

ESPN Thematic Report on Inequalities in access to healthcare

Lithuania







EUROPEAN COMMISSION

Directorate-General for Employment, Social Affairs and Inclusion Directorate C — Social Affairs Unit C.2 — Modernisation of social protection systems

Contact: Giulia Pagliani

E-mail: Giulia.PAGLIANI@ec.europa.eu

European Commission B-1049 Brussels

European Social Policy Network (ESPN)

ESPN Thematic Report on Inequalities in access to healthcare

Lithuania

2018

Romas Lazutka, Arunas Poviliunas, Laima Zalimiene

The European Social Policy Network (ESPN) was established in July 2014 on the initiative of the European Commission to provide high-quality and timely independent information, advice, analysis and expertise on social policy issues in the European Union and neighbouring countries.

The ESPN brings together into a single network the work that used to be carried out by the European Network of Independent Experts on Social Inclusion, the Network for the Analytical Support on the Socio-Economic Impact of Social Protection Reforms (ASISP) and the MISSOC (Mutual Information Systems on Social Protection) secretariat.

The ESPN is managed by the Luxembourg Institute of Socio-Economic Research (LISER) and APPLICA, together with the European Social Observatory (OSE).

For more information on the ESPN, see: http:ec.europa.eusocialmain.jsp?catId=1135&langId=en

Europe Direct is a service to help you find answers to your questions about the European Union.

Freephone number (*):

00 800 6 7 8 9 10 11

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

LEGAL NOTICE

This document has been prepared for the European Commission, however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

More information on the European Union is available on the Internet (http://www.europa.eu).

Contents

SL	JMMARY/HIGHLIGHTS	4
1	DESCRIPTION OF THE FUNCTIONING OF THE COUNTRY'S HEALTHCARE SYSTEM FOR ACCESS	
2	ANALYSIS OF THE CHALLENGES IN INEQUALITIES IN ACCESS TO HEALTHCARE IN THE COUNTRY AND THE WAY THEY ARE TACKLED	7
	2.1 The challenges of coverage	
	2.2 Consolidation of the hospital sector and regional disparities	
	2.3 Corruption in healthcare system	10
3	DISCUSSION OF THE MEASUREMENT OF INEQUALITIES IN ACCESS TO HEALTHCARE IN THE COUNTRY	11
A١	INEX. TABLES	12
RF	FERENCES	16

Summary/Highlights

In Lithuania total health expenditure per capita is half of the EU average, while GDP per capita is 75% of the EU average. In 2015 public health expenditure as a percentage of GDP was 6.51% (the fourth lowest in the EU).

A high share, one third, of health expenditure is funded by out-of-pocket payments, which is more than double the EU average. The main cause of out-of-pocket payments is high spending on outpatient pharmaceuticals. This creates financial barriers to the purchase of pharmaceuticals for the most vulnerable groups (retired, unemployed and other low-income people). Only some of them are eligible for partial reimbursement. Prices for pharmaceuticals are high because physicians tend to prescribe unnecessarily expensive brands, and there is a low reliance on generics among the population. The government is taking efforts to promote generics and to reduce prices.

Nevertheless, Lithuanians enjoy widespread coverage for a broad package of services thanks to universal compulsory health insurance. Contributions to the National Health Insurance Fund (NHIF) by the state ensure that the unemployed and the most economically inactive population groups who are not capable of working are covered by public health insurance. Economically inactive people who are capable of working have to pay contributions by themselves even if they do not have an income. This creates a potential gap in coverage. However, there are no reliable data on how large it is. It is estimated that about 8% of the population are not paying contributions. However, due to intensive outmigration, a substantial share of them may reside, and be insured, in other EU countries.

The scope of the services covered is large and the few defined exclusions are the same as in many EU countries, e.g. parts of dentistry, medical certificates and non-medical cosmetics. Affordability is mainly high as no user fees are charged for services reimbursed by the NHIF, but coverage of pharmaceuticals and medical aids is limited. Unofficial payments for healthcare services and disability assessments still occur in Lithuania. That is another potential cause of financial barriers for lower-income patients. Urgent and emergency healthcare is provided for all residents.

The net of health services providers is rather dense and territorial access to care, especially hospitals, is rather good. However, the government is engaged in centralising healthcare institutions, due to scarcity of resources. Centralisation risks reducing the geographical accessibility of services. Even today, there is an acute shortage of professionals in rural regions. To reduce regional inequalities in access to services, additional funding is allocated by the government to institutions providing primary healthcare services in rural areas.

In Lithuania, the reported unmet need for medical care due to cost, a waiting list or travel distance is close to the EU average, but substantially better than most countries in the region. Because of the absence of user fees for all basic services, unmet need due to cost is relatively low in the poorest income quintile. There are differences in access to health services according sex, labour status and age.

We recommend an increase in public financing for healthcare, with the main aim of reducing co-payments for pharmaceuticals and increasing salaries for medical staff. First, this would increase access to healthcare services for patients. Second, it would reduce emigration of medical staff, and improve the quality of healthcare personnel in remote areas. Hopefully, it could also reduce the level of corruption in the healthcare system. All these measures would increase access to healthcare for the most vulnerable groups of the population.

1 Description of the functioning of the country's healthcare system for access

Healthcare in Lithuania is divided into three levels: (1) primary (healthcare provided by family doctors (or their assistants), nurses, obstetricians, or midwives, etc.); (2) secondary (local and municipal hospitals and outpatient departments); and (3) tertiary (national hospitals). Primary and secondary healthcare services are organised by municipalities, while the Ministry of Health organises the tertiary level of healthcare. Both secondary and tertiary level healthcare services require the patient to have been issued with a referral by a family practitioner or specialist. Since 2014, The Ministry of Health has coordinated tertiary healthcare, as well as the organisation of municipal secondary healthcare services. Municipalities are responsible for the provision of a substantial share of primary healthcare services through primary care centres and polyclinics, and for the running of small and medium-sized hospitals. The current stage of the plan for consolidating hospitals, which started in 2015, envisages the development of primary care, nursing services, palliative care, and outpatient surgery, as well as the optimisation of residential services. According to the plan, the number of hospitals and services in rural regions ought to be reduced.

The centralisation of healthcare institutions envisaged by the government is aimed at optimising the network and improving the quality of services. Low numbers of patients and the narrow range of services provided by the lowest-level institutions do not allow sufficient training practice for doctors and hinders the development of their professional skills. The additional argument for centralisation is depopulation caused by a high level of emigration from rural and small cities during the last two decades. The critics of centralisation consider that it could reduce the geographical accessibility of healthcare services.

The health sector in Lithuania relies on mixed financing, consisting of statutory health insurance, budget allocations and direct out-of-pocket payments by patients. Health insurance is compulsory for all of the population. Employees, the self-employed, and even those not employed but capable of working, have to pay mandatory health insurance contributions to the National Health Insurance Fund (NHIF). Thus, although most public spending on health comes from the NHIF, a substantial share (41% in 2016) of NHIF revenue comes from the state's budget (NHIF 2017), which funds the insurance coverage of the non-working population: children, students in higher education, unemployed people, pensioners and others. 1 One third of health spending comes from private sources – largely out-of-pocket payments, mainly for pharmaceuticals. Patients pay the full cost of both prescribed and over-the-counter outpatient medications. Only some groups are eligible for full or partial reimbursement. These are: children, the retired, disabled people and patients with certain diseases (tuberculosis, cancers and some other chronic diseases). However, even in the case of 100% reimbursement for pharmaceuticals by the NHIF, all patients incur some form of co-payment for outpatient pharmaceuticals when its market price is higher than the reimbursed reference price. Out-of-pocket payments are for services not covered by the NHIF (e.g. dentistry, medical certificates and non-medical cosmetics) and specialist visits without referral.

Total health expenditure as a percentage of GDP in 2015 was 6.51%, which was the fourth lowest percentage in the EU.² Total health expenditure per capita is half of the EU average.

Healthcare services are available to all persons covered by health insurance: persons in paid employment, those who pay contributions for themselves (the self-employed and some economically inactive people not insured by the state), and those inactive people who are insured by the state. Urgent and emergency healthcare is provided for all residents. Other health services (a broad range, defined rather loosely) are available to

¹ OECD and European Observatory on Health Systems and Policies (2017) *Lithuania: Country Health Profile* 2017: https://www.oecd-ilibrary.org/social-issues-migration-health/lithuania-country-health-profile-2017 9789264283473-en.

² Eurostat, Healthcare expenditure by provider: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_sha11_hp&lang=en.

insured persons, with the main costs of treatment covered by health insurance. People who do not pay compulsory contributions and are not insured by the state must cover the cost of treatment personally (except in the case of urgent and emergency healthcare). Lithuania guarantees healthcare services for asylum-seekers and undocumented migrants who are in detention.

Since 2008, the NHIF has increasingly been contracting private providers for specialist outpatient care. However, in the fast-developing day care and day surgery segment, private providers still receive only "around 10% of the amount contracted by the NHIF annually. /.../ They also provide around half of diagnostic and interventional imaging services contracted by NHIF" (OECD 2018). Privatisation of inpatient care has been limited, but the private sector plays a significant role in dental care, access to which is very limited due to long waiting lists in the public sector and due to its exclusion from the healthcare basket contracted by the NHIF. The NHIF finances the services of dentists, while the patients themselves finance materials and disposables. For children up to age 18 dental care is free of charge. Other areas, where the role of private services is more important, include cosmetic surgery, psychotherapy, some outpatient specialities and primary care. Private healthcare institutions contracted by the NHIF have the right to provide extra services paid out-of-pocket. However, they are not free to set the prices for contracted care.

The health system still remains too oriented towards curative and hospital care; and mental healthcare in particular is under-funded. In 2015, healthcare expenditure (in PPS per inhabitant) by providers was: on hospitals €507.39 (2011 − €429.83); on general hospitals €429.36 (2011 − €363.27); on providers of ambulatory healthcare €227.39 (2011 − €187.18); on residential long-term care facilities €22.01 (2011 − €15.79); and on providers of preventive care €9.78 (2011 − €7.89). In 2015, expenditure on hospitals accounted for 2.23% of GDP, on general hospitals 1.89%, on ambulatory healthcare 1.00%, and on residential long-term care facilities 0.10%. The structure of healthcare expenditure changed marginally between 2011 and 2015, but there were some positive changes in terms of increased expenditure on long-term care and prevention. Starting from 2014 there were some other positive developments: the average length of stay in a hospital decreased, as did the number of curative hospital beds (excluding those for nursing, rehabilitation, tuberculosis and psychiatric patients) per 10,000 people.

Availability of healthcare depends on the distribution of healthcare services and human resources across the territory. On the other hand, optimisation of the network of healthcare institutions means concentrating services in bigger towns and cities, sometimes at the expense of smaller towns and rural areas. Health professionals also prefer to work in cities. Rural areas suffer from depopulation (Ubarevičienė 2017), and in so far as the number of patients influences financing, regional healthcare organisations experience financial problems. A survey conducted by the union for the leaders of healthcare institutions demonstrated that in 2018 financing of national hospitals has increased by 15%-20%, and of regional hospitals by 4%-15%, while the financing of municipal hospitals is decreasing by 6%-12%.³

In order to reduce regional inequalities in access to services, additional funding is allocated to organisations providing primary healthcare services in sparsely populated areas (with a population less than 4,000). There are discussions on combining local hospitals and outpatient departments: however, opponents claim that this change will reduce the role of

miestuose-ilges-eiles-56-603929.

³ Saukienė, I. (2016) 'Prognozės: per dešimtmetį rajonuose gali nelikti gydytojų, miestuose ilgės eilės' [Forecasts: during the next decade doctors could disappear in regions, and in cities waiting lists will increase]: https://www.15min.lt/naujiena/aktualu/lietuva/prognozes-per-desimtmeti-rajonuose-gali-nelikti-gydytoju-

family doctors. In 2018 the Ministry of Health is due to prepare a plan for optimising the network of healthcare organisations.⁴

Despite the increasing number of healthcare personnel per 100,000 inhabitants, there is a lack of healthcare personnel in rural areas. In 2013, a national committee was created to examine the balance of supply and demand for healthcare professionals, and a number of measures were adopted. But in 2014 the provision of doctors per 10,000 people was still 1.5-2.5 times higher in big cities than in the regions, and inhabitants of rural areas had 40% less contact with doctors than the urban population. There have been long-lasting public discussions and very controversial opinions on how to attract state-funded medical students to work in the countryside.

The funding of public health is low. In 2015, Lithuania spent 1.9% of total healthcare expenditure on prevention. With 32 suicides per 100,000 inhabitants, Lithuania registered by far the highest rate of suicide among the EU Member States.⁶ The suicide rate in rural areas is as high as in urban areas. The main group at risk are men living in rural areas.⁷ Researchers have identified an uneven territorial distribution of public health human resources – ranging from 5.3 specialists per 10,000 population in the mainly rural Taurage county to 10 in the capital, Vilnius – and of the distribution of related institutions (Kanapeckienė, Gerasimavičienė, Izokaitis 2017: p.67).

2 Analysis of the challenges in inequalities in access to healthcare in the country and the way they are tackled

Despite the fact that the percentage of inhabitants who reported poor health fell in Lithuania over the period 2010-2016, it was still much higher than the EU average (Table 2-1).

Table 2-	Table 2-1. Self-perceived health rated as bad, by sex (16+, %)									
		2010	2011	2012	2013	2014	2015	2016		
EU28	Males	6.6	6.8	6.9	7.0	6.9	6.9	6.3		
	Females	8.4	8.6	8.8	8.9	8.7	8.6	8.0		
	Total	7.6	7.7	7.9	8.0	7.9	7.8	7.2		
LT	Males	12.9	13.4	13.6	12.0	11.9	11.5	11.9		
	Females	17.4	18.0	18.7	17.6	17.1	17.2	15.7		
	Total	15.6	16.0	16.6	15.3	14.9	15.0	14.2		

Source: Eurostat, Self-perceived health by sex, age and income quintile

In Lithuania there are differences in access to health services according sex, labour status, age, and income quintile (Table 4-1, Table 4-2, Table 4-3 and Table 4-4 in the Annex).

The gap in self-rated health by socioeconomic status is large in Lithuania, with only 32% of people in the lowest income quintile reporting good health in 2015, compared with 63% of those in the highest income quintile, according to a recent report (OECD and European Observatory on Health Systems and Policies 2017: p.4). The same report said that: "In Lithuania, 2.9% of the population reported an unmet need of medical care due to cost, waiting list or travel distance, which is below the EU average and substantially better than

⁴ Kazakevičius, K. (2018) 'Dar viena ligoninių reforma' [One more reform of hospitals]: https://www.lzinios.lt/lzinios/lietuva/dar-viena-ligoniniu-reforma/259575.

⁵ Eurostat, Health personnel (excluding nursing and caring professionals): http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_rs_prs1&lang=en.

⁶ Eurostat news 17 May 2017 'Almost 60,000 suicides in the EU': http://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20170517-1.

⁷ Valstybinis psichikos sveikatos centras [National Centre for Mental Health], *Savižudybių statistika* [Statistics of suicides]: https://vpsc.lrv.lt/lt/statistika/savizudybiu-statistika.

most neighbouring countries. In addition, unmet need due to cost is relatively low in the poorest income quintile – 1.0% compared to the EU average of 4.1%, which can be explained by the absence of user fees for all basic services and the relatively extensive supply of services. However, there are greater income-related inequalities in access to pharmaceuticals in Lithuania, as out-of-pocket payments for pharmaceutical drugs are generally high" (p.12). Inequalities in the accessibility of health services between the urban and rural population in terms of access to emergency services remained.

The action plan for reducing health disparities in Lithuania 2014-2023 states that access to healthcare services by people with disabilities is limited. The plan sets out measures for improving the quality of medical rehabilitation services and dental care services for disabled people (Minister of Health 2014).

2.1 The challenges of coverage

The NHIF provides quasi-universal population coverage, and contracts public and private providers. The principle of universality in the Lithuanian compulsory health insurance system means that all permanent residents (as well as foreigners who are temporarily resident and working legally, along with their family members) are obliged to pay compulsory health insurance contributions, and on the occurrence of an insured event are entitled to receive healthcare services compensated from the budget of the NHIF. The system is financed by contributions, together with per capita payments from the state budget on behalf of the economically inactive population. Contributions to the NHIF by the state ensure that the unemployed and most economically inactive population groups not capable of working because of age and health (representing 56% of all those insured in 2016) are covered by health insurance (OECD and European Observatory on Health Systems and Policies 2017: p.12). These groups include children, students, and retired, unemployed and disabled people. People who do not pay compulsory contributions and are not insured by the state must cover the cost of treatment personally. They have to pay a monthly contribution equal to 9% of the minimum wage (€36 in 2018). It is estimated that in total 92% of the population is covered. "The non-insured (estimated to be around 280,000 or 8% of the population) are to a large extent people who reside and work outside the country" (OECD and European Observatory on Health Systems and Policies 2017: p.12).

Formally, healthcare is free of charge. The scope of services covered is large and the few defined exclusions are the same as in many EU countries, e.g. parts of dentistry, medical certificates and non-medical cosmetics (OECD and European Observatory on Health Systems and Policies 2017: p.12). An EU expert network, Analytical Support on the Socio-Economic Impact of Social Protection Reforms (ASISP), reported in 2014 that: "there is a list of health care services which are approved as paid services that are financed entirely from the person's own resources according to a set price list. When assessing health care coverage, it becomes obvious that there is some disproportion between health care coverage declared by law and practical access. In particular, there are differences in terms of access between socio-economic groups. Waiting times for family doctors and for specialised care are too long; patients require more consultation time and attention to their specific problem, there are local inequalities in terms of access to emergency services. The occurrence of informal payments to medical staff is also a problem. Measures to deal with all those issues are under negotiation and new plans are being drawn up" (Medaiskis, Jankauskienė 2014: p.23).

The share of households' out-of-pocket payments in health spending had been increasing (Table 4-13 in the Annex). The relatively high out-of-pocket payments are mainly accounted for by medical goods and curative care (Tables 4-11), but also include payments for providers of services (4-12 in the Annex). Lithuania has one of the largest differences between public funding for pharmaceuticals and for health services in general (OECD and European Observatory on Health Systems and Policies 2017: p.12). This can create financial barriers to purchasing pharmaceuticals for the most vulnerable groups (retired, unemployed and other low-income people). Prices for pharmaceuticals are high because:

there is no effective health technology assessment (HTA) system in place; physicians tend to prescribe unnecessarily expensive brands; and there is a low reliance on generics among the population (OECD and European Observatory on Health Systems and Policies 2017: p.12).

2.2 Consolidation of the hospital sector and regional disparities

Due to relatively small geographical distances, territorial access to healthcare services, especially hospitals, is rather good. The country has 63 general hospitals, spread out across most of the 60 municipalities of the country (OECD and European Observatory on Health Systems and Policies 2017: p.12). Patients can receive a broad set of healthcare services in these institutions. On the other hand, centralisation in the name of greater optimisation decreases the accessibility of primary healthcare services for the rural population.

There are persistent inequalities in the accessibility of health services by age and gender, and especially those between the urban and rural population in terms of access to emergency services. People in rural areas are generally more likely to report poor health than those in cities and towns (Table 4-4 in the Annex). The action plan for reducing health disparities in Lithuania 2014-2023 recognises that people with disabilities also experience healthcare inequalities, and it sets out measures to tackle these.⁸

According to the Health Behaviour in School-aged Children (HBSC) survey data⁹ for Lithuania in 2014, 10% of boys and 16% of girls of 11, 13 and 15 years age rated their health as poor. Since 2002, this indicator has had a tendency to decrease. Lithuania differs from other EU countries in having a comparatively low rate of suicides among children and youth.

The action plan for reducing health disparities in Lithuania 2014-2023 highlights the importance of health education skills, and healthy nutrition habits. Although health policy puts the emphasis on children's health, attention to a family's involvement in activities for improving children's health is insufficient.

One of the major reasons for the failure to reduce inequalities of access has been a lack of cooperation between people in different areas of governance (state municipalities, different sectors of social policy). The project called 'Development of a model for strengthening capacities to identify and reduce health inequalities', which was financed by the Norwegian Financial Mechanism, includes actions aimed at developing the capacities of public health professionals and health policy makers in the area of health inequalities.¹⁰

The major goals of the new national health programme 2014-2025 are: involving other sectors in health promotion, promoting a healthy lifestyle, and protecting people from an unhealthy environment. Measures aimed at reducing differences in access to services in certain regions of the country and for persons belonging to different social groups are included in the action plan for reducing health disparities in Lithuania 2014-2023.¹¹

The programme of the Lithuanian government includes several measures which are aimed at promoting the rational use of medicines, by: encouraging the use of generics and biosimilars instead of patented medicines; running an information campaign for patients

⁸ Minister of Health (16 July 2014) Įsakymas Nr. V-815 'Dėl sveikatos netolygumų mažinimo Lietuvoje 2014–2023 m. Veiksmų plano patvirtinimo pakeitimo. Efektyvios sveikatos priežiūros prieinamumo gerinimo neįgaliesiems krypties aprašas' [Order for the replacement of the action plan for reducing health disparities in Lithuania 2014-2023. The improvement of access to healthcare services for the disabled]: https://www.e-tar.lt/portal/lt/legalAct/92c9a1e0532211e6b72ff16034f7f796.

⁹ A cross-national survey of school students: http://www.hbsc.org/.

¹⁰ For example, the teaching programme for politicians 'Decreasing the inequalities of health and healthcare: situation, challenges and possibilities':

http://www.hi.lt/uploads/pdf/projektai/Modelis%20Norway%20Grants/sp_programa_pilna.pdf.

¹¹ Minister of Health (16 July 2014) *Sveikatos netolygumų mažinimo Lietuvoje 2014–2023 m. veiksmų planas* [Action plan for reducing health disparities in Lithuania 2014-2023] https://www.e-tar.lt/portal/lt/legalAct/682b6f200d7111e4adf3c8c5d7681e73.

about the rational use of medicines, including non-prescription medicines; control of prescription-only medicine sales in pharmacies; decreasing patients' co-payments for reimbursed medicines; and ensuring better access to medicines for people with very low incomes. To decrease the co-payments, a government decree on calculating prices for reimbursable medicines was amended and came into force on 1 July 2017.

2.3 Corruption in healthcare system

Healthcare institutions and services are among the fields with the highest potential for corruption. 73% of Lithuanian residents consider healthcare institutions to be corrupt (Parliament of Lithuania 2015: 7). In 2016 the highest bribery indexes¹² were recorded in national hospitals (index of demanding was 0.40, and index of giving 0.27) and local hospitals (index of demanding was 0.36, index of giving 0.23) (Tables 4-5 and 4-7 in the Annex).

According to the national anti-corruption programme, the main factors causing corruption in the healthcare system are: vague administrative procedures and their insufficient openness; unlawful lobbying; an insufficient control mechanism; and the fact that the public sometimes justifies paying a bribe (Tables 4-7 and 4-8 in the Annex). In addition, corruption results from the connections that the heads of healthcare institutions have with the private companies that bid for procurement contracts to sell medical supplies, equipment and medicines. Persons in charge of healthcare institutions are also in some cases employed by private personal healthcare institutions, or are even their owners or co-owners, which causes the risk of a conflict of public and private interests. Pharmaceutical companies are sometimes involved in unfair competition, and their marketing activities are not always transparent (Parliament of Lithuania 2015).

Examples of corruption are also recorded in the following areas (Parliament of Lithuania 2015):

- representatives of pharmaceutical companies providing informal services to doctors in return for certain (usually expensive) drugs being prescribed for patients;
- heads of healthcare institutions who, having made prior agreements with certain businesses, apply to the NHIF for the provision of unnecessarily large quantities of medicines or medicinal products supplied by them;
- premises located at healthcare institutions which are rented to private legal persons providing pharmaceutical services;
- surcharges paid by patients for additional services received in a hospital, which are not accounted for with a view to misappropriation;
- the use of the resources of state healthcare institutions to treat the patients of private healthcare institutions;
- the issuing of fake certificates of incapacity for work;
- unjustified referrals to rehabilitation institutions, prescription of nursing care, establishing a level of capacity for work; and

 12 The findings in the $\it Lithuanian\ \it Map\ of\ \it Corruption\ \it are\ easier\ to\ interpret\ by\ introducing\ the\ bribery\ indices: demanding, giving, and effectiveness. <math display="inline">\it The\ index\ of\ demanding\ \it giving\ \it and\ effectiveness\ \it and\ \it s$ is estimated according to the following formula: $I_p=S_p/S_i$, where S_p is the percentage of respondents who claimed that a bribe had been demanded from them, and S_i is the percentage of those who claimed they had dealt with their matters in the same institution. $\it The\ index\ of\ giving\ \it g$ is estimated according to the following formula: $I_d=S_d/S_i$, where S_d is the percentage of respondents who admitted they had given a bribe and S_i is the percentage of those who claimed they had dealt with their matters in the same institution. $\it The\ index\ of\ effectiveness\ \it is\ estimated\ according\ to\ the\ following\ formula: \ I_e=S_e/S_d$, where S_e is the percentage of respondents who claimed the bribe had helped them and S_d is the percentage of respondents who said they had given a bribe (Special Investigation Service of the Republic of Lithuania 2016: p.231).

• unlawful activities of experts from the state forensic medicine service.

The Lithuanian Map of Corruption survey has established that residents have paid the most bribes in city and regional hospitals, national hospitals or clinics and outpatient clinics (Tables 4-8 to 4-10 in the Annex).

The national anti-corruption programme includes the objective of increasing transparency, and reducing and eliminating possibilities for corruption in the field of healthcare. The first task under this objective is to increase transparency in the activities of healthcare institutions. The second task is to create a support mechanism for healthcare institutions (Parliament of Lithuania 2015).

3 Discussion of the measurement of inequalities in access to healthcare in the country

In 2014, EEA and Norway Grants has supported 13 programmes in Lithuania under the umbrella of public health initiatives. A grant of €7.1 million has been allocated for the implementation of the programme, of which 85% are funds from the Norwegian Financial Mechanism and 15% from the Lithuanian government. The project 'Development of a model for strengthening the capacities to identify and reduce health inequalities' was financed under this programme. The framework of the project includes four main activities: (1) analysis of the present situation in monitoring and reducing health inequalities; (2) development of a sustainable health inequalities monitoring system; (3) development of a set of recommendations for public health professionals for reducing health inequalities; and (4) capacity development of public health professionals and health policy makers in the area of health inequalities (Stankunas, Kalediene 2017).

As the project was completed in April 2017, the main outcomes can be identified. The first is that a system for monitoring health inequalities in Lithuania has been developed. This system includes a set of guidelines for the collection of health inequalities data and a webbased platform for the presentation of this information, 'SveNAS' (http://svenas.lt). The second major outcome is a set of practical recommendations for the reduction of health inequalities. The project team has identified six main determinants for the persistence of health inequalities in Lithuania. They are the following: smoking, alcohol abuse, nutrition, physical inactivity, mental health/suicides, and healthcare accessibility (Stankunas, Kalediene 2017).

The project team has published methodological recommendations entitled 'Monitoring and evaluation of inequalities in access to healthcare' The authors of the recommendations distinguished four different concepts which are often entangled with each other: health differences, health inequality, health inequity and health equity (Valentienė et al. 2016: p.7).

The project team group elaborated three groups of indicators. The first group include demographic, social and economic indicators. The category of demographic indicators covers age, gender, place of residence, ethnicity, and composition of family. The category of social indicators includes education, occupation/profession, living conditions, and social capital. The category of economic indicators encompasses income (Valentienė et al. 2016: p.8-19). The second group of indicators includes the sources of official statistical information on mortality, morbidity, and access to healthcare services; and the third group covers the data from surveys of the population.

In 2016, municipalities have started to collect information according to these indicators. Unfortunately, the municipalities were not able to gather all the information set out in the methodical recommendations: further work will therefore be needed to reach general conclusions about inequalities in access to healthcare.

Annex. Tables

Table 4-1. Self-reported unmet needs for medical examination by sex (age – from 16 or over, reason – too expensive or too far to travel or waiting list, %)

		2010	2011	2012	2013	2014	2015	2016
	Males	2.6	2.8	2.8	3.0	3.1	2.7	2.1
EU28	Females	3.6	3.9	3.9	4.2	4.0	3.6	2.9
	Total	3.1	3.4	3.3	3.6	3.6	3.2	2.5
	Males	2.1	1.7	1.7	2.0	2.4	2.2	2.1
LT	Females	3.0	3.8	2.8	4.1	4.7	3.4	3.9
	Total	2.6	2.9	2.3	3.2	3.7	2.9	3.1

Source: Self-reported unmet needs for medical examination by sex, age, main reason declared and income quintile.

Table 4-2. Self-reported unmet needs for medical examination by age (reason – too expensive or too far to travel or waiting list, %)

		2010	2011	2012	2013	2014	2015	2016
	16+	3.1	3.4	3.4	3.6	3.6	3.2	2.5
EU28	16-64	1.8	2.1	2.0	2.2	2.2	1.8	1.5
	65+	2.4	2.9	2.8	2.9	2.8	2.7	2.0
	16+	2.6	2.8	2.3	3.2	3.7	2.9	3.1
LT	16-64	0.7	0.7	0.4	0.5	0.7	0.4	0.8
	65+	1.2	1.5	0.9	0.6	0.8	0.8	0.6

Source: <u>Self-reported unmet needs for medical examination by sex, age, main reason declared and income</u> quintile.

Table 4-3. Self-reported unmet needs for medical examination by income quintile (reason – too expensive or too far to travel or waiting list) (16 years or over, 2016, %)

	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile	Total
EU28	5.0	2.9	2.3	1.5	1.1	2.5
LT	5.2	3.0	2.4	1.5	1.6	3.1

Source: <u>Self-reported unmet needs for medical examination by sex, age, main reason declared and income quintile.</u>

Table 4-4. Distribution of population aged 18 and over by health status (bad) and degree of urbanisation, %

		2010	2011	2012	2013	2014	2015	2016
	Total	7.7	7.9	8.1	8.2	8.0	7.9	7.4
EU28	Cities	7.2	7.2	7.6	7.7	7.6	7.6	7.0
	Towns, suburbs	7.1	7.7	7.8	8.0	7.7	7.6	7.1
	Rural	9.3	9.4	9.1	9.0	9.1	8.8	8.2
	Total	15.9	16.4	17.0	15.6	15.2	15.2	14.3
LT	Cities	13.5	12.9	13.8	13.5	13.2	14.0	13.4
	Towns, suburbs			17.1	14.5	14.3	12.0	17.9
	Rural	17.6	18.9	19.9	17.7	17.2	16.2	14.9

Source: Distribution of population aged 18 and over by health status, age group, sex and degree of urbanisation - EU-SILC survey.

Table 4-5. Bribery indexes in healthcare and other institutions (in 2016, during last 5 years)

	Demanding	Giving	Effectiveness
National hospitals	0.40	0.27	0.92
Local hospitals	0.36	0.23	0.89
Ministry of Health	0.30	0.27	0.89
Outpatients departments	0.14	0.07	0.90
Private healthcare institutions	0.12	0.08	0.68
Emergency medical service	0.08	0.03	0.50
Traffic police	0.22	0.12	0.94
Local municipalities	0.16	0.05	0.75
Church, religious organisations	0.14	0.10	1.0
Labour exchange	0.14	0.04	0.89
Vehicle technical inspections centres	0.13	0.08	0.93

Source: Special Investigation Service of the Republic of Lithuania 2016: p.233-238.

Table 4-6. Index of bribes being demand in healthcare and other institutions								
	2005	2007	2008	2011	2014	2016		
National hospitals	0.49	0.33	0.55	0.52	0.53	0.40		
Local hospitals	0.39	0.34	0.50	0.47	0.53	0.36		
Outpatients departments	0.24	0.23	0.28	0.24	0.32	0.16		
Emergency medical service	0.14	0.09	0.11	0.10	0.13	0.08		
Traffic police	0.61	0.40	0.62	0.58	0.43	0.22		
Local municipalities	0.22	0.18	0.36	0.21	0.24	0.16		

Source: Special Investigation Service of the Republic of Lithuania 2016: p.239.

Fable 4-7. Index of bribes being given in healthcare and other institutions								
2005 2007 2008 2011 2014 20								
National hospitals	0.45	0.48	0.56	0.48	0.50	0.27		
Local hospitals	0.37	0.37	0.44	0.44	0.47	0.23		
Outpatients departments	0.22	0.21	0.22	0.18	0.28	0.10		
Emergency medical service	0.06	0.04	0.08	0.07	0.11	0.03		
Traffic police	0.52	0.48	0.51	0.41	0.35	0.12		
Local municipalities	0.10	0.10	0.24	0.07	0.21	0.05		

Source: Special Investigation Service of the Republic of Lithuania 2016: p.240.

Table 4-8. Index of bribery effectiveness in healthcare and other institutions								
	2005	2007	2008	2011	2014	2016		
National hospitals	0.77	0.81	0.90	0.88	0.93	0.92		
Local hospitals	0.81	0.82	0.92	0.91	0.95	0.89		
Outpatients departments	0.80	0.84	0.93	0.88	0.93	0.96		
Emergency medical service	0.77	0.74	0.95	0.86	0.97	0.50		
Traffic police	0.85	0.84	1.00	0.98	0.96	0.94		
Local municipalities	0,83	0.88	0.95	0.94	0.94	0.75		

Source: Special Investigation Service of the Republic of Lithuania 2016: p.240.

Table 4-9. Index of use of acquaintance 13 for procedures in the healthcare and other sectors

	Use of acquaintance	Demanding	Giving	Effectiveness
Prescription of compensated pharmaceuticals	0.02	0.01	0.01	0.80
Healthcare services	0.08	0.10	0.09	0.88
Services of family doctor	0.07	0.11	0.12	0.82
Operation	0.19	0.38	0.48	0.85
Hospital care	0.14	0.25	0.28	0.78
Dental treatment	0.05	0.05	0.03	0.89
Penalties for violations of traffic regulations	0.07	0.16	0.15	0.83
Employment to private sector	0.37	0.09	0.07	0.91
Prescription of social assistance benefits	0.02	0.05	0.01	1.0

Source: Special Investigation Service of the Republic of Lithuania 2016: p.244-245.

Table 4-10. Amount of bribes

	Number of		Bribe in €				
	respondents who indicated amount. Sample – 1002 respondents	Minimal	Maximum	Average			
Operation	106	15	1000	140			
Services of family doctor	73	10	200	40			
Hospital care	35	2	150	50			
Personal healthcare services	31	20	700	120			
Certificates of disability	13	15	1000	200			
Dental treatment	12	15	1700	170			
Health certificates	11	10	100	30			
Penalties for violations of traffic regulations	16	10	200	60			

Source: Special Investigation Service of the Republic of Lithuania 2016: p.248.

Table 4-11. Expenditure for selected healthcare functions by household out-of-pocket payments; € per capita

								2016-
	2010	2011	2012	2013	2014	2015	2016	2010
Curative care	39.83	50.46	59.47	74.64	70.78	84.09	94.92	55.09
Rehabilitative care	7.01	6.5	7.07	9.24	8.7	8.17	9.38	2.37
Long-term care (health)	0.91	1.08	1.17	1.48	1.65	2.17	2.66	1.75
Ancillary services	1.81	1.82	2.05	1.97	1.3	1.67	2.77	0.96
Medical goods	115.24	129.5	153.42	150.85	160.88	169.56	181.14	65.9
Functions, total	164.8	189.36	223.18	238.19	243.31	265.67	290.87	126.07

Source: Statistics Lithuania.

 13 *The index of use of acquaintance* is estimated according to the following formula: $I_r = S_r \, / S_i$, where S_r is the percentage of respondents who admitted they had used an acquaintance and S_i is the percentage of those who claimed they had dealt with their matters in the same institution (Special Investigation Service of the Republic of Lithuania 2016: p. 231).

Table 4-12. Expenditure for selected healthcare providers by household out-of-pocket payments; € per capita

	2010	2011	2012	2013	2014	2015	2016	2016- 2010
Hospitals	11.24	10.71	11.45	13.84	14.04	14.17	15.65	4.41
Residential long-term care facilities	0.89	1.06	1.15	1.46	1.63	2.04	2.51	1.62
Providers of ambulatory healthcare	35.12	45.4	53.82	68.74	64.04	76.67	87.2	52.08
Providers of ancillary services	1.76	1.76	1.94	1.9	1.3	1.67	2.77	1.01
Retailers and other providers of medical goods	115.49	130.11	154.48	151.85	161.86	170.17	181.82	66.33
Rest of economy	0.31	0.32	0.34	0.4	0.45	0.95	0.92	0.61
Providers, total	164.8	189.36	223.18	238.19	243.31	265.67	290.87	126.07

Source: Statistics Lithuania.

Table 4-13. The share of household out-of-pocket payments in healthcare expenditure; PPS per inhabitant; %

	2010	2011	2012	2013	2014	2015	2015- 2010
All financing schemes, in PPS	1066.21	1149.8	1209.78	1255.25	1347.1	1483	416.79
Household out- of-pocket payments, in PPS	294.16	324.5	384.72	411.97	424.23	475.37	181.21
Percentage of household out-of-pocket payments,	07.4	00.0	04.0	00.0	04.5	00.4	
in %	27.6	28.2	31.8	32.8	31.5	32.1	4.5

Source: <u>Eurostat.</u>

References

- Ališauskienė, R., Dobryninas, A., Žilinskienė, L. (2006) *Lithuanian Map of Corruption*. Vilnius: Eugrimas. Available online.
- Ecorys Nederland B.V. (2017) *Updated Study on Corruption in the Healthcare Sector Final Report.* Brussels: European Commission. <u>Available online</u>.
- Kanapeckienė, V., Gerasimavičienė, D., Izokaitis, M. (2017) 'Visuomenės sveikatos žmogiškųjų išteklių pasiskirstymas Lietuvoje atsižvelgiant į demografines charakteristikas, išsilavinimą ir darbo vietas' [Distribution of public health human resources in Lithuania by education, demographic characteristics and public healthcare facilities], Visuomenės sveikata, 3 (78): 60-67. Available online.
- 'Liuima, V., Valintėlienė, R., Jociutė, A. (2016) *Mokyklinio amžiaus vaikų gyvensenos tyrimas 2016 m. rodiklių suvestinė–ataskaita* [The research of the patterns of life of schoolchildren. The report on indicators of 2016 year]. Vilnius: Institute of Hygiene. Available online.
- Medaiskis, T., Jankauskienė, D. (2014) *Pensions, health and long-term care: Lithuania.* ASISP. On behalf of the European Commission DG Employment, Social Affairs and Inclusion. <u>Available online</u>.
- Minister of Health (2014) *Sveikatos netolygumų mažinimo Lietuvoje 2014–2023 m. veiksmų planas* [Action plan for reducing health disparities in Lithuania 2014-2023]. Available online.
- Murauskiene, L., Janoniene, R., Veniute, M., van Ginneken, E., Karanikolos, M. (2013) Lithuania: health system review. Health Systems in Transition, 2013; 15(2): 1–150. Available online.
- NHIF (2017) *Privalomoji sveikatos draudimo fondo biudžeto vykdymo ataskaita* [Account of the National Health Insurance Fund]. <u>Available online</u>.
- OECD (2018) OECD Reviews of Health Systems: Lithuania 2018. Available online.
- OECD and European Observatory on Health Systems and Policies (2017) *Lithuania: Country Health Profile 2017*. Available online.
- Parliament of Lithuania (2015) *National Anti-Corruption Programme of the Republic of Lithuania for 2015-2025*. Resolution No XII-1537 of the Seimas of the Republic of Lithuania of 10 March 2015. Available online.
- Skrobotovas, R., Želvienė, A. (2017) 'Lietuvos sveikatos 2014–2025 m. strategijos vykdymas: kaip sekasi siekti užsibrėžtų tikslų?' [Implementation of the Lithuanian health strategy: How we are moving towards established tasks?], *Visuomenės sveikatos netolygumai* Nr. 6(25). <u>Available online</u>.
- Special Investigation Service of the Republic of Lithuania (2016) *Lietuvos korupcijos žemėlapis* [Lithuanian map of corruption]. Report. Available online.
- Stankunas, M., Kalediene, R. (2017) 'Lithuania is tackling health inequalities with support from Norway grants programme', *Public Health*, Volume 149, pages 28-30. https://doi.org/10.1016/j.puhe.2017.04.011
- Ubarevičienė, R. (2017) *Socio-spatial change in Lithuania. Depopulation and increasing spatial inequalities.* Ph.D. thesis Delft University of Technology, Faculty of Architecture and the Built Environment. <u>Available online</u>.
- Valentienė, J., Nedzinskienė, L., Liuima, V., Mekšriūnaitė, S., Sauliūnė, S., Kaselienė, S. (2016) Sveikatos netolygumų stebėsena ir vertinimas. Metodinės rekomendacijos [Monitoring and evaluation of inequalities in access to Healthcare], Institute of Hygiene. Available online.

