Published Online May 2016 in SciRes. <a href="http://www.scirp.org/journal/jss">http://www.scirp.org/journal/jss</a> <a href="http://dx.doi.org/10.4236/iss.2016.45005">http://dx.doi.org/10.4236/iss.2016.45005</a>



# Analysis of Medicinal Products' Expenditure Reimbursed by the National Health Insurance Fund in Bulgaria for Outpatient Care

## Petya Trendafilova<sup>1</sup>, Tatyana Benisheva<sup>2</sup>, Borislav Borissov<sup>3</sup>

<sup>1</sup>Department of Health Technology Assessment, Faculty of Public Health, Medical University—Sofia, Sofia, Bulgaria

<sup>2</sup>Department of Health Policy and Management, Faculty of Public Health, Medical University—Sofia, Sofia, Bulgaria

<sup>3</sup>Prescriptia Ltd., Sofia, Bulgaria

Email: petiadt@yahoo.com

Received 30 March 2016; accepted 13 May 2016; published 16 May 2016

Copyright © 2016 by authors and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY).





Open Access

## **Abstract**

The aim of this study is to trace and analyze the public reporting of medicinal products' expenditure paid by the National Health Insurance Fund (NHIF) for outpatient care since its establishment (June 2000) in Bulgaria. The analysis of financing from the NHIF for the period 2000-2016 shows an increasing expenditure of medicinal products for outpatient care. There is a big increase of the medicinal products' spending paid by the NHIF budget for 2012 - 495.5 million BGN (which means 104.5 (21%) million BGN more than the previous 2011. As a result of this analysis it was found out that there is scarce fragmentary chronological public reporting traceable by indicators for outpatient care expenditure since the National Health Insurance Fund establishment. The reports published on the NHIF's website provide partial information only about total expenditure for health insurance payments for medicinal products for outpatient care.

## **Keywords**

Analysis, Expenditure for Medicinal Products, Outpatient Care, NHIF

### 1. Introduction

With an aging of the population, the population's needs for health services have increased in the European Un-

How to cite this paper: Trendafilova, P., Benisheva, T. and Borissov, B. (2016) Analysis of Medicinal Products' Expenditure Reimbursed by the National Health Insurance Fund in Bulgaria for Outpatient Care. *Open Journal of Social Sciences*, **4**, 27-32. http://dx.doi.org/10.4236/jss.2016.45005

ion (EU-27) [1].

Since 2000, funding of medicines for outpatient care is done by the National Health Insurance Fund (Art. 55 of the Health Insurance Act). This method of funding has been valid until nowadays.

Reporting on the financing of the National Health Insurance Fund (NHIF) for the period 2000-2016 shows a continuous increase of medicinal products expenditure for outpatient care and the total cost for inpatient care. The reports published on the website of the NHIF indicate only total spending for medicines for outpatient care.

Bulgarian citizens should have publicly available information about how these funds are spent and accounted for through the year. It should be possible for everybody to compare different indicators, trends to be traceable and to warrant transparency and control of spending.

According to the Law on the NHIF's budget, funds are voted by the Parliament every year. The amounts of the funds are based on an analysis of the funds from the previous calendar year, according to publicly available documents promulgated pursuant the legal requirements of the Health Insurance Act. Funds for reimbursement of medicines for outpatient care are also voted as part of the general budget of the NHIF. For the period from 2000 (when the NHIF was established) to 2016, they represent a significant portion (between 6% and 35%) of the NHIF budget and their share in absolute value has been continuously increasing [2]-[4].

#### 2. Methods

The annual reports of the National Health Insurance Fund and the Ministry of Health have been studied for the period 2000-2016, as well as the budget legislation of the Republic of Bulgaria and the NHIF for the above mentioned 16-year period.

Scientific methods:

## 2.1. Method of Critical Analysis and Synthesis of Scientific Literature on the Matter

15 annual reports of the National Health Insurance Fund and the Ministry of Health have been studied and analyzed for the period 2000 - 2016, as well as 5 Decisions of the National Assembly for adoption the reports on the implementation of the NHIF budget.

## 2.2. Documentary Method

Official documents for the period 2000-2016 are studied in the field of public health.

## 2.3. Historical Analysis

Budgetary performance for the period of 16 years is covered.

#### 2.4. Graphical Methods for Analysis and Visualization of Published Data

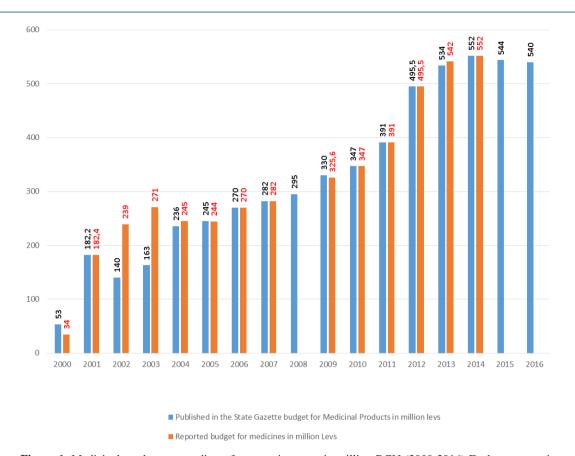
Standard column graphs are used for presenting the dynamic of drug expenditures in the respected years.

#### 3. Results and Discussion

A proper official analysis based on the published documents of the NHIF cannot be traced because there is no analogical financial indicators over the years 2000-2016. The reports of the NHIF on drugs contain mainly the normative base, the inspections, sanctions and fines in the outpatient and hospital care [5]. On the other hand, the published indicators over the years are different, untraceable and incomparable. Access to information currently applies to the voted funds for outpatient care medicines and the funds granted by the Ministry of Health (MoH) for expensive medicines to treat socially significant diseases, based on Ordinance 34 of MoH.

These funds have remained relatively constant over the period 2013-2016, as a slight rising (3.2%) can be observed from 534 mln BGN for 2013 to 552 mln BGN in 2014. For the period 2014-2016 even a strange reduction in the adopted budget by 24 millionBGN (2.1%) for year 2016 can be stated (**Figure 1**). In fact, the medicinal products cost was updated during the year and the voted amount at the beginning of the year did not respond to the value at the end of the same year. Updating of the budget is expected to take place at the end of the year, as it has been the usual practice.

According to the Health Insurance Act, since June 2000 the NHIF has covered the inpatient and outpatient



**Figure 1.** Medicinal products expenditure for outpatient care in million BGN (2000-2016) Exchange rate: 1 Euro = 1.95583 BGN.

care. For the last 16 years the trends are positive about the growth of the reimbursement budget, which NHIF pays for medicinal products. The cost for medicines for the period is continuously increasing, which might be explained with the entry of more and more new innovative drugs, the aging population and the need for continuous supportive treatment of some rare and socially significant diseases [3] [4].

The first Drug List reimbursed by the NHIF was promulgated in 2000 in the State Gazette No 55. Although budgeted funds are amounting to 55 million BGN for half a year, the drugs' costsare only 34 millionBGN or only 61.8% of the budget that has been spent. Obviously, the medicinal practitioners were not aware of the newly introduced reimbursement system with medicinal products.

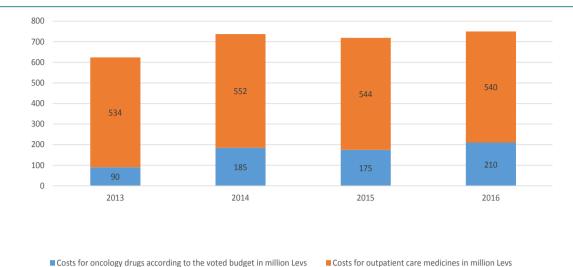
Ten years later (in 2010) voted budget for medicines reimbursed partially or fully by NHIF reaches 347 million BGN or 10 times more compared to the first year when the National Health Insurance Fund started operating. Is there a relevant tenfold improvement in the quality of health and life of the Bulgarian population, resulting in higher costs can hardly be considered because reimbursement of medicinal products is not tied to the health outcome assessment [3] [4] (**Figure 2**).

The Drug List of the NHIF since 2000 according to which the medicinal products for outpatient care are reimbursed is based on the general criteria set out in the National Framework Agreement (NFA). Only authorized medicinal products for use in the country are reimbursed. Criteria for inclusion and exclusion of these drugs on the list of NHIF did not exist legally until 2004 [6]-[9].

Obviously after 2003 the reason for regulation of the outpatient care costs is the introduction of the Positive Drug List (PDL) because NHIF begins to comply with the voted funds for outpatient care medicines [10]-[15].

Chronological data about the amounts reimbursed of these funds, published in the official reports of the NHIF and the website cannot be found. There are no traceable public analyses on the NHIF budget spending for drugs for outpatient care in those years [4].

For the last 2015, and for 2008 there are no published expenditure reports for outpatient care medicines and



**Figure 2.** Oncology costs compared to medicinal products expenditure for outpatient care for 2013-2016 (in million BGN).

for those that are 100% reimbursed by the National Health Insurance Fund as well. These medicines are 60% - 70% of all outpatient drug cost for which there must be a strict and continuous public monitoring.

There are no analyses and no public data from the NHIF how much drugs are imported compared to those locally produced; the proportion of generic drugs to innovative ones that NHIF annually reimburses, as well as the number of patients with social significant diseases that are 100% reimbursed from the NHIF [5] [13]-[27].

#### 4. Conclusion

There is no control over the detailed public reporting of the NHIF budget execution. Moreover, the reasons for increasing of the amount of funds that NHIF pays for drugs for outpatient care are not publicly clarified.

According to the scarce and inconsistent reports in the field of public health from the Ministry of Health and the National Health Insurance Fund cannot be given an answer if the constantly rising costs of medicinal products for the past sixteen years are spent efficiently.

On the other hand, the NHIF reports cannot determine whether this leads to improving the quality of life of patients and healthcare of the population. An open question remains: whether the public health expenditure, including for medicines, are spent effectively and what kind of control measures are implemented in the country.

It is necessary to create a single legal public annual reporting for health services expenditure and costs of medicinal products for outpatient care by introducing specific legal parameters comparable for different years. On these parameters have to be based the decisions to vote and redirect new funds for the healthcare system within the calendar year and for the subsequent years.

The cost report results for the last 16 years since the health insurance system in Bulgaria has been operating are partial, inadequate and scarce.

Obviously, there is no clear political will and competence to manage effectively the Bulgarian health care system. It is necessary to establish strict financial discipline, indicator cost control and accountability to be publicly available.

As a result, the analysis found out that no detailed chronological public accountability exists for the surveyed period 2000-2016. There have not been traceable cost indicators for outpatient care spending since creating of the National Health Insurance Fund in 2000 up to now.

### References

- [1] Kajdiz, R. and Bojnec, St. (2014) Determinants of Public Expenditures for Medicinal Products in Non-Hospital Consumption in Slovenia. *Economics*, **3**, 27-34. https://dspace.tul.cz/bitstream/handle/15240/7084/EM 03 14 3.pdf?sequence=1
- [2] Benisheva, T. and Trendafilova, P. (2008) Regulatory Framework for Medicines Provision in the Hospitals. Journal of

- *Healthcare Management*, **8**, 56-65. (Бенишева, Т. and Трендафилова, П. (2008) Нормативна рамка за осигуряване на лекарствени продукти в лечебните заведения. *Здравен мениджмънт*, **8**, 56-65).
- [3] Benisheva, T. (2010) Are the Public Funds Spent by NHIF Reported. *Medical Meridians*, Volume I, **3**, 3-10. (Бенишева, T. (2010) Отчитат ли се публично финансовите средства, изразходвани от НЗОК. *Медицински Меридиани*, том I, **3**, 3-10.)
- [4] Benisheva Dimitrova, T. and Trendafilova, P. (2011) Analysis of Drug Costs Paid by NHIF for the Period 2000-2010. Journal of Health Policy and Management, 3, 49-54. (Бенишева - Димитрова, Т. and Трендафилова, П. (2011) Анализ на разходите за лекарства, заплащани от НЗОК за периода 2000-2010 г. Здравна политика и мениджемънт, том 11, 3, 49-54.)
- [5] Annual Reports of the National Health Insurance Fund (Годишни отчети на H3OK). http://www.nhif.bg/web/guest/74
- [6] Decision of the Council of Ministers from 6.11. 2008 for Acceptance of the Report on the Implementation of the NHIF budget for 2007 (2008) Prom. SG. 98 14.11. 2008. (Решение на НС от 6.11.2008 г. за приемане отчета за изпълнението на бюджета на НЗОК за 2007 г. (2008) Обн., ДВ, бр. 98 от 14.11.2008 г.)
- [7] Decision of the National Assembly for adoption of the report on the implementation of the NHIF budget for 2004, 2005, 2006 (2008) Issued by the National Assembly promulgated. SG. No. 42 from 25 April 2008. (Решение на НС за приемане отчета за изпълнението на бюджета на НЗОК за 2004, 2005, 2006. (2008). Издадено от Народното събрание, Обн. ДВ. бр.42 от 25 Април 2008г.)
- [8] Decision of the National Assembly for Adoption the Report on the Implementation of the NHIF Budget for 2009. (2010) The Decision Is Adopted by the 41th National Assembly on December 1, 2010 and Is Stamped with the Official Seal of the National Assembly. (Tsetska Tsacheva Решение на НС за приемане отчета за изпълнението на бюджета на НЗОК за 2009. (2010) Решението е прието от 41-ото Народно събрание на 1 декември 2010 г. и е подпечатано с официалния печат на Народното събрание. Председател на Народното събрание: Цецка Цачева.)

  <a href="http://www.nhif.bg/c/document\_library/get\_file?plid=11276&folderId=13219&name=DLFE-4210.pdf">http://www.nhif.bg/c/document\_library/get\_file?plid=11276&folderId=13219&name=DLFE-4210.pdf</a>
- [9] EURO-MED STAT Group (2003) EURO-MED-STAT: Monitoring Expenditure and Utilization of Medicinal Products in the European Union Countries: A Public health Approach. *European Journal of Public Health*, **13**, 95-100.
- [10] Law on State Budget of the Republic of Bulgaria for 2011 (2011) Valid from 01/01/2011 Promulgated SG. 99, 17 December 2010. amended SG. №31, 15 April 2011. (Закон за държавния бюджет на Република България за 2011 г. (2011) В сила от 01.01.2011 г.Обн. ДВ. бр.99 от 17 Декември 2010г., изм. ДВ. бр.31 от 15 Април 2011г.)
- [11] Law on Drugs and Pharmacies in Human Medicine. SG/36/1995. All Amendments and Additions Incl. Decisions of the Constitutional Court. SG/13/2007. (Закон за лекарствата и аптеките в хуманната медицина. ДВ/36/1995. вс. изм. и допълн. вкл. и решения на конституционния съд до ДВ/13 /2007.)
- [12] Law on Medicinal Products in Human Medicine. SG / 31/2007. Amendments and Additions Incl. SG/12/2011. (Закон за лекарствените продукти в хуманната медицина. ДВ/31/2007. изм. и допълн. вкл. ДВ/12 /2011.)
- [13] Law on the NHIF Budget for 2002 (2001) SG. 110, December 21, 2001. (Закон за бюджета на НЗОК за 2002 г. (2001) ДВ, бр. 110 от 21 декември 2001 г.)
- [14] Law on the NHIF Budget for 2003 (2002) SG. 119, December 27, 2002. (Закон за бюджета на НЗОК за 2003 г. (2002) ДВ, бр. 119 от 27 декември 2002 г.)
- [15] Law on the NHIF Budget for 2004 (2003) SG. 114, December 30, 2003. (Закон за бюджета на НЗОК за 2004 г. (2003) ДВ, бр. 114 от 30 декември 2003 г.)
- [16] Law on the NHIF Budget for 2005 (2004) SG. 115, December 30, 2004. (Закон за бюджета на НЗОК за 2005 г. (2004) ДВ, бр. 115 от 30 декември 2004 г.)
- [17] Law on the NHIF Budget for 2006 (2005) SG. 102, December 20, 2005. (Закон за бюджета на НЗОК за 2006 г. (2005) ДВ, бр. 102 от 20 декември 2005 г.)
- [18] Law on the NHIF Budget for 2007 (2006) SG. 105, December 22, 2006. (Закон за бюджета на НЗОК за 2007 г. (2006) ДВ, бр. 105 от 22 декември 2006 г.)
- [19] Law on the NHIF Budget for 2008 (2007) SG. 113, December 28, 2007. (Закон за бюджета на НЗОК за 2008 г. (2007) ДВ, бр. 113 от 28 декември 2007 г.)
- [20] Law on the NHIF Budget for 2009 (2008) SG. 109, December 23, 2008. (Закон за бюджета на НЗОК за 2009 г. (2008) ДВ, бр. 109 от 23 декември 2008 г.)
- [21] Law on the NHIF Budget for 2010 (2010) Promulgated SG. 99, 15 December 2009, Amendments SG. 59 from July 31, 2010. Amendments SG. 62 from 10 August 2010. )Закон за бюджета на НЗОК за 2010 г. (2010) Обн. ДВ. бр.99 от 15 Декември 2009г., изм. ДВ. бр.59 от 31 Юли 2010г., изм. ДВ. бр.62 от 10 Август 2010г.
- [22] Law on the NHIF Budget for 2011 (2010) Promulgated SG. No.98, December 14, 2010. (Закон за бюджета на НЗОК

- за 2011 г. (2010) Обн. ДВ. бр. 98 от 14 Декември 2010г.)
- [23] Law on the NHIF Budget for 2012 (2011) Promulgated SG. No.99, December 16, 2011. (Закон за бюджета на НЗОК за 2012 г. (2011) Обн. ДВ. бр.99 от 16 Декември 2011г.)
- [24] Law on the NHIF Budget for 2013 (2012) Prom. SG. No. 101, December 18, 2012. (Закон за бюджета на НЗОК за 2013 г. (2012) Обн. ДВ. бр.101 от 18 Декември 2012 г.)
- [25] Law on the NHIF Budget for 2014 (2013) Prom. SG. No.106, December 10, 2013. (Закон за бюджета на НЗОК за 2014 г. (2013) Обн. ДВ. бр.106 от 10 Декември 2013 г.)
- [26] Law on the NHIF Budget for 2015 (2014) Prom. SG. No.107, December 24, 2014. (Закон за бюджета на НЗОК за 2015 г. (2014) Обн. ДВ. бр.107 от 24 Декември 2014 г.)
- [27] Law on the NHIF Budget for 2016 (2015) Prom. SG. No.98, December 15, 2015. (Закон за бюджета на НЗОК за 2016 г. (2015) Обн. ДВ. бр.98 от 15 Декември 2015 г.)