













# **Pharmaceutical Health Information System**

# **PHIS Hospital Report 2009 Draft version**

**Commissioned by the Executive Agency for Health and Consumers** (EAHC) and the Austrian Federal Ministry of Health (BMG)

Straff, report, not to be cited

# **PHIS**

## **Pharmaceutical Health Information System**

# **LITHUANIA**

# **PHIS Hospital Report**

**Draft version, July 2009** 

#### **PHIS Network Participants**

Lithuanian Ministry of Health - Department of Pharmacy: Gita Krukiene, Tomas Alonderis

Vilnius University Hospital: Dalia Knasiene

Kaunas Medical University Hospital: Odeta Jankauskiene

#### **PHIS Pharma Hospital Report – Authors**

Lithuanian Ministry of Health - Department of Pharmacy: Gita Krukiene, Tomas Alonderis

Vilnius University Hospital: Dalia Knasiene

Kaunas Medical University Hospital: Odeta Jankauskiene

#### PHIS Pharma Hospital Report – Editorial Team

Gesundheit Österreich GmbH / Geschäftsbereich ÖBIG, Austria: Simone Morak (Editor-in-Chief), Sabine Vogler

#### Responsible for the PHIS Pharma Hospital Report Template

State Institute for Drug Control SUKL, Slovakia (Leader of Work Package 7: Hospital Pharma): Jan Mazag, Barbara Bilančíková

Gesundheit Österreich GmbH / Geschäftsbereich ÖBIG, Austria: (PHIS Project Leader): Sabine Vogler, Christine Leopold

Haft report. Not to be cited

## **Acknowledgements**

We would like to thank all persons and institutions who have supported the drafting of the Lithuanian PHIS Hospital Pharma report.

Our special thanks goes to Rasa Terbetiene M.D., Senior officer - health care institutions supervision division, State Health Care Accreditation Agency under Lithuanian Ministry of Health.

## **Executive Summary**

To be completed



## **Table of content**

Αc	cknow	ledgements	
E>	kecutiv	ve Summary	V
Ta	able of	content	VI
Lis	st of ta	ables and figures	VII
Lis	st of a	bbreviations	VIII
In	troduc	tion	
	PHIS	research project	
	PHIS	Hospital Pharma	
1	Back	ground	1
	1.1	Definition and scope	1
	1.2		1
	1.3		4
2	Pricir	ng	
	2.1	- M	6
	2.2		
	2.2		7
			9
3	Reim	bursement	10
	3.1	National hospital reimbursement proced	lure10
	3.2	Hospital pharmaceutical formularies	11
4	Cons	sumption of pharmaceuticals	12
5	Evalu	uation	14
	5.1	Monitoring	14
	5.2	Assessment	15
6	Interf	ace Management	15
7	Deve	elopments and Outlook	15
8	Refe	rences and data sources	16

## List of tables and figures

Table 1.1:	Lithuania – Key data on in-patient care, 2000 and 2004–2008	2			
Table 1.2:	Lithuania – Pharmaceuticals, 2000 and 2005–2009	3			
Γable 1.3: Lithuania – Health and pharmaceutical expenditure, 2000 and 2004–2007					
Table 4.1:	Lithuania – Pharmaceutical consumption, 2000 and 2004–2008	12			
Table 4.2:	Lithuania – Top 10 pharmaceuticals by pharmaceutical expenditure and consump 2008	otion 12			
	VO CO				
X					
91.					
91.					
91.					
91.					

### List of abbreviations

ATC Anatomic therapeutic chemical classification

BMG Austrian Ministry of Health

DDD Defined daily doses

DG SANCO Health and Consumer Protection Directorate General

EAHC Executive Agency for Health and Consumers

EU European Union

GDP Gross domestic product

GÖG/ÖBIG Gesundheit Österreich GmbH, Geschäftsbereich ÖBIG /

Austrian Health Institute

HE Health expenditure

HOEXP Health expenditure in hospital

IHHII International Healthcare and Health Insurance Institute

LTL Lithuanian Litas

NCU National currency unit

NHS National health service

Mio. Million

MoH Ministry of Health of the Republic of Lithuania

ÖBIG Österreichisches Bundesinstitut für Gesundheitswesen / Austrian Health

Institute

OECD Organisation for Economic Co-operation and Development

OPP Out-of pocket payments

OTC Over-the-counter pharmaceuticals

PE Pharmaceutical expenditure

PhD Department of Pharmacy under Ministry of Health of the Republic of Lithuania

PHIS Pharmaceutical Health Information System

POM Prescription-only medicines

PPP Pharmacy purchasing price

PPRI Pharmaceutical Pricing and Reimbursement Information project

PRP Pharmacy retail price

SHI Social Health Insurance

SMCA State Medicine Control Agency under Ministry of Health of the Republic of

Lithuania

SPF State Patient Fund under Ministry of Health of the Republic of Lithuania

SUKL Statny Ustav pre Kontrlu Lieciv / State Institute for Drug Control (Slovakia)

THE Total health expenditure

TPE Total pharmaceutical expenditure

VAT Value added tax

WP Work package

#### Introduction

#### PHIS research project

PHIS (Pharmaceutical Health Information System) is a research project commissioned under the call for proposals 2007 in the priority area "health information" of the European Commission, DG SANCO. It has been commissioned by the Executive Agency for Health and Consumers (EAHC) and co-funded by the Austrian Ministry of Health (BMG).

The PHIS project aims at increasing knowledge and exchange of information on pharmaceutical policies, in particular on pricing and reimbursement, in the European Union (EU) Member States, covering both the out-patient and the in-patient sector.

This will be done via different work packages (WP) resulting in the following deliverables:

the PHIS Glossary with key terms related to pharmaceuticals,

the PHIS Library offering country specific information on out-patient and in-patient pharmaceutical pricing and reimbursement for the EU Member States,

the PHIS Indicators and the PHIS Database, containing major data for the developed indicators in the Member States.

the PHIS Hospital Pharma Report with information on pharmaceutical policies in the inpatient sector in the EU Member States, including a price survey.

The PHIS project management is a consortium of the project leader Gesundheit Österreich GmbH, Geschäftsbereich Österreichisches Bundesinstitut für Gesundheitswesen / Austrian Health Institute (GÖG/ÖBIG), which is a research institute situated in Vienna, Austria, and four associated partners:

the Italian Medicines Agency (AIFA),

the International Healthcare and Health Insurance Institute (IHHII), Bulgaria,

SOGETI Luxembourg SA., which is a services provider, and

the State Institute for Drug Control (SUKL), Slovakia

SUKL is the WP leader of Hospital Pharma.

Further key stakeholders are the PHIS Advisory Board covering EU Commission services and agencies and other international organisations, and the PHIS network, which comprises national representatives from competent authorities and further relevant institutions from the EU Member States and associated countries.

The PHIS project runs from September 2008 to April 2011 (32 months). Further information and all deliverables are made available at the PHIS project website http://phis.goeg.at

#### **PHIS Hospital Pharma**

The aim of the work package "Hospital Pharma" is an in-depth investigation of the in-patient sector, as systematic knowledge of pharmaceutical policies in this sector has been rather poor.

The survey is divided in two phases:

Phase 1: General survey

Country reports on pharmaceuticals in hospitals ("PHIS Hospital Pharma Reports"), designed to describe specific pharmaceutical policies in the in-patient sector in the EU Member States (spring 2009)

• Phase 2: Case studies

A specific survey, including a price survey, provided by means of case studies, in a limited number of hospitals in a few countries (autumn 2009).

The final PHIS Hospital Report, covering information from the general survey (phase 1) and the case studies (phase 2), is scheduled for February 2010.

#### Methodology of the general survey

The production of the country-specific PHIS Hospital Pharma Reports is based on three steps:

1. Development of a uniform PHIS Hospital Pharma Report Template

The PHIS Hospital Pharma Report Template offers a homogenous, very detailed structure for describing the pharmaceutical pricing and reimbursement system in the in-patient sector of a country. The Template was developed by SUKL, Slovakia (Work Package leader of Hospital Pharma) in coordination with GÖG/ÖBIG (PHIS project leader) and further members of the PHIS project management. It is based on literature and internet reviews as well as interviews with experts in the hospital sector in the EU Member States. Members of the PHIS network received the draft Template for feed-back, and had an opportunity to discuss and provide personal feed-back during a meeting.

2. Collecting information and data and drafting the PHIS Hospital Pharma Report

The country-specific PHIS Hospital Pharma Reports were written by members of the PHIS network. In order to get the needed information and data, hospital experts were contacted and involved in several countries. They provided information and data in written form and during telephone conservations and personal talks. In some countries the reports (or parts of it) were written by hospital experts. In several countries, the preparatory work for drafting the PHIS Hospital Pharma Reports also included study visits of the authors to hospitals and hospital pharmacies. Information on persons and institutions involved can be found in the

"Acknowledgements" at the beginning of this PHIS Hospital Pharma Report and in section 8 "References and data sources", listing "Literature and documents" (section 8.1) and "Contacts" (section 8.2).

#### 3. Editorial process

The draft PHIS Hospital Pharma Reports were submitted to the project management for review, which was undertaken by SUKL, Slovakia (Work Package leader of Hospital Pharma) in coordination with GÖG/ÖBIG (PHIS project leader). The review focused on checking clarity and consistency in general and with regard to the outline of the Template and terminology (PHIS Glossary). In the course of the editorial process, the reviewers contacted the authors for providing feed-back on language and content, offering suggestions for rephrasing and change and clarified open and/or misunderstanding points.

## 1 Background

### 1.1 Definition and scope

In Lithuania there is a definition of hospitals and hospital care, which corresponds to the OECD definition.

Hospital "ambulatory" services are incorporated into the list of health care services, which are provided by health care establishments, issued by the State Health Care Accreditation Agency under Ministry of Health and are reimbursed by the State Patient's Fund according to established rates.

Subtypes of hospitals as defined by the OECD (general hospitals, mental health and substance abuse hospitals, speciality hospitals) are relevant in Lithuania.

The description on hospital pricing, reimbursement and monitoring in this Hospital Pharma Report refer to all hospitals in Lithuania.

## 1.2 Organisation

The competent authority on accreditation of establishments and supervision of hospitals is the State Health Care Accreditation Agency under the Ministry of Health (Health Care Institutions Licensing Division and Health Care Institutions Supervision Division).

The main task of the Health Care Institutions Licensing Division is to secure safe conditions of providing personal and public health care services in pursuance of licensing health care institutions, laboratories and pathology services of health care institutions. The division manages the licensing of personal and public health care institutions in accordance with legal instruments and register licenses. Another function of the division is to notify legal entities on issuance of licenses to the institutions as well as suspension and cancellation thereof.

The principal duty of the Health Care Institutions Supervision Division is to supervise the observance of licensing terms by the health care institutions. The division performs duties and observations of health care institutions and investigates claims, complaints and suggestions placed by natural persons and legal entities within the range of their competence. One other function of the division is to provide information on supervision of the observance of licensing terms by personal health care institutions and accreditation of legal entities and natural persons in accordance with legal instruments.

It is regulated at a federal level.

The relevant laws regarding hospital care are the following:

- The Law on Health Care System of Republic of Lithuania No I-552 approved on 19 July 1994.
- The Law on Health Care Institution of Republic of Lithuania No I-1367 approved on 6 June 1996.
- The Law on Health Insurance of Republic of Lithuania No I-1343 approved on 21 May 1996
- The Law on Budget institution Republic of Lithuania No I-1113 approved on 5 December 1995.

Table 1.1: Lithuania – Key data on in-patient care, 2000 and 2004–2008

In-patient care	2000	2004	2005	2006	2007	2008
No. of hospitals <sup>1</sup>	190	181	173	174	165	n.a.
Classified according to ownership			0			
thereof public hospitals (including 1 hospital under responsibility of Ministry of Internal Affairs and 1 under Ministry of Justice (jail hospital)	189	171	161	160	158	n.a.
- thereof private hospitals	1	10	12	14	7	n.a.
Classified according to subtypes <sup>1</sup>		X				
- thereof general hospitals	78	79	79	81	75	n.a.
thereof mental health and substance abuses hospitals	13	17	17	17	16	n.a.
thereof speciality (other than mental health and substance abuse) hospitals     including nursing hospitals	99	85	77	76	74	n.a.
No. of acute care beds	34,145	28,972	27,727	27,114	27,476	n.a.
- thereof in the public sector	23,276	18,988	17,945	17,222	17,113	n.a.
- thereof in the private sector	3	66	89	90	80	n.a.
Average length of stay in hospitals	11.2	10.2	10.2	10.0	9.85	n.a.
No. of hospital pharmacies (excluding pharmacies that serve out-patients)	n.a.	62	61	60	61	n.a.
thereof no. of hospital pharmacies that serve out-patients	0	0	0	0	0	0
ordinary community pharmacies on hospital premises	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

<sup>&</sup>lt;sup>1</sup>according to OECD definition and its subtypes

Source: Department of Statistic under Government of Lithuania (<a href="http://www.stat.gov.lt">http://www.stat.gov.lt</a>); Lithuanian Health Information Centre (<a href="http://www.lsic.lt/">http://www.lsic.lt/</a>); pharmacies data received by written communication with SMCA and Lithuanian Health Information Centre

In Lithuania the total number of hospitals is 165 (2007). There are 20 large hospitals (more than 300 beds), 67 middle-sized hospitals (100 to 300 beds) and 78 small hospitals (less than 100 beds).

Specialised individual health care services are rendered by municipal, county and university health care institutions as well as institutions subject to the Ministry of Health.

Municipal, county and institutions subordinate to the Ministry of Health provide secondary and tertiary individual health care services which are divided into out-patient and in-patient services. In-patient care institutions are mostly organised as public institutions however public non-profit-making health care institutions dominate. In 2007 the number of private in-patient health care institutions was 7. Private institutions make agreements with patient funds. This results in services free of charge for patients. In Lithuania the majority of hospitals are public institutions, only a few hospitals are private institutions.

There are three different levels of in-patient care services. The highest (third) level of health care services is provided in the biggest hospitals (university and some municipal hospitals). Second-level in-patient care services are provided in major cities, where specialist care is provided in different medical departments. First-level in-patient care services – the simplest services – can be given in all in-patient health care institutions. Hospitals are distributed throughout the country. In general they have no specialisation besides specific hospitals such as tuberculosis treatment hospitals.

In 2007 the total number of hospitals was 165 (total number of beds of 27,476). Thereof are: 72 general hospitals (town hospitals, district and county hospitals); 4 university hospitals; 14 nursing hospitals; 21 specialised hospitals (6 hospitals of infectious diseases and tuberculosis hospitals, 1 hospital of odontology care, 2 oncology centres; 12 hospitals of mental disorders and neurology hospitals); 29 rehabilitation and 25 other hospitals.

Specialised individual health care services are provided by municipal, county and university health care institutions as well as institutions which are a part of the Ministry of Health. There is 1 hospital under responsibility of the Ministry of Internal Affairs and 1 under Ministry of Justice (jail hospital).

Table 1.2: Lithuania – Pharmaceuticals, 2000 and 2005–2009

Number of pharmaceuticals	2000	2005	2006	2007	2008	2009
Authorised pharmaceuticals in total	6,240	4,435	4,072	3,763	3,852	n.a.
- thereof hospital-only pharmaceuticals	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

n.a. = not available

Note: Data are indicated as of 1 January

Method of counting:

- incl. different pharmaceutical form
- excl. different pack sizes
- incl. different dosages

Source: Data received by written communication with SMCA

Almost all deliveries to hospitals are made by wholesalers. Direct supply by pharmaceutical manufacturers is allowed (no additional wholesaling licence is needed for their own production). According to the Law on Pharmacy, manufacturing and distribution companies can deliver pharmaceuticals directly to hospitals and polyclinics if the demand is for a limited amount (not more than 14 days' supply).

Types of pharmacies in hospitals include: 1) community pharmacies; 2) community pharmacies carrying out preparation activities (magisterial and officinal's pharmaceuticals); 3) hospital pharmacies; 4) hospital pharmacies carrying out preparation activities (magisterial and officinal's pharmaceuticals); and 5) university pharmacies.

According to the Law on Pharmacy (June 2006), pharmacists working either in community pharmacies or in hospital pharmacies need to have a licence for pharmacist's practice, issued by the SMCA.

In out-patient care doctors and family nurses are not entitled to dispense pharmaceuticals.

Hospital pharmacies are set up as a division of a hospital for internal use only. They are not allowed to dispense pharmaceuticals to out-patients: for this purpose there are ordinary community pharmacies in hospitals and polyclinics. Not every hospital has a hospital pharmacy for in-patients. However, the majority of hospitals and polyclinics have ordinary community pharmacies in their premises (no precise data are available). The largest hospitals and polyclinics have more than one community pharmacy.

Hospital pharmacies are funded by hospitals; there are no other ways of funding. Pharmaceuticals are free of charge for in-patients. Hospitals have to confirm the list of pharmaceuticals which they need and purchase themselves this occurs via a public competition procedure.

### 1.3 Funding

Health expenditure (HE) is primarily financed through health insurance contributions, but also through voluntary health insurance (VHI) and out-of pocket payments (OPP). The budget for the Compulsory Health Insurance Fund is drawn up each calendar year by the State Patient Fund (SPF). Compulsory health insurance revenue consists of: (1) compulsory health insurance contributions from and for insured persons; (2) national budget contributions for persons insured with public funds; (3) earnings of institutions providing compulsory health insurance; (4) additional allocations from the national budget; (5) voluntary contributions from natural and legal persons, etc.

Persons, who are not covered by health insurance, only receive urgent medical assistance. For other services they have to pay the prices set by the Ministry of Health. In addition private health insurance is foreseen in the Health Insurance Law. However, it is still not popular in Lithuania and is only used by a small proportion of the population with high income.

All in-patient services covered by compulsory health insurance are fully reimbursed. OPP is only paid for services which are not covered by compulsory health insurance, e.g. cosmetic surgery. Doctors are employees of in-patient health care institutions and are paid by hospitals.

Hospitals are remunerated according to health care services which are provided to the patients (fee-for-service remuneration). Hospitals are funded by the Compulsory Health Insurance Fund; they can either receive money from regional budgets or from health programmes of the Ministry of Health.

In 2007 total health expenditure was LTL 5,609.9 mio.  $/ \in 1,604.7$ mio. pharmaceutical expenditure LTL 1,609.0 mio.  $/ \in 460.3$  mio. There are no data on health expenditure and pharmaceutical expenditure in hospitals available.

All pharmaceuticals for patients are fully reimbursed in hospitals, i.e. the patient does not need to pay any co-payment for medicines during the hospital stay.

Table 1.3: Lithuania – Health and pharmaceutical expenditure, 2000 and 2004–2007

Expenditure (in mio LTL)	2000	2004	2005	2006	2007	2008
Total health expenditure (THE)	2,727.7	3,478.2	4,065.8	4,832.5	5,609.9	n.a.
- thereof THE public	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- thereof THE private	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
THE in hospitals (HOSHE)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- thereof HOSHE public	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- thereof HOSHE private	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total pharmaceutical expenditure (TPE)	618	972	1,135	1,416.7	1,609	n.a.
- thereof TPE public	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- thereof TPE private	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Pharmaceutical expenditure in hospitals (HOSPE)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- thereof HOSPE public	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- thereof HOSPE private	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

HOSHE = health expenditure in hospitals, HOSPE = pharmaceutical expenditure in hospitals, n.a. = not available, THE = total health expenditure, TPE = total pharmaceutical expenditure

Note: Data are indicated as of 31 December.

Source: PPRI Pharma Profile 2008, (Table 1.3 and Table 2.9); Lithuanian Health Information Centre (<a href="http://www.lsic.lt">http://www.lsic.lt</a>); Department of Statistic under Government of Lithuania (<a href="http://www.stat.gov.lt">http://www.stat.gov.lt</a>)

## 2 Pricing

### 2.1 Organisation

#### 2.1.1 Framework

There is no legal framework concerning the pricing policy of hospital pharmaceuticals in Lithuania.

The prices of hospital pharmaceuticals are not regulated in the hospital sector, this means free pricing for pharmaceuticals is applied. Expensive medicines for hospitals may be centrally purchased via procurement by the State Patient Fund (SPF).

In the hospital sector, prices of pharmaceuticals are determined by a public procurement procedure which is regulated by the Law on Public Procurement (new version 22 December 2005) of the Republic of Lithuania (cf. section 2.2.1) In hospitals, funded by the budget of the Compulsory Health Insurance Fund, all medicines are purchased by public procurement without respect to its purpose.

For private hospitals products are purchased independently by the hospitals. If private hospitals have an agreement with the SPF, they can receive the same products which are centrally purchased for medical services.

As already mentioned in the Lithuanian hospital sector there is free pricing; the prices of hospital pharmaceuticals are not regulated. This is the major difference in comparison to the prices of medicines in the out-patient sector, where legal laws regulate them. The prices of hospital pharmaceuticals are set in purchasing documents and fixed in purchasing contracts.

## 2.1.2 Hospital prices

The concept of the "hospital price" corresponds to the pharmacy purchasing price. An official price calculation scheme for hospital pharmaceuticals is not legally valid. The hospital price usually consists of the ex-factory price + wholesale mark-ups + value added tax (VAT).

The standard VAT rate of 18% has been raised to 19% on 1 January 2009. The reduced VAT rate for medicines has been 5% since 2004. Since 1 January 2009 a VAT for non reimbursable medicines of 19% and for reimbursable pharmaceuticals of 5% has been applied. Since 1 July 2009 the VAT has amounted to 19% for all medicines.

Pharmaceuticals which are sold to hospitals are subjected to VAT. A 5% VAT rate was applied until the 1 July 2009. From that time on a 19% VAT rate has been valid to all medicines.

Suppliers sell medicines to hospitals at the wholesale price, including a certain extent of mark-ups. Legal laws do not regulate the suppliers' mark-up. Hospital pharmacies do not add any mark-up. Pharmaceuticals are dispensed to the divisions of hospitals at the pharmacy purchasing price.

Suppliers are not supposed to give any discounts when selling pharmaceuticals to hospitals; they can decide on their own. Discounts can be given in public purchases of the State Patient Fund and in any other form including free goods.

The prices of hospital pharmaceuticals are lower than pharmacy retail prices. Usually, the prices of hospital pharmaceuticals are analogous to wholesale prices of pharmaceuticals or the prices are even lower, depending on the amount of purchase and some other factors.

There is no evidence for that.

Authorities are not aware of price surveys undertaken.

Hospitals are legally not obliged to publish prices of medicines periodically for every competent institution. However, the Ministry of Health, State Patient Fund or the Competition Council in some cases officially ask hospitals to submit information. Hospitals are not committed to provide price information of pharmaceuticals for the public.

### 2.2 Pricing policies

#### 2.2.1 Procurement

Hospitals, funded by the Compulsory Health Insurance Fund, purchase medicines by means of following specific purchasing rules.

Medicines are purchased autonomously by public hospitals via a tendering process. The Law of Public Procurement by the Republic of Lithuania (new version 22 December 2005), the legal laws concerning its realisation, and the rules of Simplified Public Procurement must be followed and requirements provided in purchasing documents need to be fulfilled (e.g. suppliers participating in the purchase have to present the wholesale licence; proposed medicines must be listed in the Republic of Lithuania or European Community medicinal products registers).

As each hospital carries out its own procurement no joint procurements are made. Hospitals have to confirm their list of necessary medicines. Medicines are free of charge for patients and the cost of medicines is included in the price of the medical service.

Expensive hospital medicines are purchased centrally by the State Patient Fund (SPF) under the Ministry of Health (from the Compulsory Health Insurance Fund). This is the only method of reimbursement for expensive pharmaceuticals in Lithuania. Every year, the Council of Compulsory Health Insurance confirms the lists of centrally purchased medicines. These

medicines are used for the treatment of oncology diseases, antiviral medicines to examine a HIV infection, thrombolytic and other diseases. Competition is provided among wholesalers and manufacturers which provide interchangeable products. The SPF monitors delivery and consumption of expensive medicines. These data are collected from all patients.

Hospitals can purchase medicines only from juridical persons who have a wholesale or manufacturing license. To achieve lower prices hospitals negotiate with wholesalers and they always have to take into consideration the aspect of rational management of public resources. Hospitals, which do not have their own manufacturing pharmacy, can purchase extemporal prepared medicines from a public manufacturing pharmacy. This process is regulated by the Pharmaceutical Law (2006) of the Republic of Lithuania.

In hospitals purchasing committees are formed in order to carry out public procurement procedures. For this purpose, experts such as hospital pharmacists, clinical pharmacologists and main physicians may also be involved. These experts only play an advisory role; whereas, the final decision on the purchase is made by the purchasing committee.

After the evaluation of the proposals made by all suppliers and determining the winner, the most relevant criteria for setting the price of medicines is the lowest proposed price. Also the budget size committed for the purchase of medicines and potential therapeutic benefits are important factors.

The frequency of carrying out a public procurement procedure differs from hospital to hospital. Some hospitals sign purchasing contracts for the upcoming financial year. Other hospitals sign contracts for a longer period, providing oriental amounts of purchasing medicines in the contract, but with the possibility to renew the contracts. The validity of purchasing contracts taking into account the renewal process cannot be longer than 3 years. The underlying regulation is the Law of Public Procurement.

The law of Public Procurement does not oblige purchasing partners to publish tenders. Purchasing partners are able to survey proposals, offered by other partners, except for confidential information and commercial secrets. The purchasing contract is made publicly available, indicating the supplier and the sum of the contract in the supplement "Information Reports" of "Valstybės žinios" and in the special edition of the official publication service of the European Community, plus the internet versions of these publications). There is no acceptance to share information about procurement processes among hospitals and their results in Lithuania.

After evaluation by the purchasing partners, there is the possibility to compare prices of medicines with prices, which wholesalers sell to community pharmacies (e.g. Information System "SKS - Vaistai").

#### **2.2.2 Others**

There are no other pricing policies besides procurement.



### 3 Reimbursement

### 3.1 National hospital reimbursement procedure

The Compulsory Health Insurance Fund is the main source of health care financing. The main rules of reimbursement in the hospital sector are stated in the Law of Health Insurance. Reimbursement is organised on the basis of contracts between territorial patient's funds and hospitals. In Lithuania the majority of hospitals are public institutions, only a few hospitals are private institutions.

All in-patient services covered by compulsory health insurance are fully reimbursed by the Compulsory Health Insurance Fund. Costs of pharmaceuticals are included in the fees of medical services. Hospitals are remunerated by territorial patient's funds according to the health care services given to the patients. The Ministry of Health establishes tariffs of the health care services, which are paid from the Compulsory Health Insurance Fund budget. Hospitals which do not make contracts with the territorial patients' funds are not entitled to the resources of the compulsory health fund budget. All patients receiving health care services at those hospitals have to pay for their treatments.

There are no national reimbursement lists of medicines for the in-patient sector in Lithuania. Therefore the positive list in the out-patient sector is not relevant for the in-patient sector. Reimbursement in the out-patient sector differs from reimbursement in the in-patient sector.

All medicines for patients covered by compulsory health insurance are fully reimbursed when the patient is in hospital. The patient does not pay any co-payment for medicines; unless the patient wants a special treatment which is not included in standard treatment algorithms. In this case the patient needs to pay the difference between the standard and the special treatment.

There are limited amounts of allocations from the Compulsory Health Insurance Fund budget assigned to purchase medicines and medical aid products centrally. The State Patient Fund makes a list of reimbursed medicines and medical aid products every year. Usually the State Patient Fund centrally purchases these medicines and medical aid products and allocates them to hospitals. Medicines for treatment of rare diseases are reimbursed from the Compulsory Health Insurance Fund budget as well.

For dispensing medicines to out-patients there are ordinary community pharmacies in the majority of hospitals and polyclinics. The largest hospitals and polyclinics have more than one community pharmacy (cf. section 1.2).

The main rules of reimbursement in the hospital sector are stated in the Law of Health Insurance. All in-patient services for persons covered by the compulsory health insurance are fully reimbursed by the Compulsory Health Insurance fund (patients pay co-payment for medicines; unless they want a special treatment which is not included in the standard

treatment algorithms). The pharmaceutical expenses are included in the price of medical services. Hospitals are remunerated by territorial patient's funds according to the health care services given to the patients. The Ministry of Health establishes prices of the health care services, which are paid by the Compulsory Health Insurance Fund budget. Reimbursement of medicines in hospitals is separate from the out-patient sector.

## 3.2 Hospital pharmaceutical formularies

There are no common hospital pharmaceutical formularies (HPF) in Lithuania. Each hospital has a separate list of medicines which are applied in a hospital.

Each medicine on the HPF is covered by the compulsory health insurance and is fully reimbursed by the Compulsory Health Insurance Fund budget if these medicines are included in the standard treatment algorithms. If patients choose special treatments (medicines) it is not included in the standard treatment algorithm, patient must pay the difference between standard and special treatment.

There is no regulation for setting, developing and updating hospital pharmaceutical formularies in Lithuania. Each hospital has its own regulation.

Each hospital has a pharmaceutical and therapeutic committee (PTC) which is responsible for the formation of the HPF. The committee consists of clinical pharmacists, pharmacists, main physicians in the respective fields (surgeons, therapeutics, and gynaecologists), physicians of microbiology laboratories and management representatives.

Applications for the inclusion of medicines to or exclusion of medicines from the hospital formulary are submitted by hospital departments directly and are regularly updated by the PTC. Inclusion criteria include therapeutic and economic benefit.

There is only one HPF in each hospital. International non-proprietary names (active substances) and forms of medicines (e.g. solutions for injection, tablets etc) are listed in the HPF.

The hospital formulary is only used internally and it is mandatory for physicians. Physicians are not entitled to prescribe medicines which are not included in the hospital formulary. Medicines that are not included in the hospital formulary are only prescribed in exceptional cases.

## 4 Consumption of pharmaceuticals

This section provides information and data on consumption (utilisation) of pharmaceuticals in hospitals at a national level and informs on data availability at hospital level:

Table 4.1: Lithuania – Pharmaceutical consumption, 2000 and 2004–2008

Pharmaceutical consumption	2000	2004	2005	2006	2007	2008		
Annual pharmaceutical consumption in total								
- in packs	n.a.	78,807.85	89,952. 58	68,179.09	86,790.58	n.a.		
- in DDD (Defined Daily Doses)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
Annual pharmaceutical consumption in hospitals								
- in packs	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
- in DDD	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		

DDD = Defined Daily Doses, n.a. = not available

Source: PPRI Pharma Profile 2008, Table 2.3; SMCA

Hospitals can provide data on total pharmaceuticals consumption. There is no information about the possibility to quantify pharmaceutical consumption by hospital departments in Lithuania. However, the largest hospitals keep count of pharmaceutical consumption by department. All prescribed medicines are documented in individual patient files.

Data of pharmaceutical consumption in hospitals are not centrally collected in Lithuania.

Table 4.2: Lithuania – Top 10 pharmaceuticals by pharmaceutical expenditure and consumption 2008

<b>Total Consumpt</b>	ion (DDD)	Expenditure (Eur)		
INN	DDD/1000 inhabitants/da y	INN	Reimbursed expenditure (Eur)	
Ramipril	38.94	Salmeterolum et Fluticasonum	6,332,057	
Perindopril	36.56	Nebivololum	5,294,621	
Trimetazidin	28.59	Budesonidum et Formoterolum	4,891,317	
Lorazepam	19.77	Triptorelinum	4,241,633	
Diclofenac	17.91	Lercanidipinum	3,908,867	
Nebivolol	17.11	Olanzapinum	3,905,475	
Ibuprofen	16.32	Insulinum aspartum	3,807,302	
Xylometazolin	15.07	Clopidogrelum	3,560,175	
Omeprazol 13.55		Perindoprilum et Indapamidum	3,547,616	

<b>Total Consumpt</b>	ion (DDD)	Expenditure (Eur)				
INN DDD/1000 inhabitants/da y		INN	Reimbursed expenditure (Eur)			
Enalapril	13.27	Risperidonum (depo)	3,201,741			

Source: Authors

### 5 Evaluation

## 5.1 Monitoring

The State Medicine Control Agency (SMCA) receives information from distribution companies about the amount of all medicines which were sold. SMCA does not receive information about pharmaceutical consumption from pharmacies. Data on how many packages of medicines are sold to pharmacies and hospitals (without prices) are collected by the SMCA and are received from wholesalers. Pharmaceutical consumption is expressed in defined daily doses (DDD) according to the Anatomic Therapeutic Chemical (ATC) classification of medicines proposed by the World Health Organization (WHO).

The SPF collects information about all dispensed reimbursable medicines. Data is available for individual consumption monitoring. Information about the consumption of non-reimbursed pharmaceuticals is not collected.

There is no monitoring system of pharmaceutical consumption in hospitals in Lithuania. Each hospital is responsible for the rational management of resources. The management of hospital sets down the rules for the monitoring process.

Calculation of the expenditure of pharmaceuticals for a given disease is not computerised.

A specific information system "SKS - Vaistai" provides the possibility to get the number of medicines available on market.

IT is used in hospital pharmacies. The accounting process of medicines is computerised in Lithuania.

Sterile products are prepared in a few hospital pharmacies. Extemporaneous medicinal products are prepared in hospital pharmacies of almost every hospital. Centralised Intravenous Admixture Service is not organised in hospital pharmacies.

Hospital pharmacists are responsible for stock control and suitable storage of medicines. They order, store, prepare and dispense medicines. Pharmacists inform physicians about their assortment of medicines. The pharmaceutical and therapeutic committee is associated with the use of medicines (e.g. making decision for including/excluding medicines from the hospital pharmaceutical formulary). A clinical pharmacist participates and gives recommendation for an optimal medicine therapy of a patient.

There are no legal requirements for traceability of ordinary medicines in the in-patient sector. The requirements of traceability of advanced therapy medicines are stated in the Regulation (EC) No 1394/2007 of the Ministry of Health No.V-207, 2009.

#### 5.2 Assessment

In Lithuania hospitals do not carry out cost-effectiveness analysis. However, some statistical data which is collected in hospitals and can be used for a cost–effectiveness analysis, exists.

There are no mandatory cost-containment measures required in Lithuanian hospitals. The hospital management can decide about the most suitable cost-containment measures in the hospital. Commonly used cost-containment measures include allocation of pharmaceutical budgets to each hospital department, hospital pharmaceutical formularies mandatory for physicians or determination of prescription order of special medicines (e.g. antibiotics).

Each hospital is responsible for the rational use of its resources and for the achievement of their individual targets. It is a very hard assignment, to reach the individual goals

## 6 Interface Management

The order of transferring information on pharmacotherapy in out-patient as well as in-patient care is obligatory for all health care institutions. At hospital discharge the patient receives a hospital form (electronically or in paper) where the needed medication for treatment in the out-patient sector is indicated.

## 7 Developments and Outlook

Recently the Ministry of Health is drafting the quality standards of advanced therapy medicines under doctor's assignment for individual patients (hospital exemption), the security, traceability, requirements of co vigilance in keeping advanced therapy of medicines and the procedure for issuing permits for their production with reference to Regulation (EC) No 1394/2007.

### 8 References and data sources

- 1. Krukiene G, Alonderis T. Pharmaceutical Pricing and Reimbursement Information, Lithuania 2008. Available via URL: <a href="http://ppri.goeg.at">http://ppri.goeg.at</a>
- 2. Garuoliene K, Alonderis T, Marcinkevičius M. Pharmaceutical policy and the effects of the economic crisis: Lithuania. Eurohealth. ISSN 1356-1030. 2011; 17(1): 1-4.