



Budget impact analysis of naltrexone in the treatment of alcohol-dependent patients in Poland

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Introduction

Alcohol dependence is a cluster of physiological, behavioural, and cognitive phenomena in which the acquisition and consumption of alcohol begin to dominate over other previously important life activities¹. According to the data of the State Agency for the Prevention of Alcohol Related Problems² and the information contained in Polish publications^{3,4,5} about 2-3% of the Polish population suffer from alcohol dependence.

Naltrexone hydrochloride is an oral specific long-acting opioid antagonist which works by competitive binding to receptors located in the central and peripheral nervous system. Naltrexone is indicated as part of a comprehensive programme of treatment against alcoholism to reduce the risk of relapse, as support treatment in abstinence, and to reduce the craving for alcohol.

Objective

Evaluation of the financial consequences of naltrexone reimbursement for the Polish National Health Fund (NHF) budget.

Methods

Perspective and time horizon:

The budget impact analysis was conducted for a 2-year time horizon from two perspectives: National Health Fund (NHF) and the patient.

Target population:

Population of alcohol-dependent adult patients who receive psychotherapy in dependence treatment centres and are eligible for treatment with naltrexone:

- on average 2.5% of Polish population suffer from alcohol dependence^{2,3,4,5};
- on average 12.5% of alcohol-dependent persons are treated in dependence treatment centres in Poland¹;
- on average 17.5% of treated alcohol-dependent patients would be eligible for naltrexone therapy⁶.

	2011	2012
Population of alcohol dependent adults in Poland	776 218	777 283
Population of alcohol dependent adults in Poland treated in dependence treatment centres	97 027	97 160
Population of alcohol dependent adults in Poland treated in dependence treatment centres eligible for naltrexone therapy	16 980	17 003

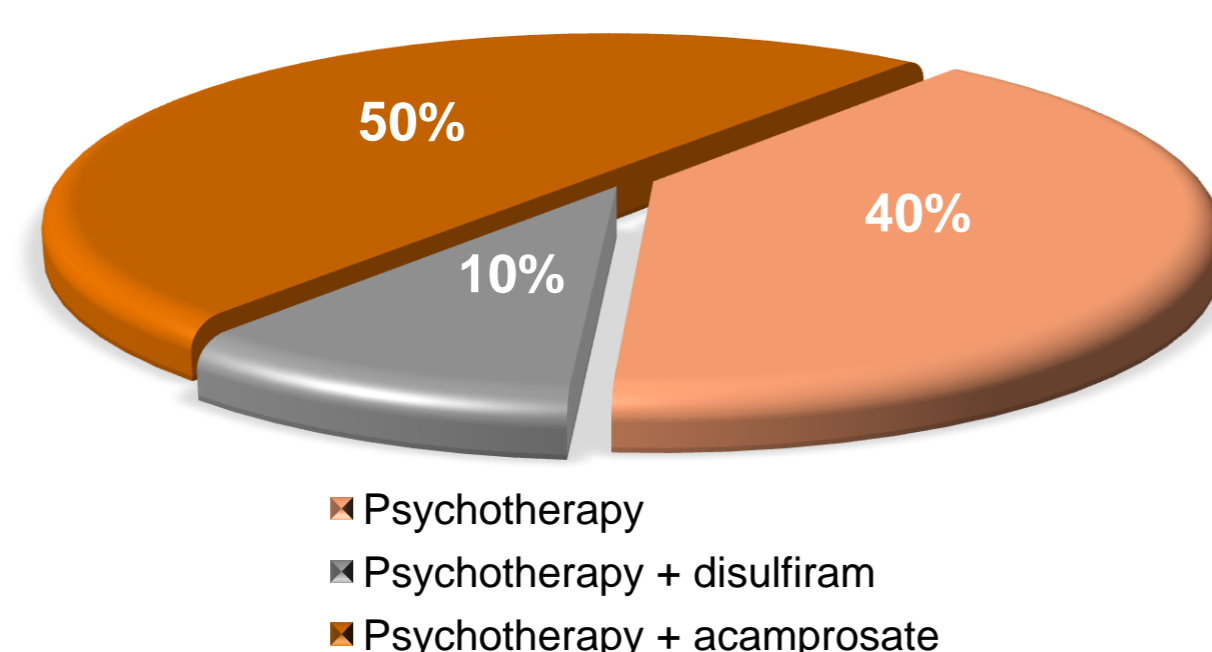
Scenarios:

Two scenarios were compared:

- present – naltrexone is not reimbursed as supportive treatment for psychotherapy in alcohol-dependent patients;

Number of patients eligible for naltrexone therapy: present scenario		
Treatment method	2011	2012
Psychotherapy	6 792	6 801
Psychotherapy + disulfiram	1 698	1 700
Psychotherapy + acamprosate	8 490	8 502
Psychotherapy + naltrexone	0	0
Total	16 980	17 003

Diagram 1. Structure of treatment of patients eligible for naltrexone therapy - present scenario



- new – naltrexone is reimbursed within the catalogue of guaranteed health services in the treatment of alcohol-dependent patients.

Number of patients eligible for naltrexone therapy: new scenario		
Treatment method	2011	2012
Psychotherapy + naltrexone	16 980	17 003

Cost data (PLN, 2010):

In the analysis, the costs incurred by the NHF and by the patient associated only with drugs that support psychotherapy in the considered target population were taken into account. The costs associated with psychotherapy were not considered, as they do not differentiate the compared interventions.

Substance	Defined Daily Dose (DDD) [g]	NHF payment/DDD [PLN]	Patient's payment/DDD [PLN]
Naltrexone	0.05	7.57*	0.00*
Disulfiram	0.2	0.00	0.41
Acamprosate	2	0.00	9.24

* in case of naltrexone reimbursement within the catalogue of guaranteed health services

In the calculations of the total costs borne by the NHF and by the patient, 100% compliance rate for alcohol-dependent patients treated in dependence treatment centres was assumed. According to Summaries of Products Characteristics, it was assumed that naltrexone therapy lasts 3 months, disulfiram therapy - 6 months, and acamprosate therapy – 1 year.

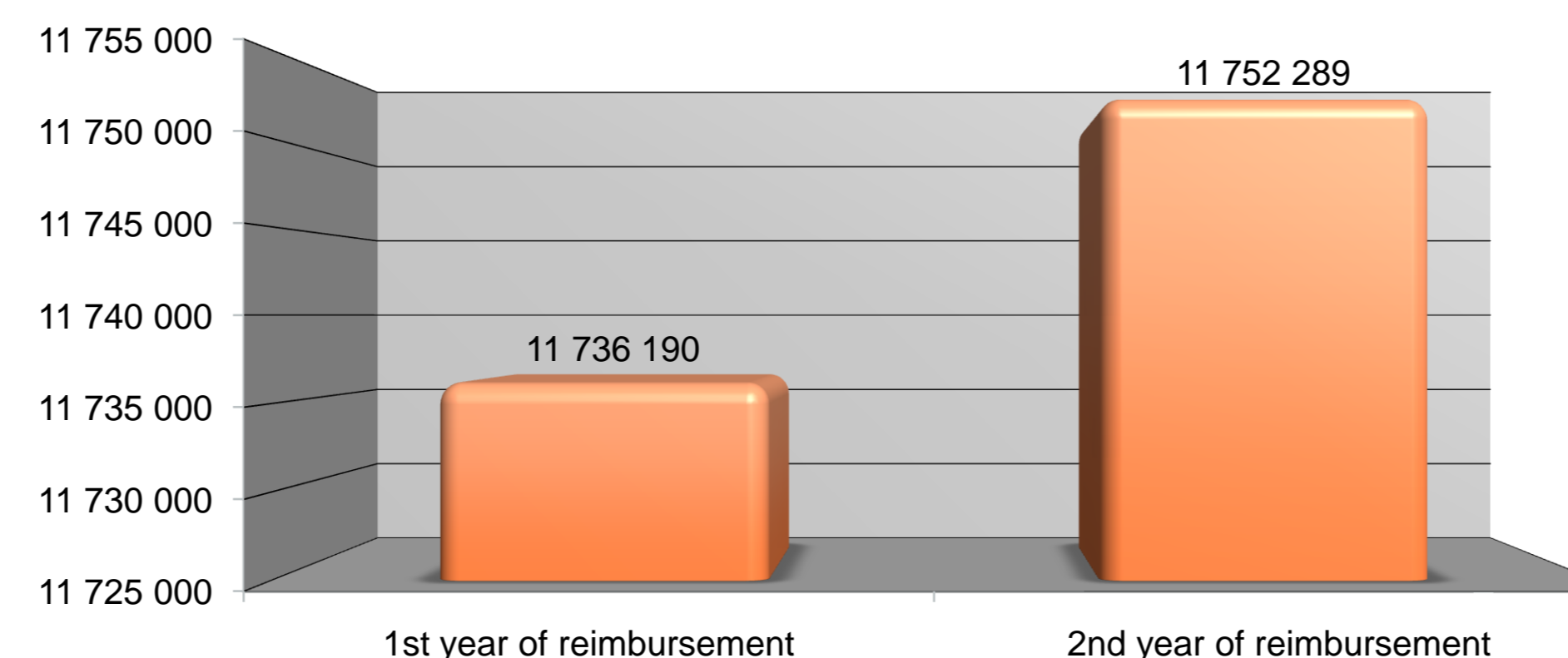
Results

Perspective of the National Health Fund:

Assuming reimbursement of naltrexone, the annual expenses from the budget of the Polish NHF for drugs that support psychotherapy in the population of adult alcohol-dependent patients treated in dependence treatment centres will increase by PLN 11.74 million in the first and PLN 11.75 million in the second year of reimbursement in comparison with the expenditure incurred in the present scenario.

Parameter	Results of Budget Impact Analysis: National Health Fund perspective	
	1 st year of reimbursement	2 nd year of reimbursement
Present scenario [PLN]	0	0
New scenario [PLN]	11 736 190	11 752 289
Incremental expenditure/savings [PLN]	11 736 190	11 752 289
Additional expenditure/savings in relation to previous year [PLN]	-	16 100

Diagram 2. Budget Impact Analysis - incremental expenses from NHF perspective [PLN]

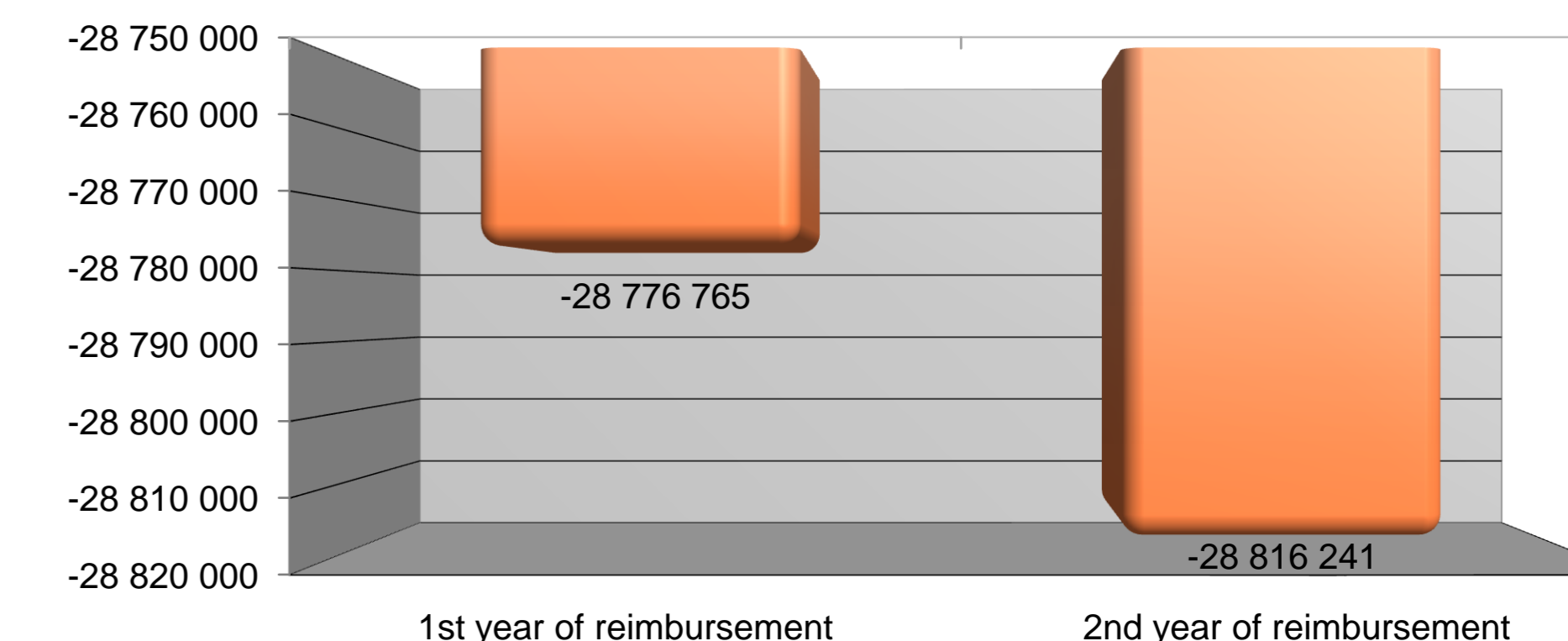


Patient's perspective:

In case of reimbursement of naltrexone, the annual expenses from the patient's perspective for drugs that support psychotherapy in the population of adult alcohol-dependent patients treated in dependence treatment centres will decrease by PLN 28.78 million in the first and PLN 28.82 million in the second year of reimbursement in comparison with the expenditure incurred in the present scenario.

Parameter	Results of Budget Impact Analysis: patient's perspective	
	1 st year of reimbursement	2 nd year of reimbursement
Present scenario [PLN]	28 776 765	28 816 241
New scenario [PLN]	0	0
Incremental expenditure/savings [PLN]	-28 776 765	-28 816 241
Additional expenditure/savings in relation to previous year [PLN]	-	-39 476

Diagram 3. Budget Impact Analysis - incremental expenses from the patient's perspective [PLN]



The 2010 weighted average exchange rate quoted by the National Bank of Poland: €1 = PLN 3.9946.

Conclusions

Due to the fact that currently none of the drugs supporting psychotherapy in the treatment of alcohol dependence is reimbursed in Poland, the results of Budget Impact Analysis showed significant changes to the public payer's (NHF) as well as the patient's expenditures. If the reimbursement of naltrexone is introduced, the annual expenses from the budget of the National Health Fund would increase in the first and the second year of reimbursement. On the other hand, from the patient perspective, reimbursement of naltrexone will bring significant cost savings in the first and second year of the refund. A positive decision on reimbursement for naltrexone would provide patients addicted to alcohol with access to safe and effective therapy that would not only enable them normal functioning in the family and society, but also increase the quality of life by improving their self-esteem and emotional condition.

References

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