European Commission

State of Health in the EU

Poland

Country Health Profile 2019

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European Observatory on Health Systems and Policies
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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.

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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-Poland.xls

Demographic and socioeconomic context in Poland, 2017

Demographic factors	Poland	EU
Population size (mid-year estimates)	37 975 000	511 876 000
Share of population over age 65 (%)	16.5	19.4
Fertility rate[1]	1.5	1.6
Socioeconomic factors		
GDP per capita (EUR PPP[2])	20 900	30 000
Relative poverty rate[3] (%)	15.0	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.

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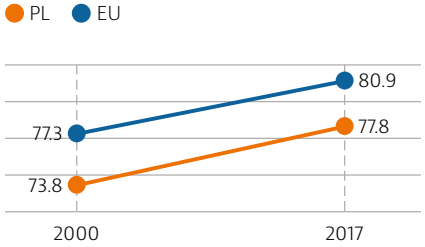
1 Highlights

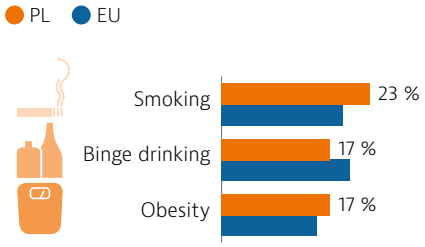
The Polish population has one of the lowest life expectancies in Europe. The Social Health Insurance system provides access to a broad scope of benefits but there are important coverage gaps, most notably for outpatient medicines. The health system tends to rely excessively on hospital care and faces shortages of health workers, particularly primary care doctors. Current reform priorities include improving the coordination of care, rationalising hospital care and strengthening the provision of ambulatory care.



Life expectancy at birth, years

Health status

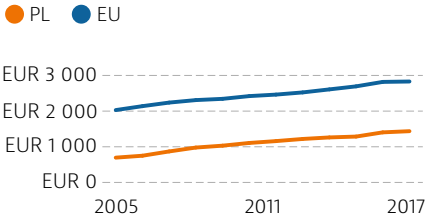
At 77.8 years, life expectancy at birth has increased markedly since 2000 but remains three years below the EU average. Differences in life expectancy between men and women and by educational level are among the highest in Europe. Ischaemic heart disease is still the main cause of death, followed by stroke and lung cancer. Strikingly, more than half of Poles over 65 report symptoms of depression, compared to a fifth in the EU.



% of adults

Risk factors

Behavioural risk factors account for almost half of all deaths in Poland. Smoking rates have decreased, contributing to a reduction in mortality from lung cancer, but remain higher than the EU average. Binge drinking among adults is slightly below the EU average but rising among teenagers. The obesity rate, is also above the EU average. In particular, the obesity rate in children has more than doubled since 2001.



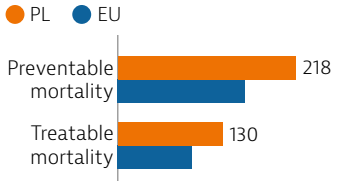
Per capita spending (EUR PPP)

Health system

At EUR 1 507 per person, health spending is low compared to other countries in Europe and this gap does not appear to be closing. In 2017, Poland spent 6.5 % of its GDP on health compared to an average of 9.8 % across the EU. Almost 70 % of this spending came from public sources, a lower share than the average for EU (79 %). The rest is predominantly paid out of pocket by households, primarily for outpatient medicines.

Effectiveness

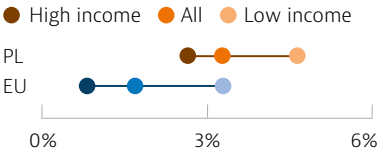
Mortality from preventable and treatable causes has decreased over the years, but both are considerably higher than average rates in the EU. Spending on prevention is relatively low and selected indicators show deficiencies in the quality of curative care.



Age-standardised mortality rate per 100 000 population, 2016

Accessibility

Unmet medical needs are higher than average rates in the EU, and arise mainly due to long waiting times, but also cost. Outpatient medicines constitute a major coverage gap, which often results in catastrophic spending, particularly for low-income households.



% reporting unmet medical needs, 2017

Resilience

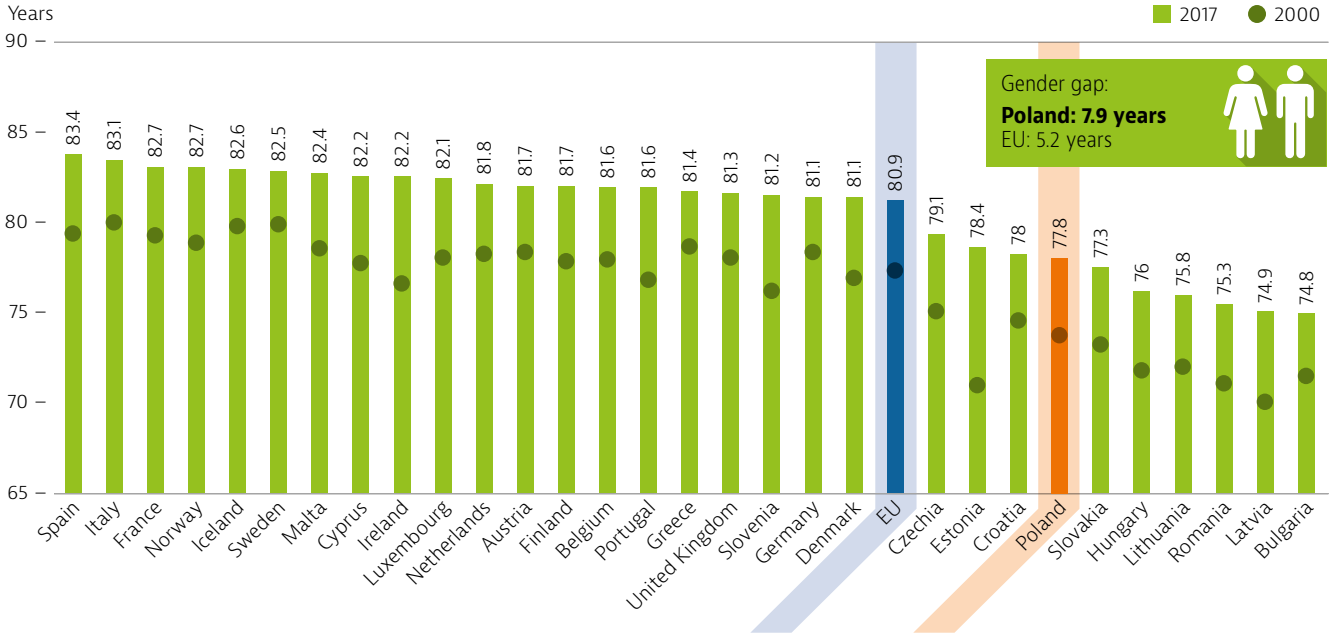
The delivery of care is skewed towards hospitals although recent reforms may help shift services to outpatient settings. The government has recently committed to increasing the public share of health spending from the very low level of 4.6 % of GDP to 6 % by 2024 to tackle some of the challenges in the system.

2 Health in Poland

Despite gains, life expectancy at birth in Poland lags behind the EU average

Life expectancy at birth in Poland increased by four years between 2000 and 2017, from 73.8 to 77.8 years. Nevertheless, in 2017, it was still three years shorter than the EU average of 80.9 years (Figure 1). On average, women live almost eight years longer than men - 73.9 compared to 81.8 years. This gender gap is much greater than the EU average (5.2 years) and is among the highest in the EU.

Figure 1. Life expectancy at birth in Poland is three years shorter than the EU average



Source: Eurostat Database.

Inequalities in life expectancy across educational levels are also significant. As shown in Figure 2, at age 30 men with the lowest levels of education live on average 12 years less than those with tertiary education. The education gap is smaller for women (5.1 years). Further inequalities can be seen in geographical differences in life expectancy (up to 5 %) and mortality rates (up to 20 %) between the districts, with the worst results noted in the Łódzkie voivodeship. Reducing geographical health inequalities is one of the goals in the key strategic health policy document for 2014–2020[1] and measures implemented so far include infrastructure investments, with the support from EU funding, particularly in the eastern regions.

Figure 2. The education gap in life expectancy at age 30 in Poland is about 5 years for women and 12 years for men

Education gap in life expectancy at age 30:

Poland: 5.1 years
EU21: 4.1 years

Poland: 12 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: Eurostat Database (data refer to 2016).

Circulatory diseases are the main cause of death, but cancer death rates are growing

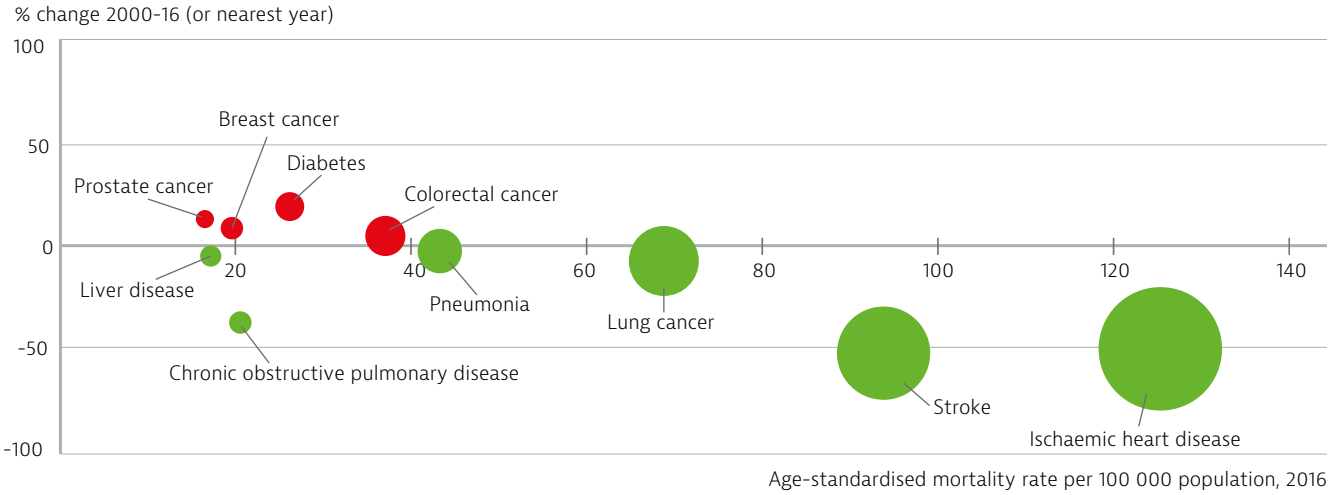
Increasing life expectancy since 2000 can largely be attributed to reductions in mortality from circulatory

1: *The National Strategic Framework. Policy paper for health protection for 2014–2020.*

diseases, mainly ischaemic heart disease and stroke (Figure 3). Mortality from ischaemic heart disease halved between 2000 and 2016, partly because of reductions in important risk factors such as smoking (see Section 3) but also better treatment (see Section 5.1). Yet, ischaemic heart disease remained the leading cause of death in 2016, accounting for 10 % of all deaths (compared to 12 % in the EU). Stroke accounted for 8 % of deaths in both Poland and the EU, but other circulatory diseases claimed more lives in Poland. As a result, diseases of the circulatory system were responsible for a much higher share of deaths in Poland compared to the EU - 45 % as opposed to 36 % in 2016.

Cancer accounted for 24 % of all deaths in 2016, close to the EU average of 26 %. Lung cancer is the most common, with a mortality rate that has decreased by 8 % since 2000, mainly because of reductions in tobacco consumption. Conversely, mortality rates from prostate, breast and colorectal cancers have all increased over the same period.

Figure 3. The mortality rate from circulatory system diseases has decreased substantially since 2000



Note: The size of the bubbles is proportional to the mortality rates in 2016.
Source: Eurostat Database.

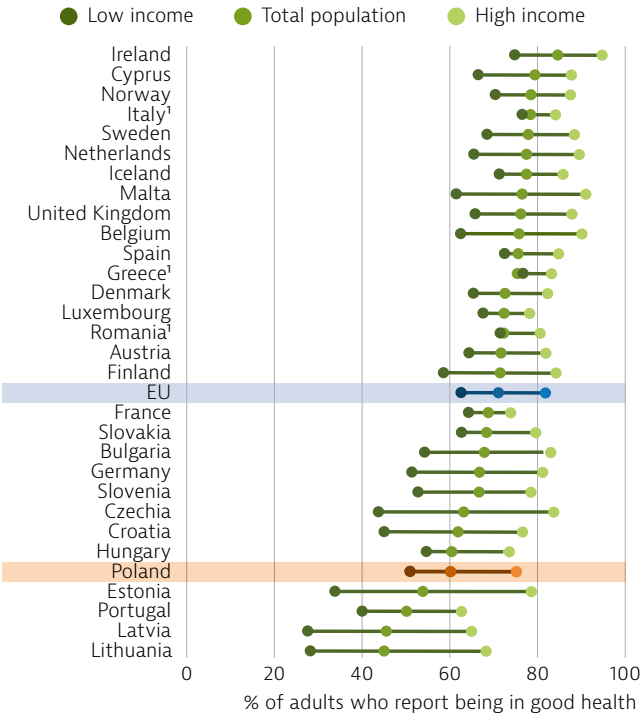
Fewer Poles report being in good health compared to other EU countries

In 2017, more than half of the Polish population (59 %) reported perceiving themselves to be in good health, compared with two thirds for the EU as a whole (Figure 4). The rate was substantially lower among poorer people (50 % for the lowest income quintile compared to 74 % for the highest) and it also declined with age. Only about one fifth of Polish people aged over 65 report being in very good or good health (over two fifths in the EU), compared with more than two thirds among working-age population (close to 80 % in the EU).

Poles live over half of their life after age 65 with health issues and disability

In 2017, Polish people aged 65 could expect to live an additional 18.3 years. While this was two and a half years more than in 2000 it was less than the EU average of 19.9 years. The gender gap in life expectancy at age 65 is 4.3 years in favour of women (20.2 years for women compared to 15.9 years for men). However, there is almost no gender gap in the

Figure 4. Inequalities in self-reported health by income level are substantial in Poland

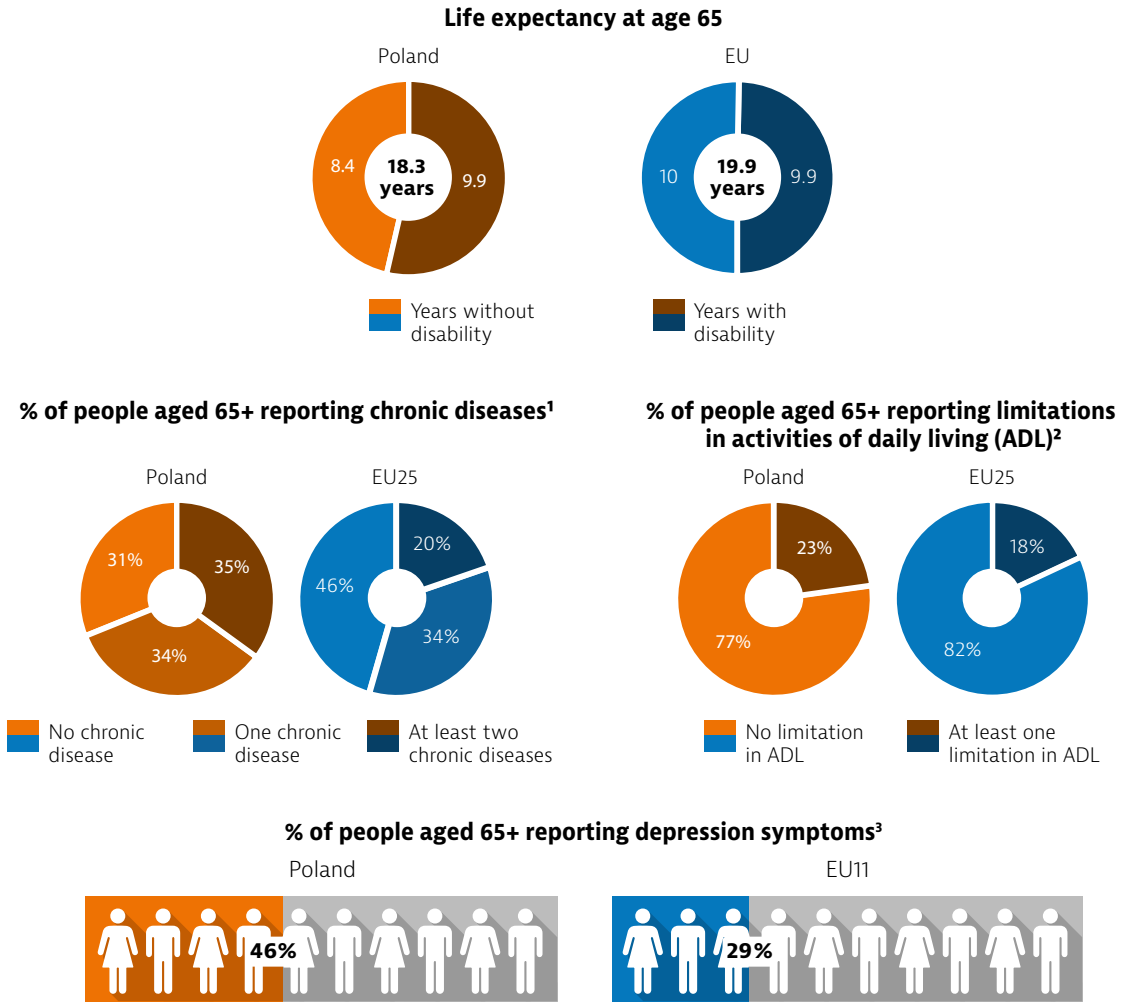


Note: 1. The shares for the total population and the population on low incomes are roughly the same.
Source: Eurostat Database, based on EU-SILC (data refer to 2017).

number of healthy life years[2], because women tend to live a greater proportion of their lives with some health issues or disabilities after age 65.

Overall, a typical person aged 65 living in Poland can expect to live slightly more than half of their remaining years with chronic diseases and disability, which is close to the EU average (Figure 5). Around two thirds of adults aged 65 and over report having at least one chronic disease, with half of them reporting having two or more. These health problems can result in functional disabilities: almost one quarter of the Polish population aged 65 and over reports experiencing some limitations in basic activities of daily living (such as bathing, dressing or getting out of bed), which is around five percentage points higher than the EU average. Notably, 46 % of Polish people aged 65 and over report symptoms of depression, compared to an average of 29 % among EU countries. Older women seem to be particularly affected, with 53 % reporting depressive symptoms, the highest share among EU countries reporting this information (EU average: 36 %).

Figure 5. Nearly half of older Poles report depression symptoms



Note: 1. Chronic diseases include heart attack, stroke, diabetes, Parkinson disease, Alzheimer's disease and rheumatoid arthritis or osteoarthritis. 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 refer to 2017); SHARE survey for other indicators (data refer to 2017).

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

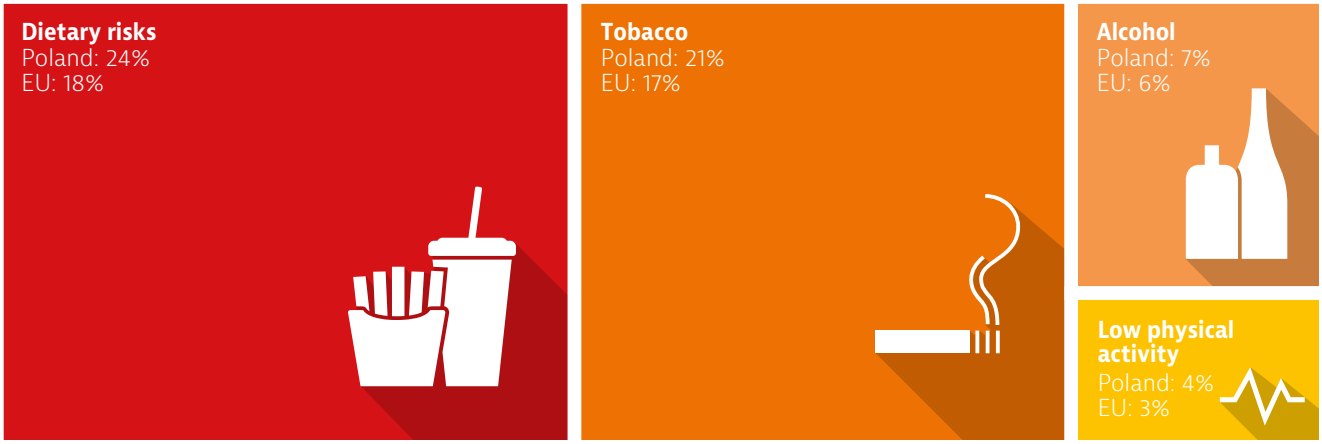
3 Risk factors

Behavioural risk factors account for almost half of all deaths

It is estimated that almost half (47 %) of all deaths in Poland can be attributed to behavioural risk factors, including dietary risks, tobacco smoking, alcohol consumption and low physical activity (Figure 6). This is higher than the EU average of 39 %. One quarter of all deaths in 2017 could be attributed to dietary risks, including low fruit and vegetable intake, and high salt and sugar consumption. Tobacco consumption, including direct and second-hand smoking, was responsible for an estimated 21 % of all deaths; about 7 % of deaths could be attributed to alcohol consumption, and some 4 % of deaths could be related to low physical activity (Figure 6).

The 2015 Act on Public Health shifted the strategic focus of the National Health Programme from key prevailing diseases (such as cardiovascular diseases and cancer) to lifestyle and other risk factors more broadly (such as nutrition and physical activity) (see Section 5.1). However, improvements flowing from this shift in public health are not yet reflected in mortality trends.

Figure 6. Poor diet and tobacco are driving mortality rates in Poland



Note: The overall number of deaths related to these risk factors (190 000) is lower than the sum of each taken individually (220 000) 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).

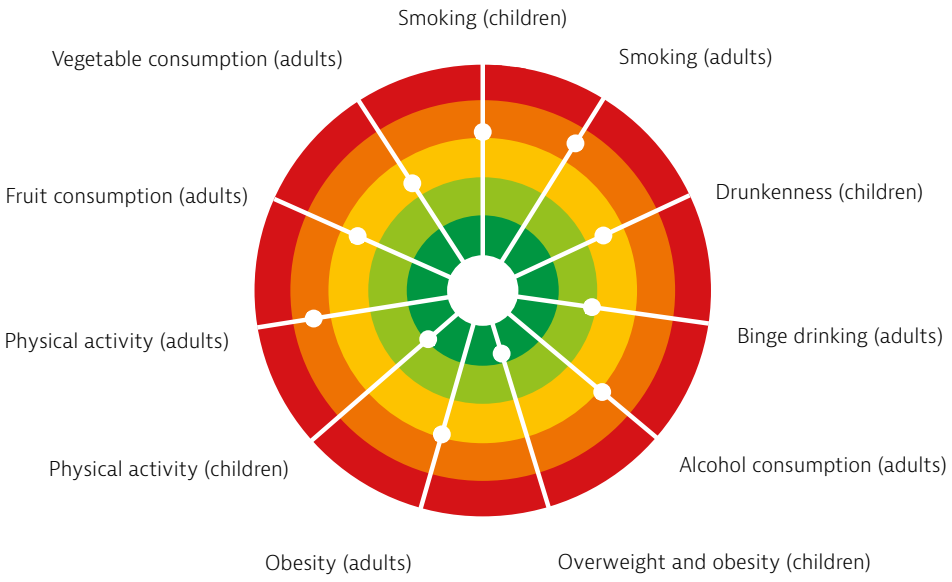
Unhealthy diet and low physical activity contribute to high obesity rates

About 17 % of adults in Poland are obese, which is slightly higher than the EU average of 15 %. This share has increased by about a third over the past ten years. Overweight and obesity trends have also been rising among children. While the self-reported overweight and obesity rate among 15-year-olds in Poland still lies below the EU average (15 % compared to 17 %), it has increased considerably over the last two decades. Poor diet and low physical activity have contributed to these trends. Two fifths of adults (42 %) report that they do not consume fruit on a daily basis, and a similar share does not eat at least one portion of vegetables daily (Figure 7). Only three in five adults report engaging in at least moderate weekly physical activity, a proportion that is lower than the EU average.

Smoking rates have decreased over the last decade but remain above EU averages

Tobacco consumption is a public health concern in Poland, particularly among men. Although smoking rates have decreased since 2000, around 23 % of adults were daily smokers in 2014, higher than the EU average of 19 %. Rates are much higher for men than women, with three in ten men smoking daily compared to less than two in ten for women. Regular smoking in teenagers is also relatively high, although only slightly above the EU average, with one quarter of 15- to 16-year-olds reporting they had smoked during the past month in 2015. The rates over the last 10 years have decreased much more for boys (11 percentage points) than for girls (2 percentage points).

Figure 7. Obesity, smoking and excessive alcohol consumption are major public health problems in Poland



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 and EHIS 2014 and OECD Health Statistics 2019 for adults indicators.

Total alcohol consumption is higher than in the EU and has increased in recent years

More than one in six adults reported heavy alcohol consumption at least once a month in 2014, which is less than the EU average (17 % compared to 20 %). However, total alcohol consumption in the population is above the EU average and has increased over the last 15 years, while in the EU as a whole it has been falling. Alcohol consumption in teenagers is also a source of concern. In 2015, one third of 15- to 16-year-old teenagers in Poland reported at least one episode of binge drinking[3] during the past month.

Inequalities in risk factors have a marked impact on health status

Many behavioural risk factors in Poland, such as smoking and obesity, are more common among people with lower education or income. In 2014, around one in five adults (19 %) who had not completed secondary education smoked daily, compared to only 12 % with a tertiary education. Across income groups, this difference is even greater, with 31 % of people in the lowest income quintile being smokers compared to 18 % in the highest quintile. A similar pattern emerges for obesity rates: 18 % of people without a secondary education were obese in 2014, compared to 10 % with a higher education. These differences in the prevalence of risk factors contribute importantly to inequalities in health and life expectancy, with differences of up to 16 years in life expectancy between social groups (Wojtyniak & Goryński, 2018) (see Section 2).

3: Binge drinking is defined as consuming six or more alcoholic drinks on a single occasion, and five or more alcoholic drinks for children.

4 The health system

Health care governance is very fragmented

Poland's health system is based on Social Health Insurance (SHI). The Ministry of Health shares governance and responsibility for health care with three levels of territorial government: municipalities (*gmina*) are in charge of primary care, counties (*powiat*) are responsible for (often) smaller county hospitals, and districts (*voivodeships*) for generally larger district hospitals. The Ministry of Health is the founder of the national health institutes and has a supervisory role over medical university clinics. Private facilities provide mainly outpatient (or ambulatory) care, while the majority of hospitals are public. This diversity of competencies presents considerable challenges for effective coordination of activities across the health system (see Section 5.3).

Since 2003-04, the National Health Fund (NHF) has been the sole purchaser in the SHI system through its 16 district branches, which manage the purchasing function in their respective districts. In recent years, the NHF's influence over contracting has been somewhat weakened by the increasing role of the health technology assessment (HTA) agency, which in 2015 became responsible for setting tariffs for SHI health services, as well as the introduction of the 'hospital network' (Box 1).

In 2017, Poland introduced a 'hospital network' initiative to support the integration of outpatient and inpatient care. Hospitals included in this network are required to set up specialist outpatient clinics covering both inpatient and outpatient care in return for lump sum financing.

Despite support from European funds, health spending remains comparatively low

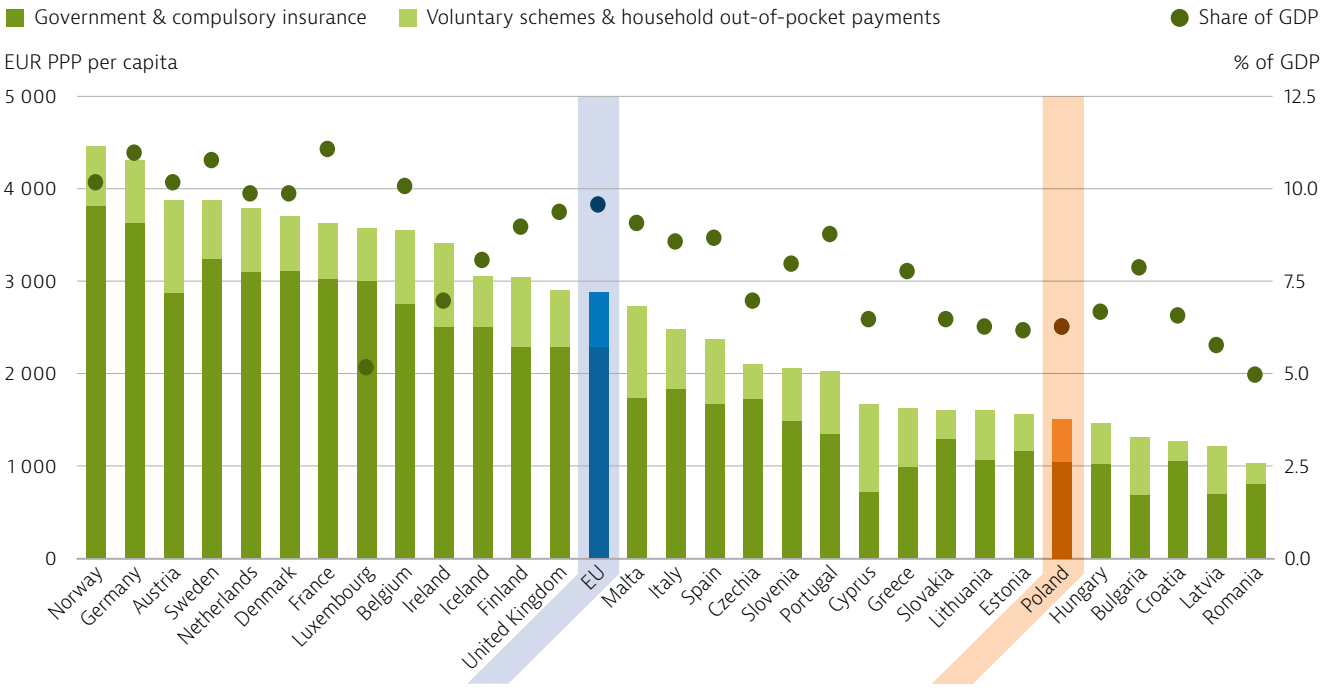
The share of GDP that Poland devotes to health is significantly lower than the EU average (9.8 %), with 6.5 % allocated to health in 2017. Per person, health expenditure amounted to EUR 1 507 (adjusted for differences in purchasing power), the sixth lowest in the EU (Figure 8). Most health expenditure is funded from health insurance contributions via an earmarked payroll tax. Overall, the public share of health spending was about 70 % in 2016, below the EU average of 79 %. Out-of-pocket (OOP) spending accounted for 23 % of all health spending, with the bulk of it spent on outpatient medicines (see Section 5.2). Around 6 % of health expenditure is on voluntary health insurance.

Financial support from the European Structural and Investment Funds (ESIF) is an important source of external funding for the health system. In the 2014-20 financing period, Poland has been allocated approximately EUR 2.8 billion to focus on public health programmes, developing eHealth solutions and improving quality of care. Since 2016, plans for new investments requiring public co-financing, including from the EU, must undergo a formal evaluation to ensure that they are cost-effective and reflect local needs (see Section 5.3). Both these goals were recently recognised at the EU level, with reports emphasising that inefficiencies in spending had to be addressed and that investments in health care ought to account for regional disparities (European Commission, 2019a; Council of the European Union, 2019).

Box 1. Poland has stepped up coordination of care in recent years

There are already numerous programmes to improve care coordination for specific conditions or population groups, such as cancer patients, and new programmes are being piloted, for example in the area of psychiatric care. Care coordination across different providers is incentivised financially (through pay-for-performance) and preferential treatment in the contracting process. In 2017, legislation strengthened the coordination of primary care by introducing multidisciplinary primary care teams to coordinate care pathways, including post-hospital treatment and rehabilitation. Coordination of care will also cover activities in the areas of health promotion and prevention. This model is being piloted and, from late 2020, will introduce elements of pay-for-performance.

Figure 8. Poland spends around half the EU average per person on health

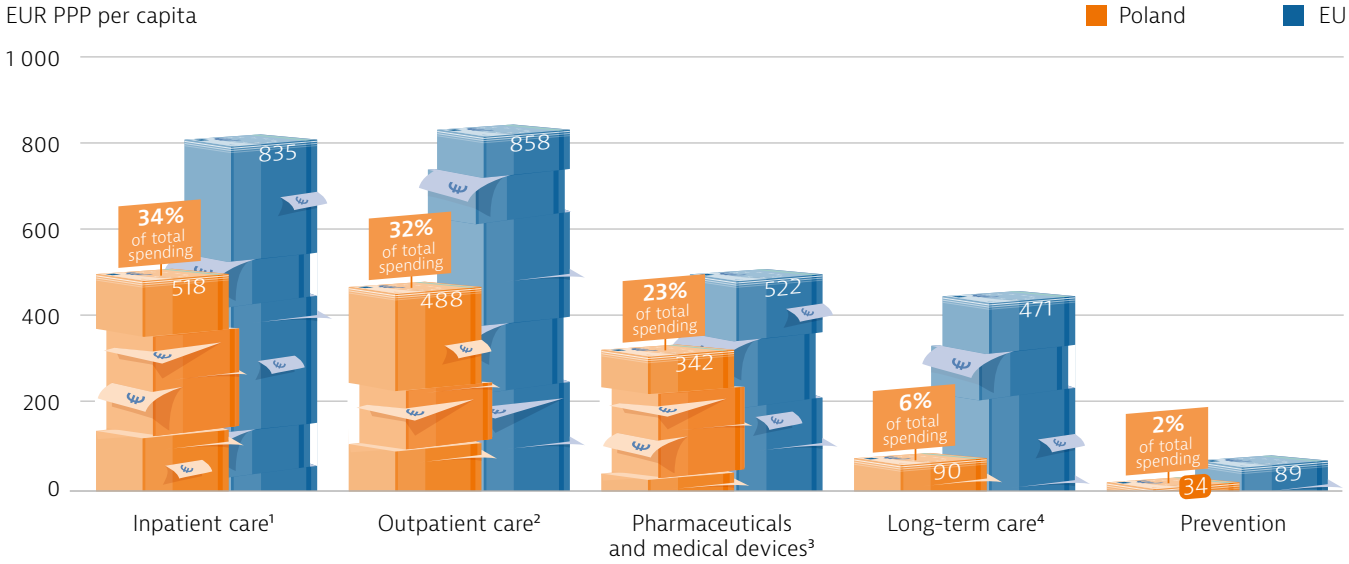


Source: OECD Health Statistics 2019 (data refer to 2017).

A large inpatient sector accounts for the majority of spending

In 2017, over one third (34 %) of health expenditure was spent on inpatient care, the third highest in the EU after Greece and Romania. Inpatient spending has been stable over the years, indicating that efforts aimed at transferring the management of less severe cases to (less resource-intensive) outpatient services have not been successful. Changes introduced within the 'hospital network' reform should strengthen the provision of ambulatory care in hospital outpatient departments. On a per capita basis, spending on both inpatient and outpatient care is below the EU average (Figure 9). Per capita spending on long-term care is also very small and accounts for 6 % of current spending (the EU average is over 16 %), placing Poland among the bottom ten spenders in the EU.

Figure 9. Spending on inpatient care is relatively high despite efforts to strengthen outpatient care



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

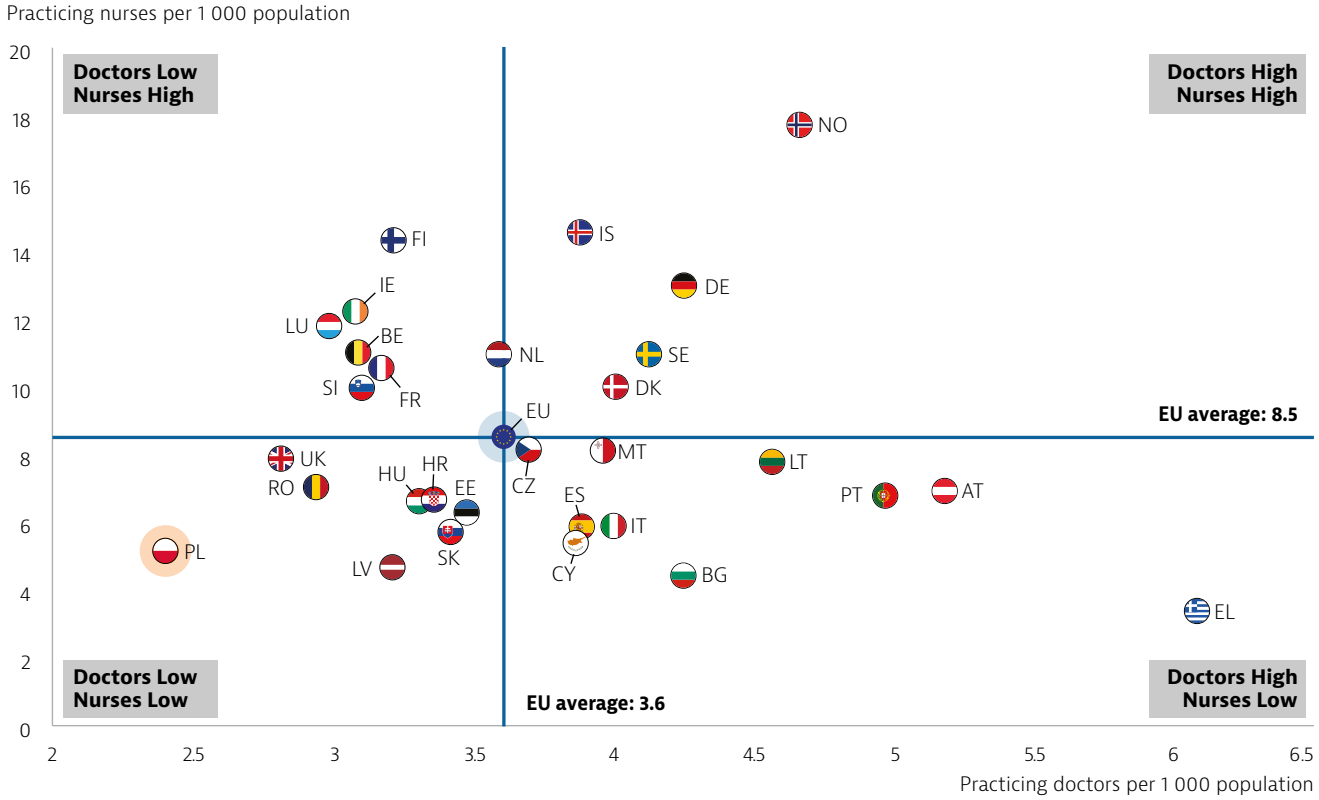
The health system is excessively concentrated on hospital care

The Polish health care system is affected by large imbalances in the provision of services, with too much infrastructure in the hospital sector, insufficient provision of outpatient care (including poor access to diagnostics) and long-term care, and weak coordination between inpatient and outpatient care. The number of hospital beds is high, with 6.6 beds per 1 000 population in 2017 compared to an EU average of 5.0, and they are unevenly distributed across the country. This contributes to the formation of inequalities in access to care (see Section 5.2). The lack of initiatives to reduce the number of beds is due in part to the highly fragmented nature of hospital ownership.

Poland faces an acute shortage of health professionals

The overall strategic planning of the health workforce is still not well developed in Poland[4], leading to shortages of health professionals and difficulties accessing care services (see Section 5.2). Health workforce shortages have become even more acute since Poland's accession to the EU in 2004, which has facilitated a large outflow of health professionals from the country. The number of doctors per 1 000 population (2.4) is the lowest among all the countries in the EU. The age composition of doctors exacerbates concerns for their future supply, as about a quarter of practicing doctors are above retirement age – a share nearing 40 % for some specialties, such as general surgery. The number of nurses (5.1 per 1 000 population) is also among the lowest in the EU (Figure 10).

Figure 10. The numbers of practicing doctors and nurses in Poland are among the lowest in the EU



Note: In Portugal and Greece, data refer to all doctors licensed to practise, resulting in a large overestimation of the number of practising doctors (e.g. of around 30 % in Portugal). In Austria and Greece, the number of nurses is underestimated as it only includes those working in hospital.
Source: Eurostat Database (data refer to 2017 or nearest year).

A lack of general practitioners poses a major challenge for the delivery of primary care

Primary care doctors generally serve as gatekeepers to more specialised care, although a referral is not needed to see gynaecologists and obstetricians, oncologists and psychiatrists. General practice is not a popular specialisation in Poland and the number of general practitioners (GPs) as a share of all doctors is the second lowest in the EU (9 % compared to the EU average of 23 %). To offset the negative consequences of this shortage, Poland allows internal medicine specialists and paediatricians to work as GPs.

4: One recent exception is the Strategy for the Development of Nursing and Midwifery published at the end of 2017.

5 Performance of the health system

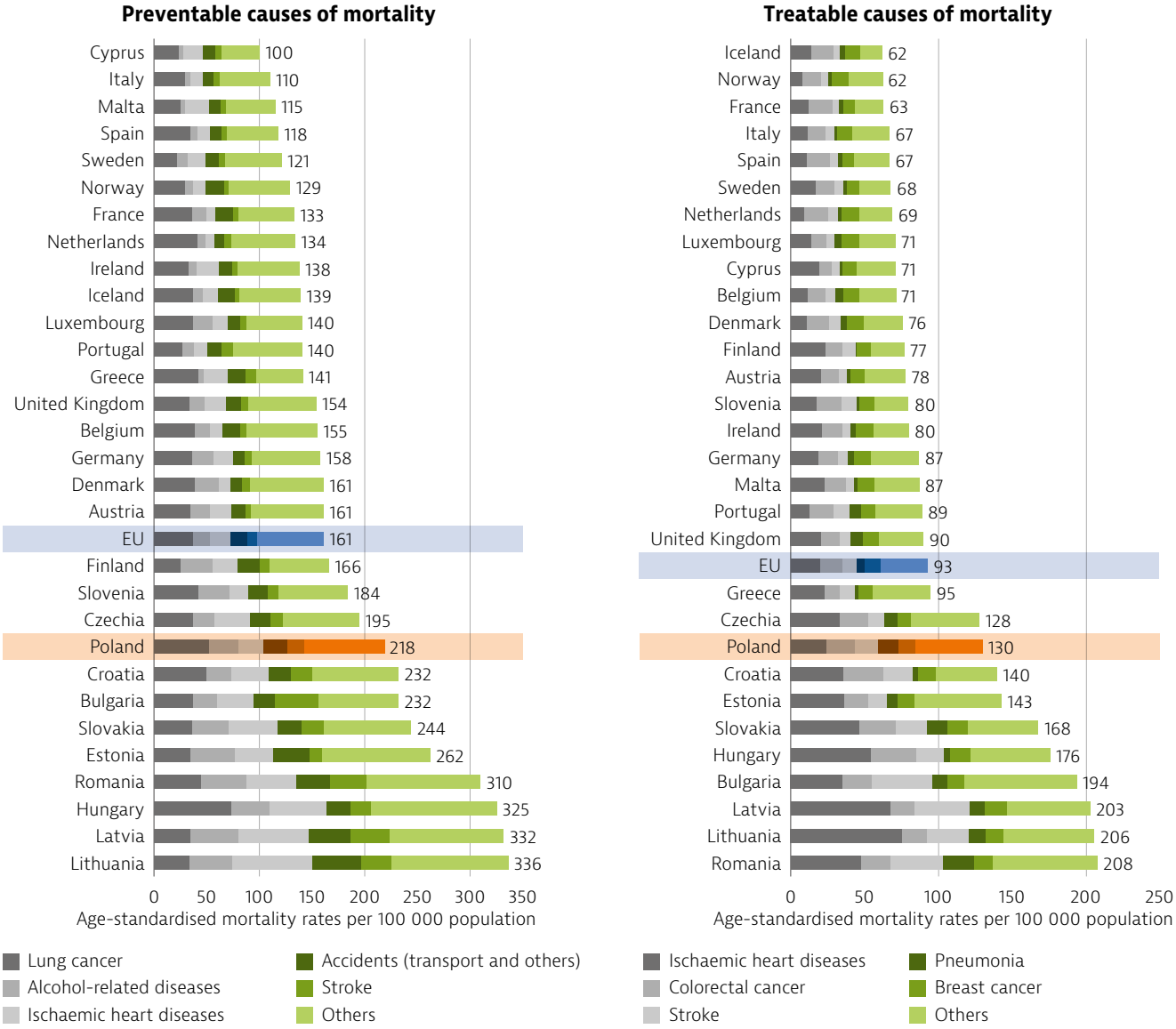
5.1. Effectiveness

Preventable mortality has decreased but remains higher than the EU average

Even though the preventable mortality rate decreased by about 10 % between 2011 and 2016, it continues to be higher than in most EU Member States, exceeding the EU average by more than one third (Figure 11).

Spending on health promotion and disease prevention is low: it is in line with the EU average when measured as a share of current health expenditure, but per person preventive care spending in Poland amounts to less than half the EU average (EUR 34 compared to EUR 89). A national audit of preventive activities between 2012 and 2015 further confirmed that financing of prevention was insufficient and inappropriately allocated (NIK, 2017).

Figure 11. Mortality from preventable and treatable causes is higher than the EU average



Note: Preventable mortality is defined as death that can be mainly avoided through public health and primary prevention interventions. Mortality from treatable (or amenable) causes 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).

Tobacco control policies could be strengthened

Smoking has long been recognised as a major public health problem and has been the focus of dedicated national programmes and legislation. Anti-smoking policies were first introduced in the 1990s and include a smoking ban in many indoor public places and workplaces, including (since 2010) restaurants; and a nearly comprehensive ban on tobacco advertising and promotion. Yet, existing bans are not always respected, and cigarette prices are among the cheapest in Europe. Access to smoking cessation support treatment (including pharmacological treatment) is restricted, and there is no national system to support smoking cessation overall.

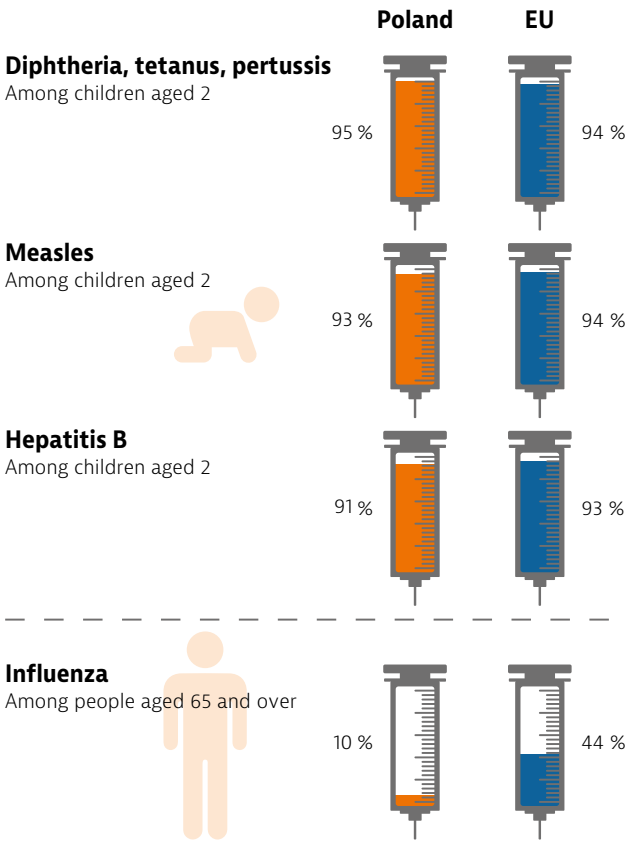
Actions to tackle obesity have yet to gain traction

The increasing prevalence of obesity in Poland has been largely underestimated as a public health issue in medical and policy circles (Brzeziński, Metelska & Sutkowska, 2019). While the first national programme dedicated to the prevention of obesity was introduced in 2006, related actions failed to achieve tangible results in combating the rising incidence of obesity. Little attention has so far been paid to policy tools such as legislative change, marketing bans or fiscal instruments such as taxes or subsidies. One exception is the ban enforced in 2015 on selling products with added sugar or salt, white bread and coffee, certain drinks and fast food in schools. Another recent and important initiative is the establishment (in 2017) of a dedicated centre by the National Institute of Food and Nutrition to promote healthy nutrition and physical activity in the population.

Vaccination rates for children are very high but have declined in recent years

Mandatory immunisation programmes are well established in Poland and child immunisation rates have traditionally been high. However, vaccine hesitancy has been growing in recent years and noticeable drops in immunisation rates for diphtheria, tetanus and pertussis (DTP3) (-4 %), measles (-5 %), and hepatitis B (-7 %) have been recorded since 2010. With the exception of DTP3, child immunisation rates are now below the EU average and the 95 % WHO target required to achieve herd immunity (Figure 12). Since mid-2018, half of the cost for influenza vaccines is reimbursed for people over aged 65 in the hope of boosting the low vaccination rates in this group, which are currently below the EU average and even further away from the 75 % target set by the WHO (Rechel, Richardson & McKee, 2018).

Figure 12. Vaccinations rates are still high for children but remain relatively low for older people



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).

Mortality from treatable causes is declining but remains high

Mortality that can be avoided through timely and effective health care interventions decreased by over 10 % in Poland between 2011 and 2016, but remains nonetheless substantially higher than the EU average (Figure 11). Part of the improvement over the last ten years is likely due to investments in cardiac care, with the NHF's spending on cardiac care services having more than tripled between 2004 and 2014. Thirty-day mortality rates for people admitted for acute myocardial infarction (AMI) are lower compared to other countries in the EU (7.7 per 100 000 population in Poland compared to 9.4 in the EU), and have decreased consistently over the last decade, signalling improvements in acute care quality.

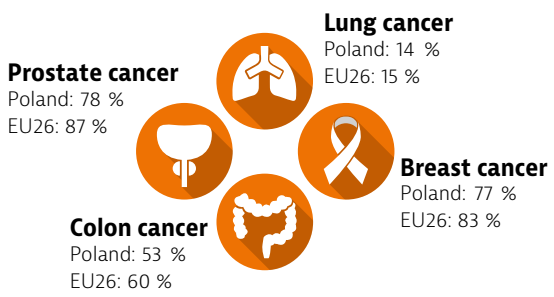
Cancer screening on a national scale was introduced in 2006 as part of a national programme and contributed to improving screening rates. The programme ended in 2015 but was renewed for the 2016-24 period with the goal of narrowing the gap in five-year survival rates between Poland and the EU. National cancer screening

programmes currently cover breast cancer, cervical cancer and colorectal cancer screening. A recent audit revealed that participation rates were low (16 %, 20 % and 40 % of the respective target groups) and there were geographical differences in access to screening (NIK, 2017).

Cancer survival rates have improved but are still relatively low

Although cancer survival rates have increased since 2000, they remain relatively low (Figure 13), and mortality from some cancers (colorectal, breast and prostate) has increased over the same period. Although the introduction in 2015 of a fast-track pathway for cancer patients has improved access to earlier detection and care, late stage diagnosis and long waiting times for diagnostic examinations play a significant role in Poland's low cancer survival rates. It is hoped that the implementation of the National Oncology Strategy 2020-24, signed into law in May 2019, will improve the quality and effectiveness of cancer care.

Figure 13. Five-year cancer survival rates are lower than the EU average



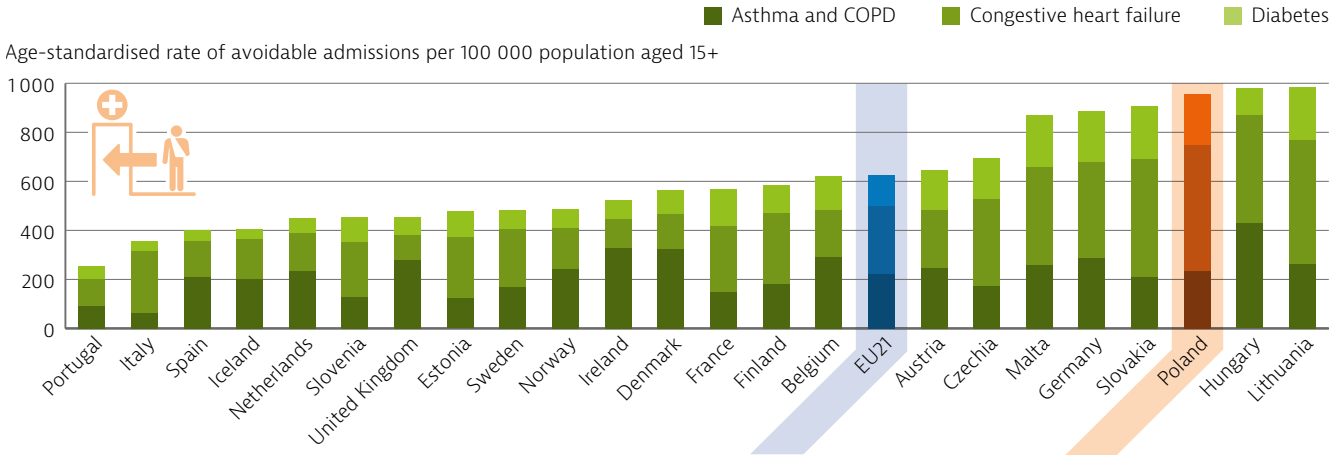
Note: Data refer to people diagnosed between 2010 and 2014.
Source: CONCORD programme, London School of Hygiene and Tropical Medicine.

Indicators point to areas where quality could be improved

Health care quality and patient safety are not routinely assessed in Poland. Most initiatives have so far focused on hospital care but they are not comprehensive. For example, although medical errors are mainly recorded in accredited hospitals, accreditation is not mandatory and only about one fifth of all hospitals has been accredited. The level of avoidable hospitalisations for conditions that are manageable in outpatient settings is one of the highest in Europe, pointing to deficiencies in the provision of primary and outpatient specialist care (see Figure 14 and Section 5.3). However, improvements have been noted for certain conditions sensitive to weaknesses in primary care, such as asthma and chronic obstructive pulmonary disease (COPD), for which avoidable admission rates decreased by 36 % between 2005 and 2016.

Another area of concern is antimicrobial resistance (AMR). In Poland, the consumption of antibiotics[5] is much higher than the EU/EEA average and the percentage of Klebsiella pneumoniae isolates testing resistant to carbapenems (a potent last-line class of antibiotics to treat bacterial infections) increased from 0.5 % in 2015 to 6.4 % in 2017 (ECDC, 2018a, 2018b). Despite documented widespread overprescribing and inappropriate use of antibiotics, few effective policies are in place, for example to change GPs' prescribing behaviour or increase hand and environmental hygiene in hospitals or other relevant interventions. A national antibiotic awareness programme for 2016-20 is being implemented to educate both health professionals and the general public on the need to rationalise the use of antibiotics.

Figure 14. A large number of hospital admissions could be prevented through stronger primary care



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

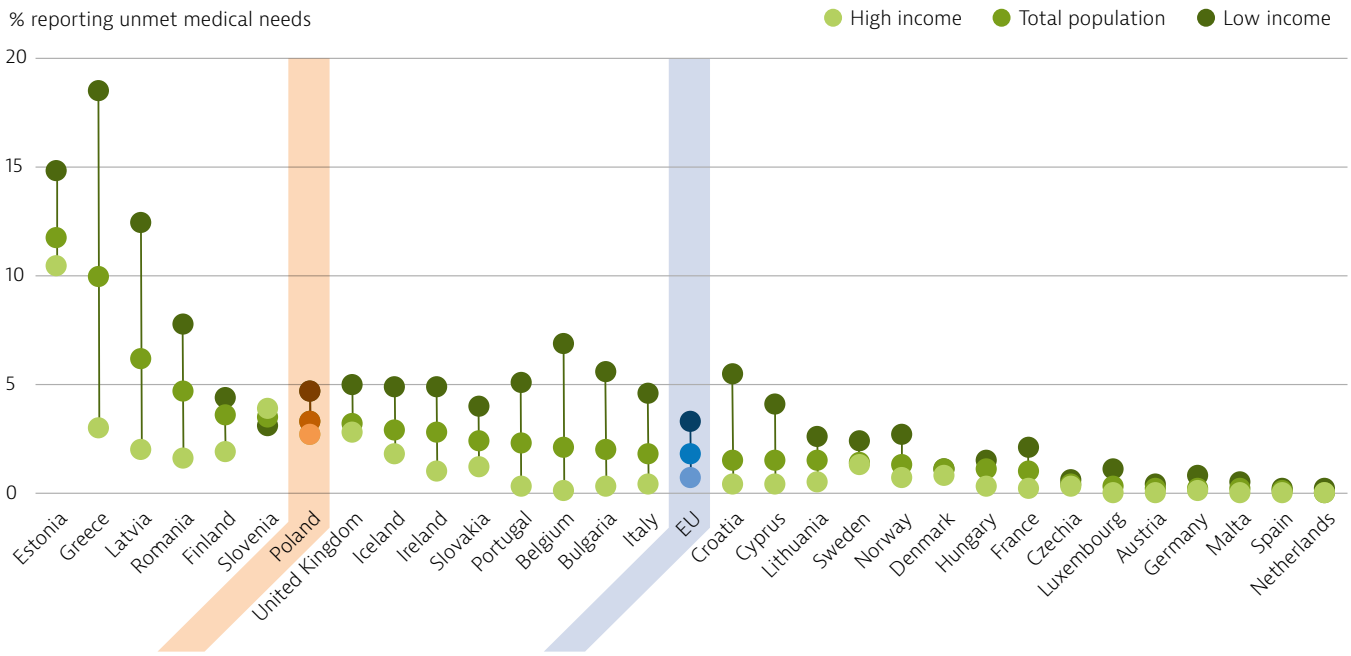
5: *Measured as defined daily doses (DDDs) per 1 000 inhabitants per day.*

5.2. Accessibility

Unmet needs for medical care are mainly due to waiting times

In 2017, the share of the Polish population reporting unmet needs for medical examinations due to either costs, distance or waiting times was 3.3 %, compared to the EU average of 1.8 %. Waiting times explained most of these unmet needs across all income groups (70 % compared to 40 % in the EU where cost was the main reason for reported unmet medical needs) (Figure 15).

Figure 15. The level of unmet medical care needs in Poland is higher than the EU average



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.
Source: Eurostat Database, based on EU-SILC (data refer to 2017).

Access to care is close to universal but with some coverage gaps and inequalities

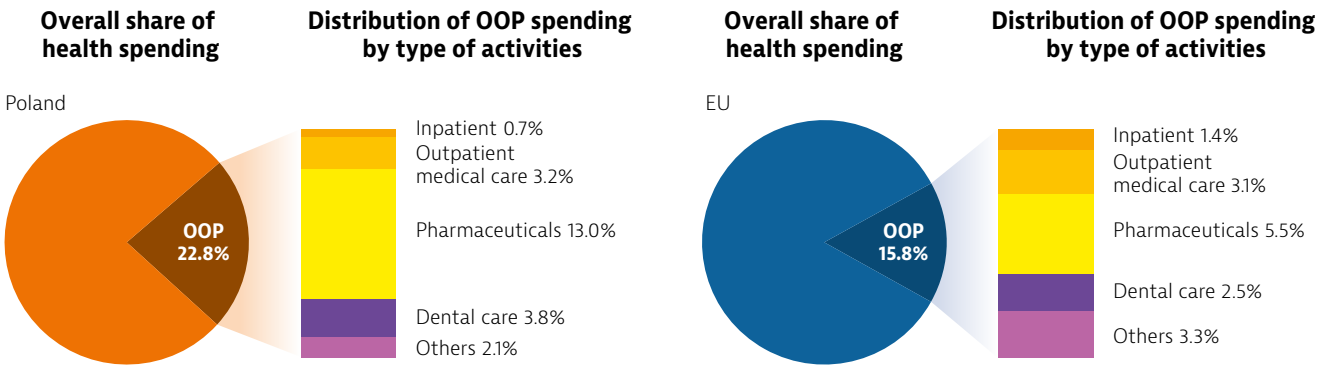
Compulsory health insurance covers 91 % of the population. Most uninsured Poles (9 %) are citizens living abroad but still registered as residents in Poland, and a negligible number are citizens employed on casual or atypical work contracts and workers in the informal economy. The scope of services is broad and includes primary care services, outpatient specialist services and hospital services. Certain vulnerable population groups have access to additional benefits – for example, dental care for young children. People without SHI coverage have access to outpatient emergency medical care, and certain population groups (e.g. pregnant women and children under 18) have the right to access publicly financed health care irrespective of their insurance status.

Access to primary care is free, and there are no cost-sharing requirements for inpatient care services. Nevertheless, key coverage gaps exist, including for outpatient medicines (see Box 2), outpatient medical devices, dental care, and long-term care, which is highly reliant on informal carers.

Box 2. Outpatient medicines are the largest driver of catastrophic spending

The Polish health system has low levels of financial protection and high out-of-pocket (OOP) payments for pharmaceuticals compared to many other countries in Europe. Outpatient medicines absorb most of OOP spending (Figure 16) and are the largest single driver of catastrophic spending.[7] In 2014, nearly 9 % of Polish households experienced catastrophic levels of OOP spending on health, with this share rising to 30 % among the lowest income quintile (Tambor & Pavlova, forthcoming). Mechanisms to protect the most vulnerable population groups are weak and spending on outpatient medicines is particularly high among pensioners, disabled people, households in rural areas, and small households. According to national statistics, approximately 9 % of households reported that on some occasions, they were unable to purchase prescribed or recommended medicines in 2017. Poland has introduced new exemption mechanisms, e.g. granting free access to a broad range of medicines for older people since 2016, to protect vulnerable populations from high OOP spending on medicines.

Figure 16. Pharmaceuticals absorb most out-of-pocket (OOP) spending in Poland



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

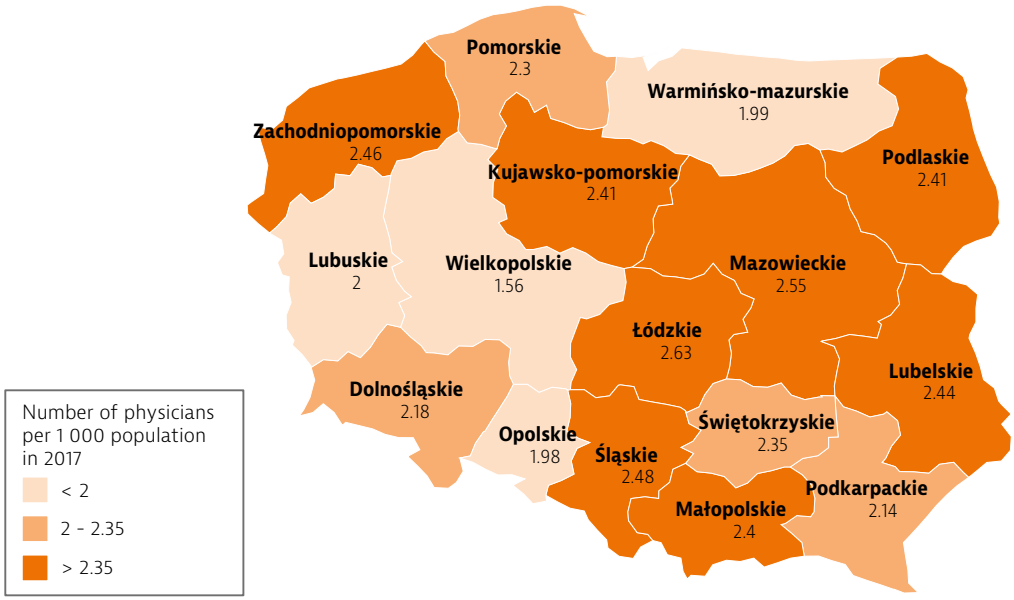
Limited public financing and workforce shortages contribute to access barriers

Although primary and inpatient care are not subject to cost-sharing in Poland, access to these services may still be limited in practice by the limited financial resources of the NHF (see Section 5.3) as well as by the severe health workforce shortages affecting the system (see Section 4), which result in long waiting times. In 2018, the average waiting times for specialist services was 3.4 months, with the longest average waiting times reported for endocrinology (11 months) and dental services (8.5 months).

Inequalities in access to care also follow a geographical gradient, with the availability of some services[7] differing significantly between districts in the country. For example, coordinated specialist care for people after a heart attack was not contracted in seven districts in 2017. The distribution of medical personnel varies widely across districts, for example, doctor density varies by almost 70 % (Figure 17). Further, there are shortages of certain medical specialists, including paediatricians, internal medicine specialists, anaesthesiologists and surgeons, in some districts.

6: Catastrophic expenditure is defined as household OOP spending that exceeds 40 % of total household spending net of subsistence needs (i.e. food, housing and utilities).
7: These include depression treatment and integrated care programmes (NIK, 2018a, 2018b).

Figure 17. There are significant differences in doctor density across Poland



Source: Eurostat Database.

The effects of measures to improve access to care are mixed

Measures have been introduced in recent years to improve access to care and reduce the extent of unmet medical need. A major initiative in 2016 introduced free access (exemption from all cost sharing) to a range of medicines for people aged 75 and over (Box 2). At the end of 2016, 1.6 million older people were able to access medicines under the new programme, and their out-of-pocket spending on reimbursed medicines declined compared to 2015 (NIK, 2019). Since 2017, Poland has also participated in the 'Fair and Affordable Pricing' platform aimed at improving access to medicines (Box 3).

Since 2015, a number of integrated care programmes have been introduced to improve access to and quality of care for certain population groups including cancer patients (see Section 5.1), pregnant women (since 2017), and children under 18 with certain health conditions (since 2017). New coordinated care programmes are currently being piloted, including for patients requiring psychiatric care and patients with multiple sclerosis. However, the results of these measures on improving general quality and accessibility of care are mixed. For example, more than half of patients with suspected cancer received fast access to further diagnostic procedures and necessary treatment. On the other hand, while limits on MRI and CT scans were lifted in 2018, the waiting time for these benefits is still long, likely due to prioritising patients with guaranteed faster access.

Box 3. Poland participates in a regional collaboration to improve access to medicines

The 'Fair and Affordable Pricing' (FAAP) initiative, established in March 2017, is an inter-country regional collaboration platform to improve access to medicines for the citizens of member countries. This project was established among the Visegrad Group (Czechia, Hungary, Poland, Slovakia), but is also open to other countries, with Lithuania being one of its founding members and Latvia an invited guest. Several regional meetings and technical consultations have been organised. The project is being shaped as a complementary platform allowing better, proactive preparation of national reimbursement and pricing decisions. A pilot joint negotiation is under way to define possible mechanisms for future regional negotiation strategies.

5.3. Resilience[8]

The government has pledged to increase public spending on health

The public share of health care spending in Poland, both as a share of GDP and in per capita terms, is one of the lowest in Europe (see Section 4). This low level of funding is insufficient to provide timely access to high-quality care, particularly given rising health care needs due to population ageing. In 2017, the government pledged to increase the public share of health expenditure to 6 % of GDP by 2024, up from 4.6 % on average over the last 15 years. This should translate into higher total spending in real terms (if GDP does not fall), bringing total health expenditure levels closer to the EU average.

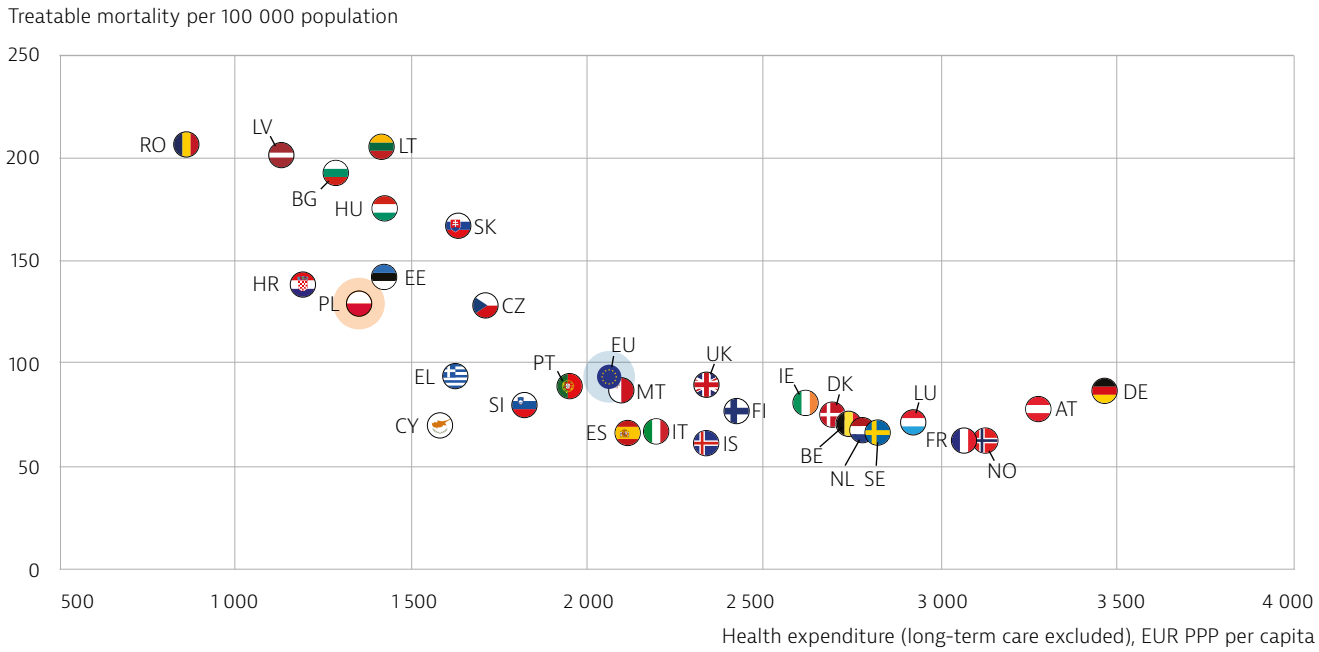
Poland is stepping up efforts to strengthen outpatient care and improve care coordination

When compared to EU countries with higher or similar health spending levels, Poland performs relatively well in terms of mortality from treatable causes (Figure 18). Nevertheless, this mortality rate is still high and well above the EU average (see Section 5.1). Historically, Poland has relied heavily on inpatient care for the provision of health services, and this excessive use of hospital care, as well as poor financial management, have resulted in the long-standing and thus far unresolved problem of hospital indebtedness. The relative weakness of outpatient (ambulatory) care and shortages in the health workforce overall (see Sections 4 and 5.2) encourage long waiting times, and partially explain why certain other indicators, such as unmet needs for health care, are worse in Poland than in countries with similar levels of health spending.

Recent efforts to improve coordination of care are increasingly accompanied by changes in the skill mix of health professionals (Box 4). Optimising the roles of health workers was also discussed as one of the ways of addressing critical workforce shortages at a Voluntary Exchange hosted in Poland in 2018 as part of the State of Health in the EU cycle (Box 5).

So far, less attention has been paid to improving integration between the health and social care. The burden of providing social care is largely borne by family members with little support from the state. However, such integration is being explored through the works of the Sectoral Council on Competencies in Health and Social Care which was established in 2016.

Figure 18. Poland has lower mortality from treatable causes than countries with similar spending levels



Source: Eurostat Database; OECD Health Statistics 2019.

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

Box 4. Modest skill mix changes support coordination of care

The growing emphasis on coordinated care in Poland has indirectly led to some new responsibilities for health professions. Since 2015, nurses and midwives with relevant training have been allowed to prescribe certain medicines and diagnostic tests and from 2016 ambulance personnel gained new competencies such as working in hospital wards alongside nurses. Most recently, in 2018, the Ministry of Health proposed increasing the number of medical secretaries in outpatient care to help alleviate the administrative burden of doctors and in 2019, the responsibilities of physiotherapists were broadened.

Such changes are likely to support more recent policies that expect doctors to provide coordinated care for certain types of patients and/or conditions, by distributing tasks traditionally performed by doctors to other health professionals. These expectations are not formally defined and so foster bottom-up initiatives that allow skill mix changes to develop 'on the job'. For example, the legislation that introduced coordinated oncological care does not specify who should do the coordinating and, in practice, in many hospitals this role has been assumed by nurses without any additional training.

Overcapacity in the hospital sector suggests sub-optimal allocation of resources

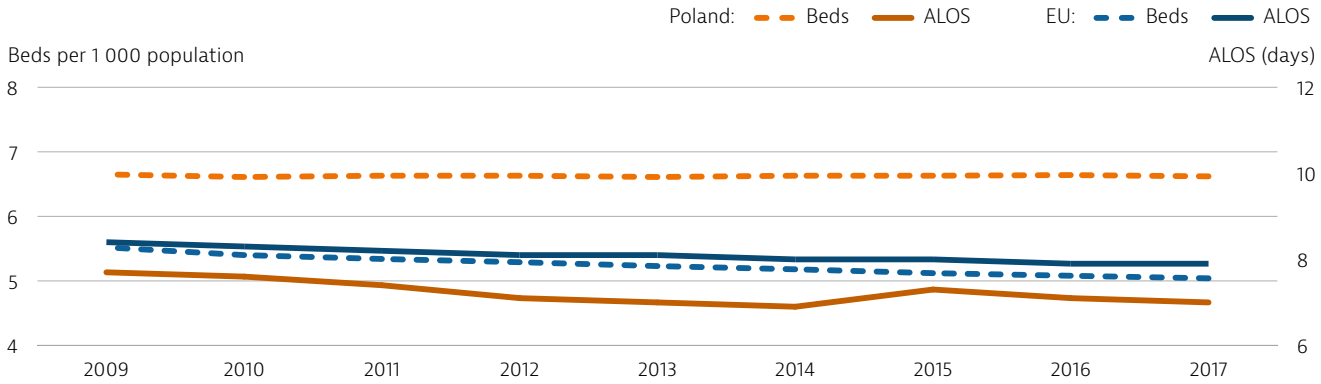
The number of beds per inhabitant has remained relatively stable over the last decade at a level significantly above the EU average (see Section 4). However, a new regulation introduced in 2019, which ties employment quotas for hospital nurses to the number of hospital beds, is pushing hospital directors to reduce the number of beds in response to recent increases in nurses' salaries. At the same time, the average length of stay (ALOS) in hospital has decreased since 2005 and is now below the EU average (Figure 19), the bed occupancy rate is also relatively low (66 % compared to 77 % in the EU). This suggests substantial room to release and reallocate hospital resources.

The relatively low use of day surgery for selected procedures compared to many other EU countries also highlights a potential area for improving efficiency (Figure 20). For example, day surgery rates for procedures such as cataract removal, tonsillectomy and inguinal hernia are far below the EU average and, except for cataract surgery, day surgery rates in Poland have remained flat since 2000. The main reason for this is the formal requirements around medical procedures that push doctors to 'play it safe' by admitting patients for observation.

Box 5. Poland hosted a Voluntary Exchange on addressing critical workforce shortages in May 2018

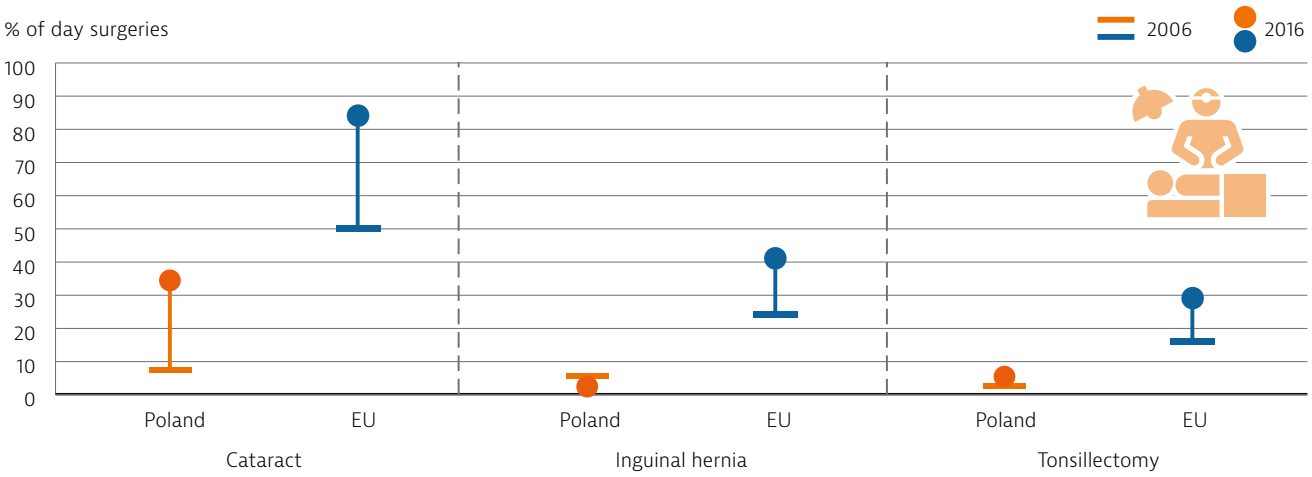
As part of the first State of Health in the EU cycle, the Polish Ministry of Health hosted a policy dialogue on addressing health workforce shortages by optimising the roles of health workers and implementing effective retention policies. The meeting brought together around 30 high-level national health policy stakeholders. National experts showed that useful initiatives could focus on skill mix for building multidisciplinary primary care teams capable of delivering complex personalised care and provide an optimal mix of preventive and curative services.

Figure 19. The number of hospital beds is much higher than in the EU despite a falling average length of stay



Source: Eurostat Database.

Figure 20. Day surgery is underdeveloped in Poland



Source: OECD Health Statistics 2018; Eurostat Database (data refer to 2006 and 2016, or nearest year).

Shortfalls in long-term care will become more acute with population ageing

Excess capacity in the hospital sector is accompanied by shortfalls in the provision of long-term care. The severe underdevelopment of formal long-term care and subsequent heavy reliance on informal carers is particularly problematic. In addition, projections suggest that the number of people depending on others to carry out activities of daily living will increase by 30 % in the next 50 years, a steeper increase than in the EU as a whole (25 %). Overall, population ageing is expected to increase the costs of health care and long-term care, posing risks to fiscal sustainability in the longer term (European Commission-EPC, 2018; European Commission, 2019b).

Better working conditions in the health sector would contribute to improving workforce recruitment and retention

Health workforce shortages have been a long-standing problem in the Polish health sector (see Section 4). Over the years, various measures have been implemented to address this problem, including shortening educational pathways and increasing university quotas to train more doctors and nurses, but with limited results. More recently, following repeated strikes, the number of residency places funded by the state has been increased and, in September 2018, the salaries of resident doctors and nurses were raised. In addition, to address the geographical imbalances in the distribution of doctors (see Section 4), medical degrees have been offered at non-medical universities in the districts with doctor shortages.

The allocation of resources is becoming more efficient but is skewed towards districts with more hospital beds

Resources are divided among the district branches of the NHF according to a formula that takes into account demographic characteristics and the amount granted in the previous year. In practice, resource allocation continues to be skewed towards districts with more health system infrastructure. Although maps of health needs have been developed since 2015, they are not yet effectively used to support purchasing and investment decisions.

Since 2015, the health technology assessment (HTA) agency has played an important role in appraising publicly funded health policy programmes. Its negative opinion can effectively block investments in health technologies that are deemed low value, which may improve the cost-effectiveness of resource allocation within the system. The introduction of a new system for assessing the costs and benefits of health care investments in 2016 is also expected to further improve resource allocation (including of EU funds).

Adoption of eHealth solutions is now gaining pace

An improvement in the use of IT and eHealth solutions has the potential to further improve efficiency (European Commission, 2019b). Although this was a health policy priority for over a decade, progress has been slow until recently. Currently, all pharmacies and an increasing number of health care providers are connected to the ePrescription service, which will be mandatory from 2020. A pilot of eReferrals is currently under way and a national roll-out is expected in 2021. The use of mHealth solutions is low and examples are confined to the private sector, although prescriptions for using mobile devices for heart monitoring have been covered by SHI for some years.

The use of generics has increased substantially

Polish doctors do not have dispensing budgets and there is no prescribing by active ingredient/ International Nonproprietary Name (INN) or guidelines on cost-effective prescribing. However, pharmacy margins are contained by price limits established for particular groups of medicines rather than the price of a particular medicine to disincentivise pharmacists from selling more expensive medicines from the same group. Pharmacists are also legally obliged to inform patients about cheaper generic equivalents and to stock such products. Today, the market share of generics in Poland is among the highest in Europe – in 2017, 89 % of reimbursed prescription medicines dispensed in hospitals and 76 % dispensed in outpatient pharmacies were generics. Legislation introduced in 2012 improved price competition in the generics market. However, because it only applies to medicines that have entered the market since 2012, major price differences persist for medicines that entered the Polish pharmaceutical market prior to 2012.

Reducing governance fragmentation and developing a unified strategic vision for the health system is underway

The fragmentation of competencies and responsibilities among various levels and their insufficient coordination impedes effective national coordination of health care activities (see Section 4). Excessive governance fragmentation also helps explain why certain reforms, have proven difficult to operationalise. However, the districts have increasingly been assuming a coordinating role and concentrating competencies in the districts may help reduce governance fragmentation in the health system. In 2018, the Minister of Health initiated a nationwide experts' debate to create a unified strategy for the health system – and work is ongoing.

6 Key findings

- Since 2000, life expectancy at birth has increased by four years in Poland, but remains three years below the EU average. Inequalities in life expectancy by gender and education are marked: men with the lowest level of education live about 12 years less than the most educated. Life expectancy at age 65 has also increased, yet two thirds of older people live with at least one chronic disease and almost half live with depressive symptoms.

- Behavioural risk factors account for almost half of all deaths. While smoking rates have decreased, and lung cancer deaths have fallen, they are higher than the EU average and much greater for men than for women. Obesity rates have also increased over the last ten years for adults and particularly for children, although both are still below the EU averages. Unhealthy dietary behaviours and low physical activity contribute to this growing public health issue, which has been largely neglected so far.

- Mortality from treatable causes continues to be much higher than the EU average and survival rates for cancers are consistently lower than in the EU, indicating that there is much scope for improvement in early diagnosis and timely, effective treatment.

- Total health spending per capita (EUR 1 507) and as a share of GDP (6.5 %) is among the lowest in the EU. A recent pledge to increase public spending on health from 4.6 % of GDP in recent years to 6.0 % of GDP by 2024 acknowledges this underfunding issue. The injection of extra funds, if invested effectively, could go a long way in addressing the main barriers to accessing care. This would comprise tackling long waiting times for medical services, and shoring up capacity to meet population needs, particularly in underserved areas.

- Lack of affordability also hinders equity of access to health care. Out-of-pocket spending is comparatively high, at nearly 23 % of health expenditure. Most of it is due to limited public coverage for outpatient pharmaceuticals, the largest single driver of catastrophic health spending, which affected some 30 % of low-income households in 2014.

- Despite a surge in medical graduates over the last decade, shortages of health professionals in public facilities, particularly doctors and nurses, are among the most acute in Europe. Since training health professionals may take time, human resources planning requires urgent action, along with attention to recruitment and retention policies. In particular, shortages of general practitioners will continue to pose a major challenge for the effective delivery of primary care.

- The avoidable hospitalisation rate for chronic conditions that could be treated in outpatient settings is one of the highest in Europe, reflecting issues in access to and quality of primary care. Related to this, the provision of care continues to be over-reliant on hospitals and the shift to more community-based care has not yet materialised. However, recent reforms and ongoing pilots targeting coordination of care may help with this shift.

- Health care governance is fragmented and helps explain the slow progress with reforms, such as reducing the number of hospital beds and clearing hospital debts. A unified strategic vision for the health system has so far been lacking, but work is ongoing to remedy this.

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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

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