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| From: | The Social Protection Committee |
| To: | Delegations |
| Subject: | Social Protection Performance Monitor (SPPM) - Report on key social challenges and main messages from SPC<br>JAF Health Country Analyses (part 1) |

Delegations will find attached ADD 6 to the SPC "Report on key social challenges" (doc. 12921/18).

# Annex 3. JAF Health Country Analyses

This annex contains extracts from the JAF Health country analyses and presents the main conclusions of the analyses, from a social protection perspective.

## DATA FROM THE JOINT ASSESSMENT FRAMEWORK (JAF)

JAF Health currently includes 93 indicators agreed with Member States divided into six dimensions: 1) Outcome; 2) Access; 3) Quality; 4) non-healthcare determinants; 5) Resources; 6) Socio-economic.

JAF Health follows the foundations and structure of JAF, which was jointly adopted by the Employment Committee and the Social Protection Committee in 2010. JAF is an analytical tool based on a set of commonly agreed indicators showing good and bad performance towards the main Europe 2020 targets. This tool was developed to provide a transparent and understandable framework for tracking progress and monitoring the Employment Guidelines under Europe 2020. In the JAF methodology the values of each indicator are standardised, in order to put different indicators on the same scale. It was agreed to use the EU average as the mean. The standardised score is calculated as follows:

*Standardised score indicator x =*

*[(value of indicator x – EU average of x)/standard deviation across EU MS of x] * 10*

JAF includes both levels and 3-year changes (where available) for each indicator. Standardised scores for changes are calculated as follows:

*Standardised 3-year change score indicator x =*

*[(3-year change value of indicator x – 3-year change of EU average of x)/standard deviation of 3-year changes across EU MS of x] * 10*

Standardised scores for changes should be interpreted as relative changes with respect to the EU average[1].

The ISG agreed to be consistent with the EPM and SPPM methodology for the assessment of the results and for the identification of challenges and good outcomes. Consistently this note defines standardised scores:

a. between -7 and +7 as around the EU average (0);

[1] There may be cases in which a 3-year positive change in absolute values corresponds to a relative negative change of the standardised score.

b. from -7 to -13 or from +7 to +13 as **better (+) / worse (-) than the EU average** (depending on the polarity of the indicator);

c. smaller than -13 or bigger than +13 as **considerably better (++) / worse (--) than the EU average** (depending on the polarity of the indicator);

3-year changes are to be considered up to the latest available year. The reading of 3-year changes as around the EU average, better/worse or considerably better/worse follows is based on the same thresholds as for levels (see point a), b), c) above).

In the charts, the colours are assigned as follows:

- red if the standardised value is considerably worse than the EU average;
- orange if the standardised value is worse than the EU average;
- white if the standardised value is around the EU average;
- yellow if the standardised value is better than the EU average;
- green if the standardised value is considerably better than the EU average;

## AUSTRIA

*With health spending above the EU average (and projected to rise) and a relatively high number of physicians, most health outcomes in Austria are around the EU average, while healthy life years at birth are worse than average. Indicators on quality are generally good, with the exception of in-hospital mortality following AMI. In the context of a fragmented statutory health insurance system, administrative expenditure is above the EU average. Austria's complex health system has been reformed to improve governance. It provides quasi-universal coverage and unmet need for medical care is better than the EU average, although some people may remain uninsured (unemployed without entitlement to social benefits and irregular migrants). Lifestyle among young, in particular smoking and drinking, and obesity are an issue in Austria, while several measures have been taken to generally address public health challenges.*

### Resources, Coverage and Organisation of the Health System

*Health spending in Austria is above average*

In 2015, Austria spent more on health than the EU average both in per capita terms (3,765 pps) and when measured as a share of GDP (10.3%). Health spending is expected to rise further due to a number of factors, including population ageing, technological progress and rising incomes: between 2013 and 2060 public spending on health as a share of GDP is projected to increase by 1.3 percentage points, which is around the EU average (0.9 percentage points). Long-term care spending according to the System of health Accounts - SHA accounted for 1.5% of GDP in 2015, which is around the EU average. While this share had been stagnating in Austria it increased in most other EU countries. Spending on administration (3.8% of current health spending) and rehabilitation (6.5%) are above the EU average. Otherwise, the spending structure does not differ notably from other EU countries.

*Government outlays and social health insurance spending are around the EU average*

In Austria, the proportion of compulsory insurance funding (44.8% of current health expenditure in 2015) and the proportion of government outlays (30.8%) are around the EU average. The remaining spending stems from households' out-of-pocket payments (17.9%) and voluntary schemes (6.5%), both similar to the EU average.

*Quasi-universal coverage is provided by a social health insurance system which contributes, along with national and regional authorities to financing service delivery*

A statutory social health insurance system provides universal coverage with services being delivered by a mix of public and private providers. The social health insurance system directly pays, among other, for pharmaceuticals and ambulatory care, and pools funds with the federal and regional governments to finance hospital care.

*The Austrian health system provides universal coverage and a comprehensive benefit package*

Austria provides coverage for 99.9% of its population, mainly through 18 social health insurance funds. There is no competition between funds and affiliation is automatically determined by place of occupation. Entitlement is based on compulsory insurance contributions which are shared between employees and employers. Dependents are covered free of charge and for people without automatic coverage there is a possibility to obtain coverage with an SHI fund on a voluntary basis (e.g. people in "mini-jobs" whose income does not exceed a certain threshold). Those remaining uninsured include the unemployed without entitlement to social benefits and irregular migrants[2]. All funds cover broadly the same benefits although some differences exist. The benefit package is broad and covers most common medical care needs.

*Most co-payments are for consultations with doctors that have no contract with SHI*

Regulations on cost-sharing and exemptions vary between insurance funds, although some legal standard are set. For the majority of the population, co-payments apply to a number of services in particular hospital care, as well as pharmaceuticals and medical goods. Physicians who are not under contract with the SHI system can set their fees but patients who consult them are only reimbursed 80% of the negotiated tariff which applies to contracted physicians.

Exemptions from co-payments exist, in particular for prescription fees. Population groups exempted include patients with infectious diseases, asylum seekers, beneficiaries of certain social benefits and people with income below a certain threshold. Exemption from prescription fees also gives automatic exemptions from a range of other co-payments. In addition, prescription fees are capped for all insured individuals at 2% of their annual net income.

[2] The third sector, e.g. some charities, may offer access to hospitals or doctors, nurses and other care-takers (including interpreters) for these uninsured persons.

*The health system is fragmented, with responsibilities shared between federal and regional governments and self-governing bodies*

Governance of the Austrian health system is shared between the federal and the regional level (Länder) and many responsibilities have been delegated to self-governing bodies (social insurance and other providers, e.g. Austrian chamber of physicians). The federal government is responsible for regulating social insurance and most areas of health care provision – except hospital care, where the basics are defined at the federal level but the Länder are responsible for the specifics of legislation and implementation. The 18 social health insurance funds collectively negotiate with regional medical chambers and other health professions regarding health care provision in the areas of ambulatory and rehabilitative care as well as pharmaceuticals.

*Service delivery is predominantly private for ambulatory care and public for hospital care*

Primary care is mainly provided by self-employed GPs working in solo practices. Patients can freely choose their GP, even among those that are not contracted by the SHI (in which case they may face significant co-payments). Contracted GPs receive a mix of capitation and fee-for-service; non-contracted GPs bill patients on a fee-for-service base. There is no gate-keeping in place and patients can in general contact specialists without referral. Since 2005, "Regional Health Funds" have been established in each region as a purchasing agents for hospital care. They pool resources from federal authorities, Länder and social insurance funds and pay for inpatient care provided by public and non-profit hospitals on the basis of Diagnosis Related Groups (DRGs).

*Austria has a relatively high number of physicians*

In 2015, there were 510 practicing physicians per 100,000 population in Austria, considerably above the EU average. Yet, as a quota on first-year students was introduced in 2006, Austria has witnessed a substantial decline in medical graduates in recent years. The number of nurses stood at 822 per 100,000 population, which is around the EU average.

## Policy Developments

*Austria's complex health system has been reformed to improve governance*

A 2013 health reform sought to improve coordination and cooperation between stakeholders in a fragmented health system. The reform put in place a target-based governance system through a contractual agreement between the federal government, regional governments and social insurance funds. For each of three key areas – structure of provision, processes of care, and focus on outcomes – the contract sets out strategic goals and defines operative targets, together with measures for achieving them. At the same time, institutional capacity for governance was raised by establishing a federal and nine regional commissions, which are the main bodies responsible for implementing the target-based governance system. The 2017 health reform extended this new form of governance at least until to 2021.

*Strengthening primary care has been a major aim of recent and current reforms*

Primary care is one of the priorities of the 2017 health reform measures. The reform aims to enhance primary care capacity through the establishment of new multi-disciplinary primary care units. The reform envisages the creation of at least 75 primary care units by 2021 and EUR 200 million were earmarked for this purpose. The multi-disciplinary units should comprise at least a core team of GPs and qualified nurses but can also include paediatricians and other health and social professionals such as physiotherapists or social workers. The reform further aims to increase access to primary care by ensuring longer opening hours, particularly during evenings and weekends, in an attempt to reduce contacts with hospital outpatient departments.

*Several measures aim to address public health challenges*

In addition to a number of initiatives to curb tobacco consumption and better protect non-smokers, Austria published its first Addiction Prevention Strategy – covering illegal and legal drugs– in 2016, providing the basis for the direction of addiction policy in the coming years. Austria also developed a National Action Plan on Nutrition, first adopted in 2011 and updated in 2012 and 2013, which aims to reduce over-, under- and malnutrition and to reverse the trend of rising overweight and obesity rates by 2020. The Action Plan establishes targets as well as strategies and documents ongoing and planned measures of Austrian nutritional policy. This was complemented in 2013 by the National Action Plan on Physical Activity, which sets targets for specific population groups and gives recommendations on possible measures to increase physical activity.

## JAF Health Results

*Health outcomes in Austria are around the EU average, with the exception of healthy life years at birth*

Healthy life years show negative developments in the last three years, especially for women at birth the trend was considerably worse than the EU average. In 2015, the level of healthy life years at birth (57.9 for men and 58.1 for women) is worse than the EU average. Although life expectancy at 65 is around the EU average, it shows no improvements over the last three

years. These variables are identified as health challenges.

*Access - The data on access dimension are generally better than the EU average*

The available indicators do not show any challenge in the access domain. In 2016, unmet need for medical is better than the EU average.

*Quality - The indicators on quality dimension are generally good, with the exception of in-hospital mortality following AMI*

Although the indicator of in-hospital mortality following AMI is improving considerably more than the EU average in the last three years, it is still worse than the EU average. Breast cancer screening among women aged 50-69 is around EU average in 2014, but it shows a considerably negative development between 2008 and 2014. These variables are identified as health challenges. On the other hand, the vaccination coverage rates of children for DTP (98%) is identified as a good health outcomes, as it shows a considerable positive development in the past three years. Screening for cervical and colorectal cancer (both for women and men) are considerably better than the EU average in 2014.

*Non-health determinants - Lifestyle among young, in particular smoking and drinking, and obesity are an issue*

Data on lifestyle domain in 2008 for Austria is only available for smoking and obesity rate.

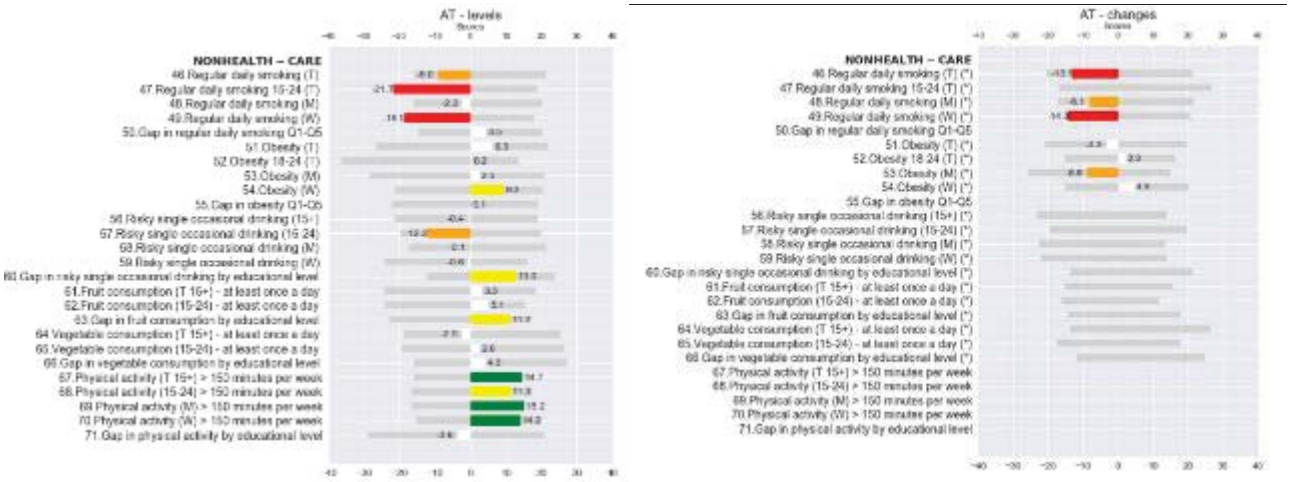
In 2014, smoking rate among women is considerably worse than the EU average, although among men is around the EU average, these two indicators are improving less compared to the EU average change between 2008 and 2014. Similarly, obesity among men is around the EU average, but also shows less improvement compared to the EU average change. These variables are identified as health challenges.

Risky single occasional drinking among young is worse than the EU average. On the other hand, physical activity is considerably better than the EU average among adults, while for young is only better than the EU average. Inequality in alcohol use and fruit consumption between educational groups is limited and better than the EU average.

**Figure 1 - JAF HEALTH PROFILE CHARTS FOR MAIN DIMENSIONS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**


Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

**Figure 2 - JAF HEALTH PROFILE CHARTS FOR NON-HEALTH DETERMINANTS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**




Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

## BELGIUM

*Although health expenditure is relatively high, the old age dependency ratio is growing less rapidly than in other EU countries and projected future growth in health expenditure is limited. The shortage of doctors is being addressed. The Belgian health system is strongly based on social insurance and achieves good overall performance though inequalities exist in access. Some inequalities can also be observed in certain health outcomes and risk factors. The system of insurance institutions is undergoing an evolution towards "health funds". Federal and federated entities play different but complementary roles, while the geographical distribution of medical care is perceived as a growing concern. The above EU average suicide rate (although on a declining path) and alcohol use (especially among young) are identified as health challenges.*

### Resources, Coverage and Organisation of the Health System

*Health spending in Belgium is relatively high but projected future growth is limited*

Belgium spends a relatively high proportion of its GDP on health (10.5% in 2015), above the EU average of 9.9% and rising somewhat faster. If measured on a per capita basis, health spending in Belgium is also above the EU average (3,546 pps). Health spending is expected to continue to increase due to a number of factors, including population ageing, technological progress and rising incomes. However, between 2013 and 2060 the share of public health spending in GDP is projected to increase by 0.1 percentage points[3], which is the smallest projected increase in the EU. Belgium reports spending 2.6% of GDP on long-term care[4]. This share is considerably above the EU average[5], although for Belgium the reporting of this expenditure is of broad nature, including the social component of long-term expenditure, which may not be (yet) fully reported by other Member States.

In terms of structure, Belgium has considerably higher spending on rehabilitative care (7%) than the EU average. In 2015, the share of spending dedicated to long-term care (health) (24%) was also considerably above the average figures reported in the EU and had been increasing faster over the three preceding years. The shares of health spending that go to prevention and administration are around the ones seen in most other EU countries. However, while the proportion of health spending dedicated to prevention had increased in recent years, the share of spending on administration has decreased.

[3] For the country and the EU, the increase in public health spending as a share of GDP refers to AWG reference scenario of EC (2015) for the period 2013-2060.

[4] The reporting of data on long-term care may still differ in the level of precision with which the system of health accounts 2011 (SHA 2011) has been implemented in EU countries.

[5] This assessment is based on to the methodology applied to this analysis agreed in the Indicators' Subgroup of the Social Protection Committee, as explained in the foreword.

*The financing structure is characterised by the prominent role of social insurance*

The share of health expenditure financed from compulsory contributory insurance schemes in Belgium is 59.2% in 2015 compared to an average of 43.4% across EU countries (in 2014), with the remaining part of public spending financed by government schemes (18.3%).

*Belgium has near universal coverage in a social insurance-based health system*

The Belgian health system is based on the principle of compulsory insurance and achieves nearly universal coverage of the population (99%). People have access to a very broad publicly-financed benefit package with cost-sharing for most services.

*Scope of services covered is wide with few exemptions*

For medical services, the detailed fee schedule for health services providers also defines the public benefit basket. This means that services not included in the fee schedule are not reimbursed by the compulsory health insurance. This refers to, for example, acupuncture and homeopathy but voluntary complementary insurance may reimburse part of these costs. Other goods and services, such as plastic surgery, orthodontics and spectacles are only covered under certain conditions by the compulsory health insurance.

*Cost sharing applies to the most health services but levels of user charge vary*

Cost-sharing applies to most health care goods and services in the public benefit basket. For outpatient care, patients pay in principle the full fee at the point of service before claiming reimbursement from their sickness fund. However, inpatient care and medicines dispensed in pharmacies are paid for by compulsory health insurance and patients only have to pay user charges. This third-party payer system is gradually enlarged further to improve access to ambulatory care, notably for vulnerable persons (chronic conditions,

beneficiaries of preferential reimbursement[6], palliative home care,..). The level of co-payment varies between the different goods and services. Some people (see footnote), mostly low-income or suffering from chronic conditions benefit from a preferential reimbursement status (lower co-payments). Above an annual limit varying with the income, co-payments are also reimbursed to the patients (the so called 'maximum bill') . These measures to improve financial protection and increase access were strengthened and simplified in 2015.

*Level of out-of-pocket payments is close to the EU average*

In 2015, the share of out-of-pocket payments in total health spending stood at 18% in Belgium - around the EU average. Voluntary insurance in Belgium can cover the full or part of the user charges borne by patients after reimbursement by the compulsory insurance , including both co-payments (for reimbursable services) as non-reimbursable services.. As a share of total health spending, voluntary health insurance accounts for 5% in Belgium - a value around the EU average.

*Different roles for federal and federated entities in Belgium with SHI having the main purchasing role*

The Belgian health system is characterised by compulsory social health insurance and involvement by both federal and federated government entities. Compulsory health insurance is executed through six private, not-for-profit national associations of sickness funds and one public sickness fund, that fulfill the 'interface' role with the patient. Federal authorities are responsible for regulating and financing the compulsory health insurance and hospitals, setting minimum standards, legislating professional qualifications, and registering and controlling prices of pharmaceuticals. The federated entities (three regions and three communities) are responsible for health promotion and prevention, providing maternity and child health care, social services, community care, long-term care as well as coordination and collaboration in primary health care and palliative care, and financing hospital investment. The compulsory health insurance is managed by the National Institute for Health and Disability Insurance (NIHDI), which will transfer the necessary means to the sickness funds to reimburse the health care costs of their members.

*Service delivery is mainly private in primary care with patient choice*

The vast majority of GPs work as independent, self-employed health professionals while medical specialists can work in health institutions (mostly hospitals) and/or on an ambulatory basis in private practice. Patients can freely choose their doctor. As there is no systematic gatekeeping by GPs, people have free access to medical specialists and hospital care. Several features of the health care delivery system enhance the availability of services in Belgium. For example, home visits to patients by GPs are regular practice and, typically, there are no problems to get quick access to GPs, although waiting times for specialised services (e.g., mental health specialists) can exist. Nurses play a key role in providing services to people with chronic diseases or disability.

There are many different types of hospitals in Belgium, including general acute care hospitals (113), specialized hospitals (20), geriatric hospitals (8) and psychiatric hospitals (68). The majority of hospitals are private not-for-profit with the rest being publicly owned. Intermediary structures and services include day care in hospital and long-term care centres.

*Growing concerns about shortages of doctors in Belgium.*

In 2015, the ratio of practicing physicians per population was below the EU average (302 per 100,000 population)[7]. With 1102 per 100,000 population, the ratio of practicing nurses and midwives was around the EU average. However, the rate of increase was higher than on average across EU countries between 2011 and 2014, mainly due to a strong increase in the number of nurse graduates in Belgium. Hospital employment is around the EU average (1307 full-time equivalent jobs per 100,000 population).

Between 2004 and 2011 the numerus clausus (annual quota) of medical graduates that were allowed to train as GPs or specialists was set at a fairly low level raising questions whether the future supply of doctors would meet the demand. In response to these concerns, the federal government has steadily increased the numerus clausus since 2011 resulting in a capacity rise of over 60% between 2008-2011 and 2015-2018. In addition, several innovative measures have been taken to extend the roles for other health care professionals, such as nurses and pharmacists, to improve access to services for the population.

## Policy developments

*Recent reforms cover a wide range of issues, such as affordability*

[6] Beneficiaries of preferential reimbursement are: beneficiaries of social assistance allowances (resource guarantee), beneficiaries of allowances for handicapped persons, handicapped children or children disabled for at least 66%, orphans and non accompanied underaged foreign persons, low income households, (including low income pensioners, lone parents, widow(er)s, invalid persons and long term ill.

[7] The ratio for Belgium includes only physicians above a legally defined minimum activity threshold for physicians. Other EU countries may not apply this threshold.

In addition to the initiatives aiming to improve access to affordable care for vulnerable groups and to increase health workforce capacities mentioned earlier, there are other initiatives covering different areas of the health system.

*Lifestyle and health workforce*

Recent health promotion campaigns, for which federated entities are responsible, have been designed to promote further reduction in tobacco smoking, healthy eating and increasing vaccination rates among target groups. To improve care coordination, new care models have been introduced in particular to address care needs of patients with diabetes and other chronic conditions.

In September 2016, the first pieces of a broader reform of the practice of health care professionals were presented. Some of the main objectives of this reform are a greater collaboration between health care professionals, a greater recognition of health care professionals on the basis of their acquired skills and continuing education, and improving the health literacy of the population while reaffirming the central role of the patient.

*Health insurance institutions are evolving towards "health funds"*

The role of health insurance institutions is changing. In an agreement signed between the Belgian government and seven health insurance institutions in 2016, the latter committed to continue their evolution towards becoming “health funds” with the main goal of improving and retaining the health of their members. The agreement also contains reciprocal engagements concerning policy support, among others through the provision of data by the health insurance institutions. Another important element emphasises the good governance and sound financial management of these organisations.

**JAF Health Results**

*Overall health outcomes*

Health outcomes are around the EU average, with the exception of the suicide rate and inequality in self-perceived health. In 2014, the number of deaths due to self-harm / suicide is worse than the EU average, but shows some positive development. This variable is identified as a health challenge. In 2015, inequality in self-perceived health (as good/very good and bad/very bad) between income groups is worse than the EU average and it is identified as a health challenge.

*Access: There are sign of warning about the social and geographical dimensions of access*

In 2016, unmet need for medical care due to distance is around the EU average, but shows a considerable negative development. The gap in unmet need for medical care between the bottom and top income group is worse than the EU average. These issues are identified as health challenges.

*Quality: Quality is around the EU average*

In-hospital mortality following stroke was around the EU average in 2011 (9.3%), with an increase between 2008 and 2011 (latest year currently available in JAF) considerably larger than the average change across EU countries (where it often decreased). However, in 2014 it decreased to 8.4%. The vaccination coverage rate of children for DTP (99% in 2015) is identified as a good outcome as it is considerably above the 95% recommended threshold.

The other indicators of the JAF quality dimension are around the EU average and do not show particular trends.

*Non-health determinants: Alcohol use, including among young and women, is a challenge*

In 2014, alcohol use among young and fruit consumption among young are worse than the EU average. These variables are identified as health challenges. The obesity rate and vegetable consumption are considerably better or better than the EU average and they are identified as good health outcomes.

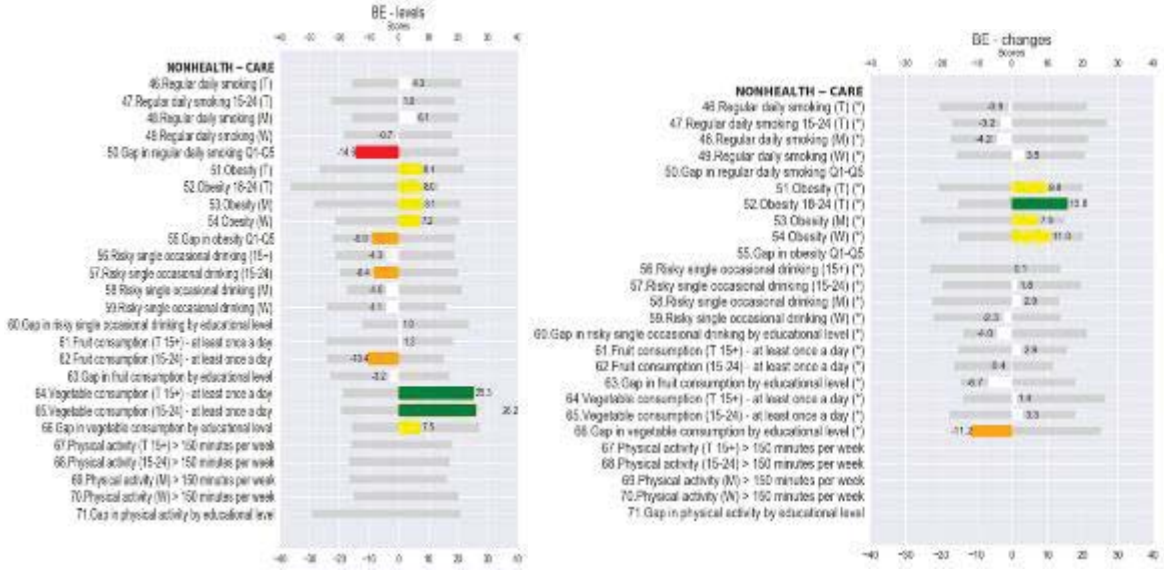
*Inequality in some aspects of lifestyle is also an issue*

The smoking rate is around the EU average, but the gap between income groups is considerably higher than the EU average. Similarly, the overall obesity rate is better than the EU average and has been in decline over the last years, but the gap between income groups is above the EU average. There are no data on physical activity for 2008 and 2014.

**Figure 3 - JAF HEALTH PROFILE CHARTS FOR MAIN DIMENSIONS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**


Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

**Figure 4 - JAF HEALTH PROFILE CHARTS FOR NON-HEALTH DETERMINANTS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**




Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

## BULGARIA

*With the lowest GDP per capita and the highest rate of poverty and social exclusion in the EU, as well as with health expenditure below the EU average, most health outcomes in Bulgaria are considerably worse than the EU average. Only infant mortality is considerably improving. Bulgaria records the lowest life expectancy of women in the EU. The quality of healthcare is worse or considerably worse than the EU average and there are also signs of a worsening of prevention, in particular due to the low vaccination coverage rates of children for DTP. Lifestyle is generally worse than the EU average, in particular for smoking, diet and physical activity and is some case it is worsening, while a few indicators are better (obesity among women and alcohol use among young). Bulgaria as recently scaled up health promotion and prevention with the National Prevention Programme (2014–20). In Bulgaria, healthcare is not universal and the contribution of out-of-pocket payments to health expenditure is the highest in the EU. Health insurance is estimated to cover 92-93% of the population. The insurance system puts vulnerable groups, such as the long-term unemployed and the poor at risk of being uncovered. Unmet need for medical care, especially due to costs, is considerably improving in relative terms. However, with the considerable regional variation in the density of GPs and in the number of enlisted patients per GP, the challenge of unmet need due to distance remains (although improving as well). Shortages in health workforce capacity, due the low numbers of graduates and to economic emigration, also remain a challenge of the Bulgarian healthcare system.*

### Resources, Coverage and Organisation of the Health System

*Health spending per capita is below the EU average*

Health spending per capita in Bulgaria, which stood at 1,224 pps in 2015, was well below the EU average. However, health spending measured as a share of GDP (8.2%) was similar to other EU countries. Health spending is expected to further rise due to a number of factors, including population ageing, technological progress and a rise in incomes: between 2013 and 2060 the percentage of GDP spent on health is projected to increase by 0.4 percentage points in Bulgaria, which is below the EU average (0.9%) . In terms of structure, Bulgaria spends less on long-term care (0.01% of health expenditure) and administration (1.32%) than other EU countries. Spending on curative-rehabilitative care represents only 46% of health spending and a significant share of financial resources in Bulgaria are dedicated to medical goods (44%), in particular pharmaceuticals.

*Government health expenditure in Bulgaria is below the EU average, while out-of-pocket payments are high*

In Bulgaria, compulsory health insurance accounts for 41.9% of health expenditure, which is similar to the EU average. Government outlays, make up 9.2% of health spending, which is below the EU average. The remaining part consists mainly of households' out-of-pocket payments (47.7%), which are considerably above the EU average, and voluntary schemes (1.2%) which are of less importance in Bulgaria than in most other EU countries.

*Partial coverage is provided by social health insurance (SHI) which contracts large numbers of providers*

A single mandatory national health insurance fund (NHIF) provides a basic package of benefits to those insured and contracts public and private providers in a service delivery system which remains hospital-centric.

*Population coverage is not universal in the Bulgarian health system*

While SHI is compulsory, an estimated 7-8% of the population did not have SHI coverage in 2015. This can be partly explained by the fact that people who fail to pay three monthly contributions in the previous 36 months lose coverage. This especially puts vulnerable groups, such as the long-term unemployed and the poor, at risk. Furthermore, some people may not be aware of their eligibility to receive government subsidies to help cover SHI contributions. Lack of insurance is particularly prevalent among the Roma population, of which 35% have no health coverage.

*Social insurance provides a basic package of benefits, but no long-term care*

The SHI system guarantees access to a basic package of health services for the insured population. It covers primary and specialised outpatient medical and dental care; laboratory services; hospital diagnostics and treatment; and highly specialised medical activities. Emergency care, mental health care, renal dialysis, in vitro fertilisation and transplantations are covered by the state budget or other dedicated funds. The most important category of excluded services is long-term care. Uninsured individuals have to pay directly for medical services and goods, unless they visit an emergency centre in a life-threatening situation.

*There are flat co-payments with no exemptions for medicines*

Patients have to pay flat user charges for most services. Children and some statutory categories are exempted and the user charge for a GP visit is lower for pensioners. The NHIF covers a proportion of the reference price of medicines on the positive drug list and patients, in addition to covering the complement as well as the difference between the reference and the actual price, also pay a dispensing fees. There are no exemptions from co-payments for medicines which account for some three-quarters of OOP costs. Patients also pay for excluded services and informal payments.

*Bulgaria's social health insurance system is highly centralised*

The Ministry of Health is responsible for the overall organisation of the health system and policy formulation. The National Health Insurance Fund (NHIF) is the core purchaser in the system, operating through 28 Regional Health Insurance Funds. The benefit basket is set by the Ministry of Health, while tariffs and reimbursement procedures are specified in the National Framework Contract and negotiated on an annual basis between the NHIF and health provider organisations.

*The over-reliance on hospital care has not been overcome*

Primary care is provided by independent GPs who work in solo or groups practices and are paid for mainly on a capitation basis. Patient can freely choose their GP which are supposed to act as gatekeepers, and have to operate within a maximum number of referrals to outpatient specialists and inpatient services. Considerable regional variation exists in the density of GPs and the number of enlisted patients per GP which results in access problems. The hospital system on the other hand comprises a very large number of facilities, all contracted by the NHIF and funded through case base payments. Many facilities are small and underused and the system is fragmented but the number inpatient discharges is exceedingly high.

*The number of physicians is above the EU average, but there are fewer nurses and midwives*

Bulgaria has a relatively high number of doctors, with 405 practising physicians per 100,000 population in 2015, above the average in EU countries. The number of nurses and midwives per 100,000 population was 483 in 2015, which is below the EU average. The low numbers of graduates entering the health workforce has been a long-standing concern. Moreover, many professionals go abroad due to low recognition and low pay at home.

## Policy Developments

*Structural reforms to contain costs and integrate care are in their early stages*

Improving the efficiency of the health care sector has been the focus of several recent reforms. Since 2015, there have been plans to allow regional branches of the NHIF to selectively contract hospitals if the capacity exceeds population needs as defined by National and Regional Health Maps. The introduction of Health Technology Assessment (HTA) in 2015 is expected to increase the effectiveness of pharmaceutical spending. HTA is currently applied for medicines belonging to new International Non-proprietary Name groups, but has yet to be used systematically on all pharmaceuticals. Furthermore, changes to the "Law on Health" in 2015 introduced the concept of integrated care in Bulgaria. This law established a new type of health care provider, integrated social and health service centres for children with disabilities, with the intention to move away from hospital-centred delivery of care.

*A recent attempt to reform the benefit package was partially struck down in court*

In 2016, an attempt was made to split the benefit package into two parts: basic and complementary. The basic part would have covered prevention, diagnosis and treatment of major diseases and conditions that cause death and disability, and maternal and child health – in accordance with health priorities listed in the National Health Strategy "Health 2020". The complementary part would have included treatment services which could be postponed without the immediate risk of a patient's condition deteriorating, such as hip replacement surgery. In 2016, the Constitutional Court rejected this proposal as unconstitutional.

*Recent efforts focus on strengthening health promotion and prevention*

Bulgaria has recently scaled up health promotion and prevention efforts. In accordance with EU Directives, a smoking ban in public places was introduced in 2012 and the National Prevention Programme (2014–20) focuses attention on early detection of non-communicable diseases, especially for cardiovascular diseases (CVD). This is supported by a budget increase in 2017, earmarked for early detection and screening. Providers are incentivised to participate in screening, examination and prophylaxis. The NHIF receives additional funding to pay for the screening of uninsured individuals.

## JAF Health Results

*Most health outcomes in Bulgaria are considerably worse than the EU average, while only few are improving*

In 2015, life expectancy at birth ( 74.7) and at 65 (16) are considerably worse than the EU average for both women and men, while life expectancy at 65 for wom-

en is improving more than the EU average in the previous three years. The infant mortality rate is considerably worse than the EU average, but is improving considerably more than the EU average in the past three years. Child mortality (for 1-14 year-old) is also considerably worse than the EU average (2013 data). In 2014, potential years life lost for both women and men and amenable mortality are considerably worse than the EU average. Moreover, amenable and preventable mortality are worsening considerably more than in other EU countries in the past three years. Inequality in general health as measured by the gap between the bottom and the top income quintile in the share of people who perceived their general health as good/very good and bad/very bad are worse than the EU average, while the second is also worsening more than the EU average in the last three years. These variables are identified as health challenges.

*Access: Unmet need for medical care due to distance is worse than the EU average, but it is improving as, in general, unmet need*

In 2016, unmet need for medical care due to distance is worse compared to the EU average, although it is improving relatively more in the last three years. Unmet need for medical care, in particular due to costs, and inequality in unmet need by income group are improving considerably more than the EU average in the last three years and are now around the EU average.

*Quality: The quality of healthcare is worse or considerably worse than the EU average and there are signs of a worsening of prevention*

Data on the quality of healthcare in Bulgaria are relatively limited, also due to the lack of time series. In 2014, colorectal cancer screening, for both women and men, is worse compared to the EU average., while the screening for breast and cervical cancer are considerably worse than the EU average. In 2007, survival rates for colorectal and breast cancer were considerably worse than the EU average, while survival rates for cervical cancer was worse than the EU average. In n 2015, the vaccination coverage rates of children for DTP and measles are, respectively, considerably worse than the recommended 95% threshold. Moreover, the vaccination coverage rates of children for DTP shows a considerably negative development over the last three years. The influenza vaccination rate for over 65 (2.4% in 2014) is also considerably worse than the EU average.

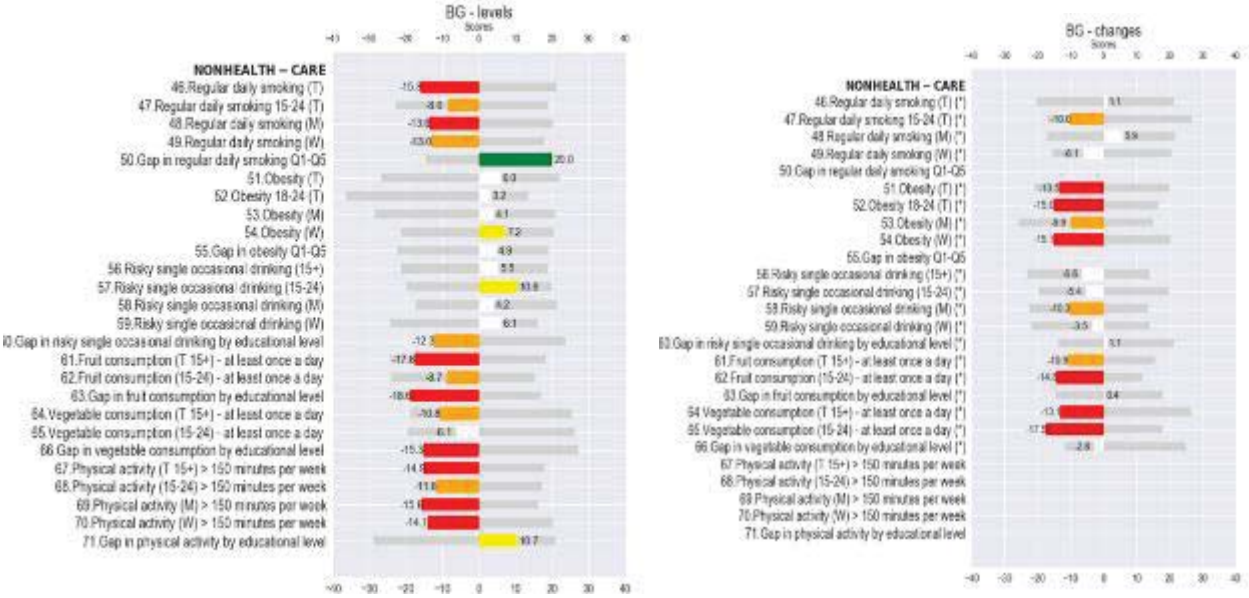
*Non-health determinants: most lifestyle indicators are worse than the EU average, in particular for smoking, diet and physical activity, while some are better (obesity among women and alcohol use among young)*

In 2014, the smoking rate, especially among men, the consumption of fruit and physical activity (among both men and women) are considerably worse than the EU average. Younger people have a less unhealthy lifestyle, but are still in a worse situation than their EU peers. Among young people, the smoking rate, fruit consumption and physical activity are worse that the EU average (while they are considerably worse for adults), while vegetable consumption is not an issue for young. While inequality in alcohol use, fruit and vegetable consumption (as measured by the gap between high and low educated) are worse and considerably worse than the EU average, inequality in smoking (as measured by the gap between the bottom and the top income quintile) and physical activity (as measure by the gap between educational groups) are, respectively, considerably better and better than the EU average. Obesity and alcohol use among men are around the EU average but are worsening compared to the EU average change.

**Figure 5 - JAF HEALTH PROFILE CHARTS FOR MAIN DIMENSIONS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**


Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

**Figure 6 - JAF HEALTH PROFILE CHARTS FOR NON-HEALTH DETERMINANTS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**




Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

## Croatia

*With GDP per capita and health expenditure below the EU average and the rate of poverty and social exclusion described above, health outcomes in Croatia are generally worse than average. In particular, life expectancy and healthy life years at 65 are considerably worse than the EU average and they are not improving. The population is aging faster than the EU average, as well as the projected increase of public health expenditure. The situation of non-health determinants is mixed with some inequalities and young people generally have a healthier lifestyle than the overall population. Overall, access to healthcare is good. The health system is based on compulsory social insurance, with the government covering contributions for some vulnerable groups, and the scope of services is wide. However, there is a challenge in the geographical distribution of healthcare, with shortages of health workers in rural areas and some islands, emigration of health workers and a considerably higher-than-average unmet need due to distance. The government adopted a Strategic Plan for Human Resources in Health Care for the period 2015-2020.*

### *Resources, Coverage and Organisation of the Health System*

#### *Croatia spends less on health care compared to other EU countries*

Health spending in Croatia was below the EU average in 2015, both when measured per capita (1,245 pps) and as a share of GDP (7,37%). However, health spending is expected to rise due to a number of factors, including population ageing, technological progress and rise in incomes: between 2013 and 2060 the share of public health spending in GDP is projected to increase by 1.7 percentage points in Croatia, which is considerably above the EU average (0.9%) . Croatia spends less on long-term care (0.2% of GDP) compared to other EU countries. Otherwise, the spending structure does not differ notably from the EU average.

#### *Public spending on health is mainly channelled through compulsory health insurance*

In Croatia, the proportion of compulsory insurance funding (74.4% of current health expenditure in 2015) is higher and the proportion of government outlays (2.4%) lower than in the EU. The remaining spending is made up of households' out-of-pocket payments (15.2%) and voluntary prepayment schemes (8%), with the latter being slightly above the EU average.

#### *The Croatian health system provides broad coverage through compulsory social health insurance*

The Croatian Health Insurance Fund (CHIF) provides broad compulsory coverage to all residents and contracts services from providers, who operate under state, county, or private ownership. Compulsory coverage of the CHIF is mainly financed by income-related contributions payable by the working population and the state budget finances coverage of vulnerable groups, such as children (up to 18 year-old), regular students (up to 26 year-old), people with 100% impairments, and people with low income. In addition to compulsory coverage, the CHIF also offers voluntary insurance for patients to cover use chargers.

According to the Health Care Act, all Croatian citizens have the right to health care and all persons with residence in Croatia and foreigners with permanent residence permits must be insured in the compulsory health insurance scheme, unless an international agreement on social insurance states otherwise.

#### *Scope of services covered is wide with few exemptions*

Under compulsory health insurance Croatian residents are entitled to a broad benefit package that includes primary, specialist and hospital care, the use of medicines on the CHIF lists, dental care and some other specific health care. Some health services are explicitly exempted from compulsory coverage, such as treatments outside the established standards of the right to health care from CHIF, experimental therapy, aesthetic surgery (except for severe diseases or disorders like breast reconstruction after mastectomy, aesthetic reconstruction of congenital malformations, and cosmetic reconstruction after severe injury), surgical treatment of obesity except for pathological obesity (body mass index >40). Pharmaceutical coverage is defined around two positive lists: the basic one, for medicines provided free of charge, and the supplemental list which requires co-payments.

#### *Cost-sharing applies to most services but vulnerable groups are exempt*

While certain health care services (e.g., laboratory tests within primary care, drugs on the basic list, etc.) are fully covered compulsory health insurance generally covers only about 80% of the costs of most services included in the benefit package (this also applies to acute health care in hospitals). The remaining costs are borne by the insured person either through complementary health insurance or out-of-pocket (OOP) payments. Complementary health insurance is voluntary and is purchased individually from either the CHIF or a private insurer. All cost-sharing is capped at HRK 2000

(approximately EUR 264) per episode of illness in secondary or tertiary care. Overall, the depth of coverage has been reduced since the early 2000s, however, voluntary complementary health insurance can be purchased to cover user charges, with the exception of co-payments for pharmaceuticals on the supplemental list. Vulnerable population groups are entitled to the complementary health insurance offered by the CHIF and their contributions are covered by the state budget.

*The Ministry of Health is the steward of a health system organised at the county level with the Croatian Health Insurance Fund contracting health providers*

The Ministry of Health is responsible for health policy, planning, evaluation, public health programmes, and regulation. As the sole insurer in the mandatory health insurance system, the CHIF contracts services from health care providers and plays a key role in defining which services are covered. It also sets performance standards and prices; pays sick leave compensation, maternity benefits and other allowances; and is the main provider of complementary voluntary health insurance. Local governments own and operate most public primary and secondary care facilities, and are responsible for planning, coordinating and managing health services at the county and municipal level.

*Primary care is contracted via public-private partnerships while secondary care is mainly public*

Primary care is mostly provided by private providers, contracted through concessions (public-private partnerships introduced in 2009), which often operate in health care facilities rented from local governments. All insured citizens must register with a general practitioner or a paediatrician, also including PHC gynecologists for women's health care and doctors of dental medicine, whom they can choose and change once per calendar year. A referral from a primary care physician is needed to access specialised ambulatory care, although patients in some cases avoid this by accessing emergency services directly. Specialist and hospital care are predominantly delivered in public facilities owned by local governments, while tertiary hospitals are owned by the central government. Primary care physicians are paid through a combination of capitation and fee-for-service with the possibility of additional payments based on performance. Hospitals are paid through a comprehensive prospective case-adjusted payment system, based on diagnosis-related groups (DRGs).

*The numbers of doctors and nurses in Croatia are close to EU averages*

In 2015, there were 319 doctors per 100, 000 population, close to the EU average, and 623 nurses per 100,000 population, slightly below the EU average. In 2016, the number of doctors and nurses per 100,000 population increased to, respectively, 323 and 633 (Source: Health Manpower Registry from Croatian Institute of Public Health, 2017). Yet, these figures mask geographical disparities, with most health workers based around the capital Zagreb and other county seats and shortages in rural areas and the islands off the Adriatic coast. Furthermore, with the country's accession to the EU, in 2013, and comparably low salaries in the health sector, emigration of health professionals has become an issue. Croatia has started to address these concerns through increasing enrolment quotas and attempts to encourage young people to study medicine, dental medicine and other health studies (nursing, midwifery, medical laboratory diagnostics, physiotherapy, radiological technology).

### *Policy Developments*

*Addressing gaps in health workforce planning and management*

In May 2015, the government adopted the Strategic Plan for Human Resources in Health Care 2015-2020. The plan seeks to address important gaps in the way human resources in health care are organised, trained and managed, as well as to tackle the negative effects of outward migration of health workers following the country's accession to the EU. The main priority is to design and implement a management information system for the health workforce, which would aggregate and harmonize different data collected by various institutions under a National Registry. The system would facilitate the identification of current and future gaps in the supply, distribution and skillset of health workers. Other measures included in the plan address working conditions and regulation of roles and professions (e.g., task shifting).

*Integrating and standardising health information in Croatia is a top priority under the National Health Care Strategy 2012-2020*

The National Health Care Strategy 2012-2020 sets out the overall vision, priorities and goals for the Croatian health system. A top priority in this strategy is the development of e-health for which the following measures have been identified: developing systems to monitor and analyse health data and support decision making (business intelligence); improving and modernising existing health information systems; developing joint procurement across the health system (including the information technology infrastructure); integrating telemedicine with emergency and other medical services; standardising and certifying health information systems (especially with regard to interoperability); training health workers and managers to use infor-

mation and communication technologies; increasing the budget for health information technologies; and regulating e-health. The priority is in line with e-Croatia 2020, a national strategy to move towards electronic provision of public services.

*Improvements in health care quality and efficiency but delays in implementing certain key reforms*

Improving the quality, efficiency, and sustainability of hospital service delivery is another priority laid out in the National Health Care Strategy 2012-2020. To that effect, the National Plan for the Development of University Hospital Centres, University Hospitals, Clinics and General Hospitals aims to rationalise the structure and activities of health care institutions. Basic hospitals should retain four main inpatient activities (internal medicine, surgery, paediatrics, and obstetrics and gynaecology) while for other services different models of functional integration would be put in place. Additional objectives include the development of day surgery, the re-profiling of acute care beds into chronic and palliative care beds, and the accreditation of hospitals. As of April 2017, good progress had been made on reducing the number of acute care beds, establishing sentinel surveillance schemes in hospitals with surgery wards, and increasing the share of elective surgeries performed on an outpatient basis. However, other aspects of the reforms, including the reorganisation of hospitals, the implementation of accreditation, and joint/centralised procurement of drugs, medical supplies and devices, were delayed and hospital arrears continued to be a problem.

***JAF Health results***

*Health outcomes in Croatia are worse than the EU average, especially the life expectancy and healthy life years at 65*

In 2015, life expectancy and healthy life years at 65 are considerably worse than EU average. Healthy life years at 65 are also deteriorating considerably more than the EU average in the last 3 years. Life expectancy (74.4 years for men and 80.5 for women in 2015) and healthy life years at birth are worse than the EU average. In 2014, amenable and preventable mortality, and number of deaths due to self-harm or suicide in Croatia were worse than the EU average. Infant mortality rate increased more than average in the last 3 years. Self-perceived general health as good/very good and bad/very bad are, respectively, worse and considerably worse than the EU average, while both are improving considerably in relative terms. Inequality in self-perceived health (as measured by the gap between income quintiles) is worse than the EU average, although the gap in self-perceived general health as bad/very bad is improving considerably. These variables are identified as a health challenge.

According to national estimates, life expectancy in 2016 increased by 0.9 years for women and by 0.6 years for men (Source: population by age and sex – mid-year estimate, average age of population and life expectancy , Croatian Central Bureau of Statistics, July 2017).

*Access: The geographical dimension of access is a challenge*

Unmet need for medical care due to distance is the highest in the EU28, while it was improving more than in other countries in the last three years.

*Quality: Data on quality are limited for Croatia but reveal a shortcoming in vaccination coverage rates of children*

Data on the quality of healthcare are limited for Croatia, due to availability and short time series.

In 2015, the vaccination coverage rates of children for DTP and measles are below the recommended 95% threshold and decreasing more than the EU average (especially for DTP) in the past three years.

In 2007, cancer survival rates, in particular for colorectal and breast cancer, were worse than the EU average

*Non-health determinants: The situation regarding lifestyle is mixed, with young generally having a healthier lifestyle with the exception of smoking habits*

Data on risk-factors based on EU surveys are limited for Croatia compared to other EU countries, specifically due to the lack of data in the 2008 wave of the European Health Interview Survey.

In 2014, the smoking rate among young and women are worse and considerably worse, respectively, than the EU average. Obesity among men is worse than the EU average, while among young it is better than average. Physical activity in both men and women is worse than the EU average. Alcohol use among women is better than the EU average. Fruit consumption among young and vegetable consumption are considerably better than the EU average.

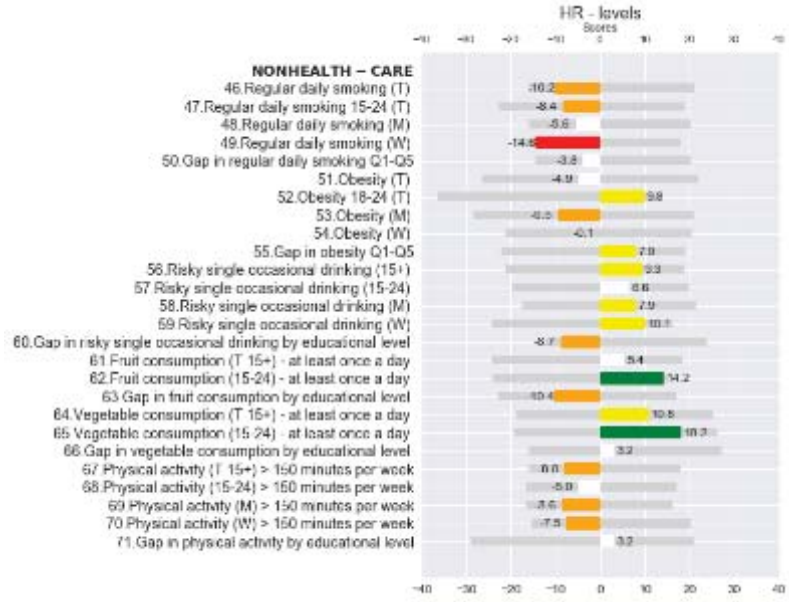
*Some inequalities in lifestyle are observed*

The gap in fruit and alcohol consumption between high and low educated are worse than the EU average. On the other hand, the gap in the obesity rate between income groups is better than the EU average.

**Figure 7 - JAF HEALTH PROFILE CHARTS FOR MAIN DIMENSIONS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**


Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

**Figure 8- JAF HEALTH PROFILE CHARTS FOR NON-HEALTH DETERMINANTS (STANDARDISED SCORES)**



## CYPRUS

*With a younger than average population, health outcomes in Cyprus are around or better than the EU average. Self-perceived general health is identified as a good outcome. However, in recent years some health outcomes, such as preventable mortality, are deteriorating more than in the EU. With a below EU average health spending per capita and a considerably lower than average expenditure on prevention, indicators on prevention, including specific vaccinations and cancer screenings (e.g. colorectal, cervical), are worse than the EU average or are deteriorating and are identified as health challenges. Lifestyle is generally good compared to the EU average. However, some lifestyle behaviors among young, such as smoking and physical activity, are worse than those of their EU peers. Smoking is also worse than the EU average and inequalities in some risk-factors are worsening in the last years. While self-reported unmet need is relatively low in Cyprus and improving, access to healthcare is not universal (but public healthcare is available to low income households) and the contribution of out-of-pocket payments to health expenditure is the second highest in Europe (with public user charges relatively low). After several delays, the new national health system has been finally agreed in 2016 and the implementation of the new system is expected to be fully completed in 2020.*

### Resources, Coverage and Organisation of the Health System

*Health spending is lower than in other EU countries*

Health spending per capita in Cyprus (1,590 pps) was lower than the EU average in 2015, and in contrast to most other EU countries spending had tended to decrease in recent years. Expenditure also represented a lower share of GDP (6.8%) than the EU average. However, health spending is expected to rise due to a number of factors, including population ageing, technological progress and rise in incomes: between 2013 and 2060 public health spending as a share of GDP is projected to increase by 0.3 percentage points in Cyprus, which is lower than the EU average (0.9%)8. Compared to other EU countries, Cyprus spent less on long term care (0.2% of GDP in 2015). It also spent considerably more on rehabilitative care (6.4% of health spending), more on curative care (57.2%), less on administration (1.5%) and considerably less on prevention (0.7%) than EU countries on average.

*Out-of-pocket is the largest source of funding in the health system*

In 2015, 42.3% of health spending was channelled through government outlays, around the EU average. By contrast, the proportion of health expenditure funded through compulsory insurance (0.3%) was considerably lower than in other EU countries. Household out-of-pocket payments were the largest source of funding in the system (43.9% of total spending), considerably higher than in other EU countries and voluntary schemes represented 12.2%, higher than the EU average.

Publicly provided care is available to the population below a given income level, while non-beneficiaries can either access public care for a fee or pay for care in the private sector

Cyprus does not provide universal coverage to its resident population. Citizens and permanent residents below a determined income level can use health services provided by a wholly-integrated National Health System with minimal user charges. The system is mostly tax financed but some groups, for instance civil servants, have to pay contributions. Non-beneficiaries, which represents around a quarter of the population, must pay public services according to fee schedules set by the Ministry of Health or seek – and privately finance - care from the private sector. Around 20% of the population has group or individual private insurance but the contribution of voluntary health insurance to financing care remains relatively limited.

*The public benefit package is comprehensive but limited funding leads to long waiting times in the public sector*

The public benefits package is comprehensive, with some dental services excluded. When services are either unavailable in the public sector or there are long waiting lists, the Ministry of Health can subsidise care provided to beneficiaries (based on income and need) either in the private sector or, more rarely, abroad. Capacity and resource constraints in the public sector lead to long waiting lists for some medical procedures and diagnostics. For this reason, a significant portion of the population prefers using private services for outpatient consultations and routine procedures, but turns to the public sector for more complex or costly services such as major emergencies.

*Public user charges remain relatively low*

Prior to 2013, user charges for public sector beneficiaries were minimal. However, since then, user charge levels have increased and new charges have been introduced. Public services now generally require some form of out-of-pocket payment. Beneficiaries pay EUR

[8] For the country and the EU, the increase in public health spending as a share of GDP refers to AWG reference scenario of EC (2015) for the period 2013-2060.

3 for a visit to a general practitioner, EUR 6 for a visit to a specialist, and EUR 10 for emergency department visits. That last rate also applies non-beneficiaries who are otherwise charged full prices for services. For diagnostics and inpatient care, however, non-beneficiary expenditure is capped to a means-tested maximum share of household annual income. There are almost no copayments on drugs in the public sector and the Ministry of Health manages a budget which can be used to partially reimburse some drugs which are only available in the private sector. Prescriptions made in the private sector are paid out-of-pocket.

*The Ministry of Health runs the public sector*

The public system is highly centralized and almost every aspect related to planning, organization, administration, financing, and regulation is under the responsibility of the Ministry of Health. It is exclusively financed by the state budget, with services provided through a network of public hospitals and health centres directly controlled by the Ministry of Health. Most regulations in the health system (e.g., concerning pharmaceuticals, private providers) were revamped in the context of the country's accession to the EU. Overall, health workers and medical technology are poorly allocated between the public and private sectors and the private sector's activity – beyond safety standards – is minimally regulated.

*Service delivery is mixed but access to private services is mostly funded out-of-pocket*

The public sub-system is highly centralized. Facilities at all levels have no financial autonomy and are staffed by civil servants. Private providers set their own fee schedule. Public primary care services are delivered in health centres as well as hospital outpatient departments. There is no gatekeeping mechanism or formal referral system between primary and specialist care in the public sector, except for certain specialties.

*Cyprus has an average number of doctors but fewer nurses than other EU countries*

In 2015, there were 358 practicing physicians per 100,000 population (which is around the average in Europe) and practicing 553 nurses and midwives, which is below average. The increase in the number of physicians in Cyprus had been considerably stronger than in other EU countries in recent years. The majority of physicians, dentists and pharmacists work in the private sector whereas the majority of nurses are employed in the public sector.

**Policy Developments**

*Progress is being made towards establishing a universal coverage system*

After three decades of delays, recent steps have been taken towards implementation of a new national health system providing universal access to care. Under the new system, a Health Insurance Organisation would cover the entire population and purchase services from public and private providers. The legal foundation for this new system was agreed by Parliament in 2001. However, full implementation has been continuously delayed due to, among other reasons, uncertainty regarding the costs, contribution rates, and financial and administrative autonomy of public hospitals and involvement of private insurers. The reform programme and timetable were finally agreed by the major parties and the President in July 2016, and parliamentary approval on a package of necessary laws, including on setting contribution and copayment rates, followed a year later. A contract for an IT system to support the new health system has been issued, and implementation of the new system is expected to be fully completed in 2020.

*As part of this package, major service delivery reforms will be implemented*

Service delivery reforms are an inherent part of this reform package and key to ensuring the new system's financial sustainability. First, public provider's autonomy must increase to allow them to contract with the Health Insurance Organisation and compete with the private sector. In June 2017, the Parliament approved a bill to provide financial and administrative autonomy to public hospitals. There are also plans to strengthen public primary care and establish gatekeeping, although the details are not known.

*Notable efforts have also been made to obtain value for money in the pharmaceutical sector*

Health Technology Assessment has not played a major role in determining the benefits package. In the public system, medicines are procured via tenders, where the bidder offering the lowest price wins the right to supply the entire market for 2 years. This has the potential to lead to low prices, presuming there is no monopoly producer. Private sector medicine prices are determined using external reference pricing. Generic substitution is required in the public sector, although in the private sector there are no incentives for doctors and pharmacists to prescribe generics. There are also clinical guidelines to discourage overprescribing, although no formal auditing system is in place to monitor compliance. Future plans in this area include the establishment of an autonomous medicines agency tasked with regulating medicines (Cyprus National Reform Programme, 2017).

### JAF Health Results

*Health outcomes in Cyprus are around or better than the EU average, but some indicators are deteriorating in the past three years*

Heathy life years at 65 for men, potential years of life lost (for both men and women) and preventable mortality show a negative development compared to the EU average in the past three years, although levels (in 2015 and 2014) are still around the EU average. These variables are identified as health challenges. On the other hand, self-perceived general health as good/very good and bad/very bad are better than the EU average and show, respectively, a considerably positive and a positive development compared to the EU average over the past three years. Self-perceived general health is identified as a good health outcome.

A number of other indicators show a considerably positive (such as life expectancy at birth for men and at 65 for women) or positive (such as infant mortality) development in relative terms over the past three years.

*Access: The number of consultations per doctor is better than the EU average and decreasing in relative terms*

In 2015, the available indicators do not show any specific challenge in access, in particular related to self-reported unmet need for medical care, which is also improving compared to the EU average in the last three years. In 2014, the number of doctor's consultations is relatively low and shows a slight reduction in the last three years. However, the number of doctors' consultations for Cyprus refers to the public sector only.

*Quality: The vaccination coverage rate of children for measles is a health challenge, as well as some cancer screenings*

In 2015, the vaccination coverage rate of children for measles (90%) is below the recommended 95% threshold, although it shows a considerable positive development compared to the EU average change over the past three years. In 2014, the proportion of persons (aged 50-74) reporting to have undergone a colorectal cancer screening test in the past two years is worse than the EU average for both women and men and it is improving less than at the EU level. The share of persons (aged 20-69) reporting to have undergone a cervical cancer screening test in the past three years is decreasing from 2008, although it is still around the EU average. These indicators are identified as health challenges.

As regards vaccination coverage for DTP and polio, according to the last immunization survey performed by the Ministry of Health in 2015, the rate remains quite high i.e. 97.1% for the first 3 doses of the vaccine. This compares favorably to the 95% recommended threshold and remains constant across the years.(no statistical significance to the previous coverage rate assessed in 2012).

*Non-health determinants: Lifestyle is generally good, while smoking is worse than the EU average, as well as some behaviors among young, and inequalities in some other risk-factors are worsening*

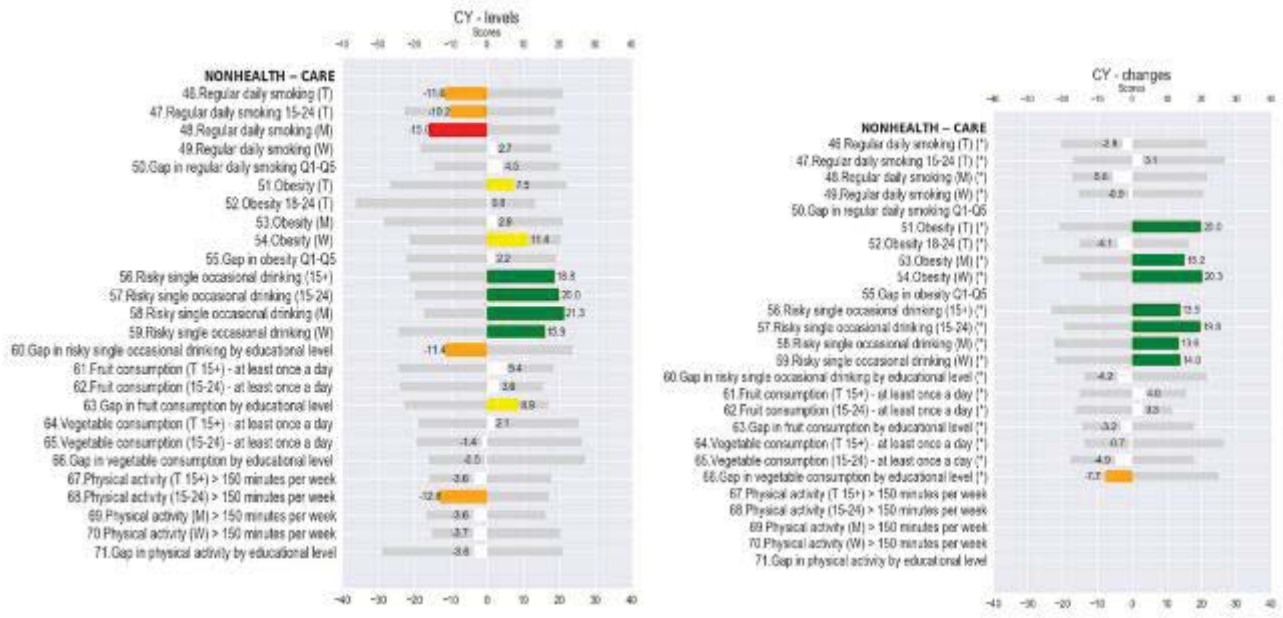
In 2014, lifestyle indicators are generally good, with the obesity rate (especially among women) and alcohol use (especially among men), respectively, better and considerably better than the EU average and improving. These variables are identified as good health outcomes. On the other hand, the smoking rate, including among young, is worse than the EU average and it is considerably worse that the EU average among men. Inequality in alcohol use and in vegetable consumption between low a higher educated are, respectively, worse than the EU average and around worsening from 2008. These variables are identified as health challenges.

Physical activity among young is worse than the EU average.

**Figure 9 - JAF HEALTH PROFILE CHARTS FOR MAIN DIMENSIONS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**


Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

**Figure 10 - JAF HEALTH PROFILE CHARTS FOR NON-HEALTH DETERMINANTS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**




Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

## CZECH REPUBLIC

*With a level and structure of health spending similar to other EU countries, some health outcomes in the Czech Republic are worse than the EU average, such as life expectancy for women and at 65 for men. In a context of increasing attention paid by the Czech government to improving the quality of care, indicators on quality are generally good. In particular, indicators on prevention for children and women are better than the EU average. The only exception is influenza vaccination for older people, which is lower than the EU average. While the health system is mostly based on compulsory health insurance contributions, the state pays contributions on behalf of almost 60% of the population. Indicators on the access to healthcare are generally good, while unmet need due to distance is worse than the EU average, although low in absolute terms. In 2017, some measures were taken to upgrade the health workforce, including by improving training programs for nurses which suffered a decline in recent years. Inequality is a challenge in some dimensions, namely in self-perceived health and in fruit and vegetable consumption. Obesity, especially among men, and diet, specifically the consumption of vegetable, are identified as health challenges. Obesity among young is improving, while the Czech government initiated actions plans on nutrition and obesity, in particular among children.*

### Resources, Coverage and Organisation of the Health System

#### *The level and structure of health spending is similar to other EU countries*

In 2015, health spending in the Czech Republic was around the EU average when measured as spending per capita (1,992 pps) and slightly below average when measured as a share of GDP (7.2%). Health spending is expected to further rise due to a number of factors, including population ageing, technological progress and rise in incomes: between 2013 and 2060 the share of public health spending in GDP is projected to increase by 1.0 percentage points in the Czech Republic, which is comparable to the EU average (0.9 percentage points) . In 2015, ,the spending structure did not differ notably from the EU average. Only expenditure for rehabilitative care (4.4% of CHE) was slightly above the EU average.

#### *Compulsory health insurance plays a larger role than in other EU countries*

In the Czech Republic, compulsory health insurance represented 70.4% of total health spending in 2015, which is higher than the EU average and government outlays accounted for 12.0%, slightly below the EU average. The remaining spending was made up of households' out-of-pocket payments (14.8%), which were slightly below the EU average, and voluntary schemes (2.8% of total spending), around the EU average.

#### *Competing insurers provide statutory coverage to virtually all residents and pay providers*

A statutory health insurance system covers all permanent residents and is operated by seven (as of 2014) competing health insurers which are quasi-public self-governing bodies. Compulsory, wage-based SHI contributions are the main source of health care financing in the Czech Republic, but the state pays contributions on behalf of almost 60 % of the total population (the so-called "state-insured"), mostly economically inactive including children, students, pensioners, women on maternity leave, people on parental leave, the unemployed, asylum seekers and etc. People are free to select their insurance fund and to ease the financial burden of health insurance funds with higher-risk beneficiaries and to lower the potential for risk selection, SHI contributions are redistributed among the funds according to a risk-adjustment scheme. The health insurance funds serve as the main purchasers of health care services in the Czech health system.

#### *The benefit basket is broad and co-payments limited*

The benefit basket is uniform, particularly generous and includes home nursing care, medical aids and devices, and spa treatment in 2017. Some services are excluded either implicitly (voluntary abortion) or explicitly (cosmetic surgery, acupuncture). Pharmaceuticals, medical aids and dental aids may only be reimbursed if they are on a positive list. Otherwise, they must represent the only available option for a given patient. Cost-sharing is required for pharmaceutical products but in order to protect vulnerable groups, there are ceilings for out-of-pocket payments.

#### *The Ministry of Health regulates the system while health insurance funds manage coverage*

The Ministry of Health serves as the main administrative and regulatory body while self-governing health insurance funds administer the collection of contributions and provide benefits-in-kind to the insured. The Ministry of Health also owns all university hospitals and some psychiatric institutions while regional authorities own several hospitals, including ambulatory (outpatient) care providers. For public health, the main actors are the National Institute of Public Health (NIPH), two institutes of public health (SZÚ a ZÚ) and 14 regional public health authorities (KHS), which are all directly under and managed by the Ministry of Health. As to long-term care, the Ministry of Health sets standards for health care providers and Ministry of Labour and

Social Affairs sets standards for social care providers, and offices under the Ministries conduct quality evaluations.

*Service delivery is predominantly private for primary care and mixed for hospital care*

Ambulatory care, both primary and specialist care, is provided predominantly by self-employed doctors in solo practice in health centres owned by municipalities and privately-owned polyclinics. General Practitioners (GPs) are reimbursed mainly through combination of capitation and fee-for-services. Specialist ambulatory care is paid on a fee-for-service basis. Hospitals are owned either by ministries, regional authorities, private sector or churches, and Diagnosis Related Groups (DRGs) are the main payment mechanism for inpatient care. Patients are free to see any specialist ambulatory care without referral and value this freedom highly, but a referral is needed for inpatient care except for medical emergency.

*The density of physicians and nurses is around the EU average but the number of nurses decreased recently*

In the Czech Republic, there were 369 practicing physicians per 100,000 population in 2013 and 841 nurses and midwives in 2015, both around the average of the EU. In recent years, the number of nurses and midwifes had tended to decrease. The problem in the remuneration of inpatient nurses has been addressed in the past three years with rapid raises of 10% a year. Since this year, nurses serving in shift receive extra remuneration in addition to general raises. These policies are meant to stabilize the workforce in Czech hospitals and provide competitive remuneration to both the outpatient sector and also other parts of the economy (notably the pharmaceutical industry). Concerns are growing about the distribution of the health workforce, the aging of physicians and the increasing tendency of younger ones to seek out better working conditions abroad. Many effective measures to remedy this situation can be envisaged, but an increased production of graduates in general medicine from all Czech medical faculties is undoubtedly a priority. This measure must not be postponed, because its effect will become evident at least 6 years later (if additional years necessary for specialist training are not considered). A long-term increase in the number of graduates from medical faculties will not only replenish the needed staff capacity, but also make the physician population younger. Furthermore, the Ministry of Health would like to reduce the administrative burden of physicians and nurses and to develop a legal protection of healthcare professionals.

The issue of remuneration has already been addressed in answers to other questions. Successive waves of pay raises in recent years have contributed to workforce stabilization. The long term sustainability of health workforce is a separate issue and the eventual decrease of number of GPs in particular seems unavoidable. As a result, higher concentration and efficiency of primary care provision should be pursued.

**Policy Developments**

*Efforts are made to address growing issues in public health*

The public health sector has seen significant reforms in recent years. From an administrative point of view, the largest change was the merger in 2012 of 14 public health institutes into two institutes of public health. The Strategic Document on Public Health of 2012 set long-term goals to expand traditional public health to include non-communicable diseases. Health promotion has gained importance over the last few years through the implementation of policies to address behavioural and social health determinants. In particular, the Czech Republic has taken on the WHO´s strategies when developing Health 2020 – National Strategy for the Protection and Promotion of Health and Disease Prevention, followed by action plans on nutrition, preventing and treating obesity, promoting physical activity, on health-risk management (tobacco, alcohol, prevention of high-risk group of children, reducing health risks from the living and working environment, managing infectious diseases, developing health screening programs, on quality of health care, on education of medical and non-medical staff, on eHealth development, on development of health literacy and indicators of the health status of the population. The same principles were embodied in the government strategic framework Czech Republic 2030. Tobacco control legislation was strengthened in 2017 (later than in most countries).

*The need to improve the financial stability of the system has driven some reforms over time*

The health financing system is unstable and over time different reforms have attempted to improve the situation. For instance, some restrictions have been put in place on the benefit basket. User fees were introduced starting in 2007, but were subsequently removed. A new risk distribution mechanism between funds will start operating in 2018. In addition to the number of clients, age and sex, the system will incorporate pharmaceutical consumption-based indicators which adjust for chronic diseases.

*Increasing attention is being paid to improving quality of care*

Safety legislation in 2011 fostered a wave of provider accreditation for institutions meeting minimal technical requirements, patient care standards, human resources management, quality and safety management,

and process assessment requirements. More recent advances in the area of quality and safety assurance include the adverse event reporting system and the introduction of sectoral safety targets for all health care providers. In 2012, maximum waiting times were established for several procedures, although there is little waiting time information, and it is not typically available to patients when they choose a hospital. To upgrade health workforce and its quality, in 2017, training programmes for doctors and nurses are also improved. With regard to data infrastructure, the national eHealth programme aims to tackle the current lack of interoperability between health-related data system and will also support the collection of information on quality of care which is currently lacking.

Since 2014, the new central system for adverse event reporting has been operated under the Institute of Health Information and Statistics supervision. Data about adverse events are monitored according the uniform methodology from 80 healthcare providers in a 3-years pilot study. Since 2018, there will be an obligation to report adverse events on central level from all inpatient healthcare facilities. In 2017, pilot study among home care agencies is also carried out.

There has been a significant development in increasing the efficiency of healthcare facilities data collection system thanks to the approval of the amendment of the Act on Health Services (372/2011 Coll.). The amendment allows us to implement system for monitoring of health care quality, contributes to the improvement of healthcare reimbursement and prescribes implementation of health registries that will allow us to significantly reduce the data collection burden. The National Registry of Reimbursed Health Services has been established within the scope of the ESF project "Development of the Technological Platform of the National Health Information System". The registry is operated in cooperation with the health insurance companies and will contain most of the production and reimbursement data collected from the healthcare providers. Due to the broad scope of the collected data, the registry will be used to validate or even replace many current data collections within the National Health Information System and will naturally become the main data source for production of performance indicators, namely those quantifying the volume of provided health service.

### JAF Health Results

*Life expectancy for women and at 65 for men, as well as inequality in self-perceived health are worse than the EU average*

In 2015, life expectancy at birth for women (81.6 years) and life expectancy at 65 (both for women and men) are worse than the EU average. Healthy life years at 65 for men shows some negative development (only +0.1 years in the last three years) compared to the EU average change, although it is around the EU average. Inequality in self-perceived general health (as good/very good and bad/very bad) between income groups are, respectively, considerably worse and worse than the EU average. Moreover, the gap in the share of people who perceive their health as good/very good shows a negative development in the previous three years. These variables are identified as health challenges.

In 2014, potential years of life lost, amenable and preventable mortality are improving more than the EU average, while they are around the EU average.

*Access: Unmet need for medical care due to distance is worse than the EU average*

In 2015, unmet need for medical care due to distance is worse than the EU average, although it concerns a small share of the population (0.3%).

The past several years have seen increasing tension regarding the accessibility of care in remote/border/rural areas. Elderly doctors (both in outpatient, primary care and inpatient care) are retiring without being replaced with younger colleagues. This leads to greater concentration of care in large cities, where the density of doctors and services is actually increasing.

Several policies have been implemented to counter this trend. Firstly in the area of primary care, which is arguably most important in remote regions, a subsidy program has been designed to cover the costs of setting up new primary practices for providers willing to move to the remote regions. Providers in remote areas where the availability of care is threatened are also motivated by greater level of reimbursement from health insurance funds. Since health insurance funds are the ultimate guarantors of availability of care, it is up to them to design policies and reimbursement motivations that will attract providers to remote regions.

As for inpatient providers, regional and remote hospitals can expect greater increases in reimbursement than large providers (with higher reimbursement base rates). This should guarantee fair competition in healthcare labour market.

Furthermore, the recently implemented new health insurance redistribution system (PCG) does not intentionally include regional aspects. This rewards health insurance funds that have wide network of contracted providers rather than a concentrated one in metropolitan areas. In large cities where the demand of care is greater (arguably due to larger supply), health insurance funds are not compensated for insuring patients with this increased demand (ceteris paribus demographic and chronic factors). This should lead to lower

reimbursement of providers in cities to counterbalance higher demand. And in turn, lower reimbursement of metropolitan providers should discourage further concentration of care.

And lastly, the effort to keep out-of-pocket expenditure to health providers at a bare minimum prevents rent-seeking of providers, which would be otherwise incentivized to move to metropolitan areas where purchasing power of population is greater and they could more easily gain profits by leveraging it using OOP payments. We can for example see that in the area of dental care, where the share of out-of-pocket payments is the greatest, the concentration of care and provider mobility is also the greatest, resulting in decreasing availability of dental care in remote regions.

As for the assessment of efficiency and impact of said policies, it is still too early to tell. Most of these have been designed in recent years or are planned for the next year, therefore there is little evidence regarding their efficacy so far. We monitor some demand for subsidies to new providers in rural areas, but we cannot analyse if the policy is effective in attracting new providers or if we subside providers who would set up new regional practice even without the subsidy (this not being a randomised control trial policy).

In 2013, number of doctor's consultations is considerably higher than the EU average.

High number of consultations is perceived as both a source of inefficiency and a sign of high availability of care. In a recent OECD health system characteristics survey (HSCS, 2017) the Czech healthcare system received maximum scores for scope of coverage (with increasing trends regarding actual levels of coverage), patient choice among providers on one hand, and minimal scores for scope of out-of-pocket payments and gate-keeping on the other. With these characteristics, it is understandable that Czech system generates such a high volume of doctor consultations. These characteristics are generally seen as a point of strength rather than weakness of the Czech healthcare system. If self-reported data on consultations to the physicians are considered (data from the European Health Interview Survey, population aged 15+), the position of the Czech Republic is very close to the EU average. During the last month only about 42 % of all respondents consulted a doctor.

*Non-health determinants: Obesity and diet, as well as inequalities in fruit and vegetable consumption, are a challenge in the Czech Republic*

The obesity rate, especially among men, and vegetable consumption are worse than the EU average. Inequalities in fruit and vegetable consumption between educational groups are worse than the EU average. The

*Quality: The indicators in the quality dimension are generally good, with the exception of influenza vaccination for over 65 year-old*

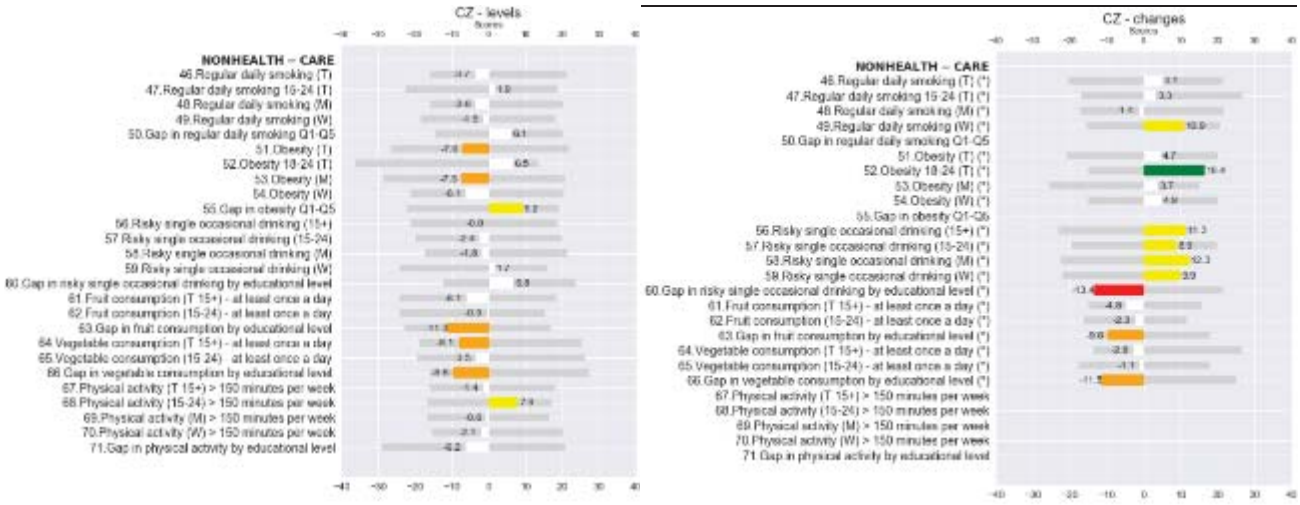
Influenza vaccination rate for over 65 year-old (15.5% in 2014) is worse than the EU average and it identified as a health challenge. However, in 2015 was adopted an amendment of the Public Health Insurance Act, which included an amendment point: “the paid service is pneumococcal vaccination to an approved vaccine schema for those over 65 years of age”. On the other hand, the vaccination coverage rate of children for DTP (99% in 2015) is identified as a good health outcome. Similarly, cancer screening for women (in particular for cervical and colorectal cancer) are considerably better than the EU average in 2014.

obesity rate is considerably improving among young. As mentioned above, the Health 2020 national strategy addresses lifestyle challenges and includes support for physical activity, good nutrition and eating habits, prevention of obesity, food safety and development of health literacy.

**Figure 11 - JAF HEALTH PROFILE CHARTS FOR MAIN DIMENSIONS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**


Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

**Figure 12 - JAF HEALTH PROFILE CHARTS FOR NON-HEALTH DETERMINANTS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**




Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

## Denmark

*With health expenditure higher than the EU average, health outcomes in Denmark are around average. Life expectancy for women is increasing, but their healthy life years are decreasing in the last years. While the number of nurses and midwifes is around the EU average, infant mortality is increasing more that at the EU level. Vaccination coverage rates of children are also a challenge in Denmark, as they are below standards. Other indicators on the quality of healthcare are around or better than the EU average. Denmark has a universal decentralised healthcare system, mostly financed by government sources, with a comprehensive package of services and no cost-sharing for primary care and hospitals. In a context of care integration and coordination, the number of doctors' consultations is better than in other EU countries. While access healthcare is generally around the EU average, unmet need for medical care due to distance is worsening in the last years. There are also some inequalities between different population groups. In particular, the gap in self-perceived general health as bad between the bottom and the top income quintile is widening in the last years and inequality in vegetable consumption is considerably worse than the EU average. In terms of risk-factors, risky alcohol consumption is an issue in Denmark, while smoking and physical activity are better than the EU average. Reducing risky behaviours has been on the agenda in Denmark.*

### Resources, Coverage and Organisation of the Health System

*Health spending in Denmark is above the EU average*

Health spending in Denmark is above the EU average when measured on a per capita basis (3,494 in pps in 2014) or as a share of GDP (10.4%). Health spending is expected to further rise due to a number of factors, including population ageing, technological progress and rise in incomes: between 2013 and 2060 the share of public health spending in GDP is projected to increase by 0.9 percentage points in Denmark, equal to the EU average. At 2.8% of GDP in 2014, Denmark spent considerably more on long-term care than most other EU countries. Otherwise, the spending structure did not differ notably from the EU average.

In Denmark, the proportion of government outlays (84.2%) is considerably higher than in the EU and there is no compulsory insurance. The remaining spending is made up of households' out-of-pocket payments (13.8%) and voluntary schemes (2%), both lower than in most other EU countries.

*The health system in Denmark is decentralised, and mainly financed through general taxation*

The highly decentralised Danish health system is tax-financed with universal coverage for all residents, and health services are delivered by a mix of public and private providers. In addition to the central government, five regional health authorities and 98 municipalities (local authorities) have different responsibilities for the delivery of services, and purchase of services from private providers. The regions are primarily financed by the central government (app. 75%), and secondarily by municipal co-financing. The municipalities are primarily financed through taxes (app. 71%), and secondarily through central government grants and other schemes.

*Grants made from the central government are adjusted for social and demographic factors.*

At the national level, the Parliament, the Ministry of Health, the Danish Health Authority, the Danish Medicines Agency, and the Danish Patient Safety Authority are responsible for the general regulation, planning, and supervision of health services, including cost-control mechanisms. These authorities also have important roles in supervising health personnel, developing quality management programme, planning the location of specialist services, approving regional hospital plans, and approving mandatory "health agreements" between regions and municipalities to coordinate service delivery. The regions are, amongst other things, responsible for the treatment of patients, operation of hospitals, and supervision of general practitioners and specialists. Municipalitities however, while municipalities are responsible for disease prevention, health promotion, rehabilitation, home care and long-term care amongst other things.

*The Danish population enjoys access to a comprehensive package of services*

All registered Danish residents are entitled to a comprehensive package of services while non-residents only receive acute care treatment. A voluntary, privately funded initiative by Danish doctors provides access to care for irregular migrants and visitors. The initiative is supported by the Danish Red Cross and Danish Refugee Aid (Commonwealth Fund, 2015).

Publicly financed health care includes all primary, specialist, hospital, preventive, mental and long term care services. National law and guidelines stipulate that regions make the decisions about the prioritisation of health services and new medical treatments. The "medicines council" established in 2017, is responsible for evaluating the cost-effectiveness of new pharmaceuticals, and provides guidance for regional decision-making. Residents have the right to seek treatment

anywhere in the country if their home region does not provide a service delivered elsewhere (in these cases, the home region needs to cover the expenses of treatment). Furthermore, a guarantee ensures that residents who are not examined or treated within 30 days after being referred by their GP, have the right to seek medical examination or treatment at private or foreign hospitals.

*There is no cost-sharing for primary care services and hospitals*

In Denmark, publicly financed services are mostly free of charge at the point of use. However, to varying degrees, user charges are required for outpatient visits to psychologists, chiropractors and physiotherapists, as well as for prescriptions, hearing aids, cosmetic treatments and dental care. Patients with high annual expenses for medicines dispensed from pharmacies (over DKK 3 390 or EUR 455)) receive 85 % reimbursement for all drug costs. On behalf of their patients, physicians are also able to apply for a raised reimbursement if the patient is in need of more expensive synonymous medicine (e.g. if the patient is allergic to the additives in the cheap alternative), or apply for full reimbursement if the patient is terminally ill. Patients with expenses exceeding DKK 3 955 or EUR 530 annually, receive full reimbursement of their expenses.. Retirees and people receiving incapacity benefits with personal assets less than DKK 84 300 or EUR 11 300, are able to receive an additional health allowance that covers expenses for medicine, dental treatment, listening aids, physiotherapy, podiatry, psychological treatment and chiropractic treatment. Most complementary voluntary insurance (for drugs and dental care) is provided by a not-for-profit organisation, while supplementary insurance (providing expanded and faster access to private providers) is often provided as an employment benefit. Although 38 % of the population has these types of complementary or supplementary coverage, they only cover a small part of total health expenditure.

*Service delivery is mainly private in primary care and public in secondary care*

General Practitioners (GPs) work predominantly in private solo practices, and act as gatekeepers for access to hospital services as well as other specialists. Nearly all Danish GPs are independent professionals working on a contractual base with the regional authorities, and are commissioned to provide primary care services either from their own facilities, or (less often) renting space from a publicly run local health care clinic. GPs are paid through a mix of capitation from the regions and fee-for-service. Capitation is composed of a basic fee based on the annual patient numbers as well as a performance element. Hospital service delivery is mainly public. Regions decide on budgeting mechanisms, generally using a combination of fixed-budget and activity-based funding based on diagnosis-related groups (DRGs), with the fixed budget making up the bulk of the funding.

*Denmark has a considerably higher number of nurses and midwifes, while the number of physicians is around the EU average*

In 2014, Denmark had 366 practising physicians per 100,000 population (around the EU average), but this number had increased less in recent years than in other EU countries. The number of nurses and midwives, however, was considerably higher than in most other EU countries (at 1,702 per 100,000 population) and had increased more in recent years than in the EU

**Policy Developments**

*Denmark is promoting care integration and coordination*

Various measures have been introduced by regions and municipalities to promote greater care integration and cooperation. Hospitals, for example, use outreach teams for home visits after hospital discharge. Municipal units have also been established within hospitals to facilitate follow-up care after hospital discharge. Some municipalities created “Health Houses” where general practice, allied health personnel and office-based specialist services are provided at one site. These multi-specialties facilities focus on care for chronic patients. In such models, GPs are encouraged to act as a care coordinator.

The new three-year agreement between the Organisation of General Practitioners and Danish Regions (concluded in September 2017) also aims at improving care coordination for patients with type 2 diabetes, COPD and cancer by strengthening GP follow-up after hospital discharge. A quality assurance programme will be introduced, and an electronic pathway program will be implemented for patients with type 2 diabetes, COPD and lower back pain. The agreement also strengthens the efforts to prevent hospital admissions, and establishes easier access to home-based care for vulnerable and chronic patients. Furthermore, a dedicated action plan for diabetes patients was agreed upon in 2017, which will improve early detection of type-2 diabetes, including by strengthening the monitoring children, young adults and vulnerable groups.

*Denmark is improving care provision for elderly patients*

A national action plan for elderly patients with complex care needs was launched in 2016. The Action Plan entails 1.2 billion DKK of extra funding for 2016 to 2019 and 300 million DKK annually from 2020 onwards. The overarching objective is to enhance the capacity of municipal health services to improve care quality for elderly and focus on early detection and intervention.

Acute care functions in the municipalities will be enhanced to reduce hospital overcrowding.

*Reducing risky behaviours is on the agenda in Denmark*

In Denmark, the municipalities are by Danish Health Law required to promote healthy living, and the Danish Health Authority is tasked with formulating recommendations regarding healthy diet, reduction of alcohol consumption, increasing physical activity, and reducing tobacco usage.

Following several EU tobacco Products Directives, Denmark has introduced health warnings on cigarette packages and also increased taxation of tobacco products. Beyond this, Denmark continues to implement a range of programmes to reduce tobacco consumption including tobacco cessation programmes and public awareness campaigns through mass media.

Denmark also implemented national strategies to promote physical activity and better nutrition, and to tackle the rising rates of obesity. In addition, 11 "prophylactic packages" were published in 2012 which aim at helping the municipalities in reducing alcohol consumption and smoking, increase physical activity, and combat mental illness etc. In regards to alcohol consumption, the government financially supports two partnerships to help achieve this target : (i) the "Partnership for a responsible alcohol culture" which involves industry stakeholders and focuses on compliance with age limits on the sale of alcohol and on initiatives to change the alcohol culture in bars; (ii) the "Partnership for youth and alcohol" which involves municipalities and civil society organisations with the aim to reduce underage drinking by initiating local activities for young people in collaboration with local authorities and civil society.

**JAF Health results**

*Health outcomes are around the EU average, with an increase in life expectancy for women and a decline in their healthy life years in the last years*

Healthy life years at birth for women is deteriorating over the past three years and it is worse than the EU average in 2015. Although the infant mortality rate and the gap in self-perceived general health as bad/very bad by income group are still around the EU average, they show negative developments compared to the EU average change in the past three years. These variables are identified as health challenges.

While life expectancy at 65 for women are considerably improving in the last three years and their remaining healthy life years are better than the EU average, healthy life years for women (both at birth and at 65) are decreasing more than the EU average change in the same period.

*Access: Unmet need for medical care due to distance is worsening in the last years*

While unmet need for medical care (including due to distance) is around the EU average in 2015, unmet need due to distance (0.1%) is worsening more that at EU level in the past three years. The number of doctor's consultations (4.4 times) is lower than the EU average and keep decreasing in the last three years (4.7 times in 2012).

*Quality: Vaccination coverage rates of children are below standards*

In 2015, the vaccination coverage rate of children for DTP (93%) and measles (91%) are below the recommended 95% threshold and are identified as health challenges in Denmark.

Other quality indicators are around or better (e.g. for specific cancer screenings) than the EU average.

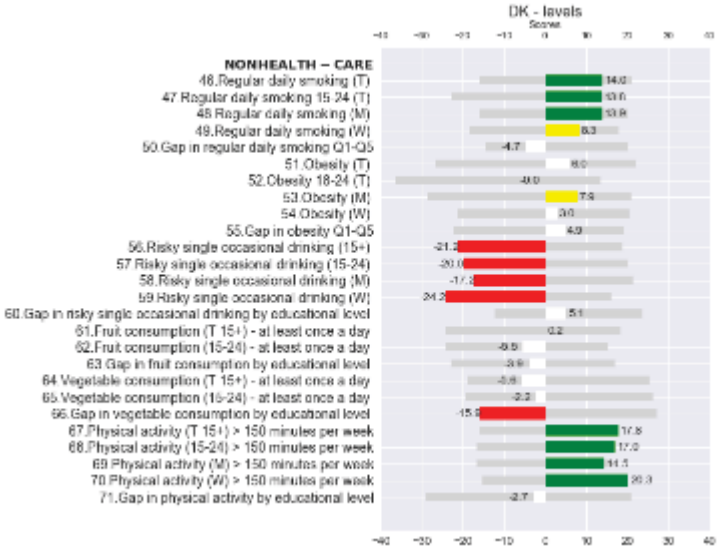
*Non-health determinants: While smoking and physical activity are better than the EU average, the risky alcohol consumption is an issue*

Data on risk-factors based on EU surveys are limited for Denmark compared to other EU countries, specifically due to the lack of data in the 2008 wave of the European Health Interview Survey.

**Figure 13 - JAF HEALTH PROFILE CHARTS FOR MAIN DIMENSIONS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**


Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

**Figure 14 - JAF HEALTH PROFILE CHARTS FOR NON-HEALTH DETERMINANTS (STANDARDISED SCORES)**



## ESTONIA

*With a below EU average expenditure for healthcare, health outcomes in Estonia are generally worse or considerably worse than average, although most are improving. Most indicators in the JAF Health quality domain are worse than the EU average, including about prevention, while a few are improving. In particular, indicators on prevention (e.g. cancer screenings, vaccination coverage rates of children) show a worse than average performance. However, public programs for certain cancer screenings (e.g. colorectal) have recently been introduced. Estonia is internationally recognized for developing E-health services, with the aim of improving care quality and efficiency. The worse than average performance in terms of lifestyle indicators, which include some inequalities, stresses the need for better prevention. The government is discussing some measures to tackle unhealthy lifestyles, such as increasing taxes on unhealthy products. Healthcare financing is mostly insurance based and aims at providing universal coverage. Nevertheless, the government has decided to increase public spending on health starting from 2018. However, access to healthcare is a challenge. A relatively large proportion of the population (6%) remains uncovered. Estonia reports the highest level of unmet need for medical care in the EU and this rate is also increasing over time. Unmet need is mostly due to long waiting time for some specialised services. Workforce shortages in some areas of care (including in hospitals) contribute to explaining long waiting times and, recently, the government started to take some measures to increase healthcare spending and personnel. The rationalization of the hospital sector through the shift towards ambulatory care can have an impact on waiting time.*

### Resources, Coverage and Organisation of the Health System

*Health spending in Estonia is below the European average*

Health spending in Estonia is below the EU average when measured on a per capita basis (1,458 in pps in 2015) or as a share of GDP (6.5%). Health spending is expected to further rise due to a number of factors, including population ageing, technological progress and rise in incomes: between 2013 and 2060 the share of public health spending in GDP is projected to increase by 0.6 percentage points in Estonia, which is comparable to the EU average (0.9%)[9].

Compared with the EU average, Estonia spends relatively less on long-term care and more on curative and rehabilitative care. While around the EU average, administrative expenditure had been declining faster than across the EU over the three preceding years.

*The majority of public spending is financed by social insurance*

In Estonia, funding by compulsory insurance represents 64.9% of current health expenditure, which is slightly higher than on average in the EU and the proportion of government outlays, at 10.8% of current expenditure, is slightly lower than in the EU. Starting from 2018 healthcare spending of government is increasing with a contribution on behalf of pensioners. Households' out-of-pocket payments are around the EU average (22.8%), while voluntary schemes represent only 1.6% of current health spending, below the EU average.

[9] For the country and the EU, the increase in public health spending as a share of GDP refers to AWG reference scenario of EC (2015) for the period 2013-2060.

*The insurance-based health system aims at providing universal access to care*

The Estonian Health Insurance Fund (EHIF) aims to provide universal access to health services and contracts public and private providers to that effect.

Enrolment is compulsory, based on residence and financed by an earmarked social payroll tax paid by the employed. In 2016, 94% of the population was covered by the mandatory health insurance and this proportion has been stable in the last 6 years. The exact status of the uninsured is unclear but it is believed that these are predominantly young men who are economically inactive or working abroad.

*The range of services covered by the EHIF is relatively broad, but rationing through waiting times occurs.*

The public benefit package to be financed by the EHIF is outlined in the 2002 Insurance law and further specified through government acts. It includes preventive and curative health services, pharmaceuticals and medical devices, as well as prevention and health promotion programmes. Partial coverage for dental care is also included and has been extended to the entire population as of July 2017. While entitlements include a relatively broad range of services, limited funding constrains the supply of those services, contributing to long waiting times for some specialised services.

*However, users do have to pay out-of-pocket expenses for most goods and health care services*

In Estonia, the health insurance act allows co-payments for patients and sets some limit. Patients incur no charge for a visit to the family doctor but pay EUR 5 for home visits or specialist consultations, EUR 2.50 per day for a hospital stay (up to 10-day max), and EUR 9.75 for inpatient nursing care. For prescription-only

pharmaceuticals delivered on an outpatient basis, the general reimbursement level is 50% of the price for listed pharmaceuticals. Yet, higher reimbursement rates of 75%, 90% and 100% exist and apply for some diseases and indications (e.g. cancers, syphilis, and diabetes), prescriptions for chronic diseases and some patients groups, such as children and pensioners. There is also a co-payment of EUR 2.50 per prescription not depending on the rate of reimbursement. Out-of-pocket spending also includes payments for services that are not in the benefits package or are made to non-contracted providers. Altogether, co-payments for medicines and dental care account for 74% of out-of-pocket spending.

*The Ministry of Social Affairs and its agencies are responsible for planning, administration, regulation and financing of the health system*

The Ministry of Social Affairs is the steward of the health system and is supported by several agencies including the National Institute for Health Development, the Health Board, the State Agency of Medicines and the Health and Welfare Information Systems Centre. They are responsible for the development of national health care policies and legislation, supervision of compliance with legal acts, collection and analysis of health information and the registration of health care professionals and licensing of health care facilities. The Estonian Health Insurance Fund is responsible for contracting with health care providers, paying for healthcare services, reimbursing pharmaceutical expenditure and paying for temporary sick leave and maternity benefits.

*Service delivery is mainly private in primary care and public in secondary care*

In Estonia, the primary care system is well developed with independent family physicians acting as the first level of contact and gatekeepers to secondary care. Family physicians are responsible for providing a core package of services to their patient-list. Since 2006, age-adjusted capitation, fee-for-service payments and basic allowances have been complemented by a quality bonus system. The overarching aim is to expand the role of family physicians and to improve the management of chronic conditions. Hospital service delivery is mainly public. A diagnosis-related group system was implemented in 2004, complementing fee-for-service payments.

*The availability of human resources is comparable to the EU average, but shortages are anticipated*

In 2016, the numbers of physicians (352.6 practicing physicians per 100,000 population) and nurses and midwives (677.0) are similar to the EU average. The number of nurses and midwives, however, had been declining in Estonia in recent years, in contrast to most other EU countries. The proportion of health personnel working in hospitals (in FTE) is below the EU average (931.3 per 100,000 population) and has decreased considerably in recent years.

## Policy Developments

*E-health services have been developed to increase care quality and efficiency*

Estonia has invested in e-health and is internationally recognised for its innovations. Most health care providers keep an electronic health record for patients and all health care providers are responsible for sending data on patient health and service provision to the central health information system. The system also allows e-consultations, digital referrals and e-prescriptions – virtually all prescriptions are electronic and pharmacists increasingly sell on-line. Several new applications are under development, including an electronic immunisation passport, a central digital registration system for outpatient care and, since 2016, a facility to provide access to claims and costs. The use of the platform is intense with 4.5 million enquiries from the patient portal to the e-health system in the first 4 months of 2017.

*Addressing risk factors is on the policy agenda in Estonia*

In accordance with several EU directives, the government increased excise taxes on cigarettes (2006–17), and introduced a smoking ban in public spaces, public transport and workplaces (2007), picture warnings on tobacco products (2016) and a ban on smoking areas in buildings (2017). The Green Paper on Tobacco Policy established by the government also aims at reducing the attractiveness of tobacco products, promoting a smoke-free environment and curbing the black market. Other key measures introduced by the government include the 'sober and healthier' programme started in 2004 to raise awareness about alcohol-related harm. Since 2018 Estonia adopted policies to further limit alcohol advertising and introduce sales restrictions. Estonia is currently at the end of process developing the Green Paper on nutrition and physical activity which aims to set goals on reducing health problems arising from dietary choices and lack of physical activity. Furthermore, Parliament is also discussing a tax on sugar-sweetened beverages to tackle obesity, which is growing sharply, especially among the young.

*Shifting care toward outpatient care has been a priority in Estonia*

The rationalisation of the hospital sector, coupled with the development of family medicine centred primary care, is a stated priority in Estonia. Many small hospitals have merged or turned into ambulatory (or outpatient) clinics, nursing and rehabilitation facilities, hospi-

tals and social services providers. In addition, since 2014, regional hospitals are encouraged to network with general hospitals to share skills and medical resources and to support access to specialist care in smaller hospitals. By 2018, two such networks coordinated by the North Estonian Medical Centre and Tartu University involved six general hospitals. Plans to further strengthen family medicine are also under development including the development of new multi-practitioners multidisciplinary primary care centres.

*Measures are taken to avoid workforce shortages*

Shortages in the health workforce in Estonia have been emerging as a result of professional ageing and inadequate training volumes and contribute to extend waiting times in some areas of care. To further develop nursing care, the government recently decided to increase the nurses training places from 400 in 2016 to 517 in 2020 (2018 – 501 nurse students, 2019 – 501 nurse students). The government also finances the project "health workers back to health care system" (in 2018 is project for doctors). Recent changes have also enabled more substitution by increasing the role of nurses and midwives in health system organisation.

**JAF Health Results**

*Health outcomes in Estonia are generally worse or considerably worse than the EU average, although most are improving*

Life expectancy for men is worse than the EU average. In 2015, life expectancy for a boy at birth is 73.2 years (9 years less than for a girl) versus 77.9 for the EU. However, life expectancy (at birth and at 65) is improving considerably for all and especially for men. Healthy life years (at birth and at 65) are worse than the EU average, especially for men who have considerably lower values but the figure increased in 2016 reaching to 56.5 years. A 65 year-old men can expect to live 5.3 years without disability versus an EU average of 9.4 years. The self-perception of general health (as good/very good and bad/very bad) is considerably worse than the EU average, as well as inequality in self perceived general health (as measure by the income quintile gap) which is not improving Among the bottom income quintile 34.1% declare to be in very good or good health against 75.2% in the top income quintile. Potential years of life lost are considerably worse than the EU average, especially for men (for women are worse than the EU average), but they are improving considerably with respect to the average change in EU countries (for women they are also improving). In 2014, amenable and preventable mortality (234.6 and 325.3, respectively, per 100000 population aged 0-74) are worse than the EU average and the first is improving more than the EU average. The number of deaths due to self-harm/suicide is worse than the EU average and increasing considerably more than the EU average. These variables are identified as health challenges. On the other hand, infant mortality rate is identified as a good health outcome, as it is better than the EU average and considerably improving in relative terms.

In 2013, child mortality (20.1 per 100 000 child aged 1-14 years) is considerably worse than the EU average, as well as external causes of death (excluding transport accidents). However, in 2016 child mortality decreased to 12.6 death cases among 1-14 year olds per 100 000 child aged 1-14 years (Estonian Death Registry). Similarly, latest data for external causes of death (excluding transport accidents) in 2016 show a reduction (59.7 according to the Estonian Death Registry).

*Access: The highest level in the EU of unmet need for medical care and the relatively low health insurance coverage signal a challenge in access to healthcare*

In 2015 Estonia has the highest level of unmet need for medical care in the EU (12.7%), which is mostly due to waiting time. This share is also increasing considerably in the last 3 years with respect to the EU average. Unmet need due to distance is considerably worse than the EU average, but still small in absolute terms (0.7%) and relatively improving in the last 3 years. Health insurance coverage is also lower than the EU average (94.3%). In general, access to healthcare is identified as a health challenge.

*Quality: Most indicators in the JAF Health quality domain are worse than the EU average, including about prevention, while a few are improving*

In 2014, breast cancer screening (for women aged 50-69) is considerably worse than the EU average, while cervical cancer screening (for women aged 20-69) is worse than the EU average but improving considerably with respect to the EU average change. In 2013, in-hospital mortality following ischemic stroke is worse than the EU average, but improving considerably with respect to the EU average change. The vaccination coverage rate of children for DTP is lower than the recommended 95% threshold (93% in 2015). Influenza vaccination for over 65 year-old is not included in national vaccination programs and it is considerably worse than the EU average. These variables are identified as a health quality challenge.

The breast cancer survival rate in Estonia for 2014 (relative survival rate for years 2010-2014) was 79% and for cervical and colorectal cancer respectively 67% and 55%. In 2007 the survival rates for colorectal and breast cancer were worse and considerably worse, respectively, than the EU average. However, colorectal cancer screening for both men and women remains worse than the EU average in 2014, this is as expected as Estonia started its public screening program for colorectal cancer in 2016, with only 6.5% of people

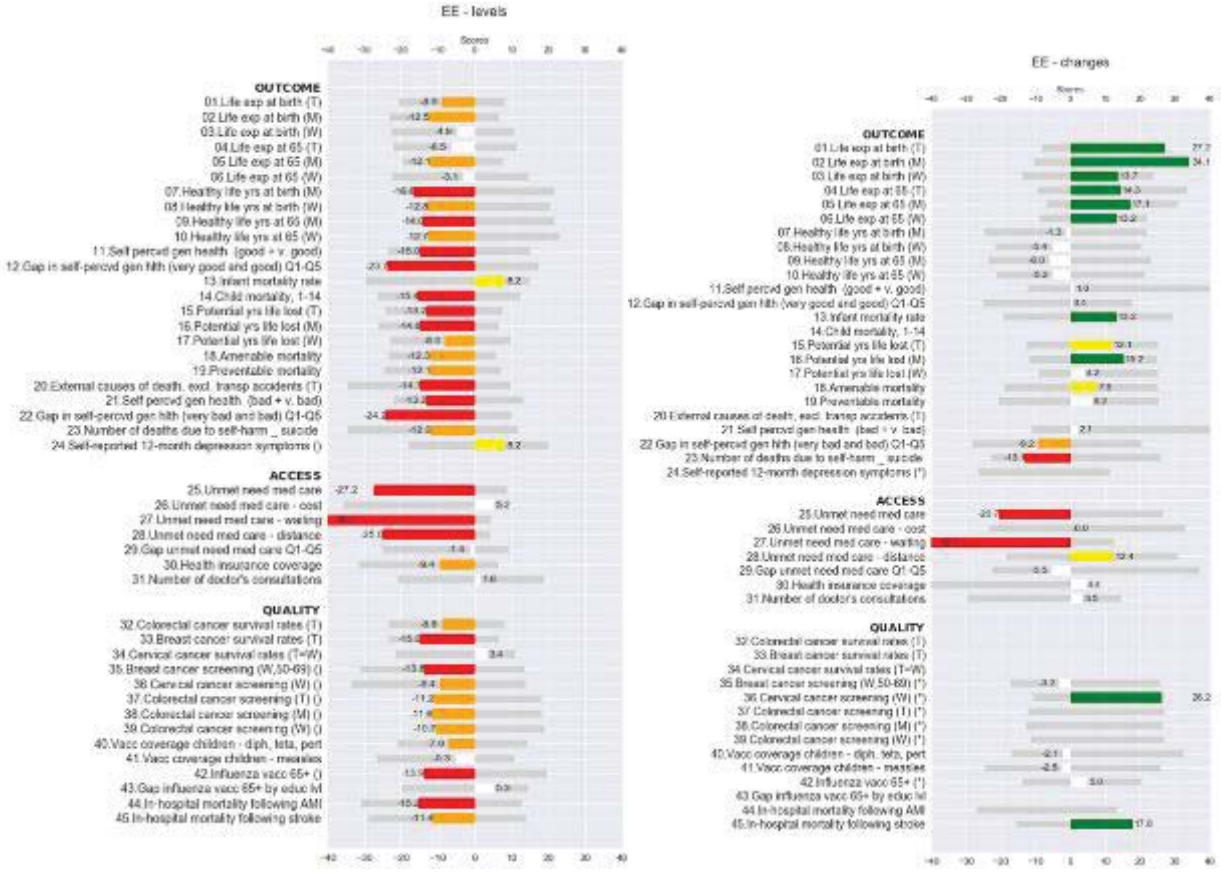
aged 50-74 reporting to have undergone a test in the past two years.

*Non-health determinants: Lifestyle indicators are worse than the EU average in most areas, such as in alcohol use and especially for obesity among women*

In 2014, obesity (19.7% of the population) is worse than the EU average and among women (20.8%) is considerably worse than the EU average. The smoking rate of men and young are worse than average, while for the first is considerably improving from 2008 compared to the EU average change. Fruit consumption (including among young) is worsening from 2008, although it is still around the EU average. Inequality in fruit consumption between lower and higher educated is worse than the EU average, but is improving considerably more than average.

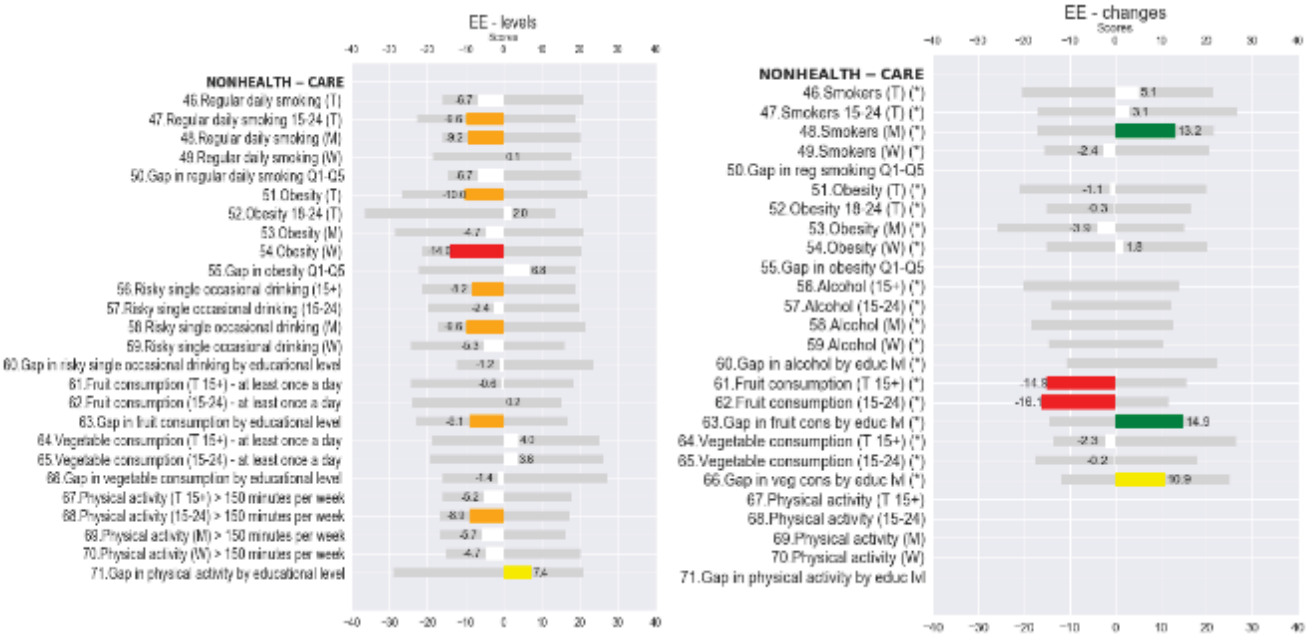
In 2014, alcohol use among men is than the EU average. The share of people reporting to have had a risky single occasional drinking in the past year is 52.7% compared to an EU average of 40.1%. However, data on alcohol use in 2008 are not available for Estonia. The smoking rate and physical activity of young Estonian (15-24 year-old) are worse than their EU peers. According to the Estonian national dietary survey the situation on obesity is worrisome also among children, as 13.9% of 6-9 year-old and 13.2% 10-13 year-old are obese.

**Figure 15 - JAF HEALTH PROFILE CHARTS FOR MAIN DIMENSIONS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**




Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

**Figure 16 - JAF HEALTH PROFILE CHARTS FOR MAIN DIMENSIONS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**




Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

## FINLAND

*With an average health spending per capita, health outcomes in Finland are around the EU average with life expectancy improving considerably more than average. However, healthy life years at birth, especially for women, are worse than the EU average. Finland also has a higher number of nurses and midwifes than the EU average and a considerably lower infant mortality rate. The quality of healthcare is generally good, with a few exceptions. With a higher than average spending on prevention and public health, some lifestyle indicators are better than the EU average (e.g. smoking) while others are worse (e.g. alcohol use). In a context of rapid aging, public healthcare is open to all residents and increasingly supplemented by occupational and private insurance, which offer a faster access to healthcare mostly to working age people in higher socio-economic groups. Unmet need for medical care due to waiting list is identified as a challenge, as it is considerably worse than the EU average. Wide-range reforms are being discussed in Finland, with the main aim of improving coordination and reducing expenditure.*

### Resources, Coverage and Organisation of the Health System

*Health spending per capita is around the EU average, but spending on long-term care and prevention is higher*

Health spending per capita in Finland, which stood at 2,885 pps in 2014, was around the EU average. Health spending measured as a share of GDP (9.5%) was also similar to the EU average, but had increased more in recent years than in other EU countries. Health spending is expected to further rise due to a number of factors, including population ageing, technological progress and a rise in incomes: between 2013 and 2060 the percentage of GDP spent on health is projected to increase by 0.7 percentage points in Finland, which is comparable to the EU average (0.9%). Finland spends 1.7% of GDP on long-term care, which is slightly above the EU average. However, this share has somewhat eroded in recent years, thus growing less than in other countries. Spending on prevention and public health services is also higher than on average in the EU, at 3.3% of total health expenditure. Finland spends relatively less on administration (1.6%) than most other EU countries.

*The share of government outlays is higher than across the EU but out-of-pocket expenditure are around the average*

In Finland, the proportion of government outlays (62.2%) is higher than in the EU, while the proportion of care funded through compulsory insurance (13.2%) is lower. The remaining spending is made up of households' out-of-pocket payments (19.1%, similar to the EU average) and voluntary schemes (5.5%). In contrast to other EU countries, the share of out-of-pocket payments in health spending has decreased in recent years.

*The health system is mostly decentralised and service delivery predominantly public*

In Finland, until 2020 when the Regional Government together with Health and Social Services Reform is implemented municipalities finance and deliver the bulk of health services, which are thus public, while the National Health Insurance (NHI) mostly provides pharmaceutical coverage and partially reimburses private services.

*Access to public healthcare is open to all residents and coverage supplemented by additional public and private financing schemes*

Municipalities finance and organise, for the residents of Finland, the provision of primary care and hospital care. The NHI – which is funded by compulsory insurance contributions and state transfers – is responsible for the financing of outpatient medications, health care-related travel costs, and sickness and maternity allowances for all permanent residents in the country. Certain population groups (irregular migrants, tourists, temporary visitors from non-EU countries) are not covered, but are entitled to essential emergency care. The NHI also partially funds the occupational health care schemes employers have to offer their employees (approximately one-third of the total population) and reimburses a proportion of care patients purchase privately. A growing share of the population (now 15%) also has duplicate, complementary and/or supplementary private health insurance, mainly to cover the cost of private services and outpatient drugs not covered by the NHI. Occupational health care and private health insurance offer wider provider choice but mainly cover people from higher socioeconomic groups and working people.

*Co-payments for services can be extensive*

User fees in the form of co-payments are quite extensive, as charges apply to most municipal health care services, including primary and emergency care. A cap of EUR 691 per person per year applies to user charges for public health services. For prescribed medicines, patients pay the first EUR 50 in a given year. Above this deductible, most drugs are reimbursed at a 40% rate (others can obtain a special reimbursement level of 65 % or 100 %), but out-of-pocket spending is capped at EUR 605 per year. Some services are free of charge

(e.g. outpatient primary and dental care for children, visits to maternal and child health clinic, occupational health care services), and people with certain diseases and disabilities are also exempted from payments. People who purchase private services pay out-of-pocket and can seek partial reimbursement by the NHI.

*Central and local institutions are involved in health care governance*

At the national level, the Ministry of Social Affairs and Health is responsible for developing and implementing health reforms and policies, and it extensively relies on a network of expert and advisory bodies in its work. The statutory National Health Insurance (NHI) scheme is run by the Social Insurance Institution and accountable to Parliament. Over 300 municipalities are responsible for the organisation and provision of health and social care services with some autonomy in the planning and steering of these services. Municipalities also jointly administer 20 hospital districts. Åland Islands have an autonomous status and administer the health and social welfare services by themselves.

*Health care services are mainly provided by public providers*

Primary care is offered in public health centres and (for employees) in occupational health units. Public health centres are financed out of the municipality budgets and staff salaried. They commonly include General Practitioner (GP)-run inpatient units, largely for chronic and long-term care patients. Secondary care (including specialised outpatient care, inpatient care and day surgery) is mainly provided by public hospitals organised in municipality-owned hospital districts. Hospital payment methods are not uniform across district. Tertiary care is delivered in five university hospitals. Finland has few private hospitals, but private provision of specialist outpatient care is much more common. Patients need a referral to access specialist care, except for emergency cases.

*Finland has a high number of nurses and midwifes*

In 2014, Finland had 321 practising physicians per 100,000 population, which is around the EU average. The number of nurses and midwives, however, was considerably higher, at 1,508 per 100,000 population. The roles of some nurses have expanded greatly with new functions such as patient case managing, consultations and prescribing, although the actual number of nurses practising in these expanded roles still remains relatively low.

## Policy Developments

*Wide-ranging reforms are being proposed in Finland*

A major reform currently under discussion in Finland aims to establish a less decentralised health and social care system -at the regional (county) level. The overarching goal is to curb expenditure growth through cost savings. The main proposed changes include transferring responsibility for the organisation and provision of health and social care services from municipalities to 18 newly created regional governments (counties); moving from a multi-payer towards a single-payer system, financed through general taxation; and improving the provision of services by introducing a purchaser-provider split and provider competition, extending freedom of choice for patients, strengthening service integration and continuity of care, and centralising emergency care and certain specialist services.

*Finland is strengthening primary care and care coordination through eHealth*

One important challenge in Finland is to strengthen access to and efficiency in primary care and promote greater coordination among primary care providers and hospitals. To this end, Finland has invested substantially in eHealth. It introduced a nationwide harmonised electronic patient record, the national Patient Data Repository (referred to as KANTA). This information system includes all public and private health care providers. It also includes mandatory electronic prescription and a health portal allowing citizens to review their own information. Since September 2016, these electronic patient records cover the entire population.

*Finland has implemented several policies to control pharmaceutical spending*

In 2009, reference pricing was introduced and since then reimbursement for pharmaceuticals has been based on the price of the cheapest substitutable product plus a small premium. Hence, if patients choose a product whose retail price exceeds the reference price, they need to pay the share above the reference price. Pharmacists are obliged to dispense the cheaper product and replace the prescription by a generic medicine if available. Finland also introduced several policies to reduce inappropriate prescribing including treatment guidelines complemented by the monitoring of prescribing patterns, as well as education and information campaigns on the prescription and use of medicines.

## JAF Health Results

*Most health outcomes in Finland are around the EU average, while healthy life years at birth among women are worse than the EU average and infant mortality considerably better*

In 2015, the life expectancy at both birth (81.6) and 65 (20.2) are around the EU average, while their developments over the last three years are considerably better or better than the EU average. Healthy life years at birth is worse than the EU average, especially among

women. These variables are identified as health challenges. Although the share of people who perceive their health as good/very good shows a considerable positive development in the last three years, inequality between income groups is worse than the EU average. On the other hand, the share of people who perceive their health as bad/very bad is better than the EU average. Infant mortality rate is considerably better than the EU average and it is identified as a good outcome.

In 2013, the number of external causes of death, excluding transport accidents, is worse than the EU average. The number of deaths due to self-harm or suicide improved more that the EU average in the past three years and is now around the EU average. In 2014, the self-reported 12-month depression symptoms is worse than the EU.

*Access: unmet need for medical care due to waiting time is a challenge*

While unmet need for medical care due to cost (0.1%) is better than the EU average in 2016, unmet need due to waiting time (4%) is considerably worse than the EU average[10]. In 2014, the number of consultations per doctor is lower than the EU average.

*Quality: the quality of healthcare is generally good, with the exception of colorectal cancer screening*

In 2013, in-hospital mortality following stroke (at 5.1% in 2013) is considerably better than the EU average and it is identified as a good health outcome.

In 2014, colorectal cancer screening (both for women and men) is worse than the EU average. The pilot study on colorectal cancer screening 2004-2014 is currently discontinued, since the effect on mortality was much smaller than expected  On the other hand, breast cancer and cervical cancer screening are better than the EU average.

*Non-health determinants: Smoking rate and physical activity are considerably better than the EU average, while alcohol use and fruit consumption are worse*

Data on risk-factors based on EU surveys are limited for Finland compared to other EU countries, specifically due to the lack of data in the 2008 wave of the European Health Interview Survey.

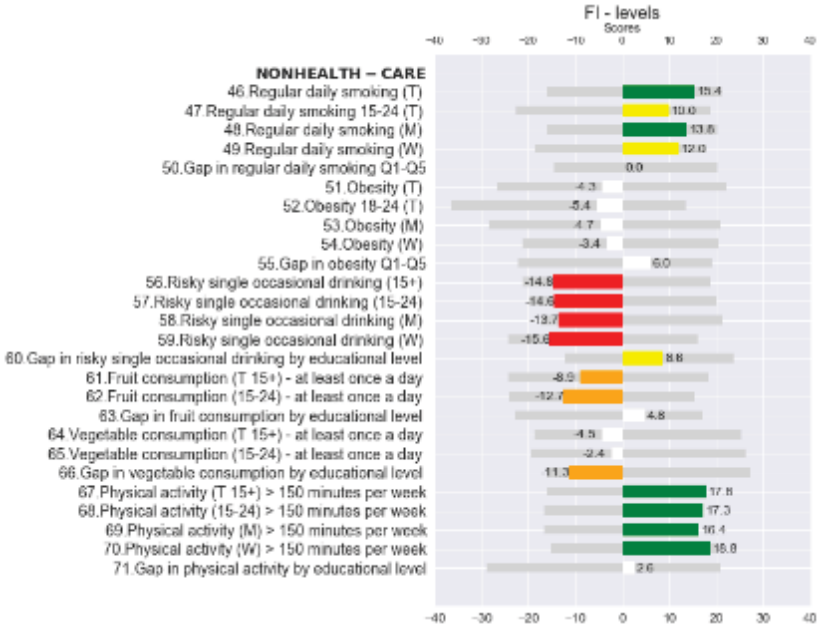
In 2014, the smoking rate (especially among men) and physical activity are considerably better than the EU average. On the other hand, the consumption of alcohol is considerably higher than the EU average. The consumption of fruit is worse than the EU average, as well as the gap in vegetable consumption between high and low educated people.

[10] However, the 2016 data is still provisional and in 2015 there was a break in the series for Finland.

**Figure 17 - JAF HEALTH PROFILE CHARTS FOR MAIN DIMENSIONS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**


Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

**Figure 18 - JAF HEALTH PROFILE CHARTS FOR NON-HEALTH DETERMINANTS (STANDARDISED SCORES)**



## France

*With a relatively high health expenditure and good socio-economic context, France has good health outcomes, especially for the life expectancy of women, and a good access to healthcare. While expenditure for health is projected to increase at the same pace as the EU average, the French population is aging faster and some risk factors, including for young, are worse. The smoking rates of young and women are considerably worse than the EU average. Inequalities in lifestyle are also worse than the EU average, in particular for smoking and obesity. The deteriorating trend of obesity signals this issue as a health challenge. Recent interventions try to address the challenge of obesity among children. Prevention among children, in particular concerning the vaccination against measles, represents a health challenge in the quality dimension.*

### *Resources, Coverage and Organisation of the Health System*

*Health spending is high in France and projected to increase at the same pace as the EU average*

Health spending per capita in France is higher than the EU average (3,339 in pps in 2014) and considerably higher and rising if measured as % of GDP (11.1% in 2014), largely a consequence of sluggish economic growth in recent years. Health spending is expected to further rise due to a number of factors, including population ageing, technological progress and rise in incomes: between 2013 and 2060 the share of public health spending in GDP is projected to increase by 0.9 percentage points in France, the average level across the EU11. In terms of structure, France stands out due to relatively high administrative expenditure on health (6% of current health spending), half of which relates to private supplementary insurance. Spending on curative and rehabilitative care (55%) is around the EU average.

*The financing structure is characterised by the prominent role of social insurance.*

In France, the share of compulsory contributory insurance in the financing of health expenditure is larger than the EU average (75% in 2014, SHA data) and the share of government schemes correspondingly lower. Yet, altogether, public spending on health is around the EU average.

The historically work-based statutory health insurance scheme has shifted to a universal coverage one since 2000

In France, all legal residents are covered by statutory health insurance (SHI), an entitlement to the wider social security system. The SHI scheme initially offered coverage based on professional activity and was contingent on contributions but is now based on residence and more than half financed by earmarked taxes (notably the contribution sociale généralisée, CSG).

*The French health care basket is relatively broad in terms of goods and services covered*

Medical goods and services covered include hospital care and treatment delivered in public and private institution, outpatient care provided by GPs, specialists, dentists and midwives and all other services prescribed by doctors (diagnostic and medical procedures, laboratory tests, pharmaceutical products, medical appliances, and health care related transport).

*However, the depth of public coverage is uneven, with cost-sharing applying to most goods and services*

A complex system of co-payments and deductibles applies to most good and services, but patients with specific diseases can be exempted from co-payments for the care and medicines related to their illness. Overall, hospital care is ultimately well covered (92% of the related expenditure was publicly funded in 2015). For outpatient care, in general, the reimbursement rate ranges between 70% of the statutory tariff for consultations with doctors and dentists to 60% for services provided by medical auxiliaries and laboratory tests. These rates can be reduced in the absence of a referral from the "preferred doctor"; patients are encouraged to register with a "preferred doctor" who is generally a primary care physician acting as a gatekeeper. The SHI also does not cover extra-billing amounts over statutory tariffs. Overall, around 66% of ambulatory care is publicly funded. The majority of outpatient pharmaceuticals are reimbursed at a 65% rate but non-substitutable or expensive drugs are reimbursed 100% and for drugs that have been assessed as having a low effectiveness only 15% (Service Médical Rendu). Overall 70% of ambulatory medicine expenditure is reimbursed.

In France, patients have traditionally paid for ambulatory health services at the point of use and are then reimbursed by the social health insurance and by their voluntary health insurance. This can constitute a financial barrier to access to health care for certain population groups. For this reason, the French authorities started to universalise third-party payment at the point of use, a reform whose implementation is still in progress.

[11] For the country and the EU, the increase in public health spending as a share of GDP refers to AWG reference scenario of EC (2015) for the period 2013-2060.

*Voluntary Health Insurance (VHI) plays an important role in France*

VHI provides complementary insurance for co-payments and better coverage for medical goods and services poorly covered by SHI. It finances approximately 14% of total health expenditure, which is considerably higher than the EU average and covers about 95% of the population. Out-of-pocket (OOP) payments account for 7% of total health expenditure in 2015, considerably lower than the EU average and this proportion had been decreasing in the three previous years.

Health policy, regulation and management of the health system are split between the central government and the SHI with an increasing role being delegated to the regions. The State (parliament, government and various ministries), defines general policies for the health sector, organizes the health system, determines the operating conditions of the SHI and sets its annual target budget (known as ONDAM). The statutory health insurance (SHI) manages its budget, negotiates with health professionals, proposes the basket of services admitted to reimbursement and can modify reimbursement rates within the limits defined by the state.

Since the mid-1990s, reforms have aimed to devolve some state responsibilities to the regional level, in particular for planning. In 2010, most existing regional institutions were merged in 2010 into a single regional health agency (ARS), under the responsibility of the ministry of health, to ensure that health care provision meets the needs of the population.

*Services delivery is mixed*

Primary and secondary ambulatory care is provided mainly by self-employed doctors, dentists and medical auxiliaries (including nurses and physiotherapists) and, to a lesser extent, by salaried staff in hospitals and health centres.

GPs have taken on an increasing role in the coordination of care with the introduction in 2004 of the "preferred doctor" scheme that provides incentives to people to visit their GP prior to consulting a specialist. The patient now is required to choose a primary GP ("preferred doctor") and to seek a referral from them for specialist services (otherwise, the consultation's reimbursements of medical consultations are lowered). Acute specialized care is provided by a diverse range of public, private for profit and non-profit hospitals. The hospital sector has traditionally occupied a central place in the French health system. Over the past decade, progress has been made to shift care away from the expensive inpatient sector to day care and outpatient care outside hospitals. Medicines are dispensed by self-employed pharmacists.

*The availability of human resources is average but their distribution uneven*

In 2015, the ratio of the number of physicians per population was around average, and it had increased more slowly than the EU average in the preceding three years. National data suggest that the number of nurses and midwives per population is also average. Further, the density of nurses and midwives has increased faster in France than on average in the EU 15 between 2010 and 2014. The proportion of health personnel working in hospitals (in FTE) is higher than the EU average.

The density of health care professionals is variable between geographic areas in France, in particular for specialist doctors. In 2015, the density of doctors was more than three times higher in urban than in rural areas (4.5 doctors per 1 000 population in urban areas vs 1.4 in rural areas).

***Policy Developments***

*In recent years, various initiatives have sought to address the lack of coordination and continuity of care in the health system.*

New modes of organisation such as multi-disciplinary care homes and hospital at home have been developed

These include the gatekeeping system and provider networks to offer multidisciplinary care to patients with complex needs. The development of multi-disciplinary health homes which group self-employed health professionals has also been encouraged in France since 2007 particularly in rural areas. The reduction in length of stay in hospital is partly due to the expansion of the "hospitalisation at home" programme (known as Programme d'Accompagnement du Retour à Domicile, PRADO) from 2010, which has been designed among other things to reduce delayed hospital discharges.

*The development of coordination structures among providers is being further encouraged at the local level*

The "Loi de modernisation de notre système de santé", adopted in January 2016, aims at rationalising the supply of physical and human resources to bring efficiency and quality gains. On the hospital side, the plan is to develop "Groupements hospitaliers de territoires" (GHT) to improve cooperation between hospitals within a defined geographical area. In July 2016, 135 GHTs were created to improve health care accessibility through greater communication and collaboration between 850 French hospitals. Regarding ambulatory care, the law plans the development of "Communautés professionelles territoriales de santé". The aim is to improve multidisciplinary practice between a range of health and social care professionals. This is expected to improve coordination at the interfaces between vari-

ous parts of the health care system and between health care, social care and long-term care. While it is too early to assess the impact of such Communautés professionelles territoriales de santé, they are intended to better meet the needs and improve the quality of care of the chronically ill population.

*Programs to tackle obesity have been in place since 2001 and trends have stabilised but socio-economic inequalities remain high*

A national programme for health nutrition (PNNS) has aimed to tackle obesity and overweight in France since 2001. Trends have stabilised but children of manual workers are still much more likely to be overweight (22%) or obese (6%) than children of executives (13% and 1% respectively). Addressing social inequalities has become a major objective of this programme with its renewal in 2011. Additional measures to reduce the prevalence of obesity and promote healthy life-styles were included in the 2016 law to modernise the French health system, notably restrictions of the distribution or sale of unlimited volumes of soft drinks and the possibility for "preferred doctors" to prescribe physical activities adapted to patients with long-term conditions. France also plays an important role in the coordination of the "joint action on nutrition and physical activity" (JANPA) – a programme that aims to contribute to halting the rise of overweight and obesity in children and adolescents in Europe by 2020

***JAF Health results***

*Health outcomes are generally good in France*

In 2015, life expectancy of women at 65 (23.5 years) is considerably better than the EU average and it is identified as a good health outcome. In 2015, life expectancy at birth for women and life expectancy at 65 for men are better than the EU average.

The number of deaths due to self-harm/suicide is around the EU average, and has decreased faster than the EU average over the last three years (from 16.68 per 100000 inhabitants to 14.13). Nevertheless it remains an area of concern in France, which is the reason why a national observatory of suicide was created in 2013.

The self-perceived level of good and very good general health is also better than the EU average (2014). All other JAF outcome variables are around the EU average and their developments over the last three years are similar to the EU average according the latest available data.

*Access: Data on access dimension is around the EU average*

In 2014, the number of doctors' consultations is around the EU average but has been decreasing between 2011 and 2014 (from 6.8 consultations in 2011 to 6.3 in 2014, per 1000 inhabitants), whereas it has been slightly increasing on average over the 18 MS for whom data are available. The other JAF access indicators are around the EU average and their developments over the last three years are similar to the EU average from the latest available data. 1.2% of the population reported unmet need for medical care in 2015 (a drop from 2.8% in 2014), while the gap between the top and the bottom income groups is small as compared to EU average.

*Quality: Indicators on quality are generally better than the EU average, with the exception of vaccination coverage rate of children for measles*

The vaccination coverage rate of children for measles is lower than the 95% threshold (at 91% in 2015) and it is identified as a health challenge. While the evolution of the first dose vaccination against measles, mumps and rubella is rather stable, the second dose vaccination is increasing. In 2014, the first dose vaccination was at 90.6% and the second dose at 76.8%[12]. In 2013, in-hospital mortality following AMI was around the EU average. In 2015 the fatality rate following heart attack is 5.6% (down from 7.9% in 2005) in France versus an EU average of 7.4% (down from 10.2% in 2005).

The colorectal cancer screening (51.4% in 2014) is considerably better than the EU average (both for women and men) and increasing. It is identified as a good outcome. National screening program for colorectal cancer has been extended to the whole French territory in 2008-2009, leading to an increase in the screening rate between 2008 and 2014[13]. National data from the screening program (Santé Publique France) show a slight decrease from 2011-2012 to 2013-2014, partly because some screenings were delayed before the introduction of a new test.

In 2014, cervical cancer screening is better than the EU average, although JAF data show an increase smaller than the EU average in the last three years. Estimations of the coverage rate based on reimbursement data (EGB-Cnamts, exploitation by Santé Publique France) show a slight decrease in coverage rate since 2008[14]. An experimentation for an organized screening program was conducted in 2010-2012, and will be implemented on the whole territory as part of the "Plan cancer 2014-2019".

Breast cancer screening is better than the EU average, with 87% of women 50-69 year-old covered. The de-

[12] Source: DREES in health quality and efficiency program (PQE), 2017 - http://www.securite-sociale.fr/Indicateurs-Objectifs-Resultats-Maladie-Partie-2,5222.
13 See DREES; "L'état de santé de la population en France », 2017, pages 230-233.
14 Ibid, pages 234-235.

velopment of this share was similar to that in other EU countries. National data from the screening program (Santé Publique France) shows a stability of breast cancer screening program participation between 2008 and 2014[15]. According to health care reimbursement data (Cnamts), 56% of women aged 50 to 74 received a breast cancer screening over the last two years, a slight decrease from 2007-2008 when that share was close to 60%[16].

National cancer register data (Francim) and civil register data (RNIPP, Insee) have been used to estimate 5 years survival rates for people diagnosed with cancer between 2005-2010, and between 1989-1993. Over this period, survival rates have improved for most cancers, including breast cancer (from 80 % to 88 %), colon and rectum cancers. However, survival rates for cervical cancer has been decreasing[17].

The vaccination coverage rate of children for DTP is above the 95% threshold (98% in 2015) and the influenza vaccination of over 65 is higher than the EU average (55.3%). The other JAF quality indicators are around the EU average and do not show developments over the last three years different from the EU average from the latest available data.

*Non-health determinants: Risk-factors among young are an issue in France and some inequalities are worse*

The obesity rate is around the EU average (14.7%) but has increased faster than in countries for which data is available on average (considerably for young people) between 2008 and 2014. National data confirms an increase in obesity rate among adults aver the recent years, although at a slower pace since 2000 than before. Obesity rates among children seem to have stabilised since 2000[18]. The gap in obesity between the bottom and top income groups is worse than the EU average. Fruit consumption among young (15-24 year-old) is worse than the EU average (38.2% in 2014) and it is identified as a health challenge. However, the gap in fruit consumption by educational level is negligible and it is identified as a good outcome.

The gap in regular smoking between income groups and the smoking rate of young people (22.2%) are, respectively, considerably worse and worse than the EU average. The smoking rate among women in 2014 is worse than the EU average (18.3%). According to national survey data, in 2014, 29% of adults aged 18-75 years old smoke daily (versus 22% of people over 15 according to EHIS data). After decreasing for several decades, the occasional smoking rate has increased between 2005 and 2010 and was then stable between 2010 and 2014. The daily smoking rate among 18-75 years old also increased between 2005 and 2010, but then decreased between 2010 and 2014 (from 29,7% to 28,6%), due to less frequent daily smoking women[19]. Physical activity among young people (38.1% in 2014) is worse than the EU average.

The other JAF non-health determinants indicators are around the EU average and do not show developments over the last three years from the latest available data.

[15] DREES; "L'état de santé de la population en France », 2017, pages 228-229. Among women 50-74.

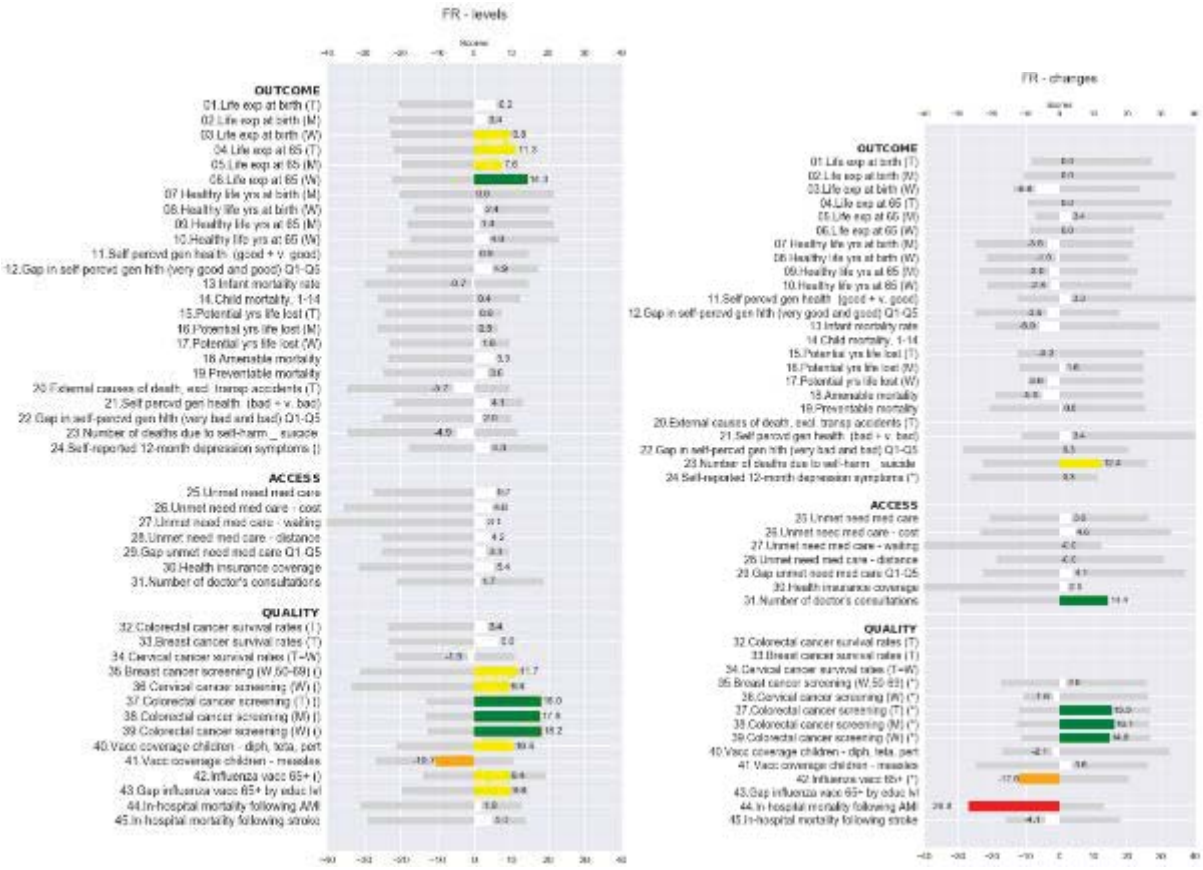
[16] Ibid. The reimbursement data doesn't allow to differentiate perfectly between a mammography intended for screening and a mammography intended for diagnostic or follow-up.

[17] DREES; "L'état de santé de la population en France », 2017, pages 222-227.

[18] DREES; "L'état de santé de la population en France », 2017, pages 123-149.

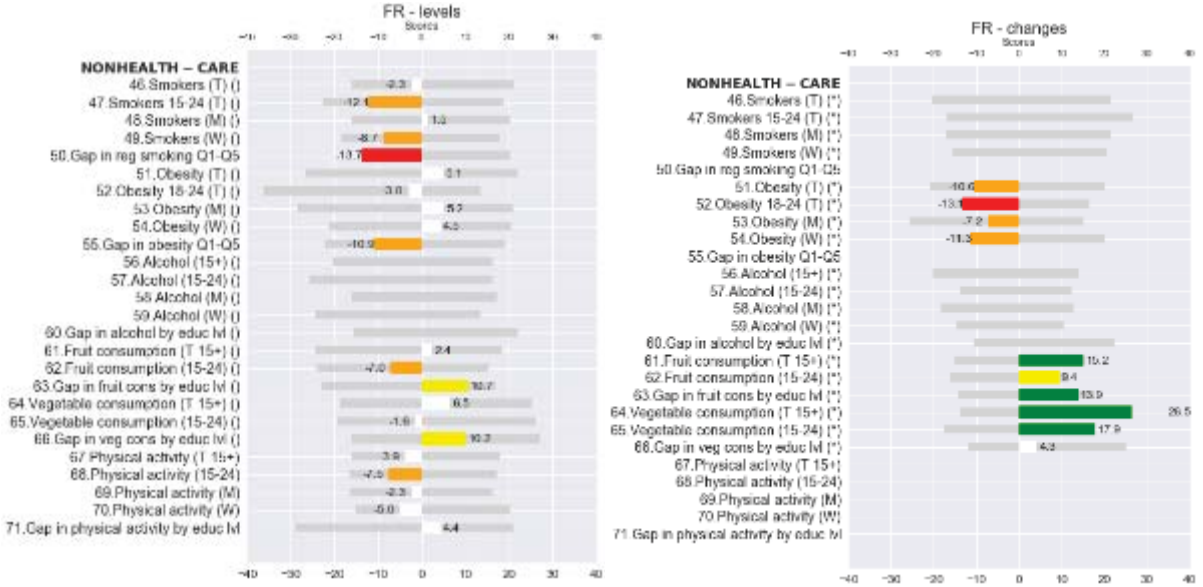
[19] DREES; "L'état de santé de la population en France », 2017, pages 123-149.

**Figure 19 - JAF HEALTH PROFILE CHARTS FOR MAIN DIMENSIONS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**




Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

**Figure 20 - JAF HEALTH PROFILE CHARTS FOR NON-HEALTH DETERMINANTS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND 3-YEAR CHANGES (RIGHT BAR)**




Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

## GERMANY

*Germany has the highest health expenditure (in % of GDP) in the EU and a higher than average expenditure on administration (although on a declining path). Healthcare expenditure is mostly financed by mandatory public (SHI) or private (PHI) insurance. The two systems are operated by a large number of entities: 100 funds for SHI and 40 companies for PHI. Health insurance in nearly universal, while a small share of residents (0.2%) has no insurance. This share may include people such as on low income or self-employed with difficulties in paying SHI contributions or PHI premiums. Within SHI, the depth of coverage is broad and co-payments limited by caps based on patients' income. Unmet need for medical care, as a measure of access to healthcare, is better than the EU average. With a higher number of health employees than average and measures taken to improve the availability of care in rural areas, Germany has an average performance in terms of health outcomes with few exceptions. Healthy life years, in particular for women, are identified as a good health outcome, while life expectancy is not improving as much as in other countries and self-reported depression is worse than the EU average. Indicators on the quality of care are generally good in Germany, with the exception of influenza vaccination for elderly, which is worsening in the last years. A new institute has recently been founded for enhancing quality assurance and transparency. In terms of risk-factors, the situation in Germany is better than the EU average for smoking, while the rising obesity rate among young is a challenge. Health promotion is on the German political agenda and recent initiatives address dietary habits and obesity, in particular among children and adolescents.*

### Resources, Coverage and Organisation of the Health System

*Health spending in Germany is considerably higher than in most European countries*

In 2015, health spending per capita in Germany (4,113 pps) was considerably higher than on average across the EU and had increased substantially more than in other European countries in recent years. As a share of GDP, health spending, at 11.2%, is the highest in the EU. It is expected to further rise due to a number of factors, including population ageing, technological progress and rise in incomes: between 2013 and 2060 the share of public health spending in GDP is projected to increase by 0.6 percentage points in Germany, which is lower than the EU average (0.9 percentage points) . In 2015, Germany spent more on long-term care (1.8% of GDP) than most EU countries and the share had increased faster than in other countries in recent years. At 4.8% of total health spending, administrative spending was substantially above the average, but unlike many other countries, the share has gone down in recent years. Otherwise, the spending structure did not notably differ from the EU average.

*Compulsory health insurance plays a larger role than in most EU countries*

In Germany, compulsory health insurance represented 77.9% of total health spending in 2015, which is higher than the EU average, and government outlays accounted for 6.6%, below the EU average. The remaining spending was made up of households' out-of-pocket payments (12.5%), which were below the EU average, and voluntary schemes (3.0% of total spending), around the EU average. The share of compulsory insurance spending had increased faster in Germany than in most other EU countries in recent years, while the opposite was true for out-of-pocket payments.

*Mandatory coverage is provided though a mixed insurance system which funds access to predominantly private service providers*

Since 2009, health insurance coverage has been mandatory for residents in Germany and most people (88% of the population) are covered by the social (public) health insurance (SHI) system. The rest of the population is predominantly covered by the private health insurance (PHI) system (operated by around 40 companies), which is open to specific population groups allowed to opt out of SHI system: employees over a specific income-threshold, civil servants and the self-employed. Additional schemes exist for policemen and asylum seekers. Service providers are mostly private. They typically sign collective agreements with the group of SHI funds which operate in their regions or in some cases at the federal level.

*Competing funds provide the social health insurance coverage*

The SHI system is operated by more than 100 competing health insurance funds. Within the SHI system, contributions are wage-related and shared between employers and employees, with the federal government making transfers on behalf of the economically inactive population. A risk-equalisation mechanism redistributes social contributions between SHI funds to counterbalance differences in the risk profiles of their insured populations. To enhance competition between the health insurance funds, each sickness fund can charge an additional income-related contribution fee directly to its members, who are free to switch insurance funds. Insurance premiums payable for coverage in the PHI system are calculated based on the health-risk of the individual. Long-term care coverage is a separate scheme organised along the same principles.

*Coverage is near universal*

Although insurance coverage is legally mandated, it is estimated that about 0.1 % of the population did not have insurance in 2015 (Mikrozensus 2015 of the Federal Statistical Insurance Authority). Lapses in coverage do only occur, when individuals do not cooperate with SHI and contribute to administrative necessities. On the other hand, unpaid PHI premiums or SHI contributions do not lead to exclusion from the insurance but to reduced benefits. While undocumented migrants (theoretically) have a right to health care often fail to do so because of language barriers or because they are afraid of legal consequences.

*The benefits basket is broad and copayments limited*

SHI covers a broad benefits package and individual SHI funds may include additional services for their insured. In contrast to many other countries the German benefits package also includes dental care, dental prostheses and orthodontics – although with considerable user charges. The benefits basket includes all licensed prescription drugs, i.e. there is no positive list of covered pharmaceuticals. Within the SHI system, copayments mainly apply to pharmaceuticals and inpatient care. They are capped at 2% of a patient's gross annual income (1% for chronic patients). Benefit packages in the PHI system depend on individual insurance policies. Federal law only stipulates a minimum package. There is also a significant variation with regards to copayments. People can opt for reduced monthly premiums in exchange for a higher deductible. Copayments for services in the long-term care scheme are considerable.

*Self-governing bodies play a decisive role in the German health system*

The federal government defines the overall legal framework for the system, while the regulatory details are specified in directives issued by the Federal Joint Committee – the highest self-governing decision-making body in the country. The Federal Joint Committee consists of representatives of associations of SHI funds, physicians and dentists, hospitals, and three independent members. It takes decisions on SHI benefits, reimbursement systems and quality assurance. The states (Bundesländer) supervise self-governing bodies at state level and are responsible for hospital planning and investments. The Federal Insurance Offices supervises SHI funds at the federal level while the Federal Financial Supervisory Authority is responsible for the monitoring of private health insurers.

*Service delivery is predominantly private*

Ambulatory care, both primary and specialist care, is provided predominantly by self-employed doctors in private solo and group practices. For patients covered under the SHI system, individual physicians are paid fee-for-service within a budget capped at practice level but some preventive services remain uncapped. For PHI patients, they are also paid fee-for-service, but in this case fees are not capped and tariffs are generally higher than for SHI patients which can lead to preferred treatment of PHI patients. Hospitals can be under public, private or not-for-profit ownership and Diagnosis Related Groups (DRGs) are the main payment mechanism for inpatient care. Patients can freely choose their GP and can see any ambulatory specialist without referral. However, SHI funds give financial incentives to those patients who participate in a voluntary gate-keeping system.

*Germany has more physicians and nurses than many other EU countries*

In Germany, there were 414 practicing physicians and 1,363 nurses and midwives per 100,000 population in 2015, both above the average of the EU and considerably more so for nurses. The numbers of physicians and nurses have both increased more in Germany (and considerably more for nurses and midwifes) than in most other EU countries in recent years.

**Policy Development**

*Prevention and health promotion are on the political agenda*

There has been considerable activity at the political level to improve prevention and health promotion in Germany. The recent Act to Strengthen Health Promotion and Prevention regulates vaccination policy and expands health check-ups. SHI funds and long-term care funds invest substantial resources into health promotion in children's day-care facilities, schools, the work environment and long-term care facilities. The National Action Plan 'IN FORM' aims to achieve lasting improvements in dietary and exercise habits in Germany by 2020 for the whole population with a focus on children and adolescents. In addition, the Federal Ministry of Health established a funding priority to promote research in the field of childhood obesity.

*Several reforms have targeted health care quality and transparency of quality of care*

A new Institute for Quality Assurance and Transparency in Health Care (IQTIG) was founded in January 2015 to make health care quality more transparent for patients. Quality assurance in Germany has traditionally been split between the ambulatory sector and the inpatient sector. Public reporting of hospital quality has existed for many years but information on quality in ambulatory care remains largely unavailable. The IQTIG - in behalf of the Federal Joint Committee (the highest decision-making body of the joint self-government of physicians, dentists, hospitals and health insurance funds) - is charged with harmonising the existing separate programs for quality assurance in ambulatory and

hospital care. In addition, IQTIG will develop quality indicators that can support quality-based planning of hospital capacities, and other indicators for a planned introduction of pay-for-performance for hospitals.

*Several reforms have aimed to improve availability of services in rural areas*

National data show that some rural areas, particularly in the Eastern Länder, face an acute shortage of physicians, and several recent reforms have addressed potential access problems. For example, the 2015 Healthcare Strengthening Act enables municipalities to set up health centres and allows hospitals in under-served areas to provide outpatient care. In addition, physicians working in under-served areas receive financial incentives.

*Future sustainability of long-term care is on the political agenda*

Three recent Long-Term Care Strengthening Acts have considerably expanded the benefits package for the long-term care insurance. This was coupled with an increase in insurance contribution rates by 0.5 percentage point. Part of this increase (0.1 percentage point) is used to create a long-term care precaution fund to stabilise future contributions after 2035. However, the sustainability of long-term care insurance depends strongly on future demographic developments and migration, which are difficult to predict.

**JAF Health Results**

*Healthy life years, in particular for women, are better than the EU average and improving, while life expectancy is not improving as much as in other countries and self-reported depression is worse than average*[20]

Life expectancy at birth (78.3 years for men and 83.1 for women) and at 65 are not improving as much as the EU average, although their levels are still around average in 2015. Inequality in self-perceived general health as good/very good by income group (as measured by the gap between the first and the fifth income quintile) is worse than the EU average. These variables are identified as a health challenges. On the other hand, healthy life years for women (67.5 years at birth and 12.3 at 65) are identified as good health outcomes, as they are better than the EU average and improving considerably more over the past three years.

Self-reported 12-month depression symptoms is worse than the EU average in 2014. However, in societies with advanced de-stigmatisation and de-tabooing of mental illnesses and with a broadly developed psychiatric-psychotherapeutic care and help system, as is the case in Germany, there are statistically more reports of depressive complaints than in other countries (Thom et al., 2017). Healthy life years for men are also good (65.3 years at birth and 11.4 at 65).

*Access: Unmet need for medical care is better than the EU average, while the number of doctor's consultations is considerably higher*

Unmet need for medical care due to costs, waiting time or distance (0.5% in 2015) is better than the EU average, with healthcare utilisation as measured by the number of doctor's consultations is considerably higher than the EU average (9.9 times in 2014).

*Quality: Indicators on quality are generally good in Germany, while the influenza vaccination rate for elderly is worsening*

The influenza vaccination rate for over 65 year-old (47.5% in 2014) is around the EU average, but it is decreasing since 2008 and is identified as a health challenge. Although colorectal cancer screening is decreasing from 2008, the level is still considerably better than the EU average (31.3% among 50-74 year-old in 2014). It should be noted that a negative colonoscopy means that further screening (including faecal occult blood test as measured in the EU Health Interview Survey) would not be necessary during the next 10 years. This may even at least partially explain the negative trend, as it seems likely that in 2014 more people in Germany have had a negative colonoscopy in the last 10 years compared to 2008 and were therefore not recommended to take a faecal occult blood test. The remaining indicators of the quality domain are generally good.

*Non-health determinants: While the situation on smoking is better than the EU average, the rising obesity rate among young is a challenge*

Data on risk-factors based on EU surveys are limited for Germany compared to other EU countries, due to the lack of data on alcohol use, fruit and vegetable consumption in the 2008 wave of the European Health Interview Survey.

The obesity rate among young is deteriorating from 2008 and it is identified as a health challenge, although the share in 2014 is still around the EU average. On the other hand, regular daily smoking, including among young, is a good health outcome in Germany, as it is better than the EU average and it shows a considerably positive development.

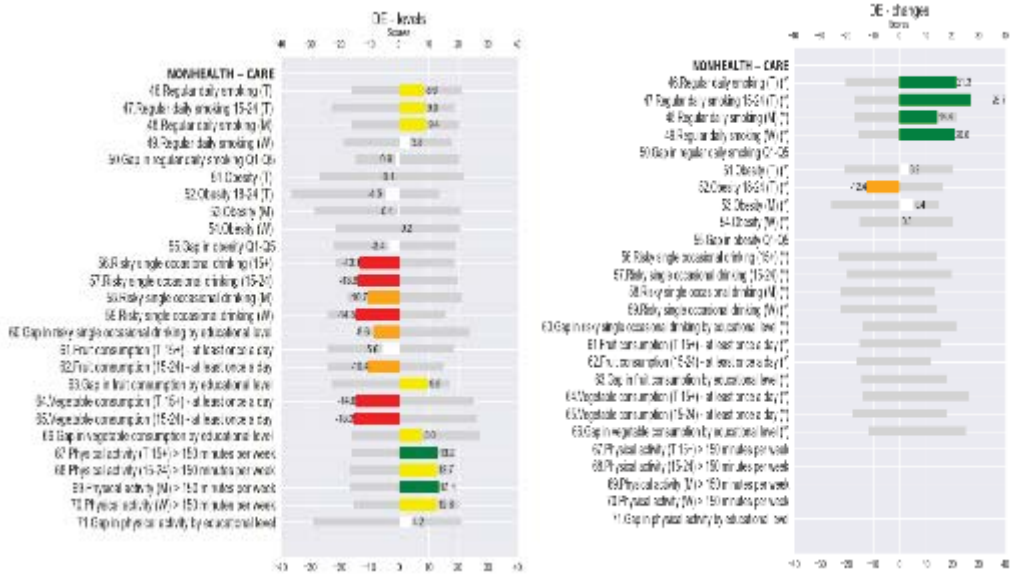
Alcohol use (especially among women) and vegetable consumption (including among young) are considerably worse than the EU average, while physical activity is considerably better than the EU average.

[20] The outcome indicators are only partly dependent on health system's factors, mostly they are influenced by a lot of factors outside the system (such as nutrition, life-style, etc.). Therefore, the "outcome" dimension reflects the health status of the population and it is not directly an assessment of the health system's performance.

**FIGURE 21 - JAF HEALTH PROFILE CHARTS FOR MAIN DIMENSIONS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND CHANGES (RIGHT BAR)**


Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.

**Figure 22- JAF HEALTH PROFILE CHARTS FOR NON-HEALTH DETERMINANTS (STANDARDISED SCORES), LEVELS (LEFT BAR) AND CHANGES (RIGHT BAR)**




Notes: time changes for indicators with * (based on EHIS data) are provisional. The comparability of EHIS wave 1 (2008) and wave 2 (2014) is under assessment by Eurostat.