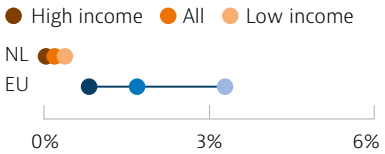
The Dutch health system achieves good results in terms of mortality due to preventable and treatable causes, with rates that are below the EU average. These rates and systematic monitoring against a range of quality indicators suggest the health system is comparatively effective.



Age-standardised mortality rate per 100 000 population, 2016

Accessibility

The Netherlands reports the lowest rate of unmet medical needs among EU countries, with virtually no difference across income quintiles. Yet many unfilled vacancies indicate the emergence of health workforce shortages, while waiting times for hospital care are rising, which may impact on accessibility.



% reporting unmet medical needs, 2017

Resilience

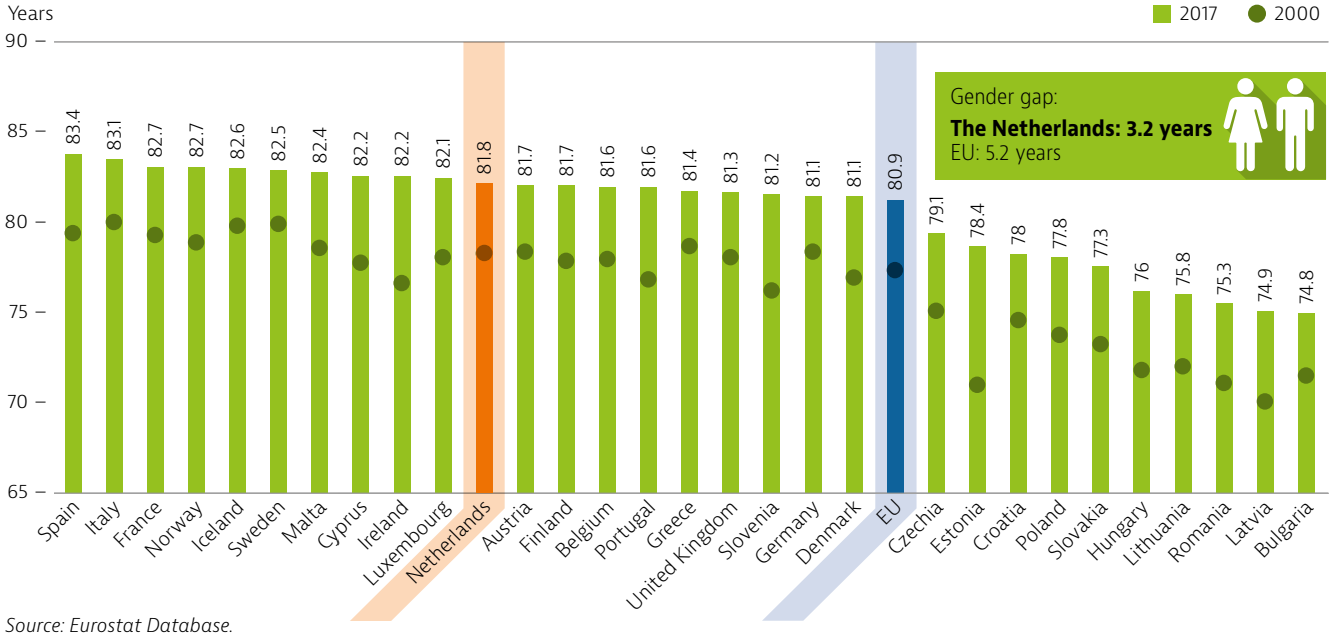
Despite stable funding and resources, rising health care costs (most notably in long-term care), new costly technologies, emerging workforce shortages and waiting lists may test health system resilience. The government has been addressing many of these issues through reforms and action plans.

2 Health in the Netherlands

Overall life expectancy is higher than the EU average, but below the EU average for women

Life expectancy at birth for the Dutch population was 81.8 years in 2017, almost one year higher than the EU average (80.9 years), but still almost two years less than Spain (Figure 1). While life expectancy overall is higher than the EU average, men in the Netherlands live almost two years longer than the EU average, while Dutch women live a month less. This comparatively weak performance for women reflects the legacy of high smoking rates in previous generations (Section 3), which has led to an increase in the number of women with lung cancer.

Figure 1. Dutch life expectancy is higher than the EU average, but 1.6 years below the best performing country

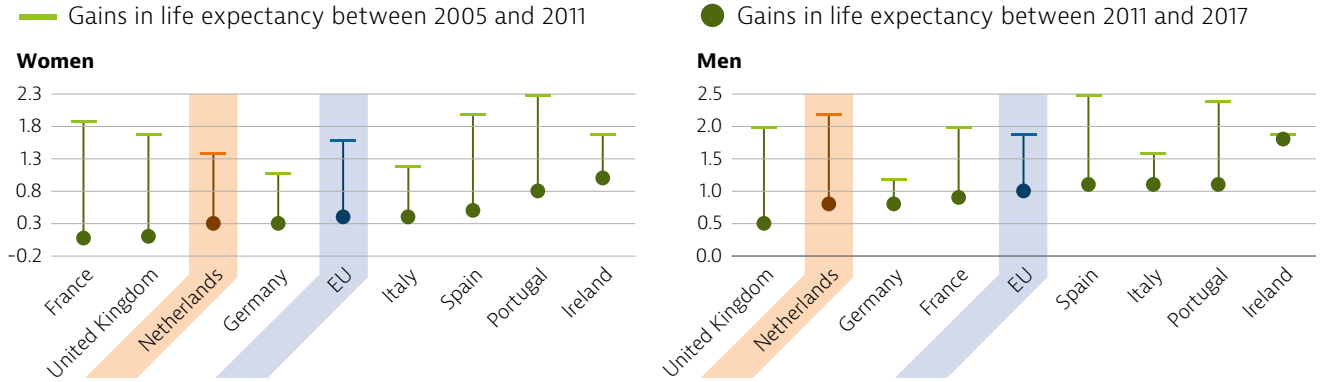


Source: Eurostat Database.

Gains in life expectancy have slowed down in recent years

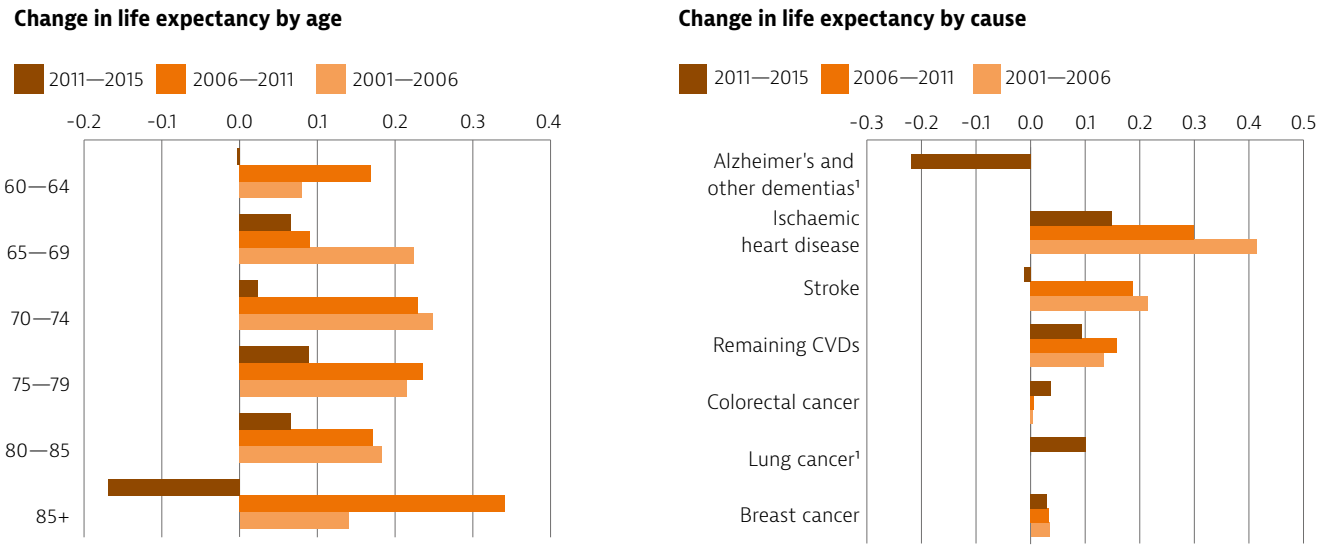
Progress in life expectancy in the last 15 years has been significant, but between 2011 and 2017, women only gained 0.3 years in life expectancy, while men did only slightly better and gained 0.8 years (Figure 2). This is largely due to a stagnation in mortality improvements among older people and even a reversal for those over 85 years. Furthermore, deaths related to Alzheimer's disease and other dementias have increased, while reductions in mortality rates from cardiovascular diseases (e.g. ischaemic heart disease and stroke) have declined (Figure 3). However, the slowdown in life expectancy gains is not unique to the Netherlands; this trend can be seen in several other EU countries, including the United Kingdom and France.

Figure 2. Life expectancy gains have slowed down markedly in the Netherlands this decade



Source: Eurostat Database.

Figure 3. The slowing growth in life expectancy in recent years has mainly affected older people and has been driven by rising death rates from Alzheimer's disease



Note: This figure only shows selected ages and causes of death. 1. No data are available for 2001–06 and 2006–11.
Source: Authors' calculations (based on Eurostat data).

Differences in life expectancy due to social inequalities are persistent

Dutch individuals with higher educational attainment live about five years longer than those with lower educational attainment. In 2015, the life expectancy of men at age 30 with the lowest education level was around six years lower than for those with the highest level (48.5 years compared to 54.3 years), which is a smaller gap than the EU average. Among Dutch women, educational inequalities translated into a 4.6 year gap, which exceeds the EU average (Figure 4). The life expectancy gap related to educational attainment can be partially explained by differences in exposure to risk factors, including higher smoking rates and poorer nutrition among those with lower education level (Section 3), but it is also associated with disparities in income. Individuals with higher levels of education generally have higher-paid jobs and higher standards of living, which are also associated with better health outcomes.

Figure 4. The difference in life expectancy according to level of education is below the EU average for men, but slightly above for women

Education gap in life expectancy at age 30:

Women:
Netherlands: 4.6 years
EU21: 4.1 years

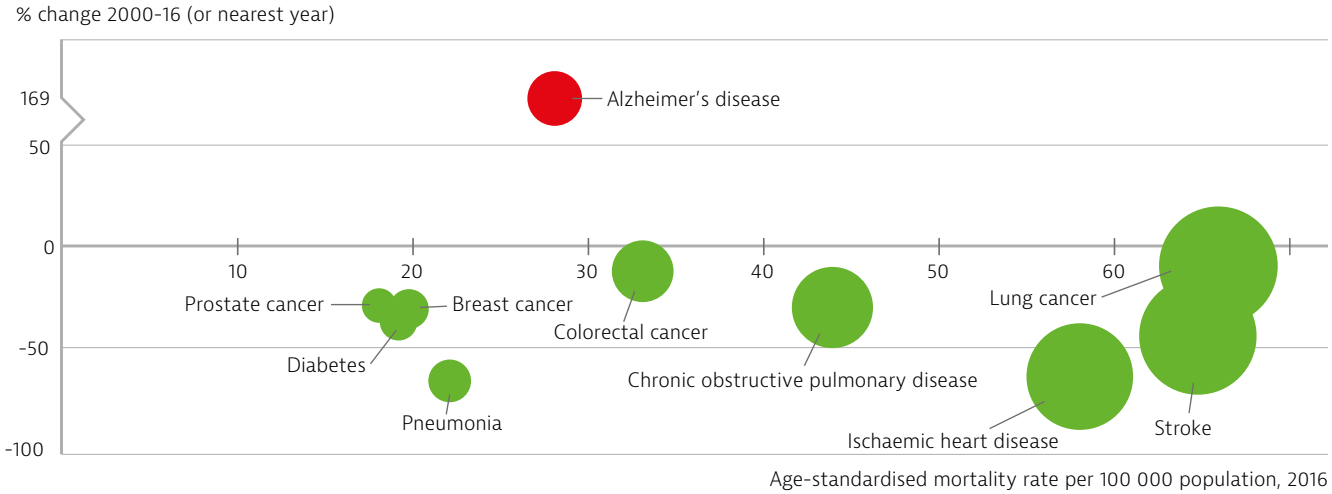
Men:
Netherlands 5.8 years
EU21: 7.6 years

Note: Data refer to life expectancy at age 30. High education is defined as people who have completed a tertiary education (ISCED 5-8) whereas low education is defined as people who have not completed their secondary education (ISCED 0-2).
Source: Statistics Netherlands (based on Health Interview Survey, Labour Force Survey and Mortality Statistics).

Deaths from respiratory diseases and lung cancer remain high

The leading causes of death are stroke, lung cancer and ischaemic heart disease (IHD) (Figure 5). The rise in deaths from Alzheimer's disease seems substantial, but could be related to changes in disease registration and mortality coding practices in addition to population ageing. Mortality from IHD and stroke has declined substantially since 2000, with rates for IHD now being the second lowest in the EU after France (47 and 58 per 100 000 respectively in 2016), and the lowest in Europe for those under 65 years. Mortality from lung cancer and chronic obstructive pulmonary disease (COPD), continue to be among the highest in the EU, despite some reduction over the years. The slower progress in defeating respiratory and lung diseases is linked, in part, to the legacy of high rates of smoking in previous generations.

Figure 5. Lung cancer is the leading cause of death, but stroke and IHD are also significant causes



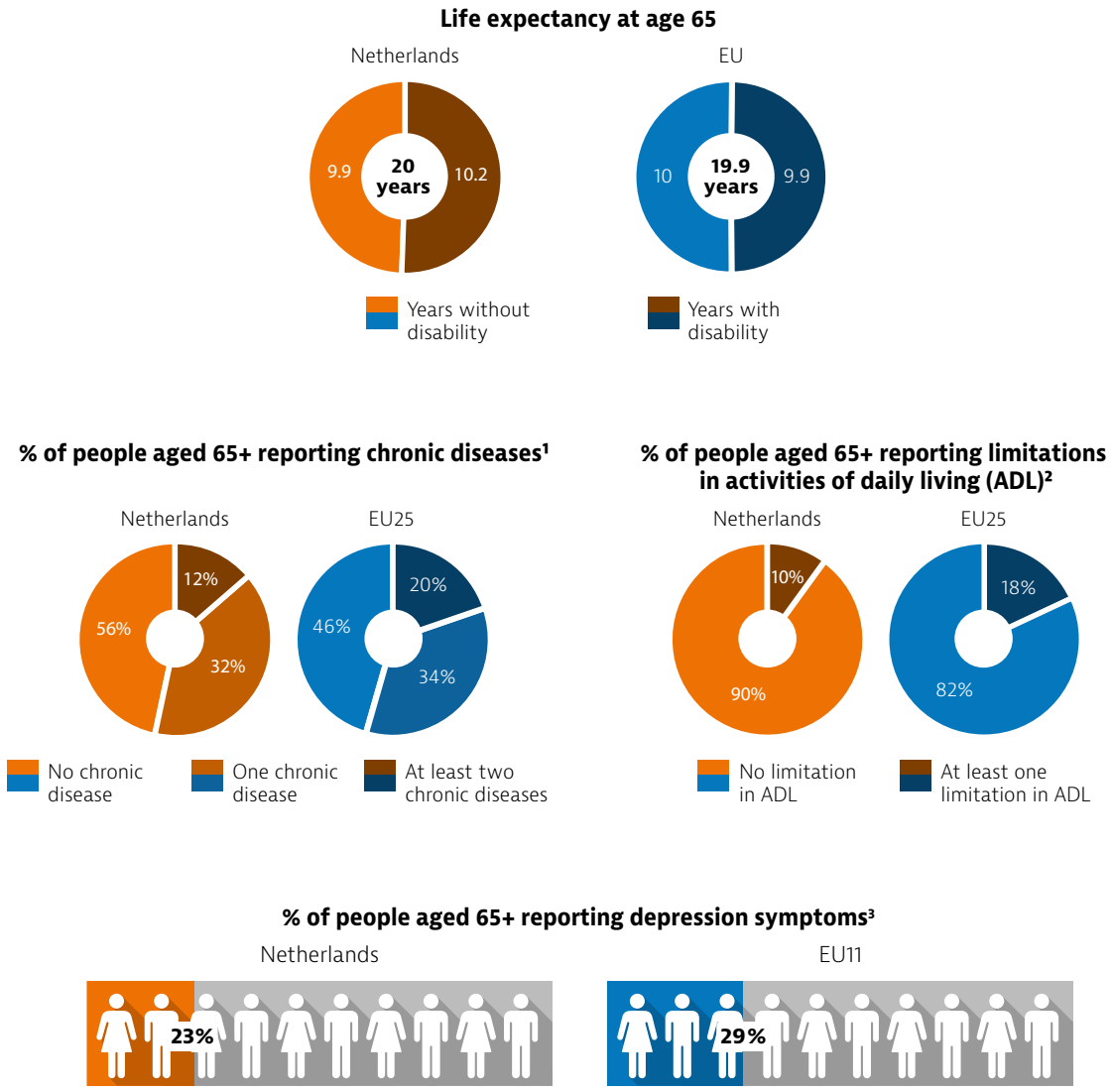
Note: The size of the bubbles is proportional to the mortality rates in 2016. The increase in mortality rates from Alzheimer's disease is largely due to changes in diagnostic and death registration practices.
Source: Eurostat Database.

Women live a greater portion of their lives after age 65 with disabilities

Due to rising life expectancy, a fertility rate below replacement level, as well as the ageing baby-boom generation, the share of people aged 65 and over has grown from 13.5 % in 2000, to 18.4 % in 2017. In 2017, people in the Netherlands at age 65 could expect to live another 20 years, about the same as the EU average (Figure 6). Around half of this additional time is lived with some health problems and disabilities. There is no gender disparity in the number of healthy life years[1] after 65, since women, while living longer, spend a greater portion of their remaining life years living with chronic diseases or disabilities. Overall, 44 % of Dutch people aged 65 and over reported having at least one chronic disease, considerably less than the EU average (54 %). Similarly, only 10 % in this age group reported having limitations in basic activities of daily living, such as dressing and showering, which is almost half the rate observed across the EU (18 %).

1: *'Healthy life years' measures the number of years that people can expect to live free of disability at different ages.*

Figure 6. Fewer people in the Netherlands report having chronic diseases than the EU average



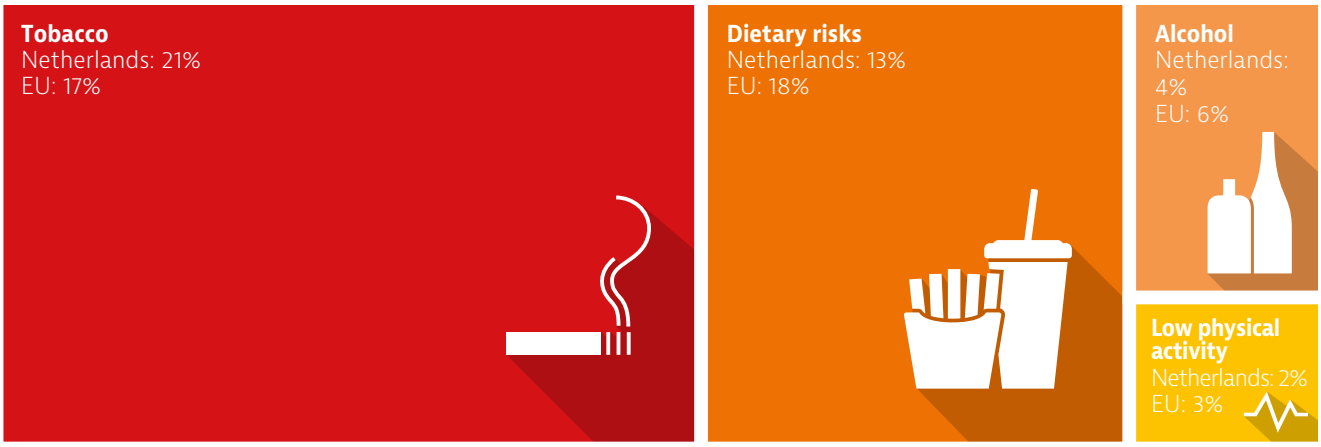
Note: 1. Chronic diseases include heart attack, stroke, diabetes, Parkinson disease, Alzheimer's disease and rheumatoid arthritis or ostheoarthitis. 2. Basic activities of daily living include dressing, walking across a room, bathing or showering, eating, getting in or out of bed and using the toilet. 3. People are considered to have depression symptoms if they report more than three depression symptoms (out of 12 possible variables).
Source: Eurostat Database for life expectancy and healthy life years (data for 2017); SHARE survey for other indicators (data refer to 2015).

3 Risk factors

Behavioural risk factors account for more than one third of all deaths

Estimates show that more than one third (36 %) of all deaths in the Netherlands can be attributed to behavioural risk factors, such as smoking, dietary risks, alcohol consumption and low physical activity (Figure 7). This is below the average of the EU (39 %). One in five deaths in 2017 could be attributed to tobacco consumption (including direct and second-hand smoking), which is higher than the EU average (21 % compared to 17 %). The second major risk factor is dietary risks (including low fruit and vegetable intake, and high sugar and salt consumption), which were responsible for an estimated 13 % of deaths which is well below the EU average (18 %). About 4 % of deaths were associated with alcohol consumption, and 2 % of deaths were related to low physical activity.

Figure 7. Behavioural risk factors, particularly tobacco consumption, contribute substantially to mortality in the Netherlands



Note: The overall number of deaths related to these risk factors (55 000) is lower than the sum of each taken individually (60 000) because the same death can be attributed to more than one factor. Dietary risks include 14 components, such as low fruit and vegetable consumption and high sugar-sweetened beverage and salt consumption.
Source: IHME (2018), Global Health Data Exchange (estimates refer to 2017).

Adult smoking has led to comparably high lung cancer mortality among women

Adult smoking rates have declined following the introduction of smoke-free working environments and other policy changes (Section 5.1), and are below the EU average. In the early 2000s, the Netherlands, along with the United Kingdom, Denmark and Norway, reported the highest smoking prevalence among women in the EU. While an impressive decline has been observed since then, the pace of reduction in the Netherlands has been lagging, and 17 % of Dutch women still smoked regularly in 2014, compared to 16 % in Denmark and 13 % in Norway and the United Kingdom. Furthermore, mortality from lung cancer among women is still rising in contrast to that of men. This is mostly due to the legacy of high smoking rates in previous generations, which peaked later in women than in men. On a more positive note, the overall consumption of alcohol among adults has declined by about 20 % since 2000 and is now lower than in most other EU countries.

Smoking among teenagers remains a concern despite improvements

In 2015, about one fifth of 15- to 16-year-olds in the Netherlands reported smoking cigarettes in the past month, a significant decline from 2011, when it was about 30 %. Although smoking rates are below the EU average, they continue to be higher than in the best performing countries. Additionally, about one in six 15-year-olds in the Netherlands reported heavy alcohol consumption (repeated drunkenness) in 2013-2014. This is well below the EU average and a sharp drop among boys from 35.3 % in 2001-2002 to 17 % in 2013-2014 is notable.

Overweight and obesity rates are slowly rising

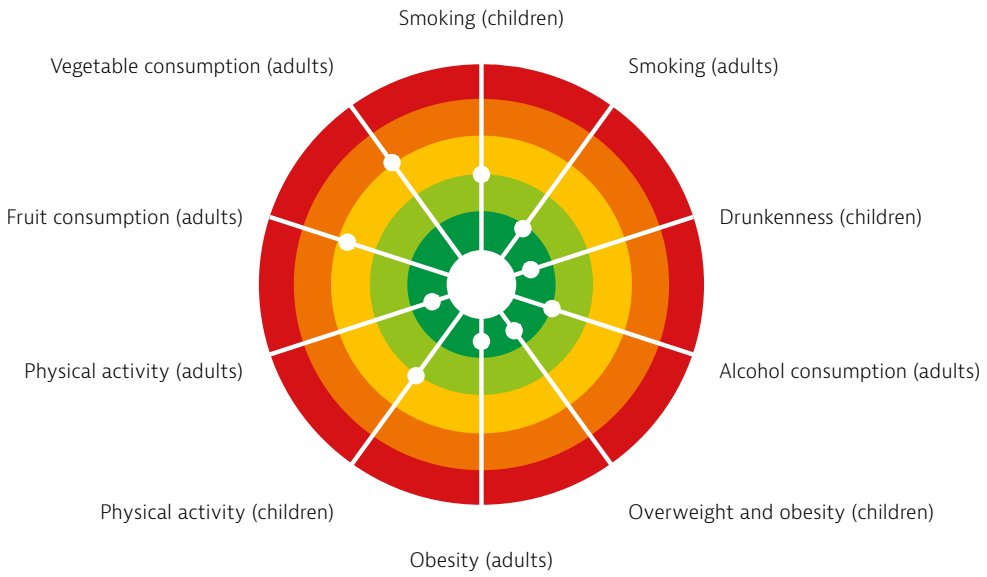
Overweight and obesity rates among teenagers and adults are lower in the Netherlands than in most EU countries (Figure 8), but have been slowly rising. More than one in eight adults (13 %) in the country were obese in 2017, up from 10 % in 2002. These trends are

cause for concern given the implications for long-term health relating to these conditions. For example, they carry a significant risk for diabetes, cardiovascular diseases and several different cancers, highlighting the need to increase efforts to change dietary habits among both children and adults. In fact, more than four out of ten adults in the Netherlands report eating less than one portion of fruit or vegetables per day, a higher proportion than in the EU.

Physical activity among teenagers is relatively low

While most adults in the Netherlands report at least moderate physical activity, this is not the case among 15-year-olds (Figure 8). Only about 17 % of Dutch teenagers report engaging in moderate physical activity on a daily basis, with a lower rate among girls. Only 12 % of girls reported doing at least moderate activity each day in 2013–14, compared to 22 % among boys.

Figure 8. The Netherlands compares well with other EU countries on many risk factors, but less so on fruit and vegetable consumption



Note: The closer the dot is to the centre, the better the country performs compared to other EU countries. No country is in the white 'target area' as there is room for progress in all countries in all areas.
Source: OECD calculations based on ESPAD survey 2015 and HBSC survey 2013–14 for children indicators; and EU-SILC 2017, EHIS 2014 and OECD Health Statistics 2019 for adults indicators.

Inequalities in risk factors persist according to education and income

In 2014, 23 % of adults who had not completed their secondary education smoked daily, compared to only 11 % among those with tertiary education. In the EU these averages are 20 % and 13 % respectively. Similarly, 16 % of people without a secondary education were obese, compared to 8 % among those with a higher education, compared to 16 % and 12 % in the EU. The higher prevalence of risk factors among socially disadvantaged groups contributes to inequalities in health and life expectancy (Section 2). Policies seeking to reduce socioeconomic inequalities in health at the individual and population level have been on the agenda in the Netherlands since the 1980s. Recent initiatives seek to explicitly address inequalities at the local level, with one example being the national programme Health in the City (2014), which is part of the National Prevention Programme (Section 5.1).

4 The health system

The health system features a mix of competitive insurance for curative care, a single payer system for long-term care and local tax-funded social care

The Dutch government is responsible for the regulation and governance of three schemes that together provide broad universal coverage. The government also sets the benefit package and available resources, and has tools to intervene in the case of overspending. The first scheme is a social insurance system for curative care that is carried out by competing private health insurers. It was introduced in 2006, and mandates all residents to purchase insurance policies that cover a defined benefit package. Insurers must accept all applicants and are expected to contract with providers based on quality and price. It is the largest scheme, covering all specialist care, primary care, pharmaceuticals and medical aids, mental health, some allied care services, and community nursing.

The second scheme is a single payer social insurance system for long-term care, which is carried out by the regionally dominant curative care insurer. The third is a social care scheme funded from tax and implemented by the municipalities (Box 1). There also exists a large Voluntary Health Insurance (VHI) market, where curative care insurers may offer policies to cover services outside of the benefit package.

The growth in health spending has been levelling off

The Netherlands is no longer one of the frontrunners in health spending in Europe, with Norway, Germany, Austria, and Sweden spending more per capita (Figure 9). In 2017, 10.1 % of GDP was devoted to health, slightly above the EU average of 9.8 %. This translates to EUR 3 791 per person (adjusted for differences in purchasing power), well above the EU average of EUR 2 884. Expenditure growth has levelled off since 2012 after the introduction of a reform package that increased financial risk for insurers and providers, and raised out-of-pocket (OOP) payments. In addition, several agreements with stakeholders have been made that aim to keep spending growth within predefined levels.

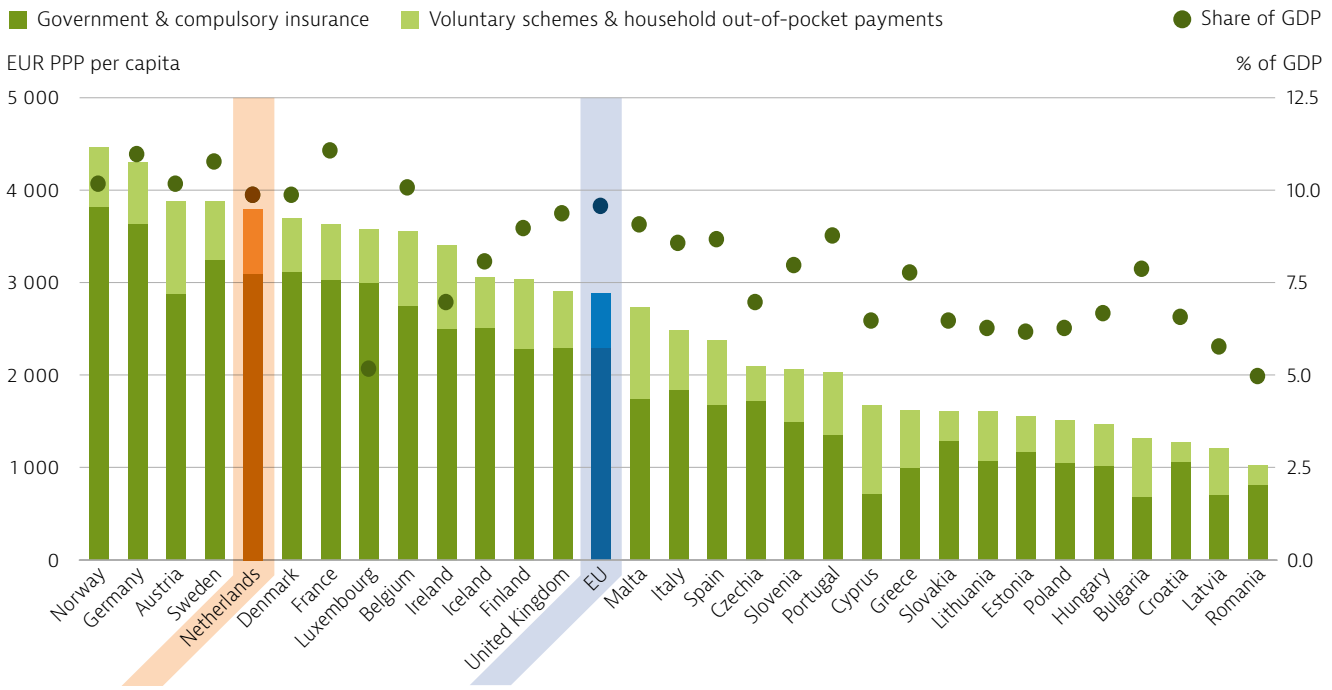
Out-of-pocket spending stands below the EU average

Following the abolition of the private insurance scheme in 2006, public expenditure (government spending and compulsory insurance) increased from about two thirds (68.4 %) of health spending in 2005 to 83.8 % in 2006, before falling slightly to 81.5 % in 2017. This remains slightly above the EU average of 79.3 %. OOP spending is comparatively low at 11.1 % of current health expenditure in 2017, compared to an EU average of 15.8 %. OOP payments are mainly due to cost-sharing, although general practitioner (GP) care, maternal care and care from district nurses remain free at the point of delivery. A comparably large VHI sector (5.9 % of health spending compared to 3.6 % in the EU in 2017) also helps keep OOP costs down (Section 5.2).

Box 1. The long-term care system was reformed to make it sustainable and keep people living at home

Over the years, the Dutch long-term care system had grown to be almost as big as the curative scheme by covering services as varied as personal budgets, home cleaning and residential care. In 2007, certain social care services, such as home cleaning, were redistributed to municipalities under the Social Support Act. A much larger reform in 2015 created a new Long-term Care Act and shifted most of the remaining outpatient responsibilities to either municipalities or insurers, while providing 24/7 care through nursing homes, homes for the disabled, in-kind provision at home for people who need 24/7 care but prefer to stay at home and, to a lesser extent, mental health clinics. The municipalities have become responsible for social care, which aims to help people to keep living at home ('ageing in place') and enable them to fully participate in society. Social care includes house-keeping, help with daily activities, and sheltered housing. The health care insurers have assumed responsibility for nursing services provided by district nurses, which are now covered under the Health Insurance Act.

Figure 9. Health spending is above the EU average

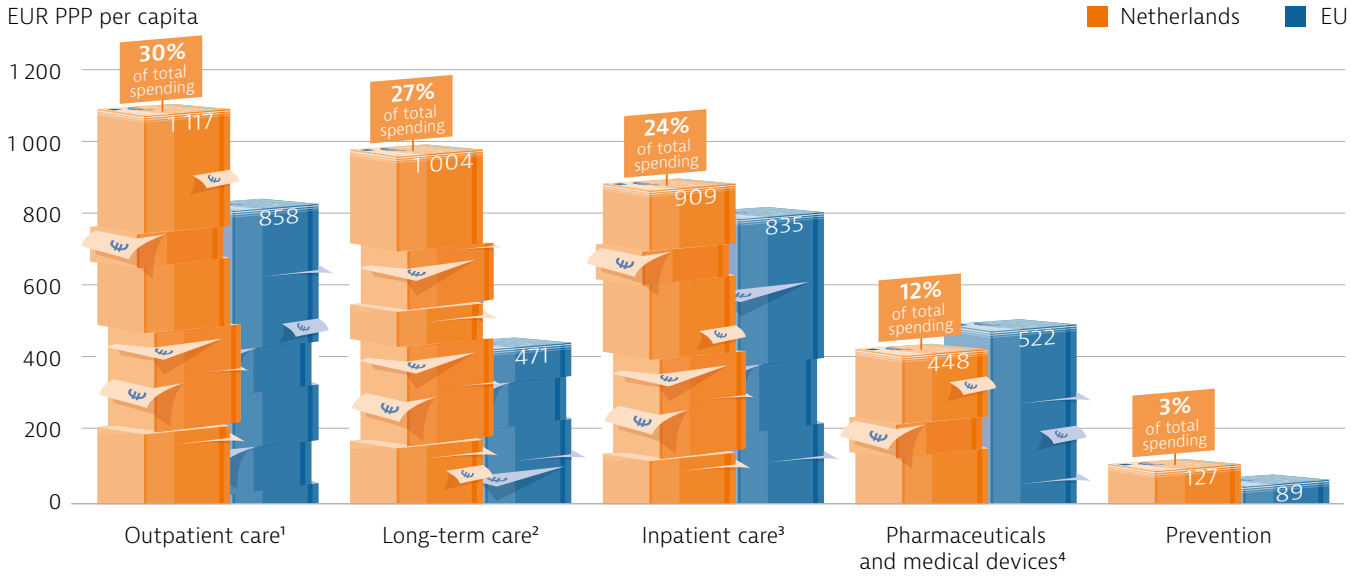


Source: OECD Health Statistics 2019 (data refer to 2017).

High overall spending primarily relates to a comparatively large long-term care sector

Looking at the pattern of spending, the Netherlands spends above the EU average in every category apart from pharmaceuticals and medical devices (Figure 10). The high overall spending is primarily due to a comparatively large long-term care sector, which absorbs more than double the EU average (Section 5.3). Spending on pharmaceuticals and medical devices is well below the EU average and reflects a long history of controlling pharmaceutical prices and volumes (Section 5.3). The Netherlands has among the highest spending on prevention at EUR 127 per person, compared to an average of EUR 89 in the EU.

Figure 10. Spending on long-term care is more than double the EU average



Note: Administration costs are not included. 1. Includes home care; 2. Includes only the health component; 3. Includes curative-rehabilitative care in hospital and other settings; 4. Includes only the outpatient market.
Source: OECD Health Statistics 2019; Eurostat Database (data refer to 2017).

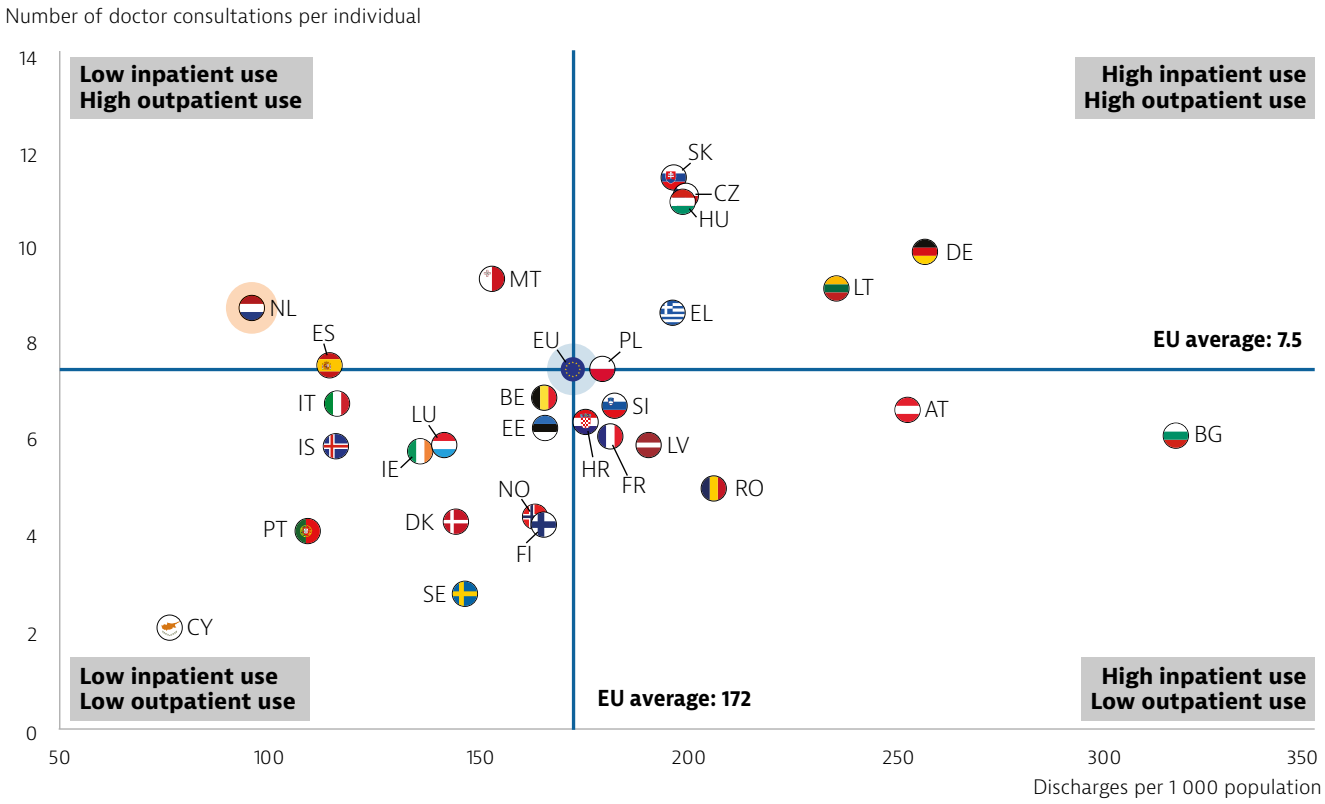
Despite extensive human resource planning, nursing shortages and gaps in the primary care workforce are emerging

The number of physicians has risen slowly in recent years, and at 3.6 physicians per 1 000 population in 2017 was equal to the EU average, while the number of nurses (10.9 per 1 000) is well above the EU average (8.5). With close to 80 % of workers on a permanent contract, the health sector provides stable, secure and often relatively well-paid jobs (van de Berg and Jettinghoff, 2018). The sector is also at the forefront of task shifting and advanced nursing practices (Box 2), creating a more attractive work environment. Less favourably, despite workforce forecasting and careful planning of educational capacity, shortages are emerging in dental care, specialised nursing, long-term and youth care, as well as primary care (Section 5.3).

Strong primary care keeps people from being admitted to hospitals

Health services are overwhelmingly provided by private non-profit providers, and most physicians are self-employed. Public health services are mainly the responsibility of the municipalities and include health promotion, screening, vaccination and youth health care (Section 5.1). The Netherlands operates a strict gatekeeper system. Patients require a referral from a GP to visit hospital and specialist care. This has led to a comparatively high numbers of outpatient contacts, but also to comparatively low numbers of hospital discharges, suggesting that strong primary care manages to keep people out of hospitals (Figure 11). There are currently several pilot projects of integrated care programmes for patients with multiple chronic diseases (e.g. for frail older people). Both long-term care and mental care services are increasingly provided in outpatient settings to respond to historically high institutionalisation rates.

Figure 11. The Netherlands is one of only few countries that combines relatively high outpatient use with low inpatient use



Note: Data for doctor consultations are estimated for Greece and Malta.
Source: Eurostat Database; OECD Health Statistics (data refer to 2016 or the nearest year).

Box 2. Changes in the approach to care delivery has led to the introduction of new primary care professions

Skill mix innovation plays an important role in health care provision in the Netherlands. This is due to an ongoing shift in health care delivery from a medical model to a more patient-oriented model, which is characterised by deinstitutionalisation and shifting health services from secondary to primary care settings. In response, new training curricula and professions have emerged to address competency gaps and challenges in continuity of care, including physician assistants and nurse practitioners. Granted full practice authority in 2012 and codified in law in 2018, nurse practitioners are empowered to prescribe all medicines within their competence and perform low-risk surgical procedures, among other specified services.

Another important skill mix innovation is the introduction of practice nurse in general practices. In 2014, mental health care was restructured to transfer services from specialised to lower-cost primary care. This reform outlined new task shifting, reorganised care pathways, and demanded new knowledge and competencies in primary care. As GPs assumed a greater gatekeeping function in mental health care, GP practices adapted to new responsibilities, leading to the introduction of the mental health practice nurse. This role has been rapidly adopted, with 88.1 % of GP practices employing mental health practice nurses in 2017.

5 Performance of the health system

5.1. Effectiveness

Low preventable mortality suggests the Dutch health care system provides effective public health interventions

Mortality from preventable causes compares favourably with the EU as a whole (134 compared to 161 per 100 000) (Figure 12). The main cause of preventable mortality is lung cancer, which accounts for more than 30 % of preventable deaths. Mortality from alcohol-related causes is below the EU average and so is alcohol consumption (Section 3). The government has implemented several public health policies aiming to minimise the impact of behavioural risk factors and social determinants of health. Smoking was banned in offices in 2004, and in cafés and restaurants in 2008, while alcohol control measures implemented in 2013 focused on reducing alcohol use among teenagers.

In 2011, a national policy paper ('Health Nearby') identified high body mass index, smoking and harmful alcohol use as the most prevalent behavioural risk factors in the Netherlands and explored policies to tackle their negative impact on people's health. The comprehensive National Prevention Programme targets all these areas and aims to slow growth in chronic diseases while reducing social disparities in health outcomes.

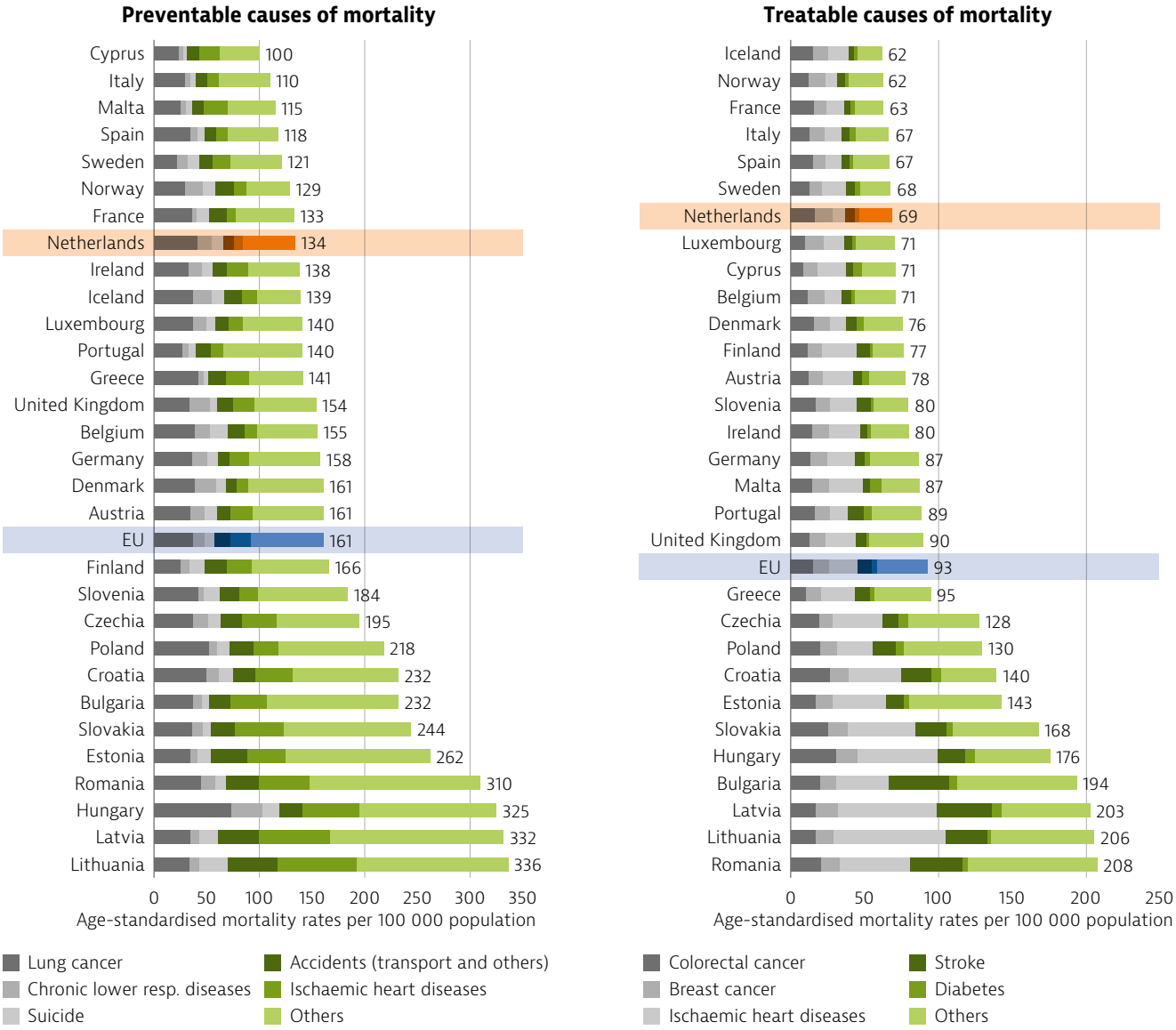
Mortality from treatable causes is among the lowest in the EU, pointing to effective health care interventions

The Netherlands is among the best performing countries in terms of mortality from treatable causes that can mainly be avoided through health care interventions (Figure 12). Colorectal cancer and breast cancer accounted for more than 40 % of deaths from treatable causes (2016), with rates for both above the EU average. Mortality from other treatable causes, such as IHD, stroke and diabetes, were among the lowest in the EU.

Vaccine hesitancy and lack of awareness are barriers to effective immunisation coverage

Childhood vaccination coverage against measles, hepatitis B and diphtheria, tetanus and polio have declined slightly in recent years and are now below the EU average and the WHO recommended target of 95 %, (Figure 13). In an effort to increase uptake, a number of activities are taking place, such as allowing more time for professionals to discuss parents' worries concerning vaccinations. Although well above the EU average, influenza immunisation is also decreasing among older people and remains below the WHO recommended target of 75 %. The main barriers to vaccine uptake are uncertainty about effectiveness and side effects of the vaccine, and the perceived low risk of contracting or dying from influenza. Childhood vaccinations are available free of charge, and influenza vaccinations are free for certain groups at high risk of complications (e.g. people over 60, children and adults with certain chronic conditions).

Figure 12. The Netherlands performs better than the EU average in terms of mortality from preventable and treatable causes



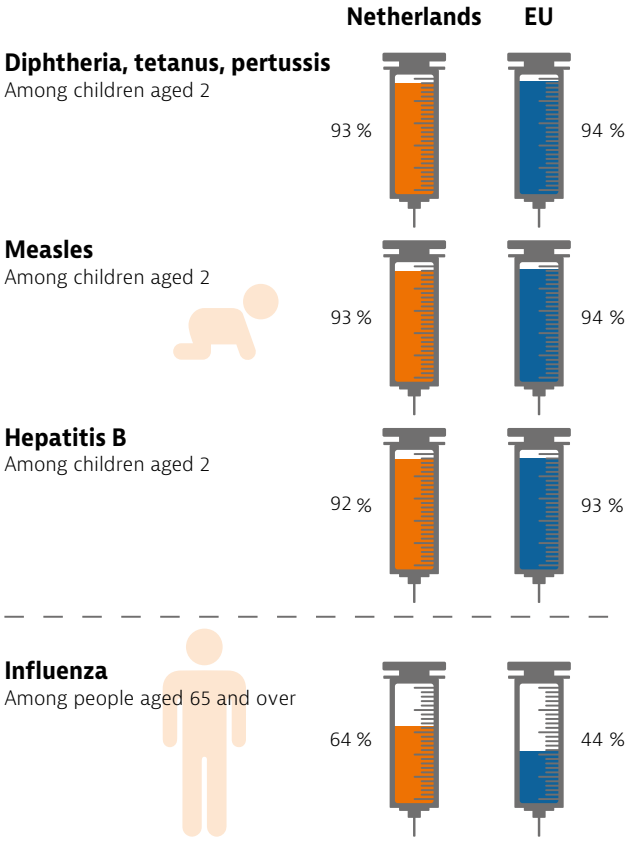
Note: Preventable mortality is defined as death that can be mainly avoided through public health and primary prevention interventions. Treatable (or amenable) mortality is defined as death that can be mainly avoided through health care interventions, including screening and treatment. Both indicators refer to premature mortality (under age 75). The data are based on the revised OECD/Eurostat lists.
Source: Eurostat Database (data refer to 2016).

Participation in a new screening programme for colorectal cancer has been very high

Population screening programmes are available for cervical cancer, breast cancer and colorectal cancer. Cervical cancer screening participation in the Netherlands (57 %) is below the EU average (66 %), while breast cancer screening participation is higher (78 % compared to 61 %). The relatively new colorectal cancer screening programme (2014) covers all individuals between 55 and 75 years of age. A recent programme evaluation found that participation rates (72 %) were above expectations, with 3.9 million people sending in self-screening tests between 2014 and 2017, contributing to higher than anticipated detection of new colorectal cancer cases (National Institute for Public Health and the Environment, 2019). It will take more time for the screening programme to result in improved survival outcomes and lower overall rates of mortality from treatable causes.

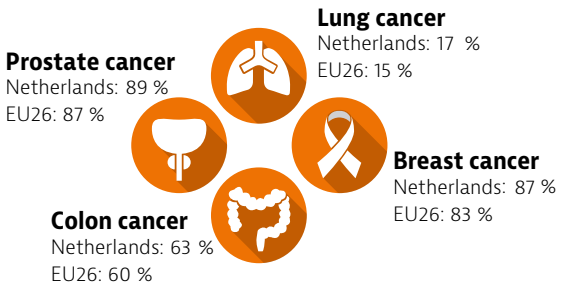
The five-year cancer survival rates for the four cancers with screening programmes in place have improved over the last decade and are all above the EU average (Figure 14).

Figure 13. Childhood vaccination rates have fallen slightly below the EU averages, but the influenza immunisation rate is still significantly higher



Note: Data refer to the third dose for diphtheria, tetanus, pertussis and hepatitis B, and the first dose for measles.
Source: WHO/UNICEF Global Health Observatory Data Repository for children (data refer to 2018); OECD Health Statistics 2019 and Eurostat Database for people aged 65 and over (data refer to 2017 or nearest year).

Figure 14. The Netherlands performs better than the EU average for five-year survival rate for prostate, lung, breast and colorectal cancer

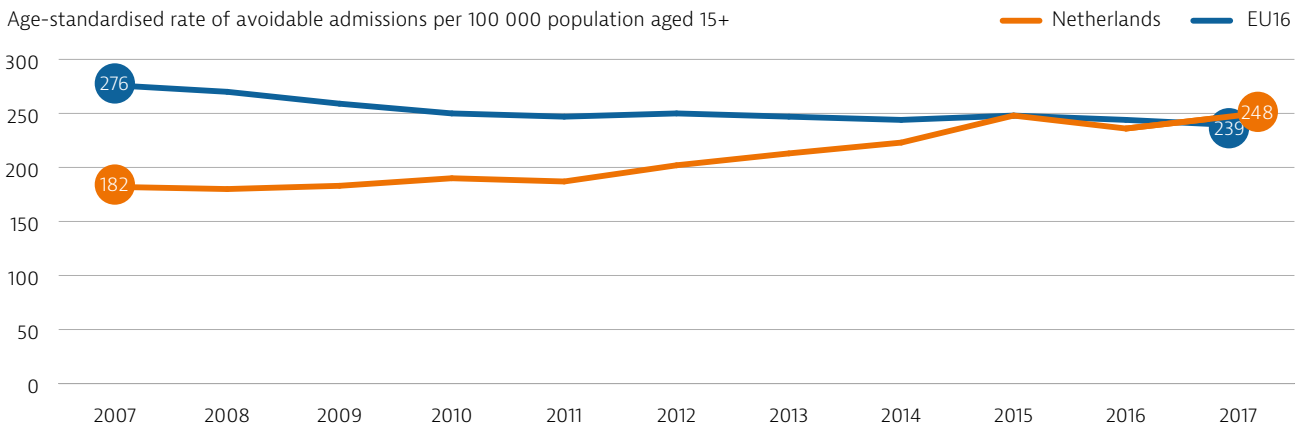


Note: Data refer to people diagnosed between 2010 and 2014.
Source: CONCORD programme, London School of Hygiene and Tropical Medicine.

Despite a strong primary care system, avoidable admissions for asthma and COPD are increasing

The Netherlands has a low number of avoidable hospitalisations, suggesting that primary care and outpatient secondary care help to prevent serious symptoms from developing. The number of avoidable admissions for congestive heart failure and diabetes are among the lowest in the EU. Avoidable admissions for asthma and COPD have increased since 2007 and are now above the EU average (Figure 15). This negative trend has been acknowledged and has led to the development of a dedicated national action programme on lung diseases (2014-2017), including a new guideline that is being implemented in several regions. Since 2007, the Netherlands has attempted to reduce fragmentation of chronic care provision for diabetes, COPD and cardiovascular disease through the use bundled payments, whereby a single payment covers all services for a chronic patient delivered by multiple providers.

Figure 15. Rates of avoidable admissions for asthma and COPD have increased by around 36 % since 2007



Source: OECD Health Statistics 2019.

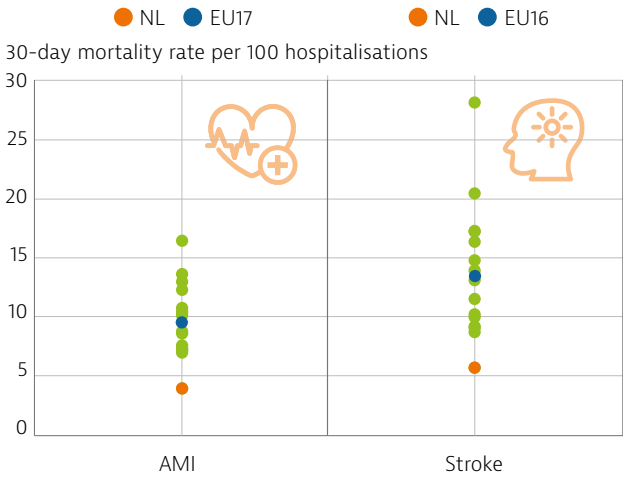
Quality of care is improving for heart attack and stroke

The 30-day mortality rate after acute myocardial infarction (heart attack) and stroke are good indicators of acute care quality. Between 2000 and 2016, the 30-day mortality after admission for heart attack and stroke in the Netherlands decreased dramatically and is now the lowest among EU countries with comparable data available (Figure 16).

Several new initiatives aim to improve quality of the Dutch health system

Insurers are supposed to play a key role in improving quality through their contracting practices. Yet in practice, volume and prices are emphasised more in their contracting decisions, partly due to a lack of quality indicators. A key policy priority is therefore to develop reliable and meaningful quality indicators. The government has set an ambitious policy goal to make 50 % of the burden of disease in medical specialist care subject to outcome indicators, which can be used to improve care, enhance shared decision making and ultimately to guide contracting with providers. In addition, insurers are increasingly experimenting with longer-term contracts centred on value-based care, where providers and professionals can define key performance indicators for quality of care and delivery innovations for which they are accountable, as opposed to a set of indicators and services defined by the insurers. These initiatives are still small scale and need careful monitoring. Other quality improvement activities rely on efforts by the medical professions or government. For example, a new long-term care quality framework aims to improve the quality of care in nursing homes (Box 3).

Figure 16. The 30-day mortality rate after heart attack and stroke is the best in the EU



Note: Figures are based on patient data and have been age-sex standardised to the 2010 OECD population aged 45+ admitted to hospital for AMI and ischaemic stroke.
Source: OECD Health Statistics 2019 (data refer to 2017 or nearest year).

5.2. Accessibility

The Dutch health system provides very good access, with virtually no difference among income groups

Government regulation guarantees universal and equal access to quality care, ensuring that all residents can afford coverage. The Dutch system covers about 99.9 % of the population, and the share of the population reporting unmet medical needs for medical examination or treatment is the lowest in the EU, with little difference between income groups (Figure 17).[2]

The benefit package is broad but Voluntary Health Insurance plays a critical role in dental care and physiotherapy coverage

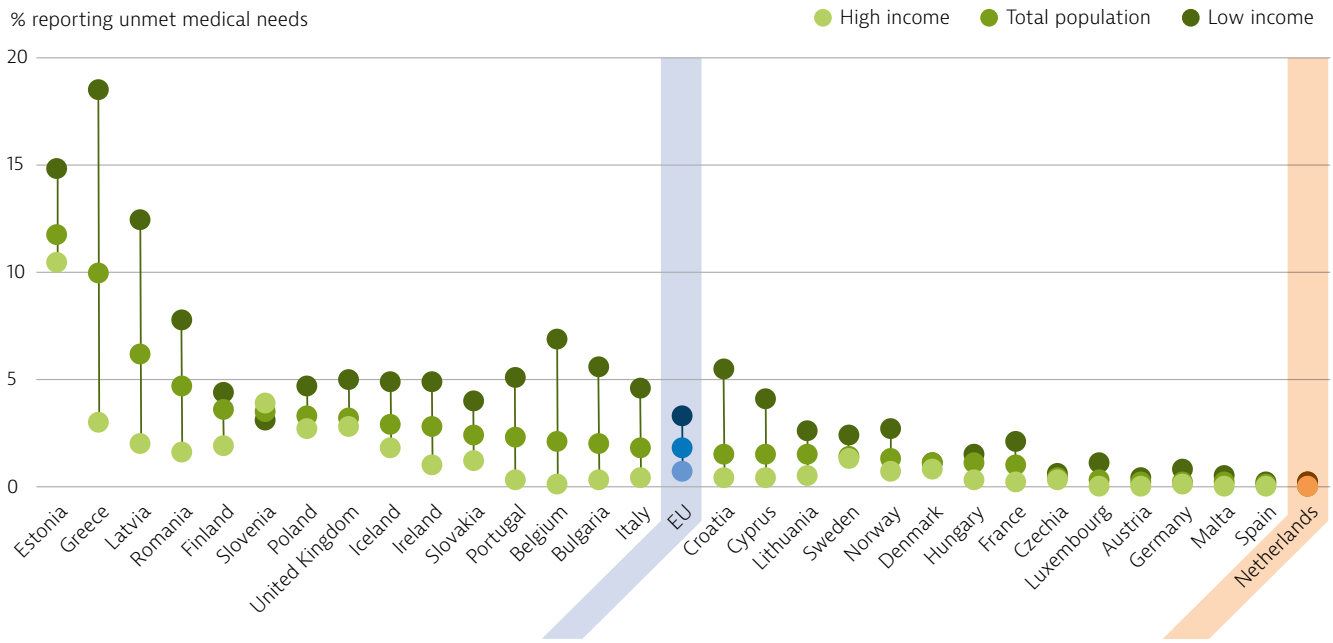
The basic package is comprehensive and includes, among other things, primary care, outpatient specialist care, hospital care, pregnancy cover (prenatal, postnatal, as well as birth), in vitro fertilisation (IVF) (maximum of three cycles), physiotherapy for chronic illness, mental health treatment, and ambulance transport. The main excluded services are dental care for adults and some allied health care (e.g. physiotherapy). Many purchase VHI to cover these services, with some 83.7 % of the population purchasing supplementary VHI in 2018, primarily to cover dental care and physiotherapy (NZA, 2018).

Out-of-pocket spending is low but continues to be a topic of debate

OOP expenditure has increased over the past decade, from 8.3 % in 2006 to 11.1 % in 2017, but growth has fallen since 2014. It stands well below the EU average of 15.8 % (Figure 18). The rise was mostly caused by a rapid increase in the mandatory deductible[3], from EUR 150 in 2008 to EUR 385 in 2016, after which it remained stable. The deductible does not apply to

2: A separate survey (the European Health Interview) which targeted people in need of care (as opposed to the population in general) shows that about 3 % of those seeking care reported some unmet medical needs for financial reasons in 2014. The rate was higher among people on low incomes (10 %) than among people with high incomes (only 1 %). Similarly, 4 % of the population with dental care needs reported some unmet needs in 2014, with the proportion much higher among low-income groups (12 %) than high-income groups (1 %).
3: A deductible is a fixed amount of incurred health care costs to be paid by the user before the insurer begins to reimburse for services.

Figure 17. The Dutch population reports the lowest level of unmet needs in the EU



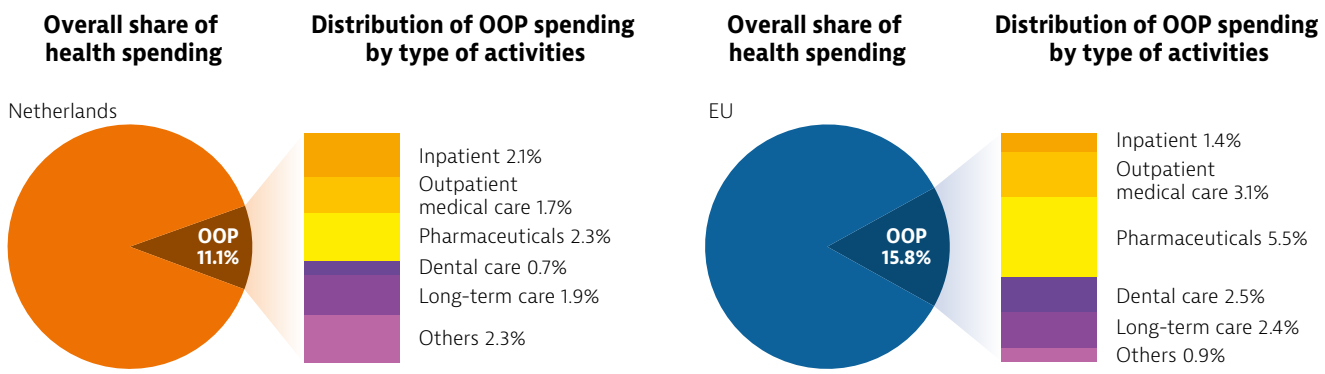
Note: Data refer to unmet needs for a medical examination or treatment due to costs, distance to travel or waiting times. Caution is required in comparing the data across countries as there are some variations in the survey instrument used. Data for the category high income is estimated.
Source: Eurostat Database, based on EU-SILC (data refer to 2017).

GP care, maternity care, district nursing, and care for children under the age of 18, which are all available without cost-sharing.

Pharmaceuticals, inpatient and long-term care are the main categories of OOP spending (Figure 18). Pharmaceutical reimbursements are based on internal reference pricing and insurers may list preferred medicines, so that patients who use a different brand may have to pay the difference in costs or the total amount. Since 2019, OOP spending on pharmaceuticals is capped at EUR 250 per year. For residential long-term care, income-dependent cost-sharing is applicable; the rate was lowered in 2018, and ranges from 0 to EUR 2 365 per month (2019). Furthermore, there are cash reimbursements for health care costs incurred by low-income chronic patients under the Social Support Act and some municipalities negotiate insurance policies with generous benefits targeted at low-income groups.

Although the system seems to protect individuals from financial hardship and OOP payments are comparably low, OOP payments are still subject to public debate. There are vulnerable people for whom the deductible is a substantial amount of money. If these individuals also live in a municipality with less generous social care services, OOP payments can accumulate through direct payments made to obtain services that are not or only partly covered. Although the deductible was supposed to grow in line with other items in the health budget, the coalition that entered into power in 2017 decided to keep the deductible at its current level (EUR 385), while some opposition parties want to abolish it entirely.

Figure 18. Pharmaceuticals account for the highest share of out-of-pocket payments



Source: OECD Health Statistics 2019 (data refer to 2017).

Health care facilities are within easy reach

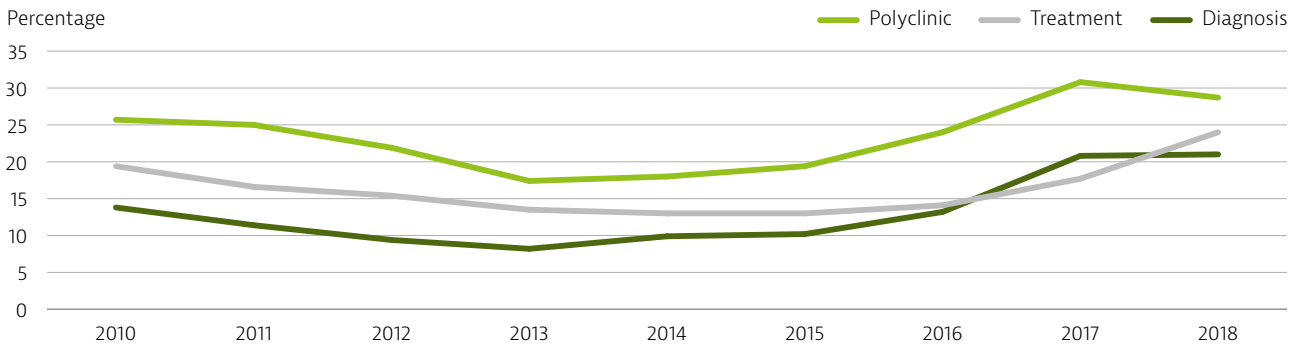
The Dutch health system maintains a dense network of providers, ensuring good geographical availability of services. In 2017, less than 0.15 % of the population had to travel more than 10 minutes by car to the nearest GP practice. Furthermore, 119 GP out-of-hours centres cover care outside office hours, which 99.9 % of the population can reach by car within 30 minutes (2017). There were 120 hospital locations, which more than 99 % of the population can reach within 30 minutes by car (2018) (Volksgezondheidenzorg, 2019). The impact of regulated competition has arguably accelerated the number of mergers between hospitals, but this has not yet affected the number of locations for accessing health care.

Reimbursement for non-contracted providers is set at a minimum of 75 %, which could result in financial barriers to access for patients that purchase cheaper ('budget') insurance policies. Insurers are therefore required to inform their clients about the financial consequences of visiting a non-contracted provider.

Waiting times are an increasing concern

Since 2000, targets for waiting times have been set at four weeks for diagnosis and outpatient clinic visits and seven weeks for treatment for most types of illness or condition. Since 2013, hospital waiting times have increased and returned to historic levels (Figure 19). The average waiting times in outpatient departments, including allergology, gastroenterology, dental surgery, neurosurgery, rheumatology and ophthalmology all exceeded target levels in 2019. The waiting times for mental health diagnosis and treatment are even longer. In 2017, the government announced more funding to prioritise the reduction of waiting times for mental health services.

Figure 19. Hospital waiting times for treatment, diagnosis and polyclinics are rising again



Note: Percentage of hospital departments above the waiting time targets.
Source: Mediquest, RIVM, www.volksgezondheidenzorg.info

5.3. Resilience[4]

The system has been financially stable but increased spending will add pressure to the budget

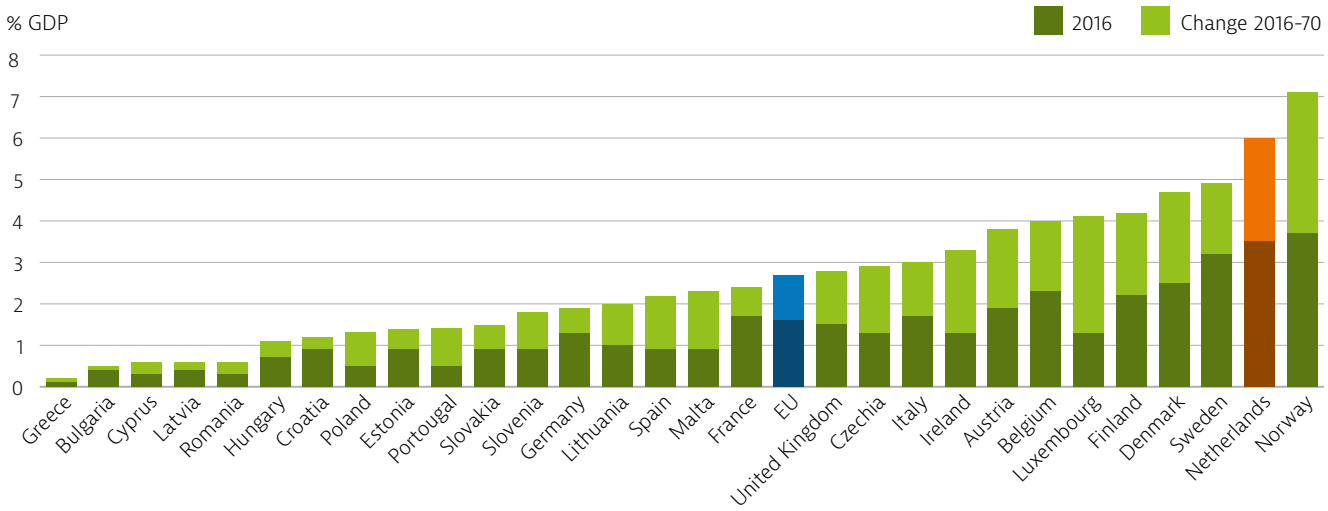
Health spending has been reined in through several cost containment measures (Section 4). However, the level of spending continues to be a political concern and is projected to increase due to population ageing and the corresponding rise in chronic conditions, as well as the introduction of high-cost technologies. This will also strongly impact the long-term care sector, where the Netherlands already reports the highest spending in the EU (Figure 20). Projections for long-term care spending suggest it will pose a medium fiscal sustainability risk in the long term (European Commission-EPC, 2018; Council of the European Union, 2019). The long-term care reform aims to contain spending, but the new quality framework for long-term care will put additional pressure on the budget (Box 3).

A new action plan should ensure the long-term stability of the workforce

Comprehensive workforce forecasting and planning mechanisms for physicians and nurses have not prevented shortages from emerging, with estimated vacancies reaching 140 000 in 2019 (Section 4). Virtually all hospitals, the mental health care sector, and social care services have difficulties finding personnel. Among GPs, the share of hard-to-fill vacancies has increased from 9 % in 2016 to 24 % in

4: Resilience refers to health systems' capacity to adapt effectively to changing environments, sudden shocks or crises.

Figure 20. Without changes, public spending on long-term care is projected to further increase



Note: The EU28 total is weighted by GDP.
Source: European Commission-EPC, 2018.

2018. As a result, waiting times have increased and health professionals are facing an increased workload and more stress (UWV, 2019). Acknowledging these issues, the ministry introduced an action plan called Working in Care ('Werken in de Zorg') in 2018, which contains a multi-pronged strategy to train and retain health professionals while making the work environment more attractive through skill mix innovations and less bureaucracy.

Box 3. A new quality framework for long-term care aims to improve care in nursing homes

Concerns have recently grown about the quality of care in nursing homes. In 2016, the health inspectorate published a list of 150 nursing homes where quality of care was deemed insufficient. In the same year, a civil initiative to promote the quality of nursing home care was endorsed by parliament, which among other demands stated there should be at least two care providers per eight residents. The National Healthcare Institute (NHI) was commissioned to develop a quality framework that defined new standards with regard to attention for patients, attendance, supervision and competences. The NHI is by law authorised to define good care quality, and the government is obliged to provide the financial means to provide care according to these standards. The new quality framework has significant consequences for the national health budget will increase the budget for nursing homes up to EUR 2.1 billion per year.

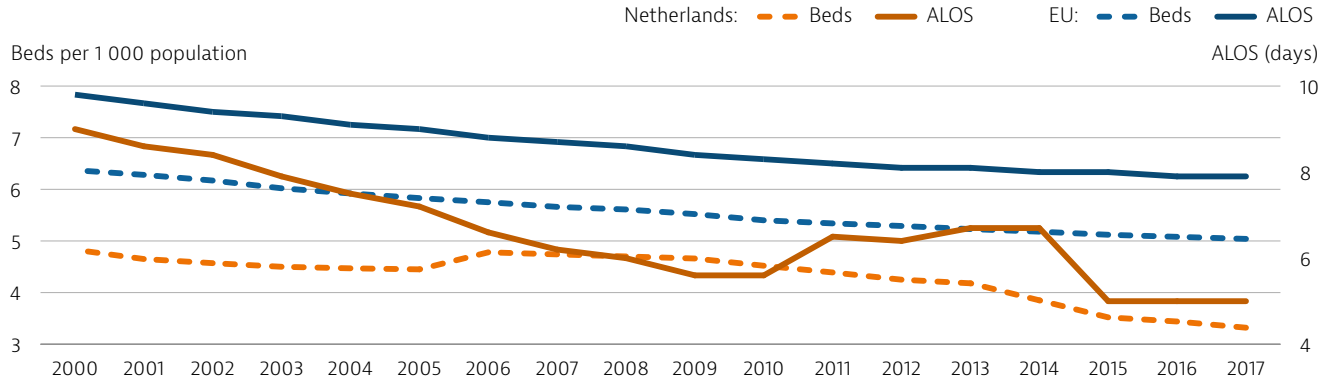
Misaligned incentives for long-term care could impact negatively on efficiency

The 2015 long-term care reform (Box 1) aimed to contain spending in the sector by shifting care delivery from institutions to private homes, but at the same time fragmented the system further. The new arrangements could impede efficiency and lead to a lack of coordination and skimping on quality if different care purchasers active in long-term care delivered at home (regional care offices, municipalities and health insurers) do not align their purchasing policies, and instead try to push responsibility for patients in need of long-term care onto each other (Alders & Schut, 2019). Furthermore, individuals only qualify for institutional care when they need 24 hours supervision, resulting in people with a substantial care burden living at home, placing pressure on the informal care system. This suggests there are implicit incentives within the system that need to be monitored and better aligned if needed.

Several indicators suggest that hospitals are efficient, but with further room to improve

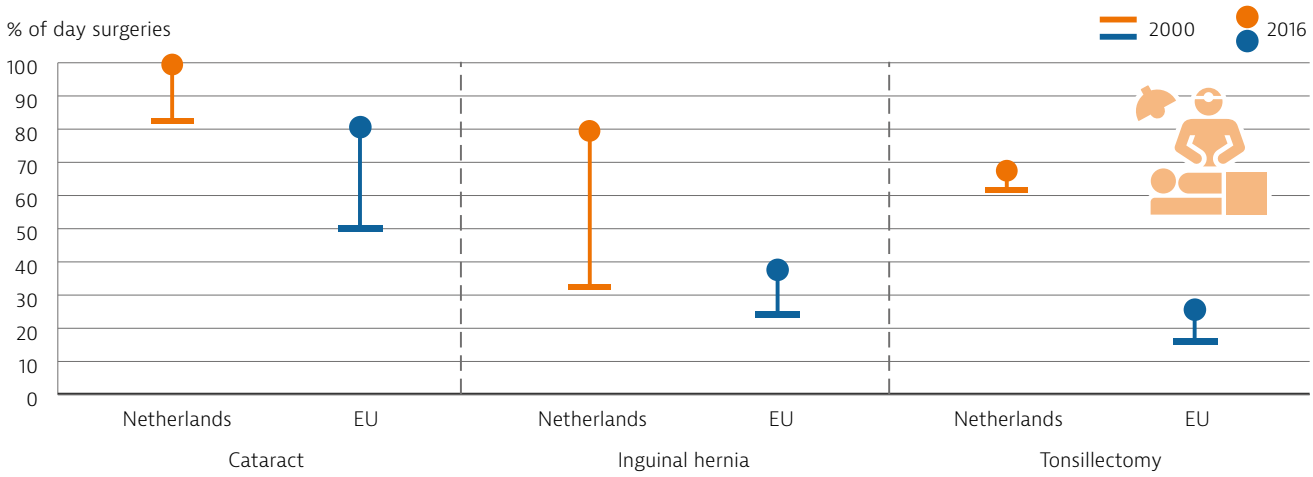
The total number of beds and discharges are below the EU average, as is the average length of stay (ALOS) in hospital, which suggests an efficient system (Figure 21). Furthermore, the Netherlands, like other countries such as Sweden and Norway, has recently made efforts to increase the use of intermediate care facilities and home-based care in order to minimise costly hospital readmissions and prolonged stays. Additionally, the adoption of day surgery is well above the EU average (Figure 22). In 2016, surgical procedures performed as day surgeries were 100 % for cataract cases (compared to 84 % in the EU) and 68 % for tonsillectomies (compared to 29 %), while

Figure 21. Numbers of beds and ALOS are below the EU averages



Source: Eurostat Database.

Figure 22. The share of day surgeries in the Netherlands is substantially higher than the EU average



Source: OECD Health Statistics 2018: Eurostat Database (data refer to 2000 and 2016, or nearest years).

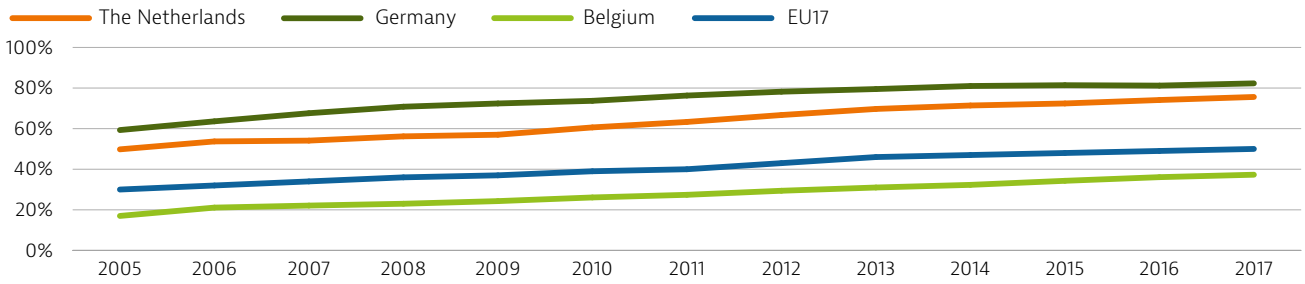
the number for inguinal hernias was almost double the EU average. However, bed occupancy rates that are below the EU average and variations in ALOS for a single diagnosis between hospitals suggest there is further room for efficiency gains (van de Vijsel, Heijink & Schipper, 2015).

Pharmaceutical policies have led to real efficiency increases

The decision to include pharmaceuticals in the benefit package is based on well-established health technology assessment (HTA) processes carried out by the NHI, while past pharmaceutical policies (direct pricing, and preferred medicines policies) have yielded notable efficiency improvements. Generic penetration is growing and comparatively high, with use of generics substitution encouraged unless otherwise indicated by the prescribing physician (Figure 23). Moreover, the Netherlands, together with Belgium, Luxembourg, Austria and Ireland, are members of the Beneluxa initiative, which aims to improve collaboration on pharmaceutical policy, including HTA.

New pharmaceuticals used in hospitals were until recently included in the basic benefit package without price negotiations. Since 2018, these are labelled 'in transit'. During this transit period, the NHI assesses the pharmaceutical and makes a recommendation to the Minister, who can then negotiate the price, before a decision is taken on whether or not the drug is included in the benefit package. The regulation applies to pharmaceuticals costing more than EUR 50 000 per treatment per year and more than EUR 10 million per year in total; or that cost more than EUR 40 million per year in total, irrespective of its price per treatment.

Figure 23. The volume of generics is above the EU average and has increased rapidly



Note: Data refer to the share of generics in volume.
Source: OECD Health Statistics 2019.

Governance seems effective and is supported by several watchdog agencies and advisory bodies

Governance of the Dutch health system is generally effective, with several watchdog agencies and advisory bodies aiding the Ministry of Health in overseeing long-standing system goals of quality, accessibility and affordability. The ministry can intervene when system goals are not met, as seen during the 2006 reform (e.g. clawing back overspending, adapting the diagnosis-related group [DRG] system), the sectoral agreements and its push to develop quality indicators.

The Dutch health system has lived through several recent reforms, which have placed demands on all stakeholders. On the whole these complex reforms were governed well and did not result in prolonged disruption. Many reform elements are still in progress (most notably the long-term care reform) or require fine-tuning as they continue to transform the system. Whether they will eventually lead to envisaged improvements in quality, affordability and sustainability to meet future demand will be proven over time.

Debate over the appropriate role of market mechanisms continues

The 2006 reform changed the role of government from direct controller of volumes and prices to rule-setting and overseeing a proper functioning of the markets. Insurers were supposed to act as quality-driven active purchasers and were given tools to selectively contract providers. More than a decade later considerable progress has been made, but the majority of hospital contracts have a one year duration and often lack agreements on quality of care or patient outcomes (Section 5.1). The Netherlands Council for Health and Society (RVS), an independent advisory body to the government, criticised current purchasing practices, arguing they have led to uniformity in care supply, low trust levels in insurers, high administrative costs, and limited care innovation and prevention. Several political parties including those in government have shifted their focus from competition in health care to achieving better care coordination and quality.

eHealth and data governance have room for improvement

Governance of eHealth and patient data, both needed to facilitate integration and introduce labour-saving technologies, is an area where the Netherlands has lagged behind (Thiel et al. 2018). Several initiatives aim to advance adoption of digital health solutions (Box 4), including a recent sectoral agreement (2017) between providers, patients, insurers and the Ministry of Health that foresees electronic exchange of information as a cornerstone of digital health transformation (Box 4) as well as plans to make data exchange mandatory.

Box 4. Several initiatives to transform digital health have yielded mixed results

In July 2014, the Dutch Ministry of Health, Welfare and Sport set three objectives to be achieved by 2019: a) guaranteeing direct access to medical information to 80 % of chronic patients; b) allowing 75 % of chronic patients and frail older people to independently perform self-measurements, in combination with remote data monitoring by a health care professional; and c) enabling everyone who receives care at home to communicate with their health care provider via video calls. So far, progress is mixed, but noteworthy initiatives include: eHealth4All, a programme aimed at people with low health literacy; a programme for diabetes patients with the aim to promote self-management capacity; and eMental Health, which promotes the use of e-consultations, e-appointments and e-intakes in mental care, and which is currently used by two out of three mental health care institutions.

Source: Nictiz, 2018.

6 Key findings

- Life expectancy in the Netherlands is almost one year higher than the EU average. Yet progress in life expectancy gains have slowed considerably since 2011, mainly due to a slowdown in mortality improvements among those aged over 85. Mortality rates from heart attack and stroke have declined substantially, but mortality from lung cancer and chronic obstructive pulmonary disease – linked to high rates of smoking in previous generations – is among the highest in the EU. Risk factors, including smoking and poor diet, account for a third of all deaths.

- Low mortality rates from preventable and treatable causes suggest the Dutch health system provides effective public health and health care interventions. Nevertheless, mortality from lung, colorectal and breast cancers is high, vaccination coverage is declining, avoidable admission rates for asthma and chronic obstructive pulmonary disease are slowly rising, and social inequalities persist. Several public health policies under the umbrella of the National Prevention Programme and screening programmes aim to tackle these issues, yet will take time to show results.

- Access to the health system is good, with virtually no differences in unmet needs across income groups. The system protects its citizens from financial hardship, while out-of-pocket spending is low. However, workforce shortages and waiting times have increased in recent years, potentially threatening accessibility. The government has responded with a workforce action plan, which hopes to train and retain more health professionals.

- The introduction of high-cost technologies, an ageing population, and the corresponding rise in chronic conditions will strain health budgets and challenge future sustainability. This will also affect the long-term care sector, which is already the largest in the EU. The 2015 reform tried to address this by shifting more responsibility to citizens; however, the new quality framework for long-term care will put additional pressure on the budget.

- Misaligned incentives in long-term care could negatively influence the efficiency of the system. The new arrangements for patients who need long-term care could hinder care coordination, if long-term care purchasers (regional care offices, municipalities and health insurers) do not align their purchasing policies but shift responsibility for long-term care onto each other. Moreover, lack of care coordination between these schemes for vulnerable groups such as frail older people may negatively affect quality of care. Monitoring and better aligning the implicit incentives of the system would ensure that access and quality are not compromised.

- Data governance is an area where large gains can be made. Until now, there has been no standardised electronic patient record and there still is room to scale up eHealth solutions. This has been acknowledged by the government, which has been taking a more active role in recent years. Among other things, a broad sectoral agreement has put improving data exchange and eHealth on the agenda, and progress will be keenly watched.

- The government sees competition and active purchasing by insurers as the main instrument for improving efficiency. Although insurers negotiate on price and volume, negotiation on quality and outcomes is limited. Nevertheless, there are some promising initiatives where long-term contracts are awarded that focus on innovation, appropriate care and eliminating waste. Scaling-up such initiatives could help transform the system from one focused on volumes and prices to one focused on quality and value.

Key Sources

Kroneman M et al. (2016), The Netherlands: Health System Review. *Health Systems in Transition*, 18(2): 1–239.

OECD/EU (2018), *Health at a Glance: Europe 2018 – State of Health in the EU Cycle,* OECD Publishing, Paris, https://www.oecd.org/health/health-at-a-glance-europe-23056088.htm

References

Alders P, Schut FT (2019), The 2015 long-term care reform in the Netherlands: getting the financial incentives right? *Health Policy,* 123(3): 312–16.

Council of the European Union (2019), *Council Recommendation on the 2019 National Reform Programme of the Netherlands,* http://data.consilium.europa.eu/doc/document/ST-10172-2019-INIT/en/pdf

European Commission (DG ECFIN)-EPC (AWG) (2018), *The 2018 Ageing Report – Economic and budgetary projections for the EU Member States (2016–2070).* Institutional Paper 079, May 2018. Brussels.

National Institute for Public Health and the Environment (2019), Population screening for colorectal cancer is successful, https://www.rivm.nl/nieuws/bevolkingsonderzoek-darmkanker-succesvol

NZA (2018), Health Insurance Monitor, https://puc.overheid.nl/nza/doc/PUC_254666_22/1/

Nictiz (2018), *Consciously choose eHealth*. Summary eHealth Monitor 2017, https://www.nictiz.nl/wp-content/uploads/2018/03/3_Nictiz_-Samenvatting_Eng.pdf

Thiel R, Deimel L, Schmidtmann D, Piesche K, Hüsing T, Rennoch J, Stroetmann V, Stroetmann K (2018), *#SmartHealthSystems. International comparison of digital strategies,* https://www.bertelsmann-stiftung.de/fileadmin/files/Projekte/Der_digitale_Patient/VV_SHS-Studie_EN.pdf

UWV (2019), *Fact Sheet, numbers and trends*, https://www.uwv.nl/overuwv/kennis-cijfers-en-onderzoek/arbeidsmarktinformatie/factsheet-zorg-2019.aspx

van de Berg D, Jettinghoff K (2018), *Werkgevers enquête 2018* [Employers' survey 2018]. AZW.

van de Vijsel AR, Heijink R, Schipper M (2015), Has variation in length-of-stay in acute hospitals decreased? Analysing trends in the variation in LOS between and within Dutch hospitals. *BMC Health Services Research*, 15: 438.

Volksgezondheidenzorg (2019), Public health and health care information, www.volksgezondheidenzorg.info

Country abbreviations

Austria	AT	Denmark	DK	Hungary	HU	Luxembourg	LU	Romania	RO
Belgium	BE	Estonia	EE	Iceland	IS	Malta	MT	Slovakia	SK
Bulgaria	BG	Finland	FI	Ireland	IE	Netherlands	NL	Slovenia	SI
Croatia	HR	France	FR	Italy	IT	Norway	NO	Spain	ES
Cyprus	CY	Germany	DE	Latvia	LV	Poland	PL	Sweden	SE
Czechia	CZ	Greece	EL	Lithuania	LT	Portugal	PT	United Kingdom	UK

European Commission

State of Health in the EU
Country Health Profile 2019

The Country Health Profiles are an important step in the European Commission's ongoing *State of Health in the EU* cycle of knowledge brokering, produced with the financial assistance of the European Union. The profiles are the result of joint work between the Organisation for Economic Co-operation and Development (OECD) and the European Observatory on Health Systems and Policies, in cooperation with the European Commission.

The concise, policy-relevant profiles are based on a transparent, consistent methodology, using both quantitative and qualitative data, yet flexibly adapted to the context of each EU/EEA country. The aim is to create a means for mutual learning and voluntary exchange that can be used by policymakers and policy influencers alike.

Each country profile provides a short synthesis of:

- health status in the country
- the determinants of health, focussing on behavioural risk factors
- the organisation of the health system
- the effectiveness, accessibility and resilience of the health system

The Commission is complementing the key findings of these country profiles with a Companion Report.

For more information see: ec.europa.eu/health/state

Please cite this publication as: OECD/European Observatory on Health Systems and Policies (2019), *The Netherlands: Country Health Profile 2019, State of Health in the EU*, OECD Publishing, Paris/European Observatory on Health Systems and Policies, Brussels.

ISBN 9789264870734 (PDF)
Series: State of Health in the EU
SSN 25227041 (online)

OECD
BETTER POLICIES FOR BETTER LIVES

European Observatory on Health Systems and Policies
a partnership hosted by WHO