

OECD Reviews of Health Systems

LITHUANIA 2018







OECD Reviews of Health Systems: Lithuania 2018

ASSESSMENT AND RECOMMENDATIONS





Foreword

Lithuania has made remarkable progress in reshaping its health system since the 1990s. The institutional and legal framework for providing health services is solid and wellfunctioning. An important component is the social health insurance system, partly funded by general budget resources to cover the non-active population, which has proven resilient in the face of the financial crisis and provides broadly adequate and equitable access to health services. Despite spending only 6.5% of GDP on health, admission rates and physician visits are well above OECD averages and unmet needs are just below the OECD average.

Lithuania has also developed a primary care system with many features which deserve to be recognised as examples for other OECD countries, including expanded nurses' practice and primary care centres with an effective gatekeeping role. Although there is still excess hospital capacity, the reform agenda for the hospital sector, involving clustering and concentration of services into larger units to raise the quality and efficiency of delivery is promising. The same is true for recent efforts to strengthen public health through policies to curb risk factors, in particular the harmful and exceptionally high alcohol consumption.

Nevertheless, Lithuania needs to decisively address a number of challenges. Life expectancy is rising slowly, but remains almost six years below the OECD average, with a large gender gap. Data on the health status of the population show that if more effective public health and medical interventions were in place, fewer people would die prematurely in Lithuania. In other words, the mix and quality of interventions delivered must improve.

Greater use of performance data to increase accountability would support these objectives. Decisive implementation of health reforms needs to be accompanied by systematic evaluations to understand how to achieve better results quickly. Deepening the use and analysis of the already rich data available in the country and further efforts to foster a culture of transparency of results would help in holding stakeholders accountable for performance, and help Lithuania building further on its already significant achievements.

This review was prepared by the OECD Secretariat to support the OECD Health Committee's evaluation of Lithuania's health system, undertaken as part of the process for Lithuania's accession to the OECD (see Roadmap for the Accession of Lithuania to the OECD [C(2015)92/FINAL]). In accordance with paragraph 14 of the Roadmap, the Health Committee agreed to declassify the review and publish it in order to allow a wider audience to become acquainted with the issues raised in the review. Publication of this document and the analysis and recommendations contained therein, does not prejudge in any way the results of the ongoing review of Lithuania as part of its process of accession to the OECD.

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During the initial mission the review team also greatly benefitted from fruitful meetings with the health and social municipality administrations of Druskininkai, as well as representatives of the local hospital, PHC Centre and Public Health Bureau. Furthermore, very informative interviews were conducted with key organisations providing important insights, including the Lithuanian Nurses' Organization, the Lithuanian General Practitioner's Society, the Vilnius University Hospital, the Lithuanian Hospital Managers Association, the Lithuanian Hospital Association, the Medicines Manufacturer's Association, the local American Working Group, the Innovative Pharmaceutical Industry association, the Help of Cancer Patients Association, and the Order of Malta Relief Organization.

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Acronyms and abbreviations

ALOS Average Length of Stay **AMR** Antimicrobial Resistance

ECDC European Centre for Disease Prevention and Control

EHIS European Health Interview Survey **EU-NMS** European Union new member states

GDP Gross domestic product

HTA Health technology assessment

INN International Non-proprietary Name

MHC Mental healthcare centers

MOH Ministry of Health

NHIF National Health Insurance Fund

Organisation for Economic Co-operation and Development **OECD**

OOP Out-of-pocket payments **PHC** Primary Health Care

State Health Care Accreditation Agency **SHCAA**

WHO World Health Organization

In figures, "OECD" refers to the unweighted average of OECD countries for which data are available.

Executive summary

Since the re-establishment of the country's independence, Lithuania's health system has been profoundly reorganised. In the early 1990s, the system was exclusively public, centrally planned, financially integrated and hospital-centric. Ownership has since been diversified, reforms have sought to rebalance service delivery by developing primary health care and restructuring the hospital system, modernising payment systems, and introducing modern regulations.

Although spending is low, the system provides broadly adequate and equitable access to care. At 6.5% of GDP, Lithuania's health spending remains below that of countries with a similar income per capita. In general, the laws and regulations in the Lithuanian health sector have proven effective in maintaining public health budgets within planned parameters. Projections indicate that spending is not expected to increase as quickly as in many other fast-ageing economies.

A well-run health insurance fund provides coverage to virtually the entire population. It contracts with autonomous providers, including an emerging private sector. The state guarantees and funds access to coverage for the economically inactive. This served as a powerful counter-cyclical financing mechanism when the 2008 global financial crisis hit.

Even if out-of-pocket payments represent nearly a third of health spending in Lithuania, the system broadly ensures access to care.

- Admission rates and physician visits are well above OECD averages, unmet needs are just below the OECD average and differences across socio-economic groups are not stark.
- Waiting lists exist for some specialised services but rationing is not a common feature of the system.
- Ambulatory drugs are extensively funded through out-of-pocket payments and there are indications patients do not systematically use the cheapest medicines available. In 2014, only 2% of the population reported that they had not followed a prescription because of the cost.
- In 2016, one in 4 of patients still declare paying informally for care, 10 percentage points less than four years before but among the highest proportion in the EU.
- A more detailed diagnostic on possible barriers to access would require better data on waiting times and out-of-pocket payments for medicines.

The main challenge to the health system is that health outcomes still place Lithuania among the lowest ranked in the OECD.

Life expectancy at birth is nearly six years below the OECD average (close to the levels in Mexico and Latvia), and characterised by a larger gender gap than in any OECD country.

- Chronic conditions account for the majority of deaths, and excess mortality due to cardio-vascular diseases and suicide are more than double the OECD average.
- While the burden of disease is similar to countries in the region, some of them have achieved more rapid progress (e.g. Estonia, the Slovak Republic).

Many structural elements and policies are already in place in Lithuania to address these challenges, but the efficiency of spending and quality of service delivered in primary care, hospital care, and public health must improve rapidly.

Primary health care (PHC) is well developed and reflects best OECD practices.

- PHC physicians work in teams with nurses whose role is expanding and are expected to provide care after hours.
- Patients have to register with a gatekeeping PHC provider, and information is available on individual facilities' performance to guide their choice of provider.
- PHC providers receive a capitation payment combined with fees incentivising the delivery of preventive services, as well as a pay-for-performance element.

PHC's capacity to manage patients care is improving, as shown by the decreasing proportion of patients hospitalised for some of the conditions which should, on the whole, be managed by PHC providers, such as asthma and congestive heart failure. However, absolute levels of hospitalisations remain high and the coverage of some preventive services, in particular cancer screening, is low. Care co-ordination also needs strengthening.

The health system remains too hospital-centric. Despite restructuring, Lithuania is still one of the countries with the highest number of beds (and hospitalisations) per capita in the OECD, and the bed occupancy ratio is below the OECD average in 85% of hospitals. Further, many facilities still perform very few surgeries and deliveries, which is inefficient but also carries a risk for patients, as facilities delivering lower volume tend to have worse outcomes of care.

Hospital contracting seeks to incentivise efficiency. In particular, diagnosis-related prices per case encourage the efficient use of resources within hospitals. Contracts are based on slowly decreasing volume caps to encourage a shift away from inpatient care, but daycase volumes are not capped.

Two recent initiatives hold the potential to improve both quality and efficiency in hospitals. First, contracting for surgery and maternity is now limited to hospitals providing more than a minimum volume of services. Second, standardised pathways have been introduced for stroke and some myocardial infarctions, and specialised centres offer previously under-developed services. Further consolidation of the hospital network requires more active planning of service delivery across municipalities and reducing the influence of local governments in decision-making.

Finally, a sustainable reduction in the burden of disease requires additional investment in public health. Curbing unhealthy behaviours, such as harmful drinking and smoking, particularly among men, is necessary to close the gap with high performing OECD countries. The importance of public health is recognised among decision-makers, but more systematic efforts are required. Health features as a prominent inter-sectoral priority across Lithuania's strategic planning documents, and the health strategy emphasises the importance of tackling health determinants and reducing inequalities. At the same time,

stakeholders are not effectively held accountable for progress on public health, and actual initiatives tend to be small-scale, seldom evaluated and short-lived.

Across the sector, further investments will be needed to accelerate progress on outcomes. These will need to be systematically directed towards high-impact interventions. There is remarkable consensus among stakeholders in Lithuania behind priorities which are aligned with the burden of disease and reforms which are conducive to achieving these objectives, but more decisive and better sustained efforts are needed.

Priority areas to improve health outcomes include:

- Further pursue and deepen efforts to rationalise the use of hospital resources and rebalance service delivery, with greater emphasis on care co-ordination and mental health at PHC level;
- Invest effectively in public health to tackle risk factors, notably harmful alcohol consumption;
- Develop a quality assurance culture to better measure results and hold stakeholders more explicitly accountable for improving them;
- Scale up the system's capacity to evaluate the impact of policies and understand the reasons for their success or lack thereof.

Assessment and recommendations

The organisation of the health system of Lithuania is modern and characterised by institutional stability. The country has been steadily pursuing policies designed to better tackle the burden of chronic diseases, including for instance the development of primary care. Remarkably, and despite the fact that Lithuania spends little on health, the population benefits from quasi-universal coverage and key metrics suggest access to care is broadly adequate.

The main challenge Lithuania continues to face however is that the health of the population is not improving as fast as it has in comparable countries and many outcome indicators place it among the poor performers of the OECD. There is scope to improve the efficiency of resources currently allocated to the sector as well as the quality and outcomes of care. Additional investments in health are probably also warranted and would not necessarily undermine system's sustainability but they need to be systematically geared towards addressing the challenges identified.

In all spheres of health policy, a more decisive implementation of reforms needs to be accompanied with systematic evaluations to understand what may or may not work, why and what course-adjustments might be required to achieve better results faster.

This opening chapter summarises the in-depth assessment carried out in the context of Lithuania's accession review and formulates key recommendations to improve the performance of the health system in the key dimensions of sustainability, access, efficiency and quality.

Lithuania's health system has modernised but health outcomes continue to be poor

Lithuania's economy is dynamic but faces some socio-demographic challenges

After the collapse of the central planning system in 1991, Lithuania experienced a difficult but fast transition towards a market economy. Economic growth was sustained in the transition phase above that of many OECD countries. Nevertheless, the economy has been vulnerable to external shocks and the impact of the global financial crisis of 2008 was severe, with a drop in GDP of nearly 15% and unemployment surging up to 18% in 2009. Since 2011, economic growth has once again been of the highest among European as well as OECD countries.

Despite impressive progress, Lithuania still faces serious socio-economic challenges. The share of the population at risk of poverty is the third highest among European countries. The poverty is also deep-rooted as the income of the poor is on average 23% below the poverty line. Lithuania is also one of the fastest-ageing countries in the EU. Indeed, the working-age population is projected to shrink by nearly half between 2014 and 2050 a trend largely driven by relatively high mortality and very strong emigration among adults aged 25-64 years.

The health system is well-designed and institutionally stable

Along with economic progress, Lithuania has achieved a profound transformation of its health system in the decades following independence. When it declared independence in the early 1990s, Lithuania's health system was typical of the Soviet era: an exclusively public, centrally-planned, financially integrated, hospital-centric service delivery system provided curative services to the entire population. In the following decade, increasing autonomy was granted to state hospitals, and municipal management and ownership was introduced for out-patient services and local hospitals. The compulsory health insurance legislation in 1996 was a milestone in moving towards a contractual model with a thirdparty payer and relatively autonomous providers.

The organisation and governance of the system today are typical of many European countries, and have been remarkably stable in the past 20 years. The Ministry of Health (MoH) and the National Health Insurance Fund (NHIF) are the main central institutions, with local administrations playing an important role in service delivery. The MoH supported by a handful of specialised agencies formulates health policy and regulations. Insurance coverage is provided to the population by the NHIF. In order to obtain coverage, the active population must contribute to the NHIF. The economically inactive, including children and students, pensioners and the unemployed, constituting 54% of the population in 2016, are automatically covered. The NHIF purchases all personal health services, and contracts with public and private providers on equal terms. The 60 municipalities of Lithuania own a large share of the primary care centres, particularly the polyclinics, and small-to-medium sized hospitals. They are also responsible delivering public health activities.

Service delivery continues to be dominated by a large and mostly public hospitals sector but outpatient service delivery is increasingly mixed. Inpatient services remain mostly publicly provided and the total number of beds, 7 per 1000 population, is well above the OECD average of 4.7. Specialist outpatient care is delivered through the outpatient departments of hospitals or polyclinics, as well as by private providers. Private providers play an increasing role in the rapidly-developing day care and day surgery segment as well as in diagnostic and interventional imaging services. Primary care is provided in either municipality-owned facilities or typically smaller private practices.

Lithuania has more physicians and fewer nurses per capita than the OECD average and their geographic distribution is a concern. Despite emigration of health staff, Lithuania has retained a relatively high number of physicians: 4.3 per 1000 population versus 3.4 in the OECD. The ratio of nurses to population on the other hand is below the OECD average. Specialists, in particular, are unequally distributed across the country. In order to attract staff in peripheral areas, GPs receive a higher capitation payment for patients living in rural areas, and hospitals/municipalities offer higher salaries. In conjunction with municipalities, the government has recently put in place grants for medical students willing to work in remote areas. Overall though, no systematic tools are in place to assess future needs and gaps, or to evaluate the impact of current policies.

An appropriate set of policy directions has been consistently pursued over time

Health features as a prominent inter-sectoral priority across Lithuania's main strategic planning documents. For instance, "Health for All" is one of three horizontal priorities of the country's national development strategy, "Lithuania 2030". The implementation of "Health for All" is governed by a specific intersectoral action plan coordinated by the Ministry of Health and involving nine other Ministries. Another set of inter-ministerial strategy and plans specifically focus on drug, alcohol and tobacco control and prevention. Overall, these documents demonstrate a clear recognition that improving health is important to the development of Lithuania and requires efforts beyond the health sector.

Furthermore stakeholders in Lithuania agree on priorities which are aligned with the burden of disease and reforms which are conducive to achieving these objectives. In particular, reforms have consistently sought to reorganise service delivery by developing primary health care, restructuring the hospital system, modernizing payment systems, and strengthening public health.

The current Lithuanian health strategy is articulated around a life-course approach which emphasises the importance of tackling health determinants and reducing inequalities. The strategy specifically targets the excessive burden of cardio-vascular diseases and recognises the need for additional emphasis on mental health. The programme of the government formed in 2016 is also aligned with these long-standing priorities. In other words, many of the conditions are met for Lithuania's health system to deliver good results.

Spending on health remains low

Lithuania however, continues to spend little on health despite some convergence with OECD countries. In 2015, expenditure per capita stood at \$1 883 adjusted for purchasing power parity and represented 6.5% of GDP. For both measures, Lithuania stands in the bottom quintile of the OECD distribution even if, over time, its position has improved.

The structure of spending between different categories of care has also converged towards the OECD average. Lithuania continues to spend relatively more on inpatient care and medical goods and less on outpatient care and long-term care than OECD countries, but the difference is less pronounced than a decade ago. Two thirds of spending in Lithuania is public, which is lower than the OECD average of 73%, a level Lithuania had managed to reach ten years ago.

Despite progress, the health status of the population is poor

Life expectancy is lower than anywhere in the OECD

Life expectancy at birth is six years below the OECD average and in 2015, lower than anywhere in the OECD. Over the past 45 years, Lithuania's accumulated gain in average life expectancy at birth has been less than four years. Moreover, Lithuania is marked by a larger gender gap in life expectancy than in any OECD country and women live nearly 11 years longer than men.

Chronic conditions and external causes contribute most to the life expectancy gap between Lithuania and OECD countries.

Chronic conditions account for majority of deaths in Lithuania, followed by external causes (accidents and intentional self-harm). Cardiovascular diseases (CVDs - including ischemic heart disease, stroke and other diseases of circulatory system) are the leading cause of death in Lithuania, accounting for 56% of deaths. Lithuanians die three times more frequently of heart attacks than citizens of the OECD on average. Progress in reducing mortality from CVDs has been slower than in other parts of Eastern Europe: Lithuania, Hungary and Estonia had a comparable mortality in 2003 and while it has decreased by 22% in Lithuania, in Hungary it has declined by 33% and Estonia 56%.

The second leading cause of mortality is cancer – 20% of deaths. While mortality is higher than the OECD average, this rate is closer to the average than in a number of eastern European countries. Accidents and intentional self-harm (suicides) - external causes of mortality - account for 8% of deaths and death rates from external causes, which are much higher among men than women, explain a large part of the gender gap in mortality. Lithuania records in particular the highest rate of mortality from suicide in the OECD. It has decreased by 42% between 1995 and 2015, but is still more than double the OECD average for the general population and nearly three-times the OECD average for men.

Fewer adults in Lithuania report being in good or excellent health than in the OECD on average. Only 43% of the population aged 15 years and above reports good or very good health while the OECD average is 68%. Furthermore, inequalities are high: in 2015, only 32% of Lithuanians in the lowest income quantile reported to be in good or very good health against 63% of the population in the highest income quintile. Elderly people in Lithuania report particularly poor health. Only 6% of the population aged 65 and over reports to be in good or very good health, markedly below the OECD average of 44%. Moreover, the average number of healthy life years at age 65 – an indicator of disabilityfree life expectancy - is among the lowest in the OECD for both women and men -5.5and 5 years, respectively.

Harmful alcohol consumption is the leading risk factor and continues to increase

Harmful alcohol consumption is a major risk factor behind the leading causes of death in Lithuania. Among Lithuanians aged 15 years and above, the consumption of alcohol per capita is significantly higher than in any OECD country and as much as 69% above the OECD average. Alcohol consumption has been on the rise in Lithuania – an opposite trend to that seen in the majority of OECD countries. Youth are particularly vulnerable: among 15-years-olds as many as 41% of boys and 33% of girls in Lithuania reported having been drunk at least twice in their life, which is the highest for boys and the third highest for girls as compared with the European member countries of the OECD in 2013-

Other risk factors, such as tobacco smoking and obesity, are less widespread than alcohol consumption. In 2015, around 20% of Lithuanians aged 15 and over reported to be daily smokers, which is slightly above average of 18% in the OECD, but men in Lithuania are among the top three heaviest smokers in the OECD. Nevertheless, unlike alcohol consumption, regular smoking has been decreasing over the recent decade. Obesity in Lithuania, on the other hand is below the OECD average. Overall, the gender gap in life expectancy can be attributed at least partly to the differences in risky health behaviours.

All in all, a large number of premature deaths could be avoided

Lithuania has among the high rates of avoidable mortality in the EU. Data from Eurostat show that amenable mortality in Lithuania, which captures the number of deaths which could be avoided through better quality care, is 2.5 higher than the EU average. Preventable mortality, which could be avoided through better control of the wider determinants of health, is twice the EU average. In other words, if more effective public health and medical interventions were in place, fewer people would die prematurely in Lithuania.

The production and use of data is increasing but more attention to policy impact is required

Lithuania's already rich data infrastructure continues to expand. Health services providers report on numerous performance indicators to the NHIF, the Ministry of Health and related institutions (although private providers tend to under-report). In many cases, this information is made public and availed to patients in a way which allows them to access it on a facility-by-facility basis. For the first time in 2017, Lithuania reported to the OECD standard health care quality indicators. E-health is being developed and a number of key records, including for instance prescriptions and discharge summaries can be electronically stored and exchanged. In sum, the use e-health is growing and the availability of data is improving.

At the same time, the use of data for performance assessment and decision making remains insufficient. Performance data are not always statistically analysed, rarely presented in dashboards or used for benchmarking progress of entities responsible for delivering results like individual facilities and municipalities. Such tools would support more effective accountability for results. Similarly, progress on reform implementation is systematically monitored but more attention is paid to determining whether activities have been completed compared to their impact. Stakeholders recognise that the resources to analyse results and policy impact are limited. Developing in-house capacity or partnering with outside (academic) institutions, including those who collect data, are options which should be explored.

Sustainability and access

Lithuania's public investment in health is carefully managed and the system so far is on a financially sustainable path

Public spending is comparatively low but was, by and large, protected during the crisis and institutions at all levels are held accountable for budget management

Countries with higher income tend to spend more on health, but even accounting for the fact that Lithuania's income is lower than the OECD average, it spends relatively little on health. The low level of public spending is the result of Lithuania's overall relatively small size of government (public spending represents 35% of GDP compared to an OECD average of 44% in 2015), and the low priority given to health within the public budget: 10% of it is allocated to health when the OECD average is 15%.

Yet, the public health financing architecture in place proved to be remarkably resilient in the face of the major financial crisis of 2009 and in this respect, Lithuania is widely recognised as a good practice example. The NHIF is predominantly funded through contributions from the employed, which in 2016 represented 73% of its revenues. In addition, the NHIF receives a transfer from the general budget which corresponds to a fixed amount per inactive person statutorily covered. During the crisis, this mechanism was instrumental in protecting health spending: as revenues collected from the active population dropped sharply, transfers from the state increased with the increased number of unemployed. The share of general budget funding in NHIF revenue rose from less than 20% before the crisis to around 35% between 2010 and 2013 before returning to its current level of 27%.

Budget management procedures are effective at keeping public spending in check. By law, the NHIF must balance revenues and expenditure each year. In each budget cycle, it sets aside provisions to adjust payments to service providers based on the services actually delivered at the end of the year. The NHIF also builds up reserves which can be used in case of revenue shortages or unexpected expenditure increases. They served as a buffer during the financial crisis and have also been used to increase tariffs and compensate facilities for increases in the base salary of health workers decided by the Ministry. In contrast to a number of countries in the region where public facilities are often in deficit and accumulate debts, the finances of public institutions delivering health services are generally financially sound.

The system so far is on a financial sustainable path but additional investment must be strategically managed

So far, Lithuania's health system is on a financially sustainable path. As seen above, Lithuania's spending is on the low side and from a public finance perspective, kept in check. Additionally, Lithuania's health expenditure is not projected to grow as quickly as that of other EU members. Under the reference scenario of the 2013-2060 European Commission projections, Lithuania, along with Belgium, is one of the two countries with the lowest anticipated growth in public health expenditure among EU countries (0.1 p.p. over the period). The overall picture is thus one of financial sustainability.

Recent decisions though envisage significant increases in salaries for health workers. In 2016, the salaries of all staff working in health institutions increased by 8% and in 2017, a further 8% increase was granted to nurses and physicians. An agreement was reached in 2017 between Trade Unions and the Ministry of Health to implement a further 20% rise in 2018 for all staff working in health institutions. Finally, fairly ambitious targets were set for health workers salaries in relation to the average wage in the economy to be reached by 2020. Blanket salary increases need to be sustainably funded and attention must be paid to ensuring they do not undermine the resources available for the other inputs or investments the system requires to provide quality services.

So, while consideration should be given to increasing public funding for health in Lithuania, additional investments should also be leveraged to improve the performance of the health system as whole. There is no doubt that some pressure exists to increase salaries in the hope to retain staff to work in the health sector in Lithuania. Relative levels of remuneration across countries can play a role in staff retention, but are not the only element. Overall, a more in depth analysis of the labour market dynamics for health workers in Lithuania should be undertaken and a comprehensive strategy devised to address current and future human resources imbalances more systematically. More broadly, blanket salary increases should not be the only driver of public health spending. Additional public funding is necessary to improve the population's health outcomes and financial protection, but investments should be targeted to the amenable burden of diseases and based on evidence of effectiveness.

Despite significant out-of-pocket payments, access to services is broadly adequate

Coverage is broad but household still face high out-of-pocket payments

The population is adequately covered by the public health insurance scheme managed by the NHIF. All citizens and legal residents are required to seek coverage from the NHIF and the vast majority comply. The state guarantees coverage for the economically inactive and the estimated 2% to 4% of the population which is uninsured is entitled to free emergency care. Coverage is quite broad but patient co-payments apply on most outpatient medicines. In fact, the co-payment rules for medicine are complex and result from co-insurance but also the fact that patients who do not choose the cheapest medicine in a group of presumed comparable ones (for instance, a generic), pay the difference outof-pocket.

In 2015, out of pocket payments represented around 32% of health spending in Lithuania, among the highest levels in the OECD where the average is 20%. Private health insurance is not developed in Lithuania, thus the bulk of private spending is out of pocket (OOP). The proportion of health expenditure paid OOP was around 33% in the mid-2000s, decreasing somewhat during the financial crisis due to a sharp reduction in private relative to public spending growth rates, and has risen again after 2012. Out-of-pocket payments represent 40% of spending on ambulatory services and 68% of the cost of medicines and medical goods, on par with Latvia which is the highest of the OECD (where the average is 42%).

Out-of-pocket spending has an impoverishing effect on part of the population. WHO suggests that the risk of impoverishment from OOP costs becomes significant in countries where these represent more than 20% of total spending. A forthcoming WHO report on Lithuania showed that in 2012 (most recent year for which data is available) 9.4% of the population experienced financial hardship due to health spending, a reduction from the 2008 level of 11.5% but higher than in 2005 (7%). The incidence of catastrophic spending is heavily concentrated among older people (those aged 60 and over) and couples without children. Eighty percent of catastrophic spending is due to medicines, and this proportion is even higher among households belonging to the lowest income quintile.

A number of steps have been taken in 2017 to try to curb out-of-pocket payments on medicines and increase the transparency of pharmaceutical policy. These include a reduction in the VAT on expensive medicines and caps put on the difference between the prices at which medicines are offered in pharmacies and their reference prices (to which the reimbursement rates by the NHIF apply). Consideration is also being given to developing a separate model for the reimbursement of medicines for low-income patients. Additional measures aim to promote the use of generics and the rational use of medicines. Many of these measures were outlined in Lithuania's first medicines policy guidelines, adopted by the government in 2017. The guidelines also included other intentions, in particular, the strengthening of Health Technology Assessment in collaboration with other countries. This represents are a promising step in the direction of more effective policies whose progress and impact should be monitored.

Informal payments were widespread in Lithuania but recent data suggest they might be declining. Informal payments seem to have been more widespread in Lithuania than in comparable countries. A 2013 Transparency International report, based on a survey implemented in a range of countries, inquired whether people had paid a bribe when accessing services. In Lithuania, 35% declared having done so, by far the highest proportion in the OECD where the average was 7%. In 2015, the Ministry of Health put a strategy in place to tackle informal payments, which is currently under implementation. The most recent data suggest that informal payments may be decreasing. In the 2017 Eurobarometer on corruption, only 12% of people who had been in contact with the system in the previous year declared having made a non-official fee or gift to the doctor, nurse or hospital, when in 2013 the proportion in the same survey was 21%.

Key metrics nevertheless suggest access to care is adequate in Lithuania

Compared with OECD averages, people in Lithuania access health services frequently. In 2016, individuals consulted physicians on average 8.8 times a year, nearly 20% above the OECD average. Around two thirds of these visits were to primary care physicians (NHIF data). In 2015 there was an average of 24 hospital discharges per 1000 population. This is the third highest discharge rate among OECD countries and 50% above the average. This suggests that access to services is not constrained.

Unmet needs are comparatively lower than in other similar countries. In the 25 EU countries of the OECD, on average, 3.2% of the population declared not having sought care for financial, geographic or waiting time reasons in 2015, compared with 2.9% in Lithuania. In addition, in most countries where the proportion of the population foregoing care exceeds 2%, individuals in low income households are much more likely than those in high income households to do so. In Lithuania, this difference is relatively small.

Few Lithuanians perceive financial barriers to access. In Lithuania, only 2% of the population declared having foregone medical care for financial reasons in the 2014 European Health Interview Survey. The proportion foregoing dental care was 5%, but only 2% for prescribed pharmaceuticals, which is surprising given the extensive out-ofpocket payments on medicines. Relatively speaking, waiting times are much more of a constraint to access. Three-quarters of the people declaring having foregone medical care do so because of waiting times (SILC 2015). This represents 2% of the population, significantly above the 1% EU28 average but nevertheless below the United Kingdom (2.5%), Finland (4.2%) and Estonia (above 11%).

Increasing attention will need to be paid to measuring and, as needed, addressing possible barriers in access to care. While high-level analyses suggest access to care in Lithuania is reasonable, a more nuanced understanding of the situation is required. Indeed, available data are not sufficiently detailed to assess the nature and the distribution of the financial burden people face in accessing care and particularly in obtaining medicines. Little is known about the constraints faced by those living in rural areas. While summary data on waiting times are not readily available it is likely that access to care is problematic for some groups of the population and may contribute to inequalities in outcomes. Monitoring systems need to be strengthened and measures designed to address identified issues.

On balance, the overall assessment of the performance of Lithuania's health system on the key dimensions of sustainability and access is rather positive. Lithuania's spending on health is low and efforts to keep public spending in check are effective. At the same time, the sustainability of the system is not only a matter of public finance. Improving health outcomes and the financial protection of the population is likely to require additional investments. Nevertheless, people have reasonable access to the system and unmet needs are lower than in countries with comparable income and spending. This balance – as everywhere – is a difficult one to maintain. In particular, more needs to be done to protect people from high out-of-pocket spending on pharmaceuticals and to ensure that additional funds invested in the system are geared towards improving the health of the population. As the next section will show, efforts in particular will need to be stepped up to increase the efficiency and quality of services delivered.

Efficiency and quality

Comparative studies have shown that several European countries and OECD economies with a level of income and health spending comparable to those of Lithuania achieve considerably higher life expectancy. Put differently, these high-level analyses suggest significant scope for improving the efficiency and quality, in particular the effectiveness, of service delivery in Lithuania and resonate with the fact that both preventable and amenable mortality are high compared to other European countries.

Efforts in rebalancing service delivery must be pursued and deepened to increase efficiency

Prior to 1990, the role of primary health care and health promotion was limited and services were predominantly delivered in a range of hospitals, which were numerous and frequently narrowly specialized by disease or population segment. Reorganising the hospital sector and reducing its size, rebalancing service delivery in favour of a modernised and considerably strengthened primary care and developing better strategies to tackle risk factors have been the main drivers behind service delivery reforms in Eastern and central Europe since transition. Lithuania is no exception and all stakeholders have been consistently aligned behind these priorities.

Lithuania's steady efforts to overhaul the hospital sector need to be pursued

The current configuration of the hospital system represents significant progress in shaping the hospital sector. In 2015, there were 119 public hospitals, significantly less than the 202 in 1991. The number of monoprofile hospitals has substantially decreased. The MoH manages 10 "republican level" facilities and there are 49 smaller municipal hospitals. Since 1992, more than half of the beds have been closed through administratively planned downsizing and application of incentives such as shifting the funding to an output based reimbursement.

Still, many countries have been more effective in consolidating hospital infrastructure. Today Lithuania remains with Germany, Austria and Hungary among the European countries with the most hospital beds. Compared to neighbouring Baltic countries, the pace of change in reducing hospital capacity has been relatively slow: between 2000 and 2015, the number of beds in Latvia dropped by 54%, in Estonia by 42% and in Lithuania by 27%.

Average lengths of stay are relatively short but the low and very variable bed occupancy rate indicates the hospital sector remains in overcapacity. In 2015, among the 65 public general hospitals, the average bed occupancy rate was 73.5%, which is below the OECD average of 77%. There are however large variations among general hospitals with predominantly small hospitals reporting very low rates. The current health system development plan aims to increased bed occupancy levels and sets a target of 300 days per year (above 82%). In 2015, only 4 of the 65 public general hospitals in Lithuania met this target. In fact, the bed occupancy rate was lower than 60% in 13 public hospitals.

Payment systems and contracting methods have been increasingly leveraged to encourage more efficient modes of delivery

Diagnosis-related group-based payments (DRG) combined with volume caps seek to encourage efficient use of resources and lower volumes of inpatient hospitalisations. In 2012, a DRG system based on the Australian coding and diagnosis grouping was introduced and continues to be fine-tuned. To account for the fact that DRG systems can encourage increases in the number of hospitalisations, contracts between the NHIF with individual facilities include volume ceilings for in-patient services which are decreased year-on-year.

Contracting and payments have also effectively encouraged the development of day-cases and outpatient surgery. Day-cases are paid at the full DRG price. In addition, for individual hospitals, day-cases volumes are not capped. Among the 71 main procedures eligible to be performed as day-cases, the proportion actually performed as day-cases was 58% in 2016, an increase of 20 percentage points compared with 2012. In 2016, tonsillectomies were included in the day-case list and around 45% were performed as day cases that same year. In other words, hospitals are actively developing the day-case activity.

Further consolidation of service delivery is warranted on efficacy and safety grounds and steps have been taken in that direction

Surgeries are undertaken in the vast majority of hospitals in Lithuania, which is inefficient and also carries a risk for patients. Of the 65 hospitals with a general profile contracted by the NHIF, 52 provided at least one surgical procedure in a 12 month period (2015 data). Among them, 22 carried out less than 250 procedures, which is roughly one per (business) day. Moreover, the number and complexity of these procedures varies considerably across hospitals, and many carry out major surgeries which could be programmed at very low frequency. Concentrating their delivery in a few places could allow a more efficient use of staff and equipment. More importantly, the fact that so many facilities carry out few surgeries raises serious concerns about their capacity to deliver good outcomes.

A recent decision to use minimum volume thresholds for contracting is a bold step in the right direction. Lithuania intends on concentrating services in fewer places and is using volume targets for obstetrics and common surgeries in contracting to that effect. Since 2016, the plan is that unless a hospital is more than 50km away from the nearest one, or it has recently received specific investments, it will no longer be contracted by the NHIF when if carries out fewer than 300 births per year or less than 400 major surgeries. In 2015, half of the public general hospitals in Lithuania (31 of 65) had an obstetric department. In 14 of these, less than 300 deliveries were conducted.

Further restructuring may also require planning and organising service delivery at a higher level of government. The reconfiguration of hospital service delivery is difficult in all countries. Progress in Lithuania has been hampered by the fact that municipalities, which own and manage hospitals, have a natural tendency to protect local interests, in terms of perceived access to services or simply employment. Many countries in the wider Europe region have realised that the distribution of hospitals services needs to be decided at a higher level than the municipality and reverted to more central planning including Finland, Austria, Denmark and Croatia.

Primary care is modern and well organised

Lithuania clearly recognises that a strong primary health care is the foundation of a health system that is effective, efficient and responsive to patients' needs and has developed the system accordingly.

The introduction and development of family medicine were encouraged early on and today, the number of GPs per population is higher in Lithuania than in most OECD countries. Primary care is delivered by teams which must include a nurse, who is being given increasing autonomy and responsibilities in the management of chronic patients with non-communicable diseases. The number of PHC visits per person per year has increased from 4.8 in 2007 to 5.7 in 2014.

Primary care services are delivered in a variety of public and private settings remunerated through a mixed but predominantly capitation-based system. Most PHC facilities are owned by the municipalities but private clinics can open and work on the same terms as public ones. In cities, polyclinics also include outpatient specialists. In remote areas public facilities can also run community medical dispensaries to bring services closer to the population. Public facilities are typically larger entities: they represent 39% of PHC providers but cover around 70% of the population. Public and private providers are all contracted and monitored the same way. A little less than three quarters of their remuneration comes from a capitation adjusted for age and they receive additional payments to incentivise quality.

Primary care providers have been given a key role in managing patients' health. Virtually the entire population is registered with a GP or a primary care team. Patients cannot obtain free PHC services unless they are registered with a GP and referrals are required for specialised care in most cases. PHC providers are financially incentivised to deliver specific services and expected to coordinate patient care. They must also be informed about care provided by others (specialists, hospitals). PHC providers are required to ensure access to care 24/7. Compared to other EU countries, a smaller share of emergency department visitors report they did so due to unavailability of primary care.

GPs' role could be further strengthened in some areas, on efficiency but also quality grounds. The delineation of responsibilities between GPs and specialist needs to further evolve and GPs believe that some guidelines continue to unnecessarily limit their responsibilities. Primary care teams also need to play an increasing role in the coordination of their patients' care as well as in mental health.

Renewed efforts to strengthen public health policies must be sustained

The main challenges with regard to the state of public health are well recognised. The populations' health status and behaviours indicate sizeable room for improvement. The 2014-2025 Lithuanian Health Strategy specifies concrete goals with regard to reducing harmful alcohol consumption, tobacco, drugs and psychoactive substances, as well as encouraging healthy nutrition and physical activity. The Strategy has an impressive crosssectorial framework (involving nearly all Ministries), and the MoH is responsible for monitoring of the implementation. Intermediate evaluation of the progress is due in 2020.

In recent years, Lithuania has introduced additional measures to tackle the exceptionally high alcohol consumption. The Parliament has adopted a number of evidence-based alcohol control measures, such as restrictions on alcohol advertising and on alcohol selling hours, as we as a prohibition to sell alcohol in the gas stations. Lithuania also raised most alcohol excise rates in March 2017 substantially, e.g. from 336 to 711 Euros per hectolitre pure alcohol on beer (MoH). In June 2017, additional alcohol restrictions were approved, which came into effect 1st of January 2018. From this date, Lithuania has a full ban on alcohol advertisement on TV, radio and internet. Alcohol sales hours were shortened, and the minimum legal age for buying and consuming alcoholic beverages was raised to 20 years.

These steps are all welcome and Lithuania should carefully monitor and evaluate the enforcement level of these policies. Additional gains in health and life expectancy can be obtained through interventions targeting heavy drinkers as well as drug and psychosocial therapy of alcohol dependence, which, along with worksite-based interventions, are effective and have favourable cost-effectiveness profiles in the long run.

In general, evidence that highly effective public health interventions are actively pursued is limited at all levels. There have been few concrete initiatives. At the local level, the responsibility for public health mainly lies with municipalities, who are encouraged to set up and run (or contract if they do not have one) Public Health Bureaus (currently 47 across 60 municipalities). However, municipalities are for the most part free to choose the activities they implement and decide on their level of effort. No framework is in place to help ensure that local-level stakeholders implement evidence-based interventions or are accountable for progress on results (as opposed to simply implementation).

Overall, many public health efforts are geared towards small initiatives which are insufficiently evaluated. Most interventions, such as information sessions on harmful alcohol use or benefits of healthy diet at the Public Health Bureaus, are assessed in terms of process indicators, such as a number of participants, and not focused on outcomes. Project design, including monitoring and evaluation, must focus also on the effectiveness of these actions. This could improve results, which have been below expectation in many programs, notably those targeting harmful alcohol consumption.

Further priority can be given to increased and stable funding for public health services. Lithuania allocates 1.9% (2016) of health spending to preventive services, noticeably below the OECD average. Many initiatives and research projects are conducted within time-limited EU funded projects. While project-based testing and piloting is good to find effective approaches, there is a risk that many good projects will not be sustained without a more robust financing framework for these functions.

More attention must be paid to improving the quality of care

Lithuania has put in place a number of initiatives to support improvements in quality of care

Key policies and institutions to improve quality of care are in place. The State Health Care Accreditation Agency has long been responsible for licensing of health care organisations and most professionals and has launched an accreditation program in 2016. However, by the end of 2016, only five PHC organisations had applied for accreditation and ten more were in the preparation stage. In January 2017 a financial incentive in the form of a marginally higher capitation for accredited clinics was introduced, although it seems to be inadequate to substantially raise interest. By the end of 2017 only 16 institutions were accredited.

Some clinical guidelines exist but information about their effective use lacking. The Ministry of Health has issued 123 diagnostic and treatment protocols (in cardiology, oncology, neurology, traumatology and paediatrics). Providers are encouraged and supposed to follow them, regardless of the ownership or level and volume of the services provided but no mechanisms are in place to monitor compliance or support providers in implementation. To date, patient safety has received very little attention. Overall, Lithuania lacks a system-wide support for continuous health care quality improvement at the clinical level.

A number of recent initiatives put greater emphasis on measuring and - at least for *primary care – rewarding quality.*

Quality is increasingly monitored and Lithuania in 2017 reported data on a range of OECD-HCQI indicators. In 2012, a set of 15 quality indicators for hospitals was adopted, in line with the PATH (Performance Assessment Tool for Quality Improvement in Europe) recommendations. However, the procedure for engaging hospitals in a quality discussion, limited to a yearly discussion of the results between the managers of the facilities and the NHIF, is weak. For primary care, a set of indicators is used to calculate a performance-based add-on to the capitation.

Information on quality is shared transparently in an effort to support informed choices by patients. Quality indicators for hospitals are published annually. For primary care, many quality indicators are calculated to facilitate bench marking by clinics and municipalities. For patients, data on individual facilities' performance is readily available on-line, published by the five territorial insurance funds. While this is a very welcome step towards improving transparency, further steps could be taken to contextualise and make this information user-friendly.

PHC remuneration is organised to reward performance, through fees for services and a pay-for-performance component. Facilities receive an age and sex-adjusted capitation rate (72.9% of total PHC facilities' revenue in 2016) with an additional per capita amount for rural facilities (7.1% of revenue). PHC providers also receive activity- or output-based payments for a list of specific services (10.7% of revenue). The final element of remuneration is a result-based payment based on a list of performance indicators (9.3% of revenue).

The performance based payment for PHC is well intended and monitored, and some indicators show improvements although from low levels. Twelve indicators are taken into account to determine the payment. They include to the proportion of registered adults and children who visits the clinic at least once per year, rates of cancer screening and rates of hospitalisations of patients with chronic diseases. Results are monitored by the NHIF, which for instance show that the cervical cancer screening rate for registered patients rose from 23% in 2008 to 35% in 2015.

While the focus of the pay-for-performance scheme on non-communicable diseases is welcome, a review and revision would be warranted to better encourage the delivery of appropriate services. For example, a high share of listed adults who visit PHC over one year, which generates a bonus payment, does not necessarily mean the clinic meets those in most need of a consultation. Furthermore, general check-ups for healthy adults are not shown to improve morbidity or mortality. Finally, access in Lithuania is well developed and in 2016, 92% of PHC clinics reached the highest level of performance on this indicator. Therefore, the usefulness of this indicator in the performance scheme could – at this point – be debated. As another example, the indicators on avoidable hospitalisations which are certainly relevant to monitor the performance of PHC at a high level, may not be so appropriate at the level of a single (especially small) facility as they are not only impacted by primary care. For chronic diseases, performance schemes more typically use processes indicators to reward clinical excellence (for example, blood pressure checks for patients with hypertension, tests for HgbA1c for diabetic patient) or better intermediate outcomes (for example, cholesterol control in people with diabetes or controlled blood pressure). So, while monitoring and rewarding performance may be appropriate, the current system could be better calibrated.

Two interesting initiatives to strengthen specific services which have a strong potential to increase the effectiveness of service delivery and thus quality have recently been introduced.

First, an EU-funded programme supporting the integration of health and social services encourages care co-ordination. In 2013, the Ministry of Social Security and Labour launched the Integrated Assistance Programme to offer integrated health and social care to the disabled and elderly. In 21 municipalities, 70 mobile teams provide integrated services (nursing and social care) at home, including support to their informal care givers. Funding from the EU will support the expansion to all municipalities but funding is only secured until 2020. The project-based approach can help devise effective solutions to integrate services, but carry a risk that they may not be sustained. Given the increasing population need for such services, the program should be carefully evaluated and - if cost-effective – sustainably funded.

Second, the recently introduced functional clustering can strengthen the quality of specific hospital services for which rapid access is needed. In 2013, standardised pathways were introduced for stroke and myocardial infarction with elevated ST, conditions for which a fast response is required. Depending on severity, patients are directed by emergency services either to the regional hospital or one of the six regional stroke treatment centres or five cardiology centres established by the program. For strokes, the program has allowed the development of intravenous (IV) thrombolysis or thrombectomy in the country, two types of procedures used to treat and remove blood clots from the body. The rates of IV thrombolysis, a quality indicator monitored in stroke care which remains disappointingly low in many high income countries has increased dramatically in Lithuania. In 2012, 160 intravenous thrombolyses were performed while in 2016, 808 were performed. For thrombectomies the number rose from 4 to 276 in that same period. These measures, as well as selective contracting based on minimum volume, hold great potential for increasing the quality of inpatient services in Lithuania but it will be critical to demonstrate more rigorously that they lead to improvements in clinical outcomes.

Despite progress, quality of care indicators still place Lithuania among OECD's poor performers

Survey data consistently shows that patients in Lithuania are more satisfied with services than a few years ago. For instance, according to Eurobarometer, the population's view on the quality of health care improved dramatically between 2009 and 2013. Between these 4 years, the share of Lithuanians rating the overall quality of health care in the country as good increased from 40 to 65%, the largest increase among European Union countries, although this share is still below the EU average (71%). However, measures of clinical outcomes show that progress is required at all levels.

Prevention and treatment at the primary care level can still improve. For instance, immunisation rates could be higher. High rates of children immunisation were one of the hallmarks of soviet systems, which many countries have retained. Results in this regard in Lithuania are a bit disappointing being around or slightly below OECD averages. Although Influenza vaccination coverage for people above 65 is much higher than in Latvia and Estonia, at 19.5% it also remains well below the OECD average of 43% in 2015.

PHC in Lithuania is increasingly effective in managing chronic diseases and keeping people out of the hospital. Hospitalisations for ambulatory care sensitive conditions are among the key quality indicators for primary care. Hospitalisations for these conditions have been declining in Lithuania since 2005, although from very high starting levels. In fact, for Asthma and COPD, the rates are converging with OECD averages. However, this progress is only relative as many countries manage to achieve substantially lower rates of hospitalisations. On the other hand, despite progress, for congestive heart failure, the proportion of patients hospitalised still remains the highest among 32 countries reporting this indicator to the OECD, more than twice the average rate. Hospitalisation rates for diabetes are a third higher than the OECD average and do not seem to decline.

Hospital mortality for acute conditions is also stubbornly high. Mortality after hospitalisation for acute conditions is the most common indicator for measuring hospital care quality and is collected by the OECD for international comparison purposes. For the first time, Lithuania provided 30 day mortality data for acute myocardial infarction, haemorrhagic stroke and ischemic stroke in 2017. In all cases, Lithuania's figures considerably exceed OECD averages. For instance, Lithuania has the second highest mortality rates compared to OECD countries that are able to link mortality data across health providers for AMI and ischaemic stroke. Although Lithuanian data is only available for four years (2012-2015), results have not improved over this period. This reinforces the recommendation to monitor the impact of on-going clustering of stroke and cardiac services. In addition, Lithuania should expand the number of quality indicators reported to the OECD, particularly on patient safety to better benchmark its performance.

Cancer offers a disease-oriented and systemic perspective on quality as results depend on both effective PHC and hospital services. Despite progress, PHC providers struggle to ensure better coverage of cancer screening. Lithuania has set up publicly funded population-based screening programs for common cancers: breast, prostate, colorectal and cervical cancer and coverage of the target population has increased over the last 10 years. For instance, in 2015, 45% of targeted women had been screened for breast cancer compared to only 12% in 2006, a significant improvement from very low levels but still below the OECD average of 61%.

Overall, the effectiveness of cancer care quality has improved considerably but still lags behind most OECD countries. Five-year survival rates after cancer diagnosis for most forms of cancer have increased substantially over the past decade and faster than in many other countries, but remain among the lowest in the OECD. Breast cancer survival has increased from 65% to 74% between 2000-04 to 2010-14, but it remains behind those of neighbouring Baltic countries Latvia and Estonia. Similarly colorectal cancer treatment is increasingly successful and at par with neighbouring countries. Colon cancer survival has increased from 45% to 57% in the same time period (CONCORD programme, LSHTM, 2018). For prostate cancer, survival has doubled between the late 1990s and the late 2000s. However, much of the increase in cancer survival is driven by earlier detection, which increases survival also without decreasing mortality (Krilaviciute et al., 2014). All in all thus, from diagnostic to treatment, progress is still needed.

To summarise, there remains room to improve the efficiency and quality in the Lithuanian health system. Progress in restructuring the hospital sector has been slower than in other countries and many facilities still perform very few surgeries and deliveries, which is inefficient but also detrimental to quality and carries a risk for patients. The ongoing initiatives to cluster services in fewer hospitals, and develop a small number of specialised hospitals for some conditions, are promising but need to be extended, sustained over a long time frame and their impact evaluated.

PHC is well organised and reflects best OECD practices and several indicators suggest that PHC has a positive impact on wider system efficiency, as shown by the decreasing hospitalisations for ambulatory care sensitive conditions. However, the coverage of preventive services, in particular cancer screening, is still disappointing. Coordination with public health and mental health services has been on the agenda for some time but results are still modest. Curbing unhealthy behaviours, such as harmful drinking and smoking, particularly among men, is essential to closing the gap with high performing OECD countries.

Overall, the focus on quality needs to be strengthened in Lithuania. The quality assurance culture remains underdeveloped and the policies to change this have not yet been effective. Measuring results and holding stakeholders more explicitly accountable for results can contribute to strengthening clinical outcomes.

Key recommendations

This chapter concludes with key recommendations which could help improve Lithuania's health system performance.

Key Policy Recommendations

Lithuania's health system has many elements in place to ensure comprehensive and equitable access to good quality care. More decisive action is however needed on a number of fronts.

Sustainability and access

- Strengthen efforts to measure and understand limitations to access, in particular due to out-of-pocket payments on pharmaceuticals, informal payments and for populations living in remote areas, and develop appropriate policies.
- Monitor and address current and future human resources imbalances more systematically.
- Consider increasing public funding for health but ensure investments are targeted to the amenable burden of diseases and intervention based on evidence of effectiveness.
- Ensure that Health Technology Assessment becomes an integrated part of decision making within the health system and continue exploring opportunities for international collaboration in this domain and for procurement.
- Put in place measures promoting the rational use of medicines and encouraging all stakeholders to use generics more systematically.
- Further debate, elaborate and operationalise the principles laid out in the 2017 medicines policy guidelines to address individual and collective affordability, technical and allocative efficiency, and long-term sustainability.

Efficiency and quality

- Continue to strengthen primary care service by developing PHC teams' competencies to deliver effective services including primary and secondary prevention interventions and monitor compliance with clinical guidelines.
- Increase the capacity of the primary care system to recognise, treat and manage common mental disorders and increase access to psychological treatments.
- Develop linkages between PHC and other parts of the system, including hospital and social care, especially for chronic and high-need patients.
- Develop, fund, and implement a comprehensive evidence-based public health and prevention strategy, targeting determinants of health as well as high risk individuals. In particular, develop the evaluation of interventions and projects, and create funding mechanisms which can support sustainable implementation of those successful. Increase the accountability of all stakeholders for delivering results.
- Monitor the effectiveness of implementation of newly introduced policies aimed at reducing harmful alcohol consumption as well as their impact.

- Continue implementing contracting for hospital services based on minimum volumes and ensure the development of a graded and safe hospital-based service delivery.
- Further rationalise hospital delivery and downsize the network. This will require (i) a more formal national service plan to be formulated and (ii) adapting the governance and ownership framework to enable and incentivise reorganisation of service delivery across municipal and possibly regional boundaries. Monitor and evaluate impact as efforts are continued to ensure progress and demonstrate the legitimacy of the change.
- Continue efforts to measure quality objectively, in line with the 2017 effort to report data on OECD's Health Care Quality Indicators, and hold people more accountable for it for instance by developing more systematic benchmarking. Develop formats and channels for disseminating performance data more effectively to both clinicians and patients for primary care providers, and consider expanding it in hospitals.
- Strengthen the quality assurance architecture and develop a continuous quality assurance culture. In particular develop a national adverse event reporting and learning system, and set up a system to encourage and monitor compliance with guidelines.

Governance

- Advance the development of e-health infrastructure, create additional incentives for providers and users to join and use it and pay additional attention to ensuring it is user-friendly.
- Use Lithuania's already rich data more systematically to analyse and hold stakeholders accountable for performance.