European Commission



State of Health in the EU

Italy

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.

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.

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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-Italy.xls

Demographic and socioeconomic context in Italy, 2017

Demographic factors	Italy	EU
Population size (mid-year estimates)	60 537 000	511 876 000
Share of population over age 65 (%)	22.3	19.4
Fertility rate[1]	1.3	1.6
Socioeconomic factors		
GDP per capita (EUR PPP[2])	28 900	30 000
Relative poverty rate[3] (%)	20.3	16.9
Unemployment rate (%)	11.2	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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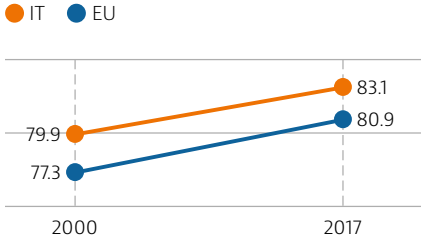
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1 Highlights

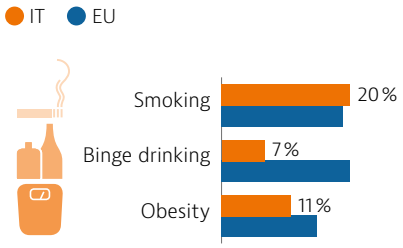
Italy enjoys the second highest life expectancy in Europe, although sizeable inequalities persist across regions and by gender and socioeconomic status. The Italian health care system is generally efficient and performs well in providing good access to high-quality care at a relatively low cost, although there are significant variations across regions. The main challenges facing the health system relate to improving coordination of care for the growing share of the population living with chronic diseases and reducing disparities in access to care.



Life expectancy at birth, years

Health status

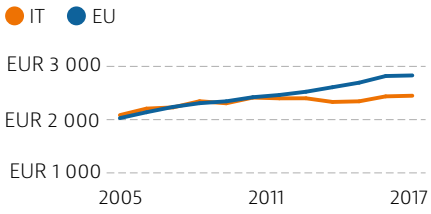
Life expectancy at birth in Italy reached 83.1 years in 2017, the second highest in the EU after Spain. Since 2000, the gender gap in life expectancy has narrowed, but on average Italian men still live four years less than women. Important disparities also exist by socioeconomic status and across regions: the least educated Italian men on average live 4.5 years less than the most educated, and people in the most affluent regions in the north live over three years more than those living in the least affluent regions in the south.



% of adults

Risk factors

Smoking rates in Italy have decreased since 2000, but one in five adults still smoked daily in 2017, slightly more than the EU average (19 %). Obesity among adults increased from 9 % in 2003 to 11 % in 2017 but remains below the EU average (15 %). Excess weight problems among children and adolescents are also an important public health issue, with about one-fifth of 15-year-olds being overweight or obese in 2013-14, a share close to the EU average. On a more positive note, the proportion of adults who report episodic heavy drinking is much lower than in most EU countries.



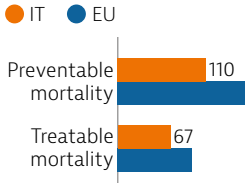
Per capita spending (EUR PPP)

Health system

Health spending per capita in Italy was EUR 2 483 in 2017, about 15 % below the EU average of EUR 2 884. Health spending has started to increase again in recent years, but at a slower rate than in most EU countries. As a share of the economy, health spending accounted for 8.8 % of GDP in 2017, one percentage point below the EU average of 9.8 %. Nearly three-quarters of health spending is publicly funded, with the rest paid mainly through out-of-pocket payments.

Effectiveness

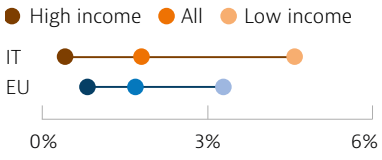
Italy's health system is relatively effective at avoiding premature deaths, with one of the lowest rates of preventable and treatable causes of mortality in the EU.



Age-standardised mortality rate per 100 000 population, 2016

Accessibility

Unmet needs for medical care in Italy are generally low, although low-income groups and residents in some regions experience greater barriers to accessing some services.



% reporting unmet medical needs, 2017

Resilience



As in many other Member States, population ageing will exert pressure on health and long-term care systems in the years ahead, requiring increased efficiency through further transformation of service delivery models towards the provision of chronic care outside hospitals.

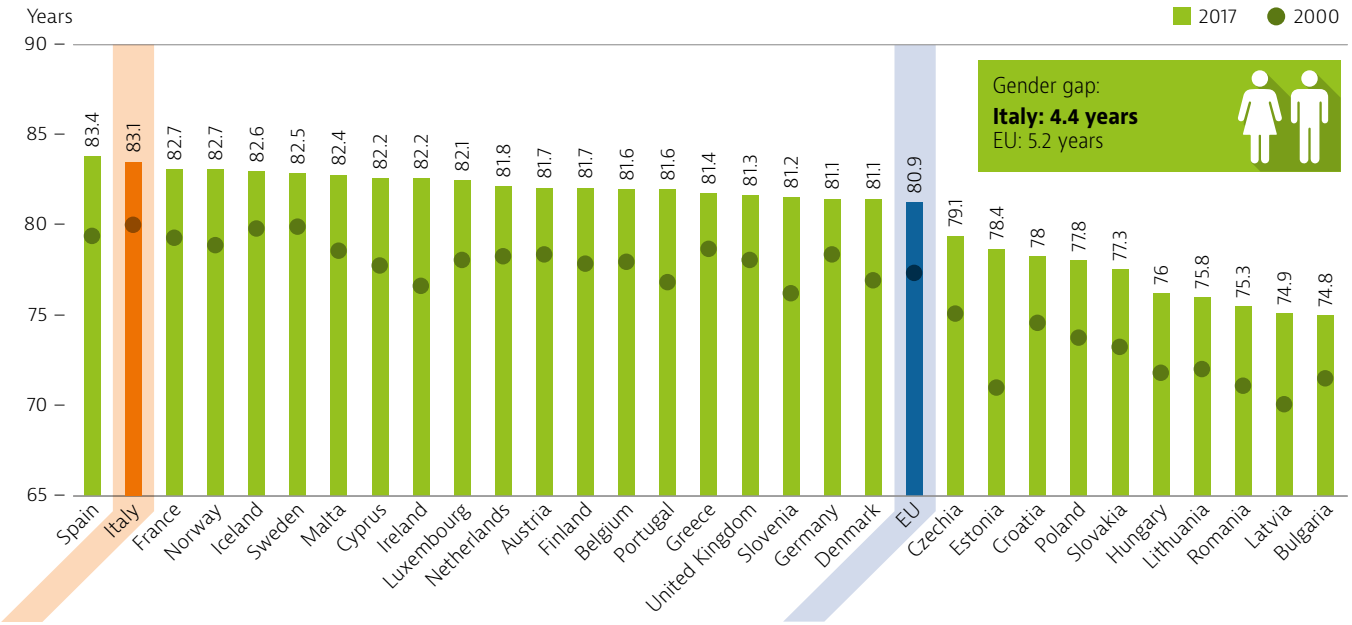
2 Health in Italy

Life expectancy at birth in Italy is the second highest in the EU

At 83.1 years in 2017, Italy continues to enjoy the second highest life expectancy at birth in the EU after Spain and more than two years above the EU average (Figure 1). Between 2000 and 2017, the life expectancy of Italians increased by 3.2 years, a slightly slower gain than in the EU as a whole (3.6 years).

The gender gap in life expectancy is smaller than the EU average. While Italian women still live more than four years longer than men, this gap has narrowed by 1.5 years as men's life expectancy increased more rapidly than that of women between 2000 and 2017.

Figure 1. Italians enjoy the second highest life expectancy in the EU



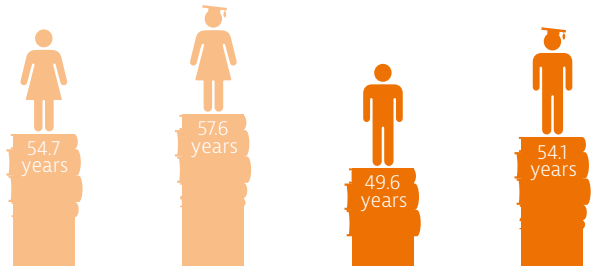
Source: Eurostat Database.

Inequalities in life expectancy are less pronounced than in other EU countries

Although less severe than in most other EU countries, inequalities in life expectancy by socioeconomic status remain non-negligible in Italy. As shown in Figure 2, 30-year-old men with lower levels of education live on average 4.5 years less than those with the highest level of education. This education gap in longevity is smaller among women, at about three years. These gaps can be explained at least partly by differences in exposure to various risk factors and unhealthy lifestyles, including higher smoking rates and poorer nutritional habits among men and women with lower levels of education.

Regional inequalities in life expectancy also exist but are less pronounced than those by education level. In 2017, the region with the highest life expectancy at birth was the northern region of Trentino-Alto-Adige, where citizens could expect to live over three years longer than in the southern region of Campania, which had the lowest.

Figure 2. The education gap in life expectancy is 4.5 years for men and about 3 years for women



Education gap in life expectancy at age 30:

Italy: 2.9 years	Italy: 4.5 years
EU21: 4.1 years	EU21: 7.6 years

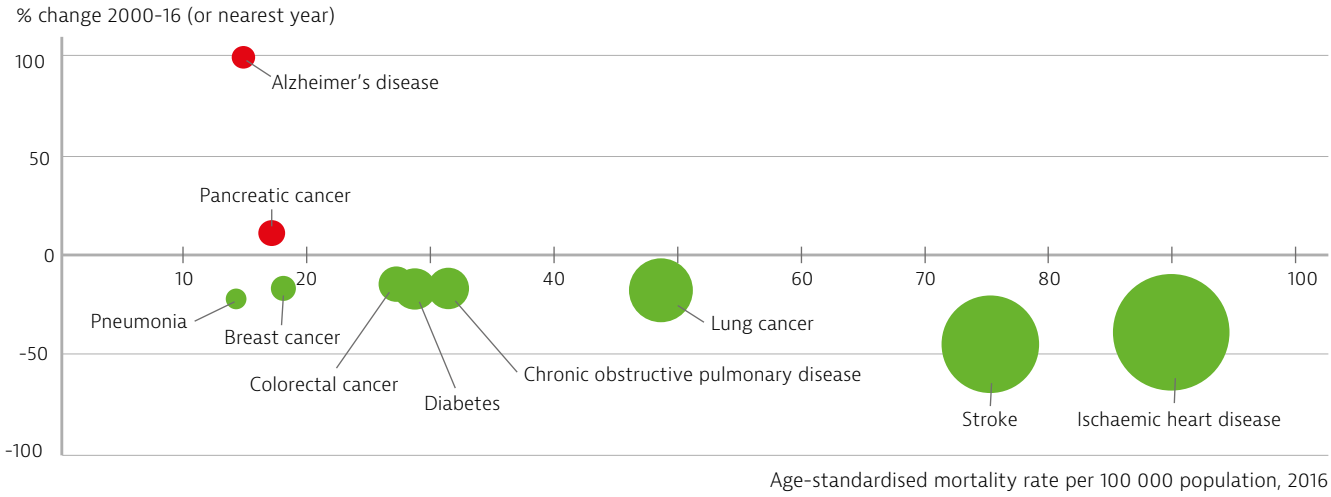
Note: Data refer to life expectancy at age 30. High education is defined as people who have completed tertiary education (ISCED 5-8), whereas low education is defined as people who have not completed secondary education (ISCED 0-2).
Source: Eurostat Database (data refer to 2016).

Cardiovascular diseases remain the main cause of death in Italy

The increase in life expectancy since 2000 has mainly been driven by substantial reductions in mortality rates from ischaemic heart disease and stroke, although they remained the two leading causes of death in Italy in 2016 (Figure 3). Lung cancer and colorectal cancer are the most frequent causes of death from cancer, but mortality rates have also decreased by about 15 % since 2000.

At the same time, mortality rates from Alzheimer's disease have increased significantly in Italy, although this rise is due largely to improvements in diagnosis and changes in death registration practices.

Figure 3. Ischaemic heart disease, stroke and lung cancer are still the leading causes of death



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.

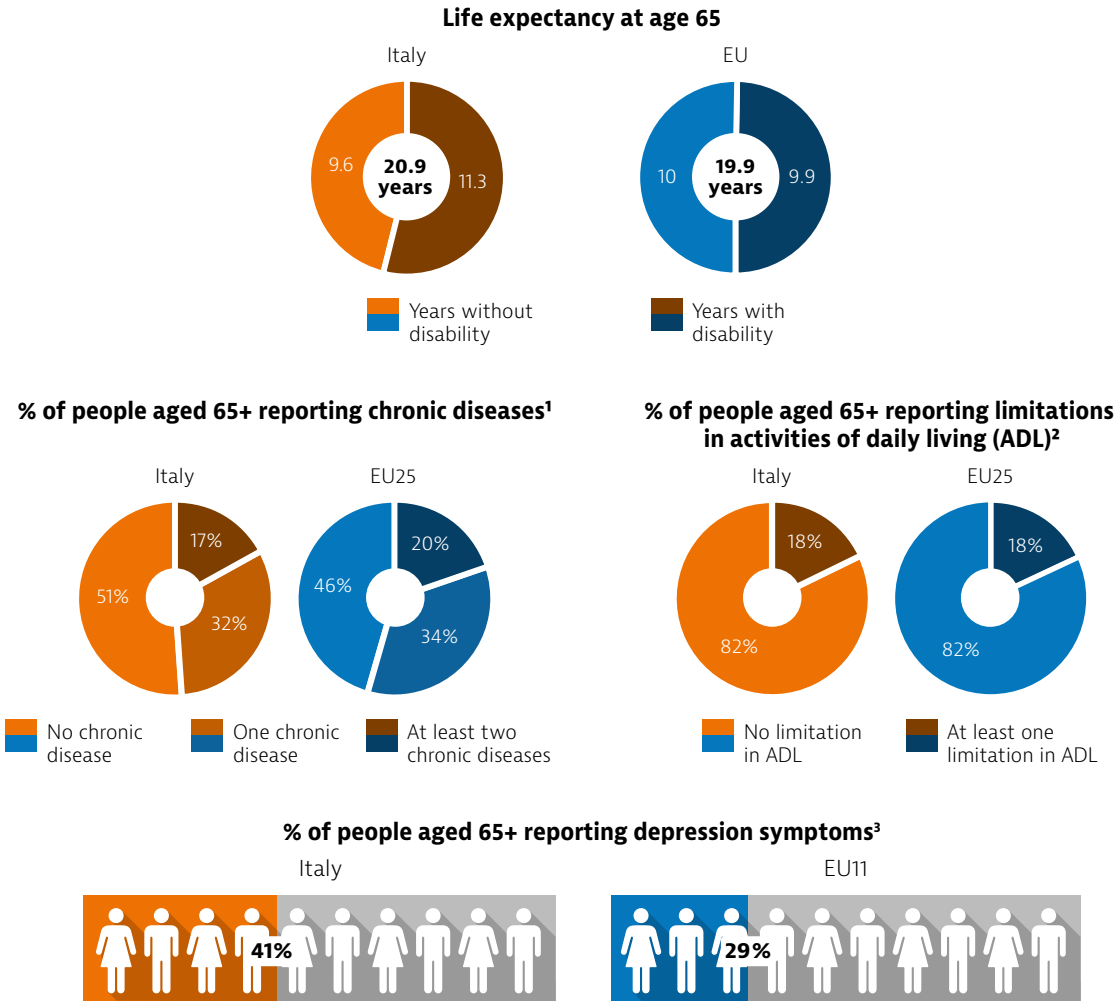
Many years of life after age 65 are lived with some chronic diseases and disabilities

Sustained gains in life expectancy combined with low fertility rates over the last two decades have contributed to a steady rise in the share of the population aged 65 and over. In 2017, more than one in five Italians was aged 65 years and over, up from only one in eight in 1980; this share is projected to increase to around one in three people by 2050.

In 2017, life expectancy at age 65 reached nearly 21 years, one year above the EU average (Figure 4). However, as in other countries, Italians spend slightly more than half of these additional years of life after 65 with some health issues and disabilities. The gender gap in life expectancy at age 65 is about three years in favour of women, but there is no gender gap in the number of healthy life years because Italian women live a greater proportion of their lives in old age with some health issues and disabilities.

Slightly less than half of Italians aged 65 and over reported having at least one chronic disease in 2017, which is lower than the EU average. Most people are able to continue to live independently in old age, but one in six Italians aged 65 and over reported in 2017 some limitations in basic activities of daily living, such as dressing and eating, which may require long-term care assistance. About four in ten people aged 65 years and more reported some depression symptoms, a higher proportion than the EU average.

Figure 4. About half of Italians report one or more chronic diseases after age 65



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).
Sources: Eurostat Database for life expectancy and healthy life years (data refer to 2017); SHARE survey for other indicators (data refer to 2017).

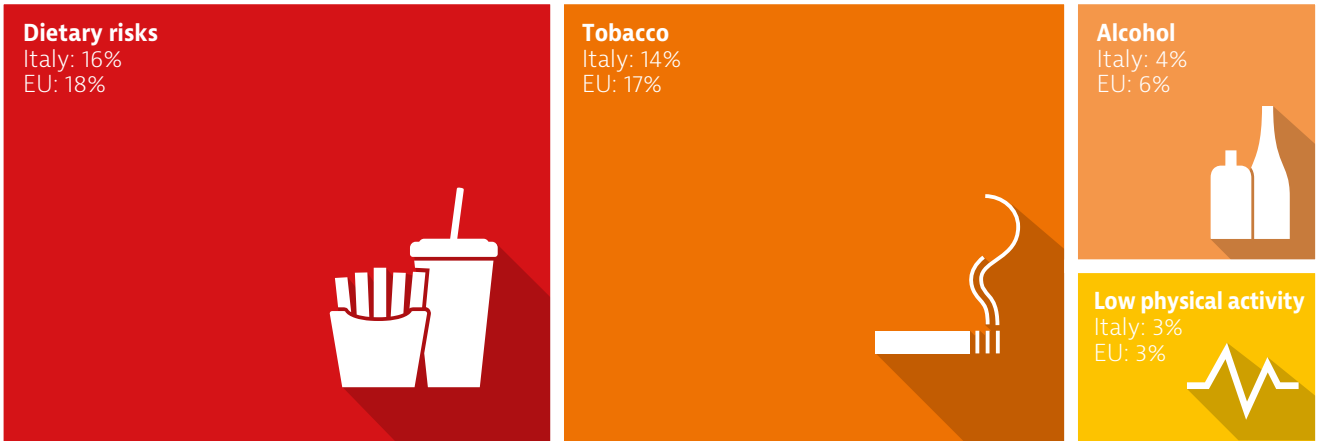
3 Risk factors

Behavioural risk factors account for one-third of all deaths in Italy

Estimates suggest that about one-third of all deaths in Italy in 2017 could be attributed to behavioural risk factors, including dietary risks, tobacco smoking, alcohol consumption and low physical activity (Figure 5; IHME, 2018). This is much lower than the EU average.

About 16 % (98 000) of deaths in 2017 were related to dietary risks (including low fruit and vegetable intake and high sugar and salt consumption). Tobacco consumption (including direct and second-hand smoking) was responsible for an estimated 14 % (over 90 000) of all deaths. About 4 % (26 000) of deaths could be attributed to alcohol consumption, and 3 % (18 000) to low physical activity. All these shares are below the EU average except for low physical activity.

Figure 5. About one-third of all deaths can be attributed to modifiable risk factors



Note: The overall number of deaths related to these risk factors (210 000) is lower than the sum of each one taken individually (231 000), because the same death can be attributed to more than one risk factor. Dietary risks include 14 components such as low fruit and vegetable consumption and high sugar-sweetened beverages and salt consumption.
Source: IHME (2018), Global Health Data Exchange (estimates refer to 2017).

Smoking remains an important public health issue

Tobacco consumption remains a major public health issue in Italy, particularly among men, with one in four reporting smoking daily in 2017, compared with 15 % of women. While this proportion has decreased slightly over the past decade, it remains higher than in most EU countries.

Smoking rates among teenagers in Italy remain very high. In 2015, more than one-third of 15- and 16-year-old boys and girls reported they had smoked at least occasionally in the past month, the highest rate in the EU (Figure 6). Smoking rates among Italian adolescents have not fallen between 1995 and 2015, while they have dropped in most other EU countries.

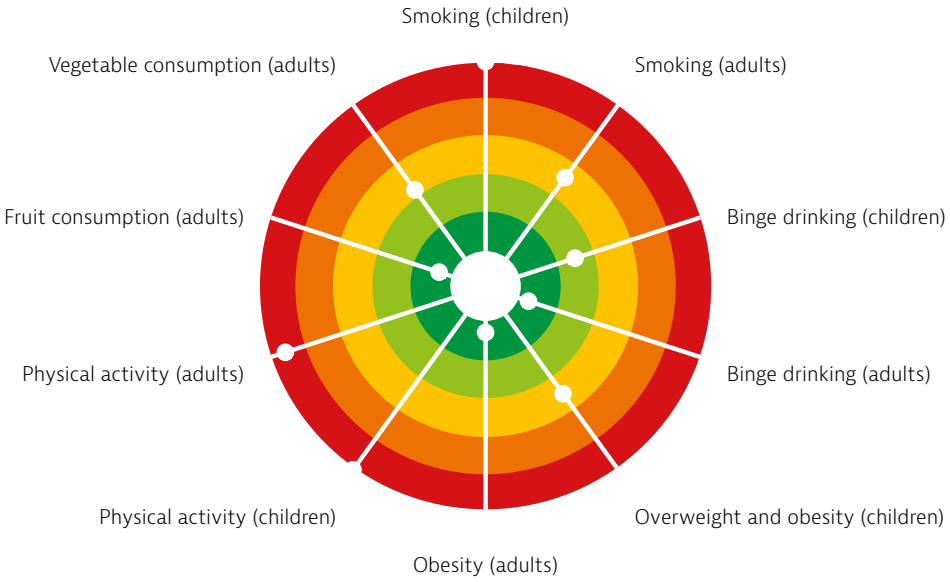
Overweight and obesity rates are high among children and adolescents

Nearly one in five 15-year-olds in Italy (18 %) was overweight or obese in 2013-2014, according to the Europe-wide HBSC survey. Another more recent national survey focusing on primary school children reported even higher rates, showing that nearly one in three children (31 %) aged 8-9 years was either overweight or obese in 2016, but this rate was down slightly from 35 % in 2008 (Spinelli et al., 2017).

High rates of overweight and obesity among children are at least partly linked to low physical activity. Only 5 % of 15-year-old girls and 11 % of 15-year-old boys reported doing at least moderate daily physical exercise in 2013-14, the lowest rate across EU countries. The level of physical activity among Italian adults is also among the lowest in the EU.

Obesity among adults has increased slightly over the past 15 years, up from 9 % in 2003 to 11% in 2017 according to a national survey, but it remains lower than in most EU countries.

Figure 6. Many risk factors among children are more prevalent than in other EU countries



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.
Sources: 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.

A greater proportion of Italian adults report consuming at least one portion of fruit and vegetable per day than in most EU countries; nevertheless, 15 % reported in 2017 that they did not eat at least one fruit each day and 20 % that they did not eat any vegetables.

Alcohol consumption among adults is low, but a third of adolescents engage in binge drinking

Alcohol consumption among adults in Italy has decreased by about 20 % since 2000 and is now among the lowest in the EU. The proportion of adults who report heavy episodic alcohol consumption ("binge drinking"[1]) is also much lower than in nearly all other EU countries.

However, binge drinking among adolescents is quite widespread. In 2015, around one-third of 15-16-year-old boys and girls reported at least one episode of heavy alcohol drinking during the past month, a proportion close to the EU average.

4 The health system

Italy has a highly decentralised health system providing universal coverage

The Italian health system is characterised by a decentralised, regionally based national health service (NHS). The central government channels general tax revenues for publicly financed health care, defines the benefit package (known as the *livelli essenziali di assistenza*, 'essential levels of care') and exercises overall stewardship. Each region is responsible for the organisation and delivery of health services through local health units and public and accredited private hospitals. The health service covers all citizens and legal foreign residents. Coverage is automatic and universal, and care is generally free for hospital and medical services. Irregular immigrants have been entitled to access urgent and essential services since 1998.

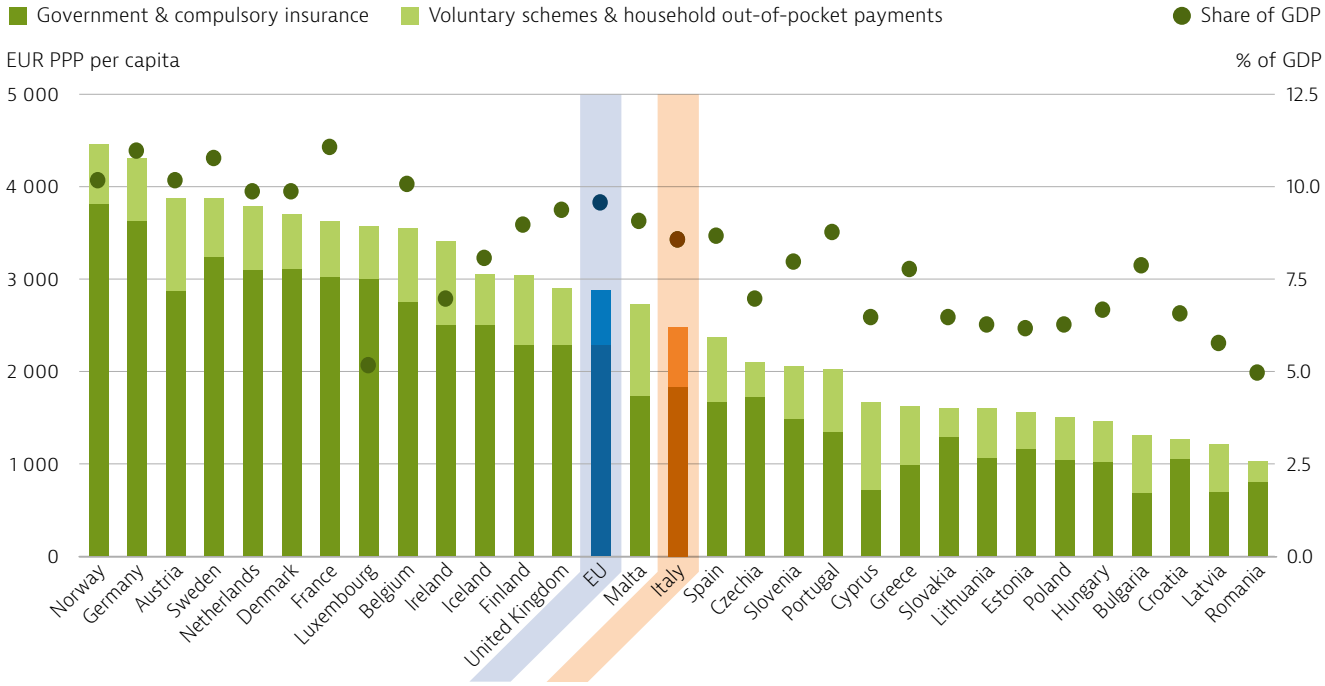
1: Binge drinking is defined as consuming six or more alcoholic drinks on a single occasion for adults, and five or more alcoholic drinks for adolescents.

Health spending in Italy is lower than the EU average

In 2017, Italy spent 8.8 % of its GDP on health care, a lower share than the EU average of 9.8 %. In per capita terms, health expenditure amounted to EUR 2 483 (adjusted for differences in purchasing power), more than 10 % below the EU average of EUR 2 884 (Figure 7). Following the economic crisis in 2009, health spending per capita fell until 2013, after which it started to increase again at least moderately.

Public spending accounted for 74 % of health expenditure in 2017 (or 6.5 % of GDP). Although the basic benefit package covers a wide range of services, direct out-of-pocket (OOP) payments by households are relatively high (24 %), making up most of the remaining expenses. Private health insurance plays a minor role, covering only about 2 % of total health expenditure.

Figure 7. Italy spends less on health care than most other western European countries



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

The regions' health care deficits have been reduced substantially

Italy's NHS is mainly funded through general taxation, complemented by revenues from regional business and individual income taxes and co-payments paid directly by patients. Different fiscal capacities and health system efficiency levels across regions raise concerns about the ability of poorer or lower-performing regions to provide access to high-quality health care services without increasing regional taxes or running deficits (Box 1). Nevertheless, through very tight expenditure controls, most regions have managed to keep their health budgets balanced in recent years. In 2017, only seven of the 20 regions were under nationally supervised recovery plans (Abruzzo, Apulia, Calabria, Campania, Lazio, Molise and Sicily) – fewer than in 2007.

Box 1. The benefit package was expanded in 2017, but several regions do not have the capacity to deliver new services

In January 2017, the Italian government approved a moderate expansion of the benefit package to include treatment for a list of rare and chronic diseases, new diagnostic services, new vaccines, neonatal screening and assistive devices. The new package also included a long-overdue update of the tariffs paid for different services. However, the lack of national guidelines and financial constraints have resulted in different levels of implementation across regions. The national committee responsible for monitoring the provision of the benefit package reported that in 2017 five regions did not comply with the national objectives and targets (Campania, Valle d'Aosta, Sardinia, Calabria and the Autonomous Province of Bolzano).

Regions can also choose to offer services beyond the benefit package list, but must finance these themselves. Significant inter-regional mobility of patients is one indicator of inequalities in health service delivery across the country. The percentage of patients treated in a different region than their home region increased from 7 % in 2001 to about 8.5 % in 2016. The proportion of patients in the south choosing to be treated in another region is almost twice as high as in the north.

User fees are common across Italy, but rates and exemptions vary between regions

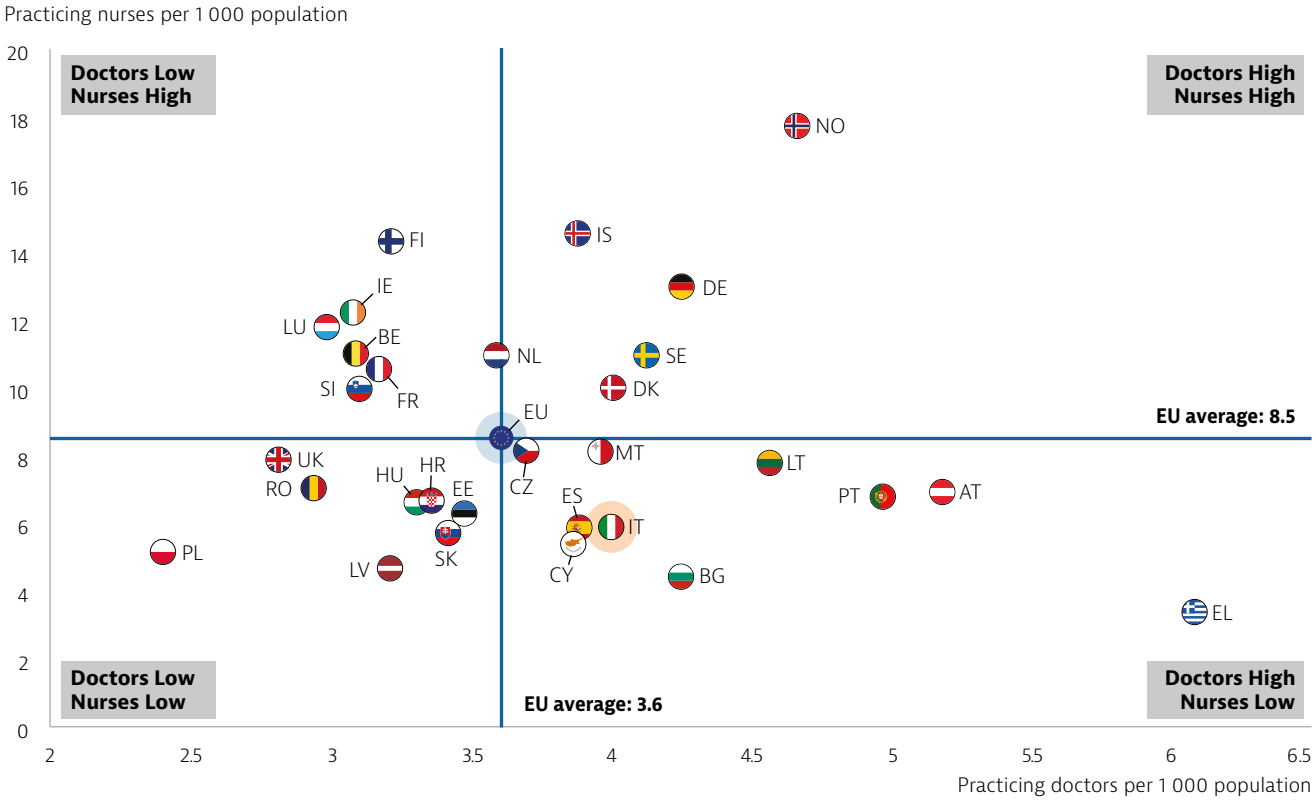
Historically, OOP spending has made up a little more than one-fifth of all health spending. However, over the last decade, the share has gradually increased, reflecting rising cost-sharing requirements for many health services and pharmaceuticals in several regions (see Section 5.2). Co-payments are required for diagnostic procedures, pharmaceuticals, specialist visits in outpatient settings and unjustified (non-urgent) interventions in hospital emergency departments. Each region establishes its own co-payment levels for pharmaceuticals, with various exemptions for some population groups, meaning that co-payment levels are not homogeneous across the country. There are no annual ceilings on co-payments, so these have the greatest impact for heavy users of health services who are not eligible for exemptions.

The number of doctors is higher than the EU average, while the number of nurses is lower

While the total number of doctors per population in Italy is higher than the EU average (4.0 compared with 3.6 per 1 000 population in 2017), the number working in public hospitals and as general practitioners (GPs) is declining, and more than half of doctors are aged over 55, raising serious concerns about future shortages.

Italy employs fewer nurses than nearly all western European countries (with the exception of Spain), and the number is substantially lower than the EU average (5.8 nurses per 1 000 population compared with 8.5 in the EU; Figure 8).

Figure 8. Compared to the EU average, Italy has a high number of doctors but fewer nurses



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 hospitals.
Source: Eurostat Database (data refer to 2017 or the nearest year).

Improving care for chronic diseases is a key focus of health care innovation

Health services are mainly delivered by public providers, alongside private or public-private entities. GPs and paediatricians act as gatekeepers for access to secondary care. Under the NHS, patients can choose either public or private providers for hospital care and specialised ambulatory services, usually depending on perceived quality and waiting time.

Recognising that new types of services are required to meet emerging care needs, a national initiative designed to improve the coordination of chronic care was launched in September 2016 (Piano Nazionale della Cronicità; Ministry of Health, 2016). A number of regions are piloting the implementation of different health service models, through multispecialty community-based centres and case management that combine health and social care, to better respond to the needs of patients with co-morbidities. However, in most cases these pilots have not been subject to formal evaluation.

5 Assessment of the health system

5.1. Effectiveness

Low rates of preventable and treatable mortality reflect the health system's effectiveness

Following a reduction of over 10 % between 2011 and 2016, Italy reports the second lowest preventable mortality rate in the EU after Cyprus (Figure 9). This low rate of preventable mortality reflects low mortality rates from ischaemic heart disease, lung cancer, accidental deaths, suicide and alcohol-related diseases, which are all well below the EU averages, because of a lower prevalence of risk factors and lower incidence of these health problems.

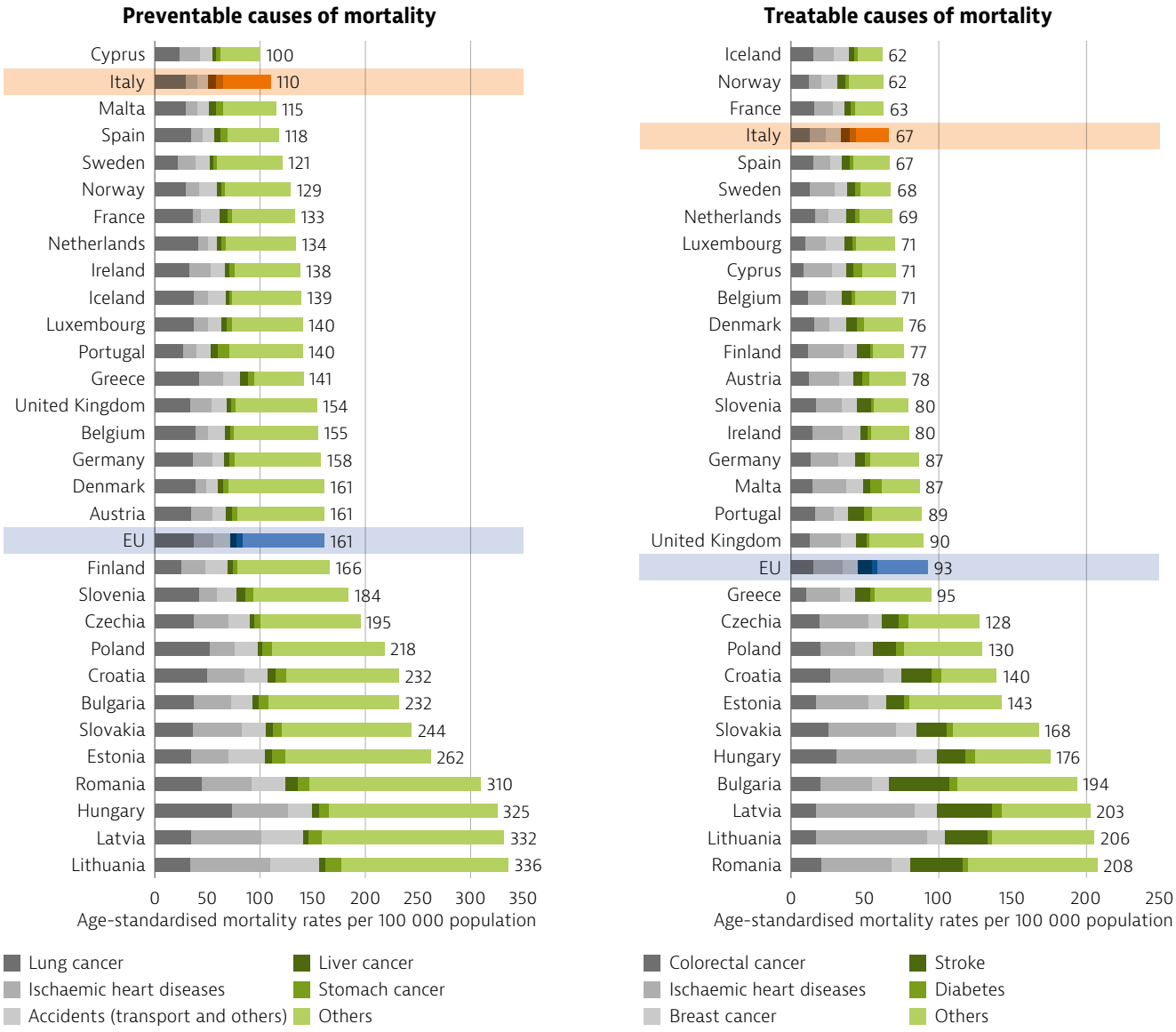
The number of deaths deemed potentially avoidable through health care interventions was also one of the lowest in the EU in 2016, indicating that the Italian health system is generally effective in treating patients with life-threatening conditions. These positive results are related to relatively low mortality rates from ischaemic heart disease, stroke and colorectal cancer, which are significantly lower than the EU average, because effective treatments are generally provided when these diseases occur.

Public health policies in the 2000s are paying off with low preventable death rates

Italy's low levels of preventable deaths can be explained at least in part by solid public health policies that were implemented about a decade ago (Box 2). A nationwide smoking ban in public places and workplaces was implemented in 2005, and successive increases in cigarette prices were enforced. In 2013, stricter rules on tobacco access among young people were also introduced: the minimum purchase age was raised to 18 years, higher fines were imposed on tobacco retailers who sold cigarettes to minors, automatic age-detection systems were installed in tobacco vending machines, a smoking ban was extended to the outdoor premises of schools and a ban on sales of electronic cigarettes to minors was implemented. In addition, in 2016, a new law regulated the combination of images and warnings on cigarette packs and introduced a smoking ban in cars (in the presence of pregnant women and minors) and in the outdoor premises of hospitals.

The remarkable reduction in alcohol consumption in recent decades can be explained largely by various sociodemographic and economic factors, and more specifically by urbanisation (Allamani et al., 2014). In addition, alcohol control policies such as drink-driving regulations, sales restrictions during mass events introduced in the 2000s and the increase in the alcohol purchasing age limit to 18 years in 2012 have contributed to reducing alcohol consumption.

Figure 9. Italy has among the lowest rates of preventable and treatable mortality in the EU



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 is based on the revised OECD/Eurostat lists.
Source: Eurostat Database (data refer to 2016).

Box 2. A national programme addresses relevant risk factors through a multisectoral approach

The 'Gaining Health: Making Healthy Choices Easier' (Guadagnare salute: rendere facili le scelte salutari) is a longstanding national programme initially approved in 2007 and still implemented today in cooperation with the regions and autonomous provinces. Its main objective is to address, in a coordinated way, four key modifiable risk factors to health across the population of all ages: poor nutrition, physical inactivity, smoking and alcohol consumption. These issues are addressed not only from the health sector perspective but also from a broader social and environmental perspective through intersectoral actions based on the 'Health in All Policies' principles.

Building on this longstanding programme, in February 2019, the Ministers of Health and Education adopted a new set of policy guidelines to promote better nutrition, physical activity and other health-promotion activities in schools (Ministry of Health, 2019).

Raising immunisation rates among children is a key challenge

Until 2016, childhood vaccination rates fell below the 95 % target recommended by WHO to protect the population against the spread of a range of communicable diseases, because of reduced public and parental trust in the benefits of vaccination. In response, in 2017 the Italian government adopted a comprehensive two-year plan to increase vaccination coverage, including by making it a requirement for school attendance, but misinformation and weak policy coherence have hindered the implementation of this plan so far (Box 3).

Box 3. Implementation of a national vaccination plan is hindered by misinformation

A national vaccination plan was approved in January 2017, harmonising a single national schedule that was previously a combination of 20 different regional schedules. The plan sets targets for vaccine coverage, but also outlines actions to reduce disparities between regions. Despite this step forward, vaccine hesitancy continues to be an issue owing to the action of various groups in Italian society that question the efficacy, safety and need for vaccinations.

As a response to the 2016-17 measles outbreaks, in July 2017 the Italian government made ten vaccines free and mandatory for children attending school. In addition, in September 2017, proof of vaccination became a requirement for children aged up to 6 years to attend kindergarten and nursery, and there was also a proposal to impose fines for parents refusing vaccination for their children of any age.

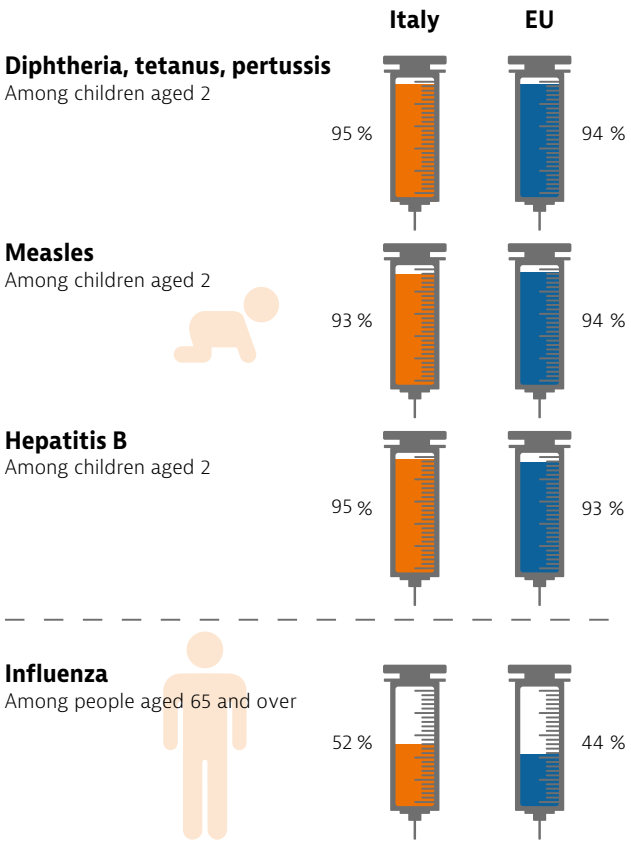
Implementation of the plan was weakened in June 2018 when the new government allowed parents to certify their children's vaccination status to schools, based on self-declaration rather than submitting a medical certificate. This resulted in a surge in measles cases in the following month, after which enforcement of the vaccination obligation was restored. Weak policy coherence by the government constitutes one of the factors that bolsters vaccine hesitancy and anti-vaccine movements in Italy.

In 2017 and 2018, vaccination coverage among children increased slightly and again reached the 95 % WHO target for diphtheria, tetanus, pertussis and hepatitis B for the first time since 2014, but it remained slightly below that level for measles (Figure 10).

Between 2017 and 2019, several measles outbreaks were registered in Italy, giving it the fourth highest notification rate of measles in Europe. The vast majority of cases were among people who had not been vaccinated.

Although above the EU average, only slightly more than half of people aged 65 and over were vaccinated against influenza in 2017, well below the recommended WHO target of 75 %. The proportion of older people vaccinated has declined over the last decade, again partly due to the spread of misinformation and misperception about the benefits and risks of this vaccination.

Figure 10. Child immunisation rates for measles in Italy do not meet the WHO target

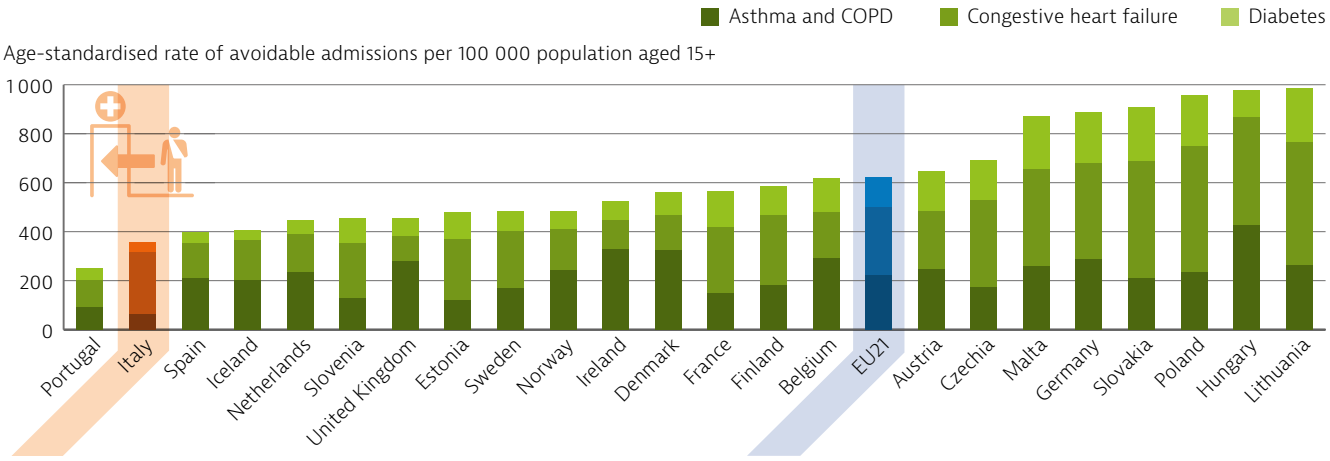


Note: The data refer to the third dose for diphtheria, tetanus and pertussis, and hepatitis B, and the first dose for measles.
Source: WHO data for children (data refer to 2018); OECD Health Statistics 2019 and Eurostat Database for people aged 65 and over (data refer to 2017).

Effective primary care is helping keep people out of hospital

The rate of hospital admissions for chronic diseases such as asthma, chronic obstructive pulmonary disease (COPD) and diabetes in Italy is among the lowest in the EU (Figure 11). This reflects a strong primary care system, where GPs act as gatekeepers and growing numbers of multidisciplinary teams provide acute and chronic care, as well as preventive services for the whole population.

Figure 11. Avoidable hospital admissions for chronic diseases are well below the EU average

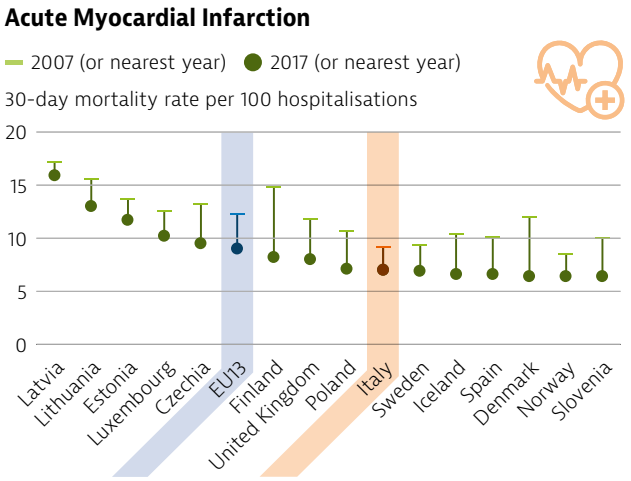


Source: OECD Health Statistics 2019 (data refer to 2017 or nearest year).

Hospitals generally provide high-quality treatment for people requiring acute care

The quality of acute care in hospitals for life-threatening conditions such as acute myocardial infarction (AMI) has improved over the past decade and compares well with other EU countries, as measured by mortality rates following hospitalisation (Figure 12). In 2012, the National Outcomes Programme (*Programma Nazionale Esiti*, PNE) was initiated to assess and support improvements in clinical processes and outcomes. Managed by the Italian National Agency for Regional Healthcare Services (AGENAS), the Programme provides a national comparative assessment of effectiveness, safety and quality of care within the NHS. The results at national and regional levels are periodically published on a website and used in audits and to provide feedback to improve clinical practices.

Figure 12. Mortality rates following hospital admission for AMI are among the lowest 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.
Source: OECD Health Statistics 2019 (data refer to 2017 or nearest year).

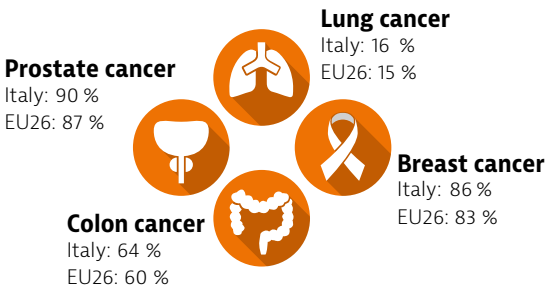
Cancer survival rates are above the EU average despite relatively low screening rates

Several national screening plans were put in place over the last decade to promote screening for common types of cancer such as breast, cervical and colorectal cancer. Although these programmes are offered free of charge for their respective target populations, coverage remains limited. Only about 60 % of women in the target age group of 50-69 had been screened for breast cancer over the past two years in 2017, which is close to the EU average of 61 %.

Screening rates for cervical cancer are much lower, with only around 40 % of women aged 20-69 screened over the past three years, compared to the EU average of 66 %.

Despite these relatively low screening rates, five-year survival rates following diagnosis for these and other cancer are slightly higher in Italy than in other EU countries (Figure 13), suggesting that the health system is generally able to provide effective and timely treatments for cancer patients.

Figure 13. Five-year survival rates for various cancers are above the EU average



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

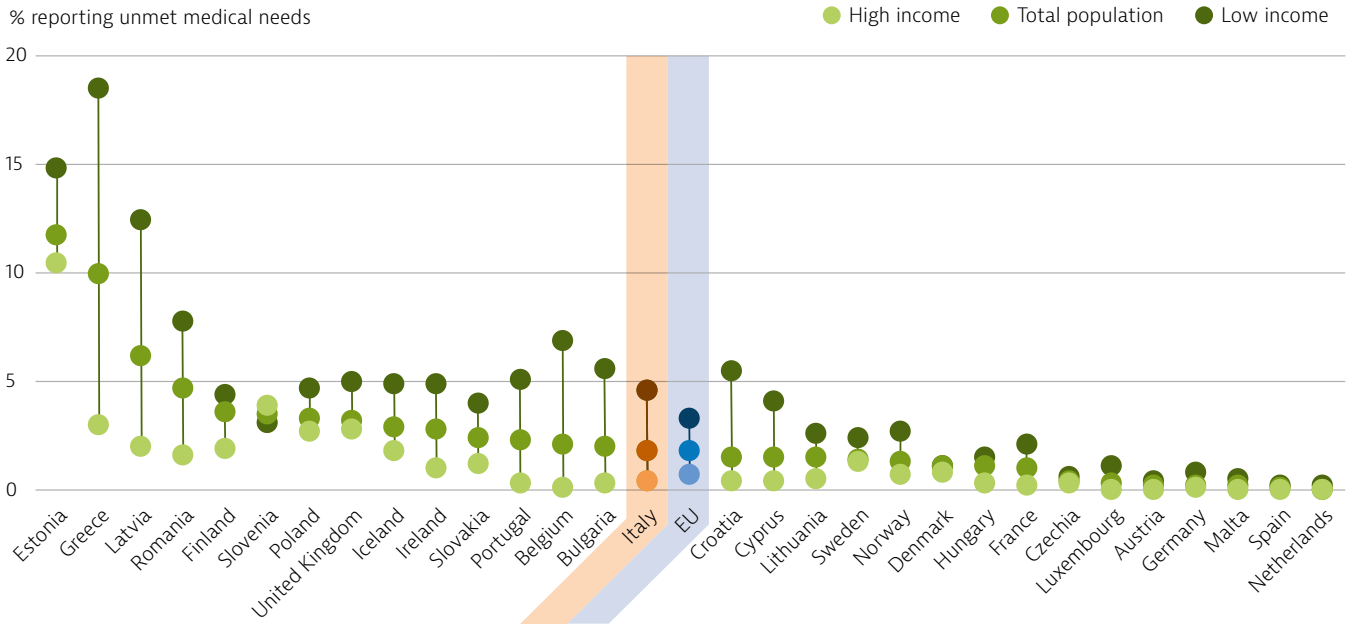
5.2. Accessibility

Unmet needs for medical care are close to the EU average

As noted in Section 4, nearly all Italian residents are covered by the NHS, which covers most of the medical cost in hospitals and consultations with doctors. Only about 2 % of the population reported unmet needs for medical care in 2017 (Figure 14), driven mainly by cost and waiting times issues. The proportion of unmet medical care needs was greater among people in the lowest income quintile (almost 5 %) than among those in the highest quintile (less than 1 %).

Unmet needs data also suggest sizeable disparities in access to care across regions, with citizens from poorer regions in the south almost twice as likely to report unmet medical care needs than those living in wealthier regions in the north. Reported unmet needs due to waiting times and travel distances are also higher in southern regions (European Commission, 2019a).

Figure 14. Unmet medical care needs are low, but disparities are wider than the EU average

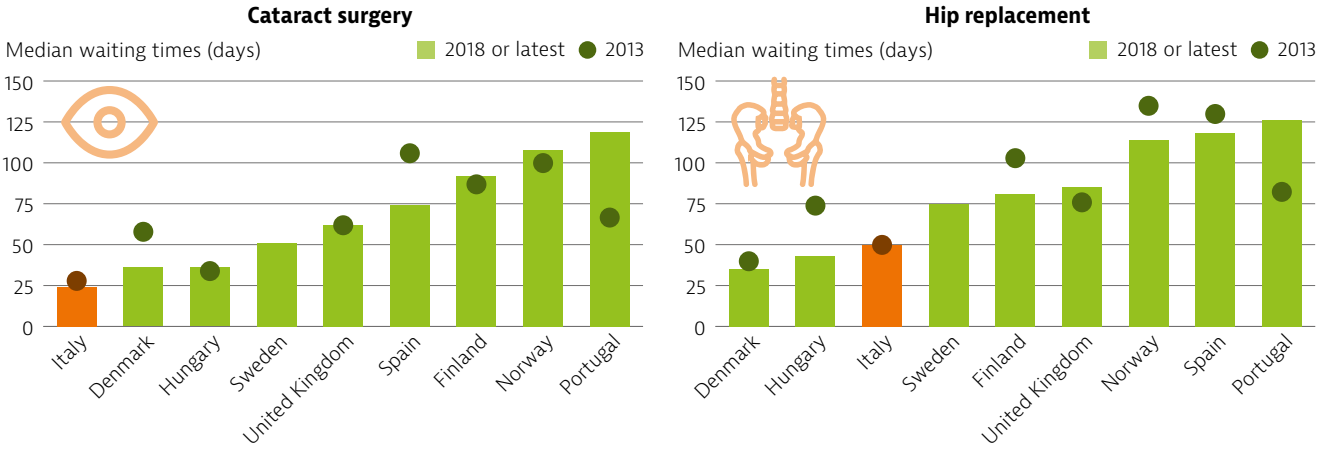


Note: Data refer to unmet needs for a medical examination or treatment due to costs, distance to travel or waiting times. Caution is required in comparing the data across countries as there are some variations in the survey instrument used.
Source: Eurostat Database, based on EU-SILC (data refer to 2017).

A new government plan to reduce waiting times has recently been adopted

As in many other NHS systems, waiting times have been a longstanding issue in the Italian health system and subject to numerous debates and policy initiatives. They can exist for a range of health services, but comparable data are readily available only for elective surgery. Compared with other EU countries with available data, Italy fares well in terms of waiting times for elective surgery such as cataract removal and hip replacement (Figure 15), although there are variations across regions.

Figure 15. Waiting times for elective surgery are lower in Italy than in many European countries



Note: The data relate to median waiting times.
Source: OECD Health Statistics 2019.

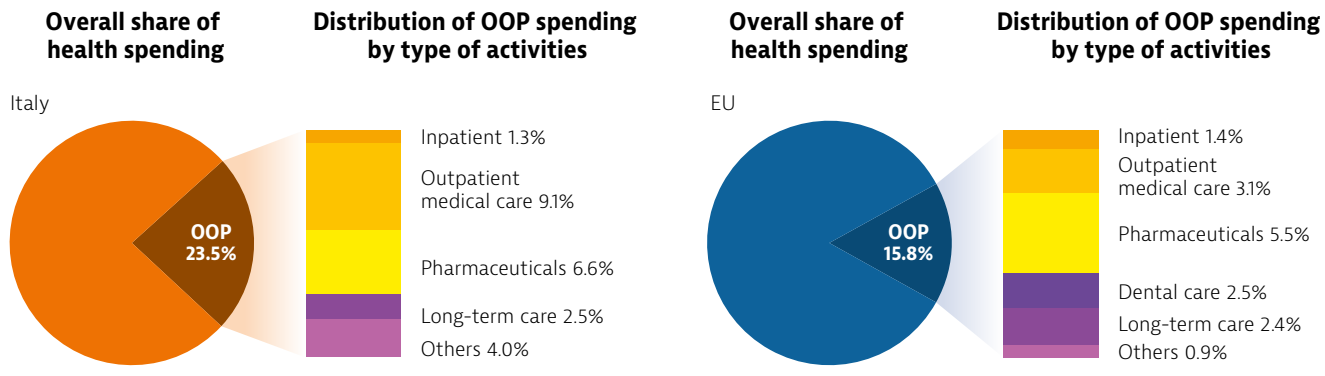
In early 2019, the Ministry of Health adopted a new three-year national plan on waiting lists, which requires regions to set maximum waiting times for all health services. Regional unique booking centres will be created to improve the management of appointments and to make the information accessible in real time through online platforms. If the maximum waiting times cannot be met, patients will be able to access the services with another provider in proximity, without additional costs.

In June 2019, the National Observatory on Waiting Lists was set up in the Ministry of Health to support the regions in implementing the plan and to monitor waiting times across the country.

Out-of-pocket payments are high, driven by outpatient medical care and pharmaceuticals

Following the economic crisis, the share of OOP payments in health spending increased from 21 % in 2009 to 23.5 % in 2017, as cost-sharing requirements increased for many health services and pharmaceuticals in several regions. This is well above the EU average of 16 % (Figure 16).

Figure 16. OOP payments make up a higher proportion of health spending than the EU average



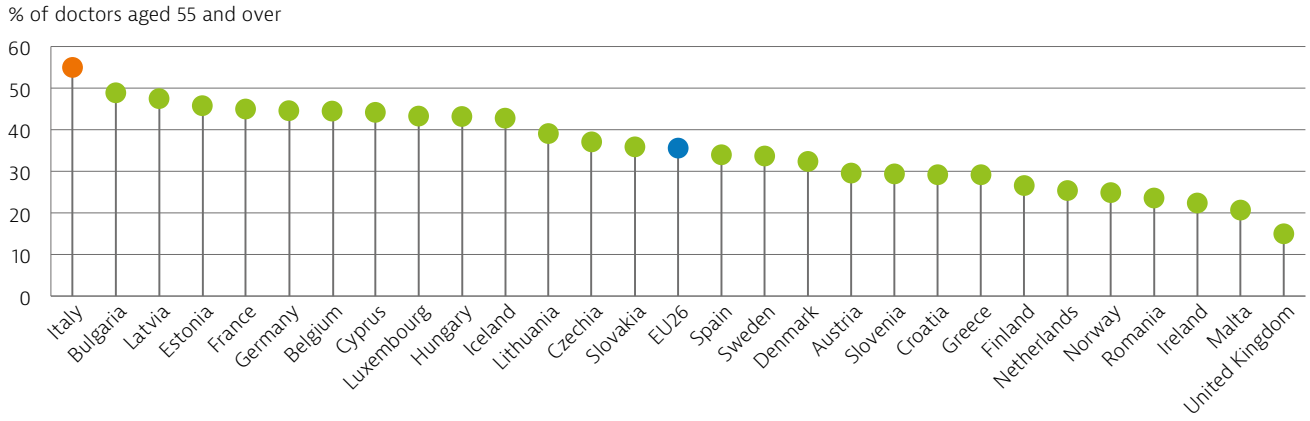
Note: OOP payments for dental care in Italy are included in outpatient medical care.
Source: OECD Health Statistics 2019 (data refer to 2017).

A large proportion of OOP payments in Italy are spent on outpatient medical care, making up about 40 % of the total (of which about half is on dental care). Outpatient pharmaceuticals constitute about 30 % of OOP spending. While GP consultations are free, co-payments are levied on specialist visits with a GP referral (without a referral, the full cost is paid by patients), diagnostic procedures and pharmaceuticals (for non-reimbursed medicines and when there are regional co-payments and co-payments resulting from the difference between the price of the purchased product and that of a cheaper alternative).

Bottlenecks in training and recruitment of new doctors raise concerns about shortages

Although the number of doctors per capita in Italy is still higher than the EU average (see Section 4), the age composition of currently practising doctors raises concerns about the ability of the health system to respond to the health needs of the population in the future. In 2017, more than half of Italy's practising doctors were aged 55 years and over, the highest share in the EU (Figure 17).

Figure 17. The majority of Italian doctors are expected to retire in the coming decade



Source: OECD Health Statistics and Eurostat Database (data refer to 2017).

Concerns about the future availability of medical personnel are heightened by bottlenecks in the training and recruitment of new doctors needed to replace the large number of doctors who are soon to retire. These bottlenecks also result in large migration outflows of new medical graduates and young doctors starting their careers.

Between 2010 and 2016, the number of medical graduates from Italian medical schools increased from about 6 700 to over 8 000. However, many of these new graduates were not able to find an internship and specialty training place to complete their training because the number of places is capped at a level significantly below the number of graduates, so many decided to go abroad to complete their specialty training. In addition, a number of newly trained doctors in Italy also moved abroad to take advantage of better job opportunities, as entry-level salaries of doctors in Italy are very low (between EUR 2 000 and EUR 2 500 per month, even for general surgeons). As a result, between 2010 and 2018, over 8 800 new medical graduates or fully trained doctors emigrated to find internships or regular positions elsewhere in Europe. This was only marginally offset by an inflow of 1 100 foreign-trained doctors during that period.

The limited supply of new doctors is straining the capacities of some local health units and hospital trusts to fill job vacancies, resulting in growing shortages. To improve the attractiveness of employment contracts, a decree was adopted in 2019, providing more flexibility to regions to offer permanent contracts to replace doctors who are retiring.

The potential for expansion of nursing roles remains largely untapped

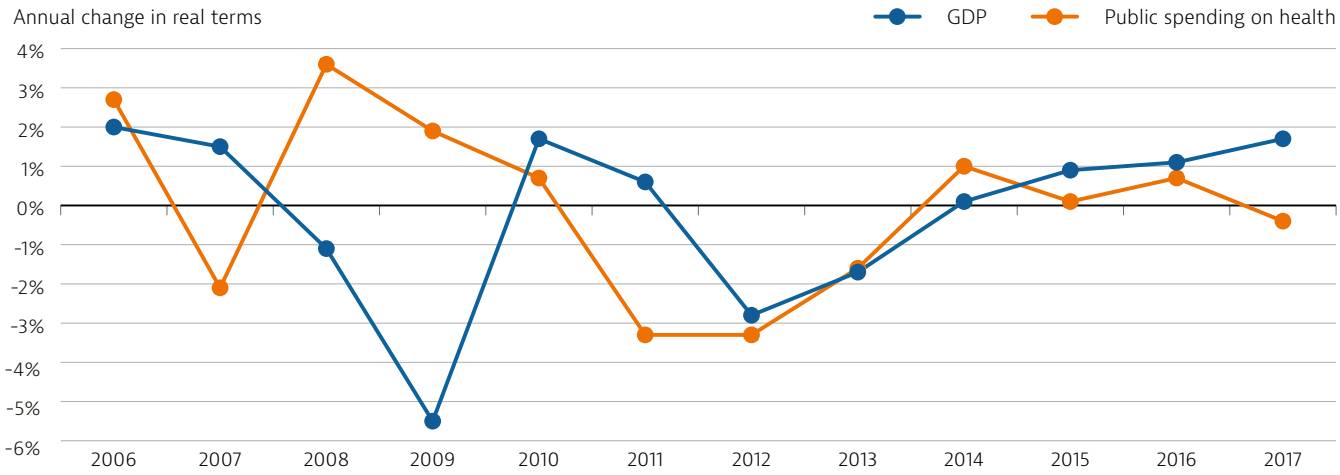
The regulatory framework for nursing has not yet been revised in Italy to allow new roles and task shifting, as is the case in several other EU countries. However, in a survey conducted in 2015-16 among health professionals, health care managers and patients, around 30 % of respondents reported that changes to nurses' roles had occurred over the past five years in the field of breast cancer management. Furthermore, over 50 % reported that there had been an expansion of the role of nurses in AMI management (Maier et al., 2018). These findings suggest that, in practice, task shifting seems to be emerging in Italy, but regulatory changes may be required to remove barriers to further implementation.

5.3. Resilience[2]

Health spending fell after the economic crisis in 2008, but has been stable in recent years

Following the economic crisis in 2009 and slow economic growth in recent years, public health spending in Italy grew at a very modest rate of about 0.2 % per year on average in real terms between 2010 and 2017 (Figure 18). As GDP grew slightly more rapidly during that period, public health spending as a share of GDP decreased slightly from 7.0 % in 2010 to 6.5 % in 2017.

Figure 18. Public spending on health has been stable in recent years



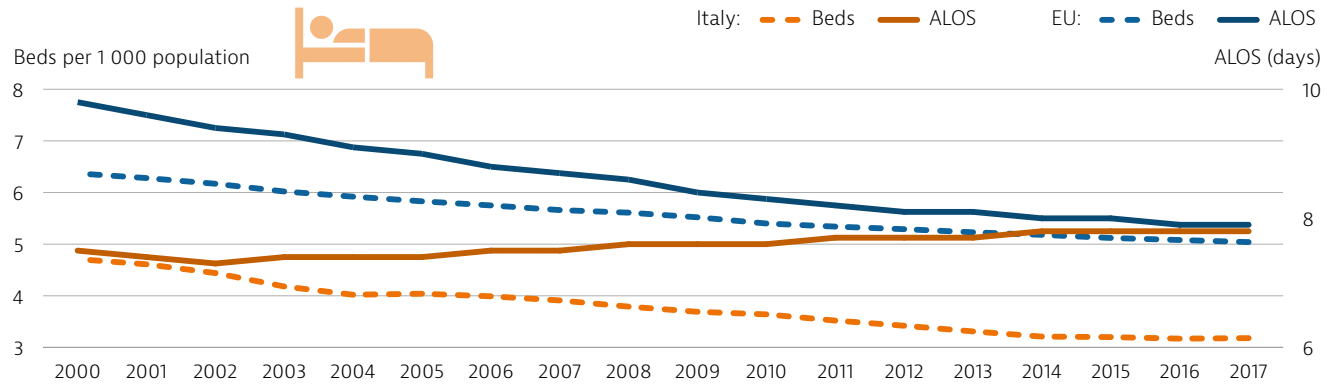
Source: OECD Health Statistics 2019; Eurostat Database.

Looking ahead, as for many other EU Member States, population ageing and moderate economic growth are expected to put pressure on public spending on health and long-term care in the coming years and decades. Recent estimates project that public spending on health will increase by 0.7 percentage point of GDP between 2016 and 2070, while public spending on long-term care is projected to grow by 1.3 percentage points, both broadly in line with the EU average (European Commission-EPC, 2018).

Hospital capacity has been reduced while more appropriate care is promoted

In line with the trend observed in almost all EU countries, between 2000 and 2017 the number of hospital beds per capita in Italy decreased by about 30 % to 3.2 beds per 1 000 population, well below the EU average (Figure 19). The number of hospital discharges decreased in parallel with the number of beds, while the average length of stay (ALOS) increased slightly, due at least partly to sicker patients being treated in hospital and an increased use of outpatient care for less severe cases.

Figure 19. Hospital bed numbers have decreased, while the average length of stay has increased



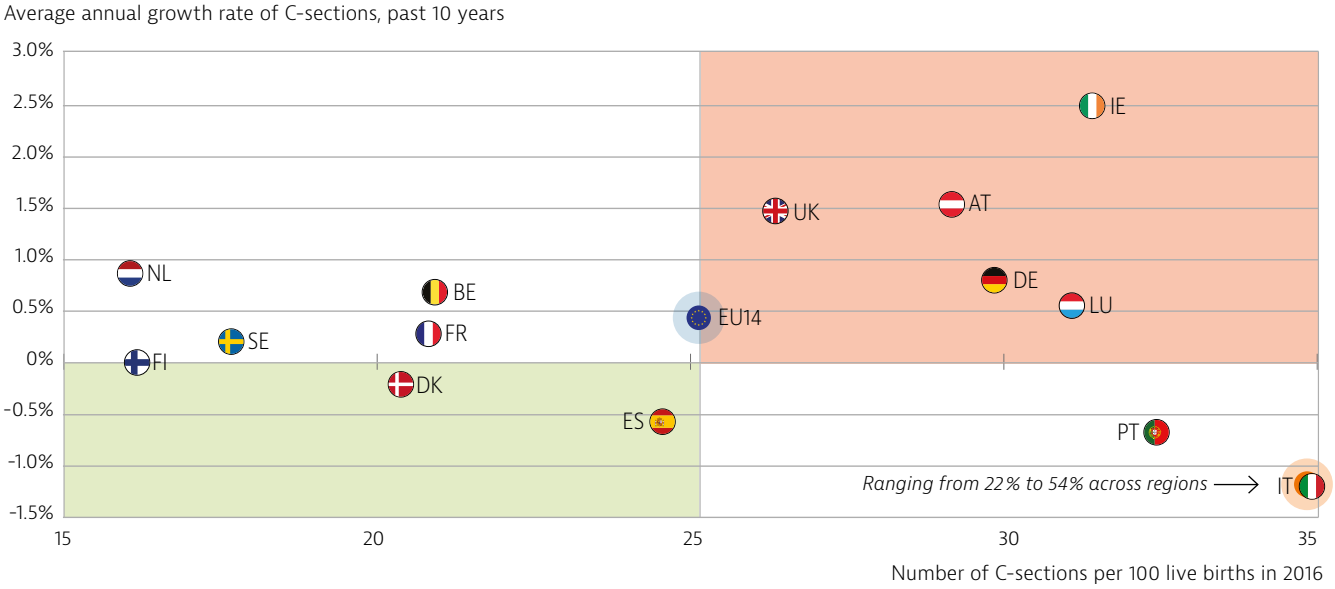
Source: Eurostat Database.

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

Since 2010 major initiatives have been launched to improve government purchasing, operational efficiency and appropriateness of care in hospital. Some progress has been achieved in reducing low-value care and unnecessary interventions. For example, the caesarean section (C-section) rate decreased over the past decade from 39 % in 2006 to 35 % in 2016, but nonetheless remains one of the highest in western European countries. There are still some large regional variations in C-section rates, with rates in some regions more than double those in others (Figure 20).

Since 2012, C-section rates have been one of 35 indicators for which regional targets are set and monitored by the Ministry of Health. Good performance across these indicators and progress is rewarded by a 3 % increase in the regional health budget.

Figure 20. Despite important reductions, C-section rate remains high and above the EU average



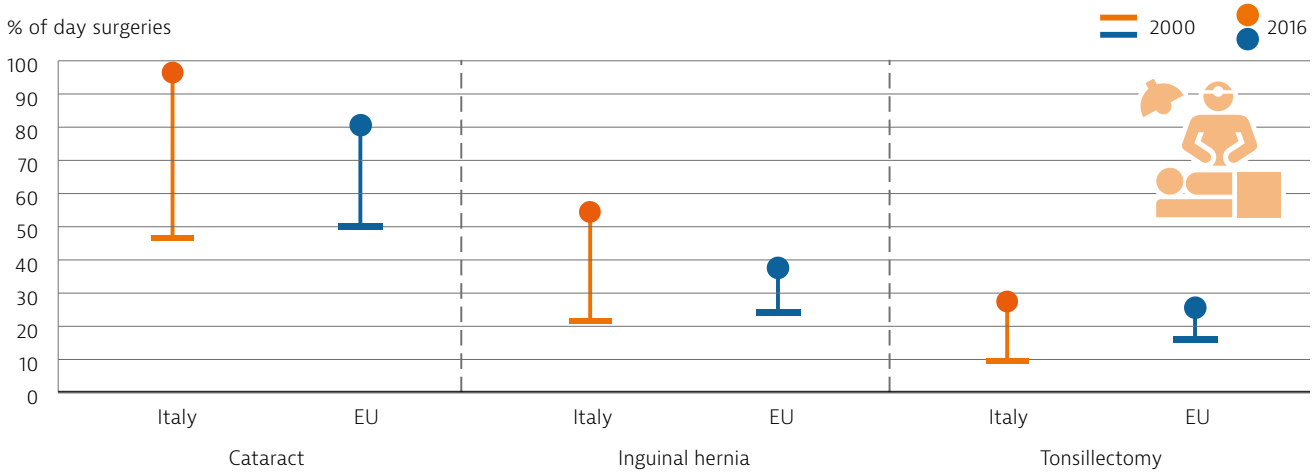
Source: Eurostat Database, except Netherlands Perinatal registry (www.perined.nl/) (data refer to 2016 and the growth rate between 2006 and 2016).

Day surgery has increased substantially, but further progress is possible

The development of day surgery has been a priority in recent decades to reduce the unnecessary use of hospital resources and respond to the preference of most patients to return home as soon as possible.

The shares of cataract surgery, inguinal hernia repair and tonsillectomy performed as day cases have increased markedly in Italy since 2000 and are now at least equal to the EU average if not greater (Figure 21). However, further progress is still possible to attain levels reached in leading countries such as the Nordic countries and the United Kingdom (OECD/EU, 2018).

Figure 21. Day surgery has increased rapidly for some interventions in Italy



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

Measures have been implemented to contain pharmaceutical spending

Pharmaceutical expenditure in Italy is a major component of public spending on health. Regulatory measures, such as spending ceilings, have been introduced to contain pharmaceutical expenditure outside hospital and in hospital, with mixed success.

Ceilings for reimbursable pharmaceutical spending in retail pharmacies were first introduced in 2001. These were initially capped at 13 % of total health expenditure per year at both national and regional levels, then reduced to 11 % in 2013 and to 8 % in 2017. In 2003, spending ceilings were also introduced for medicines delivered by hospital pharmacies for inpatients and outpatients. The ceilings for hospital pharmaceutical expenditure were initially set at 2.4 % of total health expenditure, but then increased to 3.5 % in 2013 and 6.9 % in 2017. These increases reflect the fact that new medicines used in hospitals are becoming more costly. For example, expenditure on cancer drugs increased by 12 % from 2016 to 2017, accounting for almost 23 % of total public pharmaceutical expenditure in the country in 2017 (AIFA, 2018).

To avoid overspending, some agreements between industry, regions and the NHS have been established. If the ceiling on community pharmacy expenditure is exceeded, the industry (manufacturers and distributors) is liable to refund the excess spending to the NHS – a mechanism known as 'pay-back'. If the hospital inpatient expenditure cap is exceeded, the regions and manufacturers are liable to refund 50 % each of the excess expenditure to the NHS.

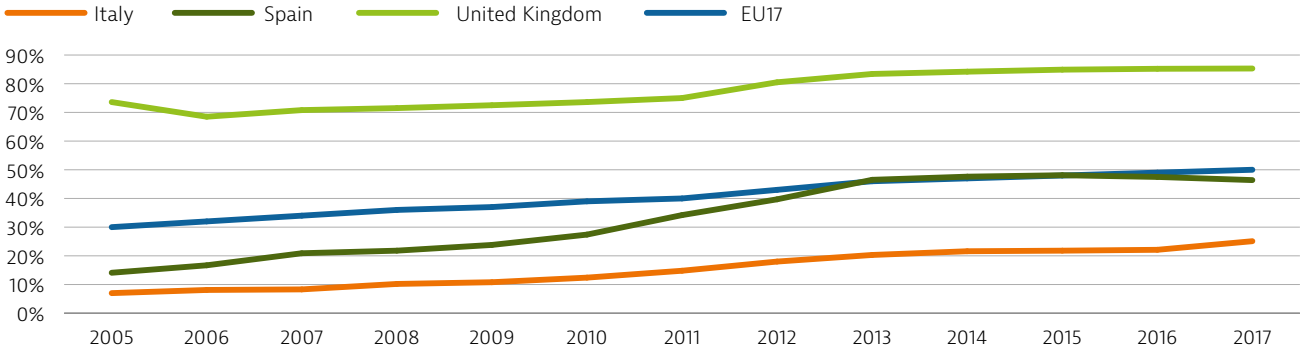
In order to monitor the dynamics of pharmaceutical expenditure and GP prescriptions, a comprehensive information system called Sistema Tessera sanitaria has been implemented, which keeps track of ePrescriptions and other health data at the patient level (European Commission, 2019b).

Financial disincentives for pharmacists have stifled the increase in the uptake of generics

To improve value for money in pharmaceutical spending, Italy has implemented a series of measures to promote greater use of generics. Unless a reason is provided by the doctor to preclude substitution, the pharmacist must mention to customers if a cheaper equivalent product exists. If the doctor indicates that the medicine is 'not substitutable' or if the customer insists on purchasing the brand name, the customer must pay the difference between the price of the dispensed medicine and the cheapest alternative.

Between 2005 and 2017, the generics market share in Italy increased from 7 % to 25 % in volume (Figure 22). Nevertheless, the share remains well below the EU average, in part because pharmacists are remunerated according to a fixed percentage of the price of each product, which creates a disincentive for them to dispense (cheaper) generic medicines.

Figure 22. The use of generic medicines in Italy is well below the EU average



Note: Data refer to the share of generics by volume for the whole market, including community pharmacies and hospitals.
Source: OECD Health Statistics 2019.

Reducing variation in use of biosimilars could help contain pharmaceutical costs

In December 2016, a new law was approved to improve access to biosimilars. The Italian Medicines Agency adopted specific rules, including on the substitutability of products and the public procurement of biosimilars through regional tenders. While the Agency recognised that biosimilars and reference medicines have the same therapeutic benefits, it did not require automatic substitution between the two products. Once a biosimilar is available on the regional market, a physician can decide whether to switch to the new treatment option or not. In Italy, as in many EU countries, the uptake of biosimilars varies greatly by product and therapeutic area (Figure 23).

Figure 23. The uptake of biosimilars is uneven across therapeutic areas

57 % of market share for some medicines for rheumatoid arthritis are biosimilars in Italy (EU: 24%)

Only **20 %** of market share for some medicines for patients with renal failure are biosimilars in Italy (EU: 45%)

Source: IMS Institute for Healthcare Informatics (2016) (data refer to 2015 and 2016).

Antimicrobial resistance is a major health and economic issue in Italy

Italy has the highest number of deaths due to infections resistant to antimicrobial treatments in the EU, with an estimated mortality rate of 18.2 per 100 000 population in 2015. The proportion of resistant infections has increased in recent years, from 17 % in 2005 to 30 % in 2015, and could increase further in the future if current trends in antibiotic consumption, population and economic growth continue. The impact of antimicrobial resistance on the Italian health system's budget is also substantial, and is the highest in the EU, with an annual cost estimated at around EUR 600 000 per 100 000 people (OECD, 2018).

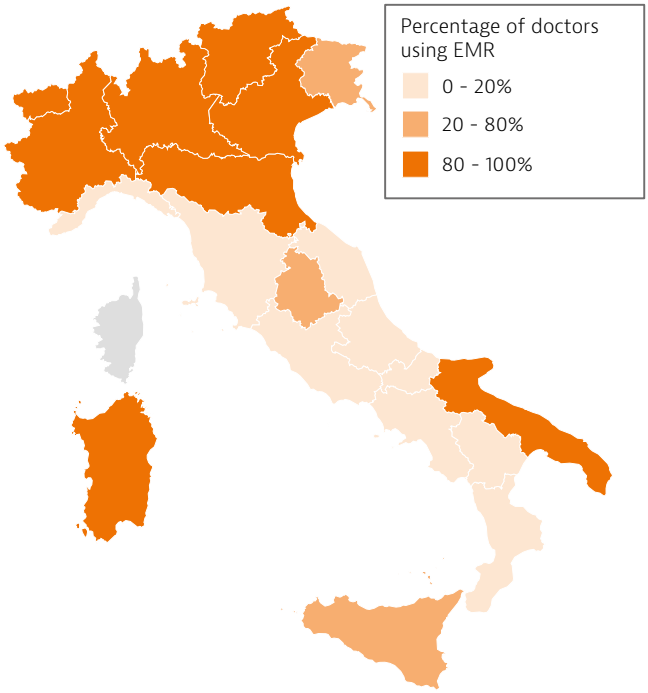
Italy has a multi-sectoral plan to tackle antimicrobial resistance, including an operational plan and monitoring arrangements. However, the implementation of antimicrobial stewardship programmes is limited to some health care facilities, and only relatively small-scale awareness-raising campaigns have been developed.

The digitalisation of the health system is going at a different pace across regions

In 2016, the Digital Health Agreement was reached to manage and promote the diffusion of eHealth in a coordinated way across the country. The main priorities were the development of electronic medical records (EMRs), telemedicine systems and ICT innovations that could improve patient workflow management and experience. Following this, the Strategy for Digital Growth and Triennial Plan for Public Administration Informatics 2019-2021 was created to guide the digitalisation of the public health system. This Triennial Plan includes initiatives that will further promote the implementation of EMRs, ePrescriptions and telemedicine across regions (Ministry of Health, 2017).

Regional uptake of EMRs still varies considerably. While no doctor had ever used EMRs in seven regions in 2019, in eight regions more than 80 % of doctors were using them (Figure 24).

Figure 24. The share of doctors using electronic medical records varies widely across Italy



Source: Agency for the Digitalisation of the Public Administration. Fascicolo Sanitario Elettronico (data refer to 2019), https://www.fascicolosanitario.gov.it/

The legal framework first defined the concept of ePrescriptions for medicines and treatments in 2009, and in 2011 set out more specific technical procedures. A series of regulations then further supported the implementation of ePrescriptions. In 2017, 17 of the 20 regional health systems had more than 90 % ePrescription rates.

In 2014, the National Guidelines for Telemedicine defined general standards to promote the development of telemedicine, but little has been done since to implement telemedicine options.

6 Key findings

- The health of the Italian population is generally good and life expectancy is the second highest in the EU after Spain, but gaps persist by socioeconomic status and region. The least educated men live 4.5 years less than the most educated (which is nonetheless a smaller gap than the EU average), and the gap in life expectancy between those living in southern and northern regions can reach up to three years in favour of the latter.
- Although tobacco-control policies have succeeded in reducing smoking rates among adults, the proportion of adolescents and adults who smoke remains higher than the EU average. While obesity among adults is lower than the EU average, the proportion of children and adolescents either overweight or obese is greater. In February 2019, the Ministers of Health and Education adopted a set of integrated policy guidelines to promote better nutrition, physical activity and other health promotion activities in schools.
- Following the economic crisis in 2008-09, health spending fell initially, but has remained stable in recent years. Health spending accounted for 8.8 % of Italy's GDP in 2017, a lower share than the EU average of 9.8 %. About three-quarters of health spending is publicly funded, a lower share than in 2010 (79 %) and lower than the current EU average (79 %). Out-of-pocket payments increased following the introduction of new co-payments for many health services and pharmaceuticals after the economic crisis. Unmet needs for medical care are generally low, although they are higher for people on low incomes.
- Italy can build on a strong primary care system to address the needs of an ageing population. Several regions are piloting new service delivery models, adding multispecialty community-based centres and intermediate care facilities between primary care and hospitals, developing case management capacity and combining them with social care. Although these initiatives aim to identify new models of chronic care, most of these pilots have not been subject to a formal evaluation process yet.
- Italy has faced important challenges in restoring public trust in the benefits of vaccination: inadequate vaccination coverage, both now and in the past, has led to several measles outbreaks in recent years. A national vaccination plan was approved in 2017, creating a single national vaccine schedule, and including ten mandatory vaccines for children. However, misinformation and weak policy coherence continue to hinder the implementation of this plan.
- While the numbers of doctors and nurses per population have slightly increased over the past decade, there are growing concerns about workforce shortages, with more than half of all doctors over the age of 55. The training and recruitment of new doctors has been limited in recent years due to a shortage of internship and postgraduate specialty training places and good job opportunities for newly trained doctors, which led to the emigration of many medical graduates and young doctors. The scope of practice of nurses remains limited and no expansion has been envisaged to improve both access to care and career prospects for nurses.
- As in other EU Member States, population ageing and moderate economic growth are projected to put pressure on public spending on health and long-term care in the coming years and decades. Better coordination across the country in the development of digital health solutions could help improve access and efficiency in health service delivery.

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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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