PRAXIS Working Paper No *3*

Financing of Mental Health in Estonia

Triin Habicht, Maie Thetloff

Tallinn 2003

Translator: Signe Joasoo

The purpose of this publication is to give a general overview of the financing of mental health in Estonia, whereas health care services' benefits, compensations for medicinal products and costs of welfare services are dealt with in more detail.

This report consists of three chapters. The first chapter gives an overview of health care services' benefits that are mainly financed from the health insurance budget. The costs of primary health care, specialised medical care and nursing care are separately analysed. Second chapter of the overview deals with benefits of reimbursed medicinal products that similarly to health services' benefits are financed from the health insurance budge. The third chapter describes the financing system of welfare services of people with special mental needs.

PRAXIS Centre for Policy Studies
Estonia pst. 3/5, 10143 Tallinn, Estonia
tel (+372) 640 9000
fax (+372) 640 9001
e-mail praxis@praxis.ee

Financing of mental health in Estonia

Triin Habicht, Maie Thetloff

Contents

Introduction

The purpose of this publication is to give a general overview of the financing of mental health in Estonia, whereas health care services' benefits, compensations for medicinal products and costs of welfare services are dealt with in more detail. Introduction gives a short overview of financing sources of given field and relevant legislation. These mental health fields the financing of which is not dealt with in this paper are also pointed out.

Health care financing in Estonia is carried out through different sources, the most relevant from which is the state budget (that in its turn is distributed between the Ministry of Social Affairs, the Ministry of Justice and health insurance), county or city budget, private sector and patient's contribution. In recent years, the calculation of National Health Accounts in Estonia has been performed pursuant to the OECD regulations and based on these calculations the public expenditure on health in 2001 was 5.5% from GDP (total health expenditure in 2001 was 5 353.8 million EEK). It is worth mentioning that in recent years the percentage of total health expenditures has decreased, e.g. in 1999 the respective indicator was 6.5%. According to the data of 2001 (Ministry of Social Affairs, 2002) 77.8% of all health expenditure was financed from the state budget, whereas the share of general and central government from expenditure was 8.2%, the share of local governments 2.6%, and the share collected by health insurance through social tax 67%. The remaining 22% came from private sector, the main share of which was formed by household expenditures (18.8%).

The system of social health insurance in Estonia exists since 1992 when the Republic of Estonia Health Insurance Act was passed. A new Health Insurance Act regulating health insurance is effective since October 2002. Pursuant to this act and Estonian Health Insurance Fund Act, Estonian Health Insurance Fund (henceforth Health Insurance Fund) organizes health insurance in Estonia that covers 94% of the total population. Health insurance budget is formed by 13% from 33% of social tax that is paid from employees' wages by employers. From all the persons covered by insurance, 45% pay health insurance tax, in addition to this the state pays the health insurance part of the social tax for 4% of insured people, the remaining 51% equal to insured persons without personal contribution. In the end of 2002, the number of insured people was 1 284 thousand, when the number of total population amounted to 1 361 thousand people. Insurance coverage is different by the health insurance regions (see Appendix 1).

Health insurance means are collected from all regions (the map of health insurance regions is given in Appendix 2) into one integral budget. The resources for health insurance regions are allocated according to the number of insured people (*crude capitation*) in each region, meaning that the existence of resources is guaranteed also in poorer regions. Allocation of resources to medical institutions and specialities takes place on the basis of historical use of health services (insurance regions and providers are also compared) and queues.

The financing of health care services is regulated by different acts: Health Services Organisation Act (RT[1]I 2001, 50, 284), Health Insurance Act (RT I 2002, 62, 377), Estonian Health Insurance Fund Act (RT 2000, 57, 374), Social Tax Act (RT 2000, 102, 675) and Medicinal Products Act (RT 1996, 3, 56). The Law of Obligations Act (RT I 2001, 81, 487) regulates the financial relationship between a doctor and a patient. Mental Health Act (RT I 1997, 16, 260) regulates the organisation of psychiatric care defining the financial obligations of the state and local government in the organisation of psychiatric care. Pursuant to the law health care institutions, physicians and other specialists with appropriate activity licences may provide psychiatric care. Preventive activities for mental disorders are organised by the Ministry of Social Affairs. Local governments must guarantee the accessibility of necessary social services for people with mental disorders. The law also provides that in order to get psychiatric care the patient may turn directly to specialist for outpatient consultation without the family doctor's referral.

In addition to health care another very important field in mental health is welfare that is regulated besides the above-mentioned legislation also by the Social Welfare Act (RT I 1995, 21, 323). Financial resources allocated from the state budget for national welfare of people with mental disorders are divided between county governments based on the number of people who need welfare services and also taking into consideration the extent of services provided in counties.

Prevention and health promotion activities are financed from the Health Insurance Fund budget and national public health programmes belonging to the administrative field of the Ministry of Social Affairs. At present, none of the public health programmes is directly aimed at mental health. Neither is any specific disease prevention programme related to mental health. In 2003, the Health Insurance Fund has planned 848 thousand EEK (i.e. 13% of the health promotion budget) in its budget for mental health promotion projects.

This paper does not deal with the amounts that go for the provision of first aid and emergency care through emergency medical aid. This field is financed from the state budget, but presently it is not possible to specify how many visits are made due to mental health problems. It is estimated that ca. 2.8% of the emergency medical aid calls are related to mental disorders. In 2003, 157.7 million EEK has been allocated from the state budget for emergency medical aid. Regarding the proportion of calls made due to mental disorders, we can estimate that 4.3 million EEK is connected with the costs of mental health emergency medical aid.

Costs of incapacity for work in case of mental disorders may be quite notable, but this report does not touch upon this topic. Temporary disability payments in Estonia come from the health insurance budget, but these are not directly linked to person's diagnosis that would help to differentiate specific morbidity due to mental disorders and thereby absence from work and costs of payable benefits.

One part of social insurance system, the prolonged incapacity for work and disability is not thoroughly dealt with in the framework of this report. Appendix 2 gives the social benefits payable in case of mental disorders to 16-year-old and older

[1] RT – *Riigi Teataja, The State Gazette*

persons by paid amounts and persons granted benefits in 2002. In the year 2002, the total paid amount was 396 744 thousand EEK, whereas the amount paid on the occasion of mental disorders was 1 531 thousand EEK (i.e. 0.4% from the total paid amount).

This report does not deal with people's expenses spent on specialist consultations outside the health insurance system like for example visiting the private doctor or psychologist, the costs of non-prescription pharmaceuticals and reimbursed medicinal products have not been assessed either.

This report consists of three chapters. The first chapter gives an overview of health care services' benefits that are mainly financed from the health insurance budget. The costs of primary health care, specialised medical care and nursing care are separately analysed. Second chapter of the overview deals with benefits of reimbursed medicinal products that similarly to health services' benefits are financed from the health insurance budge. The third chapter describes the financing system of welfare services of people with special mental needs.

1. Health services' benefits

Health Insurance Act and other laws created on its basis determine more precisely the payment for health services. In 2002, the total health insurance budget was 4 682 million EEK, whereas 3 074 million EEK were prescribed for health services (66% from the budget of health insurance benefits), 772 million EEK for medicinal products (16% from the budget of health insurance benefits) and 804 million EEK for temporary incapacity for work (17% from the budget of health insurance benefits). Figure 1 describes the expenditure of health insurance benefits by types of benefits since 1996. The expenditure of health insurance benefits has considerably increased year by year, but benefits for medicinal products have increased the most (in 1996-2002 nearly five times). This overview deals in more detail with health services benefits and benefits for medicinal products. It is not possible to assess the cots of temporary incapacity for work caused by mental disorders, as the person's diagnosis is no longer marked on the certificate of incapacity.

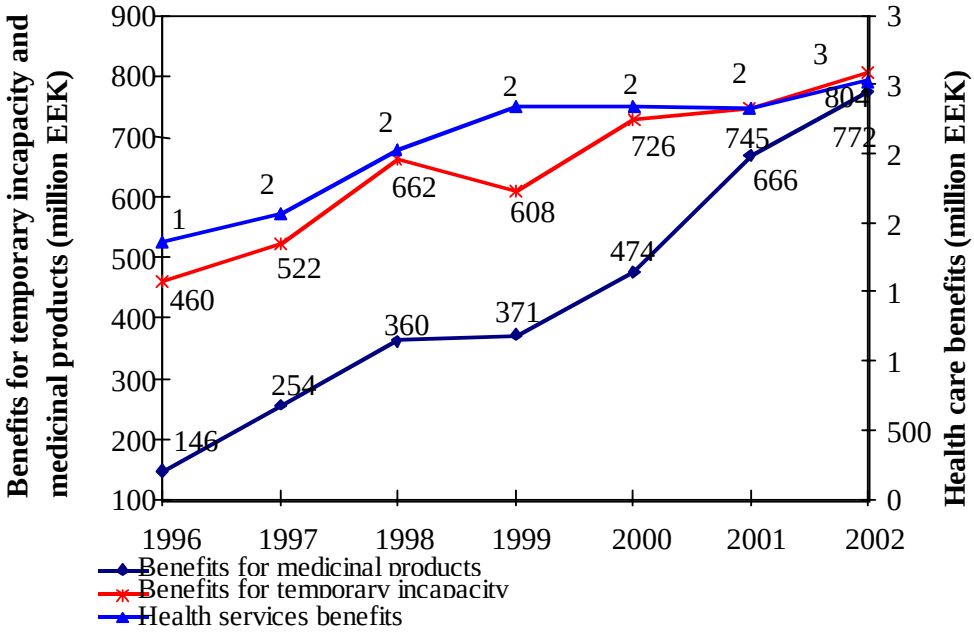


Figure 1. Expenditure of health insurance benefits in 1996-2002 (million EEK)

The financing of service providers from the budget of health insurance benefits takes place through the financing contracts of medical treatment. Health Insurance Fund signs the financing contracts of medical treatment with service providers. The conract establishes the extent of means to be received from the health insurance budget for the next year and in addition to this the cost of an average treatment case and number of treatment cases by specialities is agreed upon. However, the payment for each treatment case is implemented on the basis of submitted invoices. All conducted health services are marked on the treatment invoice pursuant to the list of health services that establishes reference prices for different services.

The list of health services consists of different ways of reward like examinations, bed days (by different specialities), integrated prices, out-patient visits, etc. All in all, the list includes ca. 1800 different positions. Health Insurance Fund assumes the obligation to pay the fee only for persons having health insurance and only to the extent given in the list of health services.

One rather important change since the end of 2002 is the establishment of patient's co-payment maximum rates by the Health Insurance Act. As the act indicates various possibilities for visit fees and bed day fees, several medical institutions have used this possibility to get additional resources. In 2003, the maximum rate of specialist visit is still EEK 50 and the bed day fee is EEK 25 per day, up to10 subsequent days per one treatment case. It has not been assessed today how big is the resulting cash flow for psychiatric care, as the institutions have implemented the possibilities differently.

Persons not covered by health insurance, will have to pay for the provided health services themselves. Theoretically it is possible that treatments cost of people not covered by health insurance will be paid from local government budgets, but this is up to each region to decide. The costs of emergency care of people not covered by health insurance will be covered from the state budget.

The following parts of this chapter will discuss the financing of primary health care, specialised medical care and nursing care related to mental disorders. It primarily concerns the health insurance budget, but in case of specialised medical care the costs of people not covered by health insurance that are financed from the state budget have been pointed out separately.

1.1. Primary health care

In Estonia the financing of primary health care takes place on the basis of capitation fee in combination with other types of remuneration. Other types of remuneration include: starting expenses that are meant for the procurement of equipment necessary for family doctor's work and training; additional fee for distance when the nearest family doctor's practice is located in the distance of 40 km; additional fee in the extent of 18.4% from the capitation fee for conducting clinical investigations and medical procedures not included in the capitation fee. Thus, family doctors are not paid for services separately aimed at psychiatric care, but receive funding on the basis of above-mentioned fees. Because of the financing system the treatment costs of mental disorders may be regarded in primary care only as estimated. In order to do so we have to proceed from the number of patient consultations with diagnosis F00-F99 according to the International Classification of Diseases-10 (ICD-10) and the average consultation cost. In 2002, the family doctor's average consultation cost was EEK 88 that was derived by dividing the primary care total costs (exc. for the additional funds for medical research) by the total number of consultations. Using this calculation the total consultation costs of patients with mental disorders in primary care are ca. 9 million EEK (see Table 1). Average consultation costs per one insured person vary by regions of health insurance nearly 2.5 times. Primary health care costs on mental disorders are exceptionally low among the insured people of Ida-Viru health insurance department

Table 1. Family doctor's consultation costs in case of mental disorders by health insurance regions

Health insurance region	Number of persons consulted	Number of consultations	Percentage of all consultations, %	Costs (thousand EEK)	Costs per one consulted person	Costs per one insured person (EEK)
Harju	18 821	35 768	2	3 148	167	6,3
Eastern-Viru	3 363	6 848	1	603	179	3,7
South-Eastern	4 983	10 051	3	884	178	8,9
Western	2 839	5 896	3	519	183	7,5
Pärnu	6 207	12 642	3	1 112	179	9,3
Rakvere	4 929	10 209	3	898	182	9,2
Tartu	10 111	20 939	3	1 843	182	8,0
Total	**51 253**	**102 356**	**3**	**9 007**	**176**	**7,0**

It is possible to view separately the use of additional funds in case of patients with mental disorders (see Table 2). 1 million EEK of additional funds for medical research was spent on patients with mental disorders that formed 2% of the total additional funds for medical research. The proportion of funds spent on mental disorders does not vary considerably by health insurance regions. Analysing the costs per one insured person, it can be seen that the differences are nearly double. Costs per one insured person have been the lowest in the Western department (EEK 0.5 per insured person) and the highest in Rakvere (EEK 0.9).

Table 2. Use of family doctor's funds for medical research procedures in case of patients with mental disorders

Health insurance region	Number of person consulted	Total costs (thousand EEK)	Costs per one consulted person	Percentage from total 18% of costs	Costs per one insured person (EEK
Harju	18 821	351	19	2	0,7
Ida-Viru	3 363	88	26	1	0,5
South-Eastern	4 983	57	11	2	0,6
Western	2 839	35	12	1	0,5
Pärnu	6 207	95	15	2	0,8
Rakvere	4 929	90	18	2	0,9
Tartu	10 111	142	14	2	0,6
Total	**51 253**	**858**	**17**	**2**	**0,7**

Table 3 points separately out by ICD-groups what are patients' mental disorders the family doctors most frequently come into contact with. In cost accounting both the consultation costs and medical research costs have been taken as a basis. It is evident that the majority of costs (nearly 80%) are related to treatment cases belonging to the diagnosis groups F3 (mood affective disorders) and F4 (neurotic, stress-related and somatoform disorders). The importance of the rest of disease groups in primary care is already considerably lower.

Table 3. Breakdown of primary care treatment costs by different mental disorders

Diagnosis Group	Name	Number of person consulted	Total costs (thousand EEK)	Costs per one person	Costs per one consulted person
F0	Organic mental disorders	2 211	418	189	4
F1	Mental and behavioural disorders due to psychoactive substance abuse	879	157	176	2
F2	Schizophrenia, schizotypal and delusional disorders	1 727	449	260	5
F3	Mood affective disorders	18 243	3 791	208	38
F4	Neurotic, stress-related and somatoform disorders	21 401	4 074	190	41
F5	Eating disorders, non-organic sleep disorders, sexual dysfunction	3 627	542	150	5
F6	Disorders of adult personality and behaviour	67	14	211	0
F7	Mental retardation	795	132	166	1
F8	Disorders of psychological development	615	71	115	1
F9	Behavioural emotional disorders with onset usually occurring in childhood or adolescence	1 689	220	130	2
Total		**51 254**	**9 865**	**192**	**100**

All in all the in 2002 the amount spent on people with mental disorders in primary care was ca. 10 million EEK from which 10% was paid on the basis of medical researches and procedures and the remaining 90% from the general funds of the practice. Assessing on the basis of costs, family doctor mainly deals with the treatment of mood affective disorders and neurotic, stress-related and somatoform disorders.

1.2. Specialised medical care

1.2.1. Insured people

The remuneration of service providers in psychiatric specialised care in in-patient medical institutions takes mainly place on the basis of bed days. Here, certain characteristic factors and changes in recent year have been pointed out, the influence of which is not yet reflected in the data for the year 2002. As for the bed day fees the change occurred in the beginning of 2003 when maximum allowed number of bed days was diminished (e.g. the number of days in the extent of which health insurance fund assumes the obligation to pay) and at the same time the service of acute psychiatry bed day was introduced. Payable reference prices of both positions increased in comparison with previous prices (earlier the price of a psychiatric care bed was EEK 394). Nowadays, the main remuneration possibility is “the psychiatric care bed” in case of which the maximum allowed number of bed days is 20 days (previously 35 days) and the reference price is EEK 500. There is a separate service

for the treatment of acute condition "Acute psychiatry" that is applied in case of involuntary treatment and here maximum remuneration up to 14 days and a price of EEK 680 for a bed day is allowed. Such a change in the list of health services was made so that patients with less serious condition should be treated rather in out-patient institutions and mainly patients with more serious condition should be hospitalized (this accounts for the increased average fee per day).

In case of out-patient psychiatry the principal way of paying to the health service provider is the consultation fee. The list of health services differentiates between the psychiatrist's consultation (price EEK 120) and psychologist's consultation (price EEK 95). Starting from 2003, a new service has been added to the list – consultation of psychiatric treatment team consisting of two specialists (price EEK 141) that provides an additional possibility for developing out-patient psychiatric care.

There are only few services in the list of health services for medical research and procedure that are meant directly for use in psychiatric care; these are mainly psychotherapy sessions for different target groups (one patient, group of patients, a family). Psychiatrists may also provide other services that are not directly linked with psychiatry, but are necessary for diagnosing and treating a disease.

The costs of specialised medical care in the treatment of people with mental disorders can be assessed in two ways: looking at the treatment costs of people with F-diagnosis (notwithstanding which specialist has submitted the relevant invoice with main diagnosis) or the costs of psychiatry (these may include also patients with other main diagnoses). As the treatment costs of psychiatry are predominantly (99%) related to treatment cases where the mental disorder is the main diagnosis, the cost breakdown of psychiatry is not separately analysed here. Cost breakdown of psychiatry by health insurance regions has been given in Appendix 3. Next, the costs of treatment cases are dealt with, where the main diagnosis falls under the category of mental disorder (F00 – F99). This approach allows to involve more extensively these mental disorders with which different specialities come into contact with. These treatment cases have been taken into consideration where the mental disorder is the main diagnosis and therefore these cases have not been considered with when the patient's main diagnosis is something else and the accompanying diagnosis is mental disorder. For that reason the actual total costs of mental disorders may be somewhat higher. From the treatment costs of mental disorders 87% of psychiatry, 4% of pediatrics, 3% of therapy, 2% of neurology and the remaining 4% of other specialities' contract volume was covered. This overview does not analyse separately the costs of medical rehabilitation that in case of mental disorders amounted to 900 thousand EEK in 2002.

Table 4 points separately out the costs of in-patient (incl. day care) and out-patient care. In 2002, the total costs of out-patient specialised medical care were 670 million EEK, from which 4.4% constituted the treatment of mental disorders. However, the total costs of in-patient specialised medical care were 2 277 million EEK and the part assigned for mental disorders formed 4% from it. All in all, 121 million EEK were spent on treatment cases with F-diagnosis in 2002, incl. 30 million EEK on out-patient treatment that is 25% of specialised medical care costs. When comparing the regions of health insurance it becomes evident that the importance of out-patient care in Eastern-Virumaa is considerably lower than in other regions.

Tabel 4. Costs of out-patient and in-patient care by regions of health insurance

Health insurance region	Out-patient (thousand EEK)		In-patient (thousand EEK)		Total (thousand EEK)		Share of specialised out-patient care, %	
	All specialities	Incl. psychiatry	All specialities	Incl. psychiatry	All specialities	Incl. psychiatry	All specialities	Incl. psychiatry
Harju	11 387	7 791	29 935	27 542	41 322	35 333	28	22
Eastern-Viru	2 656	1 878	16 649	15 956	19 305	17 834	14	11
South-Eastern	2 585	1 917	7 482	6 846	10 067	8 763	26	22
Western	1 849	1 366	5 492	4 937	7 341	6 303	25	22
Pärnu	2 830	2 104	7 835	7 016	10 666	9 120	27	23
Rakvere	2 172	1 449	6 574	5 857	8 746	7 306	25	20
Tartu	6 317	4 814	17 149	16 266	23 466	21 080	27	23
Total	**29 796**	**21 319**	**91 116**	**84 421**	**120 913**	**105 740**	**25**	**20**

In case of specialised medical care it is essential to analyse also how big is the cost per one insured person. Expecting the relatively homogeneous incidence of mental disorders in the seven regions of health insurance, the costs per insured person should be similar. On the basis of data brought in table 5, it can be seen that the highest costs per insured person are in the department of Eastern-Virumaa that is due to big proportion of in-patient care.

Table 5. Costs of out-patient and in-patient specialised medical care of mental disorders by regions of health insurance

Health insurance region	Number of insured (thousands)	Out-patient (EEK)	In-patient (EEK)	Total (EEK)
Harju	503	23	59	82
Eastern-Viru	165	16	101	117
South-Eastern	99	26	75	102
Western	69	27	80	106
Pärnu	120	24	65	89
Rakvere	98	22	67	89
Tartu	230	27	75	102
Total	**1 284**	**23**	**71**	**94**

In most cases the regions of health insurance comprise several counties that need not have similar background and therefore the sole comparison of regions may be too general. The following table 6 describes the costs of specialised medical care of mental disorders per one insured person by counties. Also the proportion of out-patient care has been pointed out that was quite similar by departments (with the exception of Eastern-Viru), but extensive differences can be noticed by counties.

Table 6. Costs of specialised medical care of mental disorders per one insured person by counties

County	Percentage of out-patient specialised care, %	Costs of specialised care per insured person (EEK)	Costs of in-patient care per one insured person (EEK)	Total costs of specialised care per one insured person (EEK)
Tallinn	29	24	61	85
Harjumaa (exc. Tallinn)	23	17	55	72
Hiiumaa	33	30	61	91
Eastern-Virumaa	14	16	101	117
Jõgevamaa	32	30	62	92
Järvamaa	18	18	85	103
Läänemaa	16	22	112	134
Western-Virumaa	30	25	58	83
Põlvamaa	30	32	77	109
Pärnumaa	32	26	56	82
Raplamaa	15	16	90	106
Saaremaa	33	30	60	90
Tartumaa	34	29	56	86
Valgamaa	21	21	79	100
Viljandimaa	14	22	133	155
Võrumaa	26	25	71	96
Total	**25**	**23**	**71**	**94**

Previously, the costs of specialised care by insured people were observed. Such an approach gives a good overview how much financial resources have been spent in one or another region for providing help to people with mental disorders. But in order to see the distribution of funds between treated people, the treatment costs per treated people must be observed (see Table 7, comparison of counties is given in Appendix 4). One person may have several doctors providing treatment within one year. Out-patient treatment costs are the lowest in the region of Eastern-Viru. As the importance of out-patient specialised psychiatric care is also the lowest there, it is probable that less complicated cases receive out-patient treatment in this region (one person may have several accounts during a year). Looking at out-patient and in-patient care together, it can be seen that the highest costs per treated person are among the insured people of the Eastern-Viru region. As we noticed previously in Table 4, mental disorders receive relatively more in-patient treatment in the Eastern-Viru region and this causes higher treatment costs. In other departments the costs per treated person do not differ that much.

Table 7. Costs of specialised care of mental disorders per treated person

Health insurance region	Out-patient (EEK)		In-patient (EEK)		Total (EEK)	
	Number of people	Per person	Number of people	Per person	Number of people	Per person
Harju	29 646	384	3 222	9 291	32 868	1 257
Eastern-Viru	9 129	291	1 937	8 595	11 066	1 745
South-Eastern	7 543	343	1 062	7 045	8 605	1 170
Western	4 656	397	656	8 372	5 312	1 382
Pärnu	7 164	395	918	8 535	8 082	1 320
Rakvere	5 762	377	730	9 006	6 492	1 347
Tartu	15 308	413	1 902	9 016	17 210	1 363
Total	**79 208**	**376**	**10 427**	**8 738**	**89 635**	**1 349**

The breakdown of out-patient and in-patient specialised care costs can be brought out also by different mental disorders. Table 9 illustrates the breakdown of out-patient and in-patient care costs by diagnosis groups. In out-patient care the highest costs are related to group F4 (neurotic, stress-related and somatoform disorders) that form one quarter of total out-patient care costs. Next come the out-patient costs of diagnosis groups F3 (mood affective disorders) and F2 (schizophrenia, schizotypal and delusional disorders). The highest costs of in-patient care (41%) are connected with the diagnosis group F2 (schizophrenia, schizotypal and delusional disorders). From the in-patient care costs of mental disorders 17% is connected with diagnosis group F3 (mood affective disorders) and 15% with F0 (organic disorders).

Table 9. Breakdown of out-patient and in-patient specialised care treatment costs by different mental disorders

Diagnosis group	Name	Out-patient, %	In-patient, %
F0	Organic mental disorders	10	**15**
F1	Mental and behavioural disorders due to psychoactive substance abuse	5	7
F2	Schizophrenia, schizotypal and delusional disorders	**17**	**41**
F3	Mood affective disorders	**18**	**17**
F4	Neurotic, stress-related and somatoform disorders	**25**	11
F5	Eating disorders, non-organic sleep disorders, sexual dysfunction	2	1
F6	Disorders of adult personality and behaviour	1	1
F7	Mental retardation	4	3
F8	Disorders of psychological development	12	1
F9	Behavioural emotional disorders with onset usually occurring in childhood or adolescence	7	2

Next, the financing by different remuneration types is analysed. Table 8 gives the percentage of different types used in out-patient and in-patient psychiatric care. As already mentioned, consultation fees form the highest percentage in in-patient care, i.e. 77%. In comparison with the average of all specialities, this is nearly twice as big

(39% on the average). The percentage of medical researches and procedures is about 20% that is two and a half times less than the average of all specialities (52%).

In case of in-patient care the rate of remuneration based on bed days is very high, i.e. 92% (47% on the average in active care). The amount for medical researches in psychiatry is nearly eight times less in comparison with the average of in-patient specialised care (respectively 5% and 38%).

Table 8. Breakdown of specialised medical care of mental disorders by types of fee

Type of fee	Out-patient, %	In-patient, %	Total, %
Consultations	77	0	19
Bed days	0	92	69
Researches, procedures	20	5	9
Other	3	3	3

Rates of different types of fee may change in the nearest future, as new types of fees that were added in 2003 should enable to change the proportion of outpatient and in-patient care in psychiatric care and this in its turn should allow to change the rates of previously described different ways of remuneration. At the same time, the main impact of new services should be the increase of the importance of out-patient care in psychiatric care that will enable to treat more patients also within the limits of the same budget.

1.2.2. People not covered by insurance

Here we have to take into consideration the fact that the whole previous part of this paper discussing the costs of specialised medical care only dealt with the costs of people covered by health insurance. Emergency care is the right (pursuant to the Health Services Organisation Act) of each citizen residing in the territory of the Republic of Estonia). Pursuant to the law, emergency care means health services that are provided by health care professionals in situations where postponement of care or failure to provide care may cause the death or permanent damage to the health of the person requiring care. Mental Health Act also stresses that all persons in the territory of Estonia are provided with emergency psychiatric care. Emergency psychiatric care is provided according to the state of health of a person through emergency medical aid, out-patient care or in-patient care. In case of persons not covered by health insurance their costs of emergency psychiatric care are reimbursed from the state budget. Starting from the 2002, it is possible to track the treatment costs of these persons through the health insurance database. In 2002, the treatment costs of people with mental disorders not covered by health insurance added up to 2.5 million EEK (from which out-patient care formed 5%). In 2002, the total costs of people not covered by health insurance amounted to 61 million EEK from which the treatment costs of mental disorders formed 4%.

In analysing the costs of treated people not covered by health insurance per person, it becomes evident that in out-patient care the costs per person were 165 EEK and in in-patient care 3024 EEK. In case of people covered by health insurance these amounts

were respectively 376 EEK and 8738 EEK, but we have to keep in mind also the fact that only emergency care is provided to people not covered by health insurance.

Table 10 illustrates the breakdown of emergency care costs of people not covered by health insurance by different mental disorders. The biggest number of people and largest amount of funds is related to mental and behavioural disorders due to psychoactive substance abuse which use 44% of in-patient care funds (in insured people only 7%) and 54% of out-patient care funds (in insured people the respective number was 17%). The treatment of schizophrenia, schizotypal and delusional disorders uses 36% of in-patient care funds (in insured people the respective percentage was 41%).

Table 10. Breakdown of treatment costs of out-patient and in-patient specialised care by different mental disorders

Diagnosis group	Name	Out-patient		In-patient	
		Number of people	Amount of health services (thousand EEK)	Number of people	Amount of health services (thousand EEK
F0	Organic mental disorders	42	6	21	97
F1	Mental and behavioural disorders due to psychoactive substance abuse	380	71	537	1 042
F2	Schizophrenia, schizotypal and delusional disorders	89	14	112	868
F3	Mood affective disorders	70	9	32	153
F4	Neurotic, stress-related and somatoform disorders	184	27	70	158
F5	Eating disorders, non-organic sleep disorders, sexual dysfunction	2	0,2	1	5
F6	Disorders of adult personality and behaviour	17	2	12	58
F7	Mental retardation	16	2	5	11
F8	Disorders of psychological development				
F9	Behavioural emotional disorders with onset usually occurring in childhood or adolescence			1	1
	Total	**800**	**132**	**791**	**2 392**

All in all the costs of specialised care of people covered by health insurance in case of mental disorders were 29.8 million EEK in out-patient care, 9.1 million EEK in in-patient care and 0.8 million EEK in rehabilitation care. Including the costs of rehabilitation care of 0.9 million EEK also in specialised medical care, the total costs of specialised care were 122.6 million EEK. The share of out-patient care is 25%, but it will probably increase in the future as the variety of out-patient services grows. In case of mental disorders the costs of emergency

care of people not covered by health insurance were 2.4 million EEK, that was related to in-patient care to the extent of 95%. In 2002, the total costs of specialised medical care of both insured people and people not covered by insurance were 125 million EEK.

1.3. Nursing care

In addition to specialised medical care one very important type of medical care is nursing care the importance of which is growing in Estonia. It has to be borne in mind that this chapter only discusses nursing care that is financed by the means of health insurance. At the moment, the nursing care budget forms ca. 2% of the budget of specialised medical care. In 2002, nearly 2.3 million EEK (see Table 11; the comparison by counties is given in Appendix 5) was spent on the nursing care of patients with mental disorders that is approximately 2% of the costs of specialised medical care spent on mental disorders. All over Estonia, slightly more than 200 people were provided the nursing care service in 2002. Probably this is causing the very uneven distribution of treatment costs between the regions of health insurance, being the highest 3.6 EEK per one insured person in Tartu region and the lowest 0.7 EEK in the Eastern-Viru region (the difference is five-fold). In the same way also the treatment costs of treated people by regions differ greatly – 22.5 thousand EEK in the Tartu region and 2.5 thousand in the Western region (here the difference is already ninefold). It also has to be taken into consideration that possibilities of nursing care differ by regions.

Table 11. Breakdown of nursing care costs in case of mental disorders

Health insurance region	Total (thousand EEK)	Costs per one insured person (EEK)	Costs per one treated person (EEK)
Harju	885	1,8	11 068
Eastern-Viru	111	0,7	7 405
South-Eastern	78	0,8	2 998
Western	54	0,8	2 488
Pärnu	127	1,1	7 453
Rakvere	220	2,3	8 145
Tartu	833	3,6	22 522
Total	**2 309**	**1,8**	**10 308**

Table 12 describes the nursing care costs by different mental disorders. More than 70% of people who have been provided nursing care are older than 65 years and therefore it is completely probable that the main part of treatment costs (i.e. 59%) is connected with the treatment of organic disorders. As for the costs, the second significant disease group is schizophrenia, schizotypal and delusional disorders on which 30% of the nursing care costs of mental disorders are spent.

Table 12. Breakdown of nursing care costs by different mental disorders

Diagnosis group	Name	Total number of people	Total (thousand EEK)
F0	Organic mental disorders	150	1 364
F1	Mental and behavioural disorders due to psychoactive substance abuse	18	84
F2	Schizophrenia, schizotypal and delusional disorders	22	704
F3	Mood affective disorders	17	97
F4	Neurotic, stress-related and somatoform disorders	13	35
F6	Disorders of adult personality and behaviour	1	3
F7	Mental retardation	3	23
Total		**224**	**2 309**

In case of mental disorders the nursing care costs are 2.3 million EEK. It is mainly related to the treatment of organic mental disorders and schizophrenia, schizotypal and delusional disorders

2. Compensations for medicinal products

Compensation of medicinal products in Estonia has been organised through the list of compensated medicinal products, in which the 50%, 75%, 90% and 100% rates may apply with regard to medicinal products entered in the list. Health insurance will only compensate the medicinal product if the relevant preparation has been entered into the list of compensated medicinal products. There are separate lists for medicinal products with the 75% and 100% compensation that include the descriptions of disease condition, medicinal product and the persons who have the right to write the relevant prescription. In case of most diagnoses of mental and behavioural disorders the permitted rate is 100%, i.e. patient's co-payment is 20 EEK and the remaining part is covered by health insurance. It is restricted by the fact that only the psychiatrist and in some cases also the neurologist has the right to prescribe medicinal products with 100% compensation. Appendix 7 lists active ingredients that are compensated 100% in the event of mental disorders and Appendix 8 gives the 2002 amounts of compensations for medicinal product in case of mental disorders by groups of medicinal products and compensation rate.

In the calculation of health insurance costs of compensated medicinal products used in case of mental disorders it is proceeded from the compensations for prescription psychotropic medicinal products bought by patients with mental disorders (diagnoses F00-F99). Medicinal products not compensated from health insurance means have not been taken into consideration. As can be seen from Table 13, the respective total amount of compensations was 33.6 million EEK in 2002. This amount is mainly formed by 100% and 50% compensations and to a lesser extent also 75% and 90% compensations. Total corresponding amount is about 4% of total amounts of compensations for medicinal products in 2002.

This how homogeneous are the compensations for reimbursed medicinal products by health insurance regions can be assessed looking at compensation costs per one insured person. Table 13 describes the corresponding indicators by given rates of compensations. It strikes the eye that in case of 100% compensation the costs per one insured person are considerably higher in the Western region (21 EEK) than anywhere else. Costs are also higher than Estonian average (13 EEK) in Tartu region (17 EEK). In case of the lowest - 50% compensation, the costs per one insured person are considerably lower in the Eastern-Viru region being 4 EEK per person that is three times smaller amount than the Estonian average. The costs are slightly higher in Harju and Tartu regions that probably is due to higher purchasing power of the population living there that makes medicinal products with lower compensation rate more available.

Table 13. Costs of psychotropic compensated medicinal products in case of mental disorders

Health insurance department	100		75/90		50		Total	
	Compen-sation (thousand) EEK	Per one insured person (EEK)	Compen-sation (thousand) EEK	Per one insured person (EEK)	Compen-sation (thousand) EEK	Per one insured person (EEK)	Compen-sation (thousand) EEK	Per one insured person (EEK
Harju	6 121	12,2	177	0,4	7 542	15,0	13 841	27,5
Eastern-Viru	1 724	10,5	39	0,2	670	4,1	2 432	14,8
South-Eastern	1 180	11,9	55	0,6	1 161	11,7	2 397	24,2
Western	1 453	21,1	36	0,5	808	11,7	2 297	33,3
Pärnu	1 203	10,0	68	0,6	1 446	12,0	2 717	22,6
Rakvere	1 081	11,0	44	0,4	1 194	12,2	2 319	23,7
Tartu	3 812	16,6	115	0,5	3 670	16,0	7 598	33,0
Total	**16 574**	**12,9**	**533**	**0,4**	**16 492**	**12,8**	**33 599**	**26,2**

When analysing the costs of compensated medicinal products it is also possible to look at the proportion of compensations of medicinal products prescribed by family doctors. This should reflect to a certain extent how much does the family doctor participate in the treatment of mental disorders. It can be seen from Table 14 that medicinal products prescribed by family doctors in case of mental disorders have been compensated in the amount of 10 million EEK, that is 30% of total costs of compensations for medicinal products of mental disorders. As for the health insurance regions, the lowest percentage of medicinal products prescribed by family doctor is in Eastern-Viru. Relatively higher is the proportion of compensations for medicinal products prescribed by family doctors in Pärnu region, but also in the Western and Rakvere region. The proportion of family doctors' prescriptions is higher (42%) than the proportion of compensations for medicinal products, that is resulting from the fact that family doctors prescribe relatively more medicinal products with lower compensation rates (48% of all medicinal products with 50% compensation and 21% of products with 100% compensation from the purchased medicinal products have been prescribed by a family doctor in case of a mental disorder).

Table 14. Costs of psychotropic compensated medicinal products prescribed by family doctors and the percentage from total compensations in case of mental disorders

Health insurance region	Compensations (thousand EEK)	Percentage from total compensations %	Percentage from all prescriptions, %
Harju	3 568	26	37
Eastern-Viru	374	15	30
South Eastern	806	34	50
Western	831	36	50
Pärnu	1 078	40	49
Rakvere	830	36	51
Tartu	2 475	33	45
Total	**9 963**	**30**	**42**

The costs of medicinal products used in case of mental disorders can be analysed also by groups of medicinal products. As can be seen from Table 15, the main costs are related to the compensations for antidepressants and anti-psychotic products. Table includes separately *naltrexonum* as basic active ingredient. It also becomes evident from the table that the biggest share of reimbursed medicinal products compensated by family doctors is formed by the compensations for antidepressants (69% of all compensations). On the average 30% of compensations for medicinal products of mental disorders are related to medicinal products prescribed by family doctors.

Table 15. Costs of psychotropic compensated drugs by drug families used in case of mental disorders

Drug family		Total benefits (thousand EEK)	incl. reimbursed medicinal products prescribed by family doctors	
			Benefits (thousand EEK)	Percentage, %
Anxiolytics and hypnotics		1 495	824	55
Antidepressants	Nonselective monoamine inhibitors	2 096	689	33
	Other antidepressants	290	106	36
	Noradrenergic and specific serotonergic antidepressant	412	71	17
	Reversible type A monoamine oxidase inhibitors	77	21	28
	Selective NA and 5HT reuptake inhibitors	625	247	40
	Selective 5HT reuptake inhibitors	12 313	5 778	47
	Selective NA reuptake inhibitors	65	9	13
Antipsychotic drugs	Conventional antipsychotics	11 816	1 598	14
	Type SDA antipsychotics	3 048	445	15
Naltrexonum		53	13	24
Carboxamide derivatives		1 311	164	13
Total		**33 601**	**9 965**	**30**

As psychotropic drugs are often used also in case of other diagnoses than mental disorders, table 16 gives the drug families already analysed in case of mental disorders and their compensation costs in case of other diagnoses. Total costs of corresponding benefits are about 14 million EEK the biggest part of which is formed by compensations for Carboxamide derivatives used in the extent of 90% for the treatment of non-psychiatric diseases (incl. the treatment of trigeminal neuralgia). Second largest cost group in case of non-psychiatric diagnoses is related to the compensation of anxiolytics and hypnotics. The last column of table 16 also gives total compensation costs by corresponding drug families (mental disorders and other diagnoses).

Table 16. Costs of psychotropic compensated drugs by drug families in case of non-psychiatric diagnoses (thousand EEK)

Drug family		Benefit (exc. F dignosis) (thousand EEK)	Percentage, %	Total benefits (thousand EEK)
Anxiolytics and hypnotics		910	38	2 405
Antidepressants	Nonselective monoamine reuptake inhibitors	150	7	2 246
	Other antidepressants	3	1	293
	Noradrenergic and specific serotonergic antidepressants	4	1	416
	Reversible type A monoamine oxidase inhibitors	1	1	78
	Selective NA and 5HT reuptake inhibitors	21	3	646
	Selective 5HT reuptake inhibitors	311	2	12 623
	Selective NA reuptake inhibitors	0	0	65
Antipsychotic drugs	Conventional antipsychotics	62	1	11 878
	Type SDA antipsychotics	1	0	3 049
Naltrexonum		10	15	62
Carboxamide derivatives		12 430	90	13 741
Total		**13 902**	**29**	**47 504**

Table 17 points separately out also the costs of previously analysed drug families per insured person by health insurance regions. As already became evident in previous tables, the benefits for medicinal products are considerably lower in the Eastern-Viru region than other health insurance regions. This table will show more clearly where this difference primarily is coming from. Namely, the costs of antidepressants are three times lower in the Eastern Viru region than in Estonia on the average. The costs of other drug families (exc. n*altrexonum*) per one insured person are also the lowest there, but differences from the Estonian average are not so high.

Table 17. Costs of psychotropic reimbursed drugs per one insured person by drug families and health insurance regions

Health insurance department	Anxiolytics and hypnotics (EEK)	Anti-depressants (EEK)	Anti-psychotics (EEK)	*Naltrexonum* (EEK)	Carboxamide derivatives (EEK)	Total (EEK)
Harju	1,3	14,2	11,0	0,04	1,0	27,5
Eastern -Viru	0,7	4,4	9,1	0,07	0,5	14,8
South-Eastern	1,5	11,0	10,7	0,04	0,9	24,2
Western	1,3	11,4	19,6	0,02	1,0	33,3
Pärnu	1,1	11,6	9,4	0,05	0,5	22,6
Rakvere	0,9	12,1	9,8	0,01	0,9	23,7
Tartu	1,2	15,5	14,5	0,05	1,8	33,0
Total	**1,2**	**12,4**	**11,6**	**0,04**	**1,0**	**26,2**

The breakdown of compensations for medicinal products can also be examined by diagnosis groups. Similar to the previously observed health services, a breakdown is given in table 18 based on the ICD-10 classification. When looking at the health insurance costs, we can see that more resources have been spent on compensations for schizophrenia, schizotypal and delusional disorders and mood affective disorders, the two groups together forming nearly 74% of total compensations for medicinal products. We can also see a different rate of co-payment from total costs by disease conditions varying from 14% in the F2 group up to 70% in the F5 group. From psychiatric care drugs, the major part of patient's co-payments are used for the treatment of mood affective disorders, forming 57% of the total amount of co-payment. When looking both at health insurance costs and co-payment, we can see that 87% of the funds are distributed for the treatment of three disease groups.

Table 18. Costs of psychotropic compensated drugs and co-payment by diagnosis groups

Diagnosis group	Name	Compen-sations (thousand EEK)	Co-payment (thousand EEK)	Co-payment, %	Compen-sation + co-payment (thousand EEK)
F0	Organic mental disorders	2 577	1 469	36	4 046
F1	Mental and behavioural disorders due to psychoactive substance abuse	523	635	55	1 158
F2	Schizophrenia, schizotypal and delusional disorders	13 680	2 264	14	15 944
F3	Mood affective disorders	11 096	17 931	62	29 027
F4	Neurotic, stress-related and somatoform disorders	4 319	7 710	64	12 029
F5	Eating disorders, non-organic sleep disorders, sexual dysfunction	497	1 152	70	1 648
F6	Disorders of adult personality and behaviour	117	141	55	258
F7	Mental retardation	685	131	16	816
F8	Disorders of psychological development	18	32	63	50
F9	Behavioural emotional disorders with onset usually occurring in childhood or adolescence	90	137	60	226
Total		**33 601**	**31 600**	**48**	**65 201**

All in all it can be pointed out that 33.6 million EEK from the health insurance budget goes for the compensation of psychiatric care drugs. Compensated drugs are mainly prescribed with compensation rates of 100% and 50% and nearly half of the latter are prescribed by family doctors. Main costs of psychiatric care are related to such drug families like antidepressants and antipsychotics,

amounting to 92% of compensations for medicinal products of mental disorders. Considerable part of cash flow for buying drugs comes from patient's own pocket, forming 48% of the cost of compensated medicinal products with a total amount of 31 million EEK. Looking at all costs of compensated medicinal products, we can see that these amount to 65.2 million EEK, whereas drugs that are not compensated from health insurance funds have not been taken into account.

3. Welfare costs

Three types of services can be differentiated in the welfare of people with special mental needs:

- **Associating services** the objective of which is the integration and support of consumption of general public services. There are two kinds of associating services: first, case management, the essence of which is to associate the person with general public services and guaranteeing thereby person's ability to cope. Case managers work in every pension board. The second service is rehabilitation, the objective of which is to increase person's independent ability to cope. State budget has allocated **6 500 thousand EEK** in order to carry out the latter in 2003.
- **Supporting services** (supported living, supported working, everyday life support and living in community)
- **Special services (**different twenty-four hour nursing services).
  In order to finance supporting and special services (all in all seven different services) **100 479 thousand EEK** have been allocated from the state budget in 2003 plus smaller amounts from local governments (e.g. supporting everyday life activities), but the latter support cannot be specified. The third source for providing the described seven services is person's co-payment for which **21 638 thousand** EEK have been planned in 2003.

The described system only covers the population of working age. At the moment, it is not known what is the proportion of customers with serious and/or permanent mental disorders in welfare institutions for the elderly.

All in all, there are less than 4000 people using these services. At the same time, it has to be noted that especially in case of supporting services several different services are combined per one person, thus the real number of service users is approximately 4300. Just like in case of treatment, services here can be divided into out-patient (or supporting services) and in-patient services (or special services) (see Table 17). Volumes of out-patient and in-patient services are almost equivalent, but 79% of funds have been channelled to financing special services.

Table 17. Supporting and special services in welfare*

Type of service		Planned number of services	Amount for different services (thousand EEK)	Percentage from total amount, %
Supporting services	Supported living	490	7 644	8
	Living in community	28	815	1
	Supported employment	478	3 585	4
	Everyday life support	1 035	9 315	9
	Total	**2 031**	**21 359**	**21**
Special services	Twenty-four hour nursing	2 001	65 433	65
	Twenty-four hour nursing with reinforced monitoring	161	9 660	10
	Twenty-four hour nursing with reinforced nursing	90	4 644	5
	Total	**2 252**	**79 737**	**79**
Total		**4 283**	**100 479**	**100**

*Person may use several different services (mostly supporting services)

* The table has been compiled pursuant to the Minister of Social Affairs Directive No 9 from 14 January 2003; author's calculations.

Below, you can see the distribution of funds and persons by regions who use supporting services (see Table 18). Numbers of people have been given according to the place of actual consumption, as the person-based data in this field are lacking. It has to be noted that the majority of services have to be consumed in places where the supply has been historically developed (e.g. the regions of Tallinn, Tartu and Pärnu). Only supporting services like everyday life support are more driven by demand and are therefore closer to the customer. If we compare the data, it becomes evident that there are regions where are relatively more special services. The proportion of special services varies from 10% to 90%. At the same time there are differences also in the very existence of supporting services in case of which more homogeneous distribution should be guaranteed as this service is consumed closer to home. But when comparing services in relation to adult population of working age there are tenfold differences; for example there are only seven services per 10 000 inhabitant in the Eastern-Viru region and at the same time 64 services in a small town Jõgeva. It is important to note that in the region of Eastern-Viru and Harju where 54% of adult population of working age is living, there are less corresponding services than in Estonia on the average.

One possibility in the future is to develop also out-patient services in welfare that are closer to people needing them and hence also more available. This provides an opportunity for increasing the availability within the limits of the same budget, as the demand for twenty-four hour services decreases.

Table 18. Regional distribution of welfare services*

County	Number of people	Share of people, %	Resources allocated to welfare (thousand EEK)	Resources allocated to welfare by regions, %	Total number of offered services	Distribution of offered services by regions, %	Share of special services, %	Number of supporting services per 10 000 people *	Co-payment (thousand EEK)	Share of co-payment, %
Harju	845	21,4	19 698	19,6	936	21,9	44,4	14	5 574	25,8
Hiiu	19	0,5	164	0,2	19	0,4	0,0	28	0	0,0
Eastern -Viru	126	3,2	2 126	2,1	114	2,7	30,7	7	350	1,6
Jõgeva	425	10,8	12 447	12,4	468	10,9	66,9	64	3 500	16,2
Järva	148	3,8	3 593	3,6	163	3,8	52,1	31	0	0,0
Western	337	8,5	10 536	10,5	394	9,2	59,4	86	1 840	8,5
Western-Viru	313	7,9	8 187	8,1	264	6,2	68,2	19	1 900	8,8
Põlva	257	6,5	7 590	7,6	284	6,6	59,2	57	1 664	7,7
Pärnu	218	5,5	4 232	4,2	223	5,2	40,4	23	520	2,4
Rapla	103	2,6	3 137	3,1	141	3,3	39,0	35	1 000	4,6
Saare	422	10,7	13 666	13,6	433	10,1	88,9	21	4 100	18,9
Tartu	300	7,6	3 484	3,5	299	7,0	10,0	27	290	1,3
Valga	93	2,4	2 503	2,5	111	2,6	53,2	23	0	0,0
Viljandi	234	5,9	6 607	6,6	261	6,1	56,3	31	900	4,2
Võru	103	2,6	2 511	2,5	99	2,3	55,6	18	0	0,0
Total	**3 943**	**100,0**	**100 479**	**100**	**4 283**	**100,0**	**48,3**	**22**	**21 638**	**6,7**

*The table has been compiled pursuant to the Minister of Social Affairs Directive No 9 from 14 January 2003; author's calculations.

Summary

This overview mainly dealt with the costs of health insurance benefits and welfare. Figure 2 describes the summation of costs of health insurance benefits by mental disorders. Drug co-payment in case of compensated medicinal products has been added as well. It is possible to see from the figure what is the share of different health insurance benefits in case of different diagnosis groups. Total treatment costs of mental disorders in primary care are 9.9 million EEK. Cost assessment reveals that family doctors mainly deal with the treatment of mood affective disorders and neurotic, stress-related and somatoform disorders. Costs of out-patient specialised medical care are 29.8 million EEK and in-patient specialised medical care 91.1 million EEK. Hence, the total costs of specialised medical care amount to 120.9 million EEK. The highest costs of specialised medical care come from the treatment of schizophrenia, schizotypal and delusional disorders and mood affective disorders. Nursing care costs in case of mental disorders are 2.3 million EEK, from which the costs of organic disorders constitute the highest proportion. Total health services benefits of people with mental disorders covered by health insurance are 133.9 million EEK (including also the costs of rehabilitation care 0.8 million EEK). Total compensations for medicinal products in case of mental disorders are 33.6 million EEK that are primarily connected with drugs prescribed in the event of schizophrenia, schizotypal and delusional disorders and mood affective disorders.

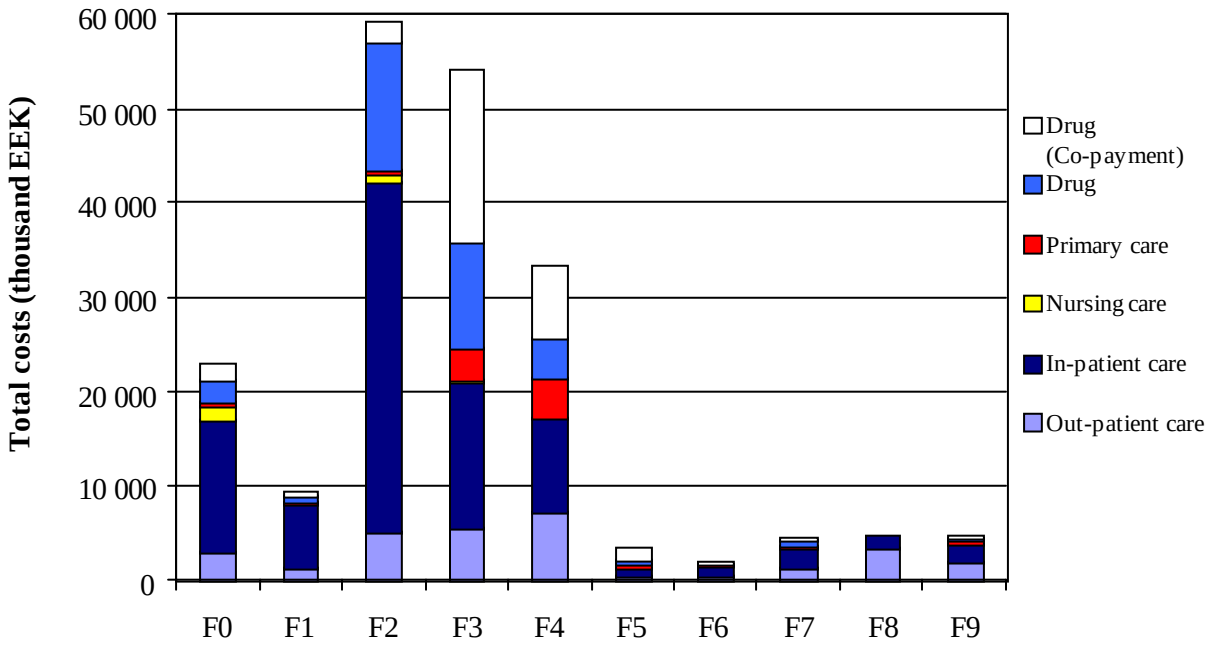


Figure 2. Costs of compensations for medicinal products and drug co-payment by mental disorders

It is possible to see from Figure 3 that health insurance benefits and drug co-payment per one insured person are not distributed evenly by all regions. Costs of health insurance benefits per one person are the lowest in the Harju region that is mainly caused by low costs of in-patient specialised medical care. The highest costs of health insurance benefits per one insured person however are related to the insured people of the Western and Tartu regions where the compensations for medicinal products are the highest and the specialised medical care costs are relatively high. Appendix 9 brings the costs of compensations for medicinal products and drug co-payment per one insured person by counties. It can be seen that by counties Viljandi county stands out where the costs of nursing care and in-patient specialised care are the highest in the republic.

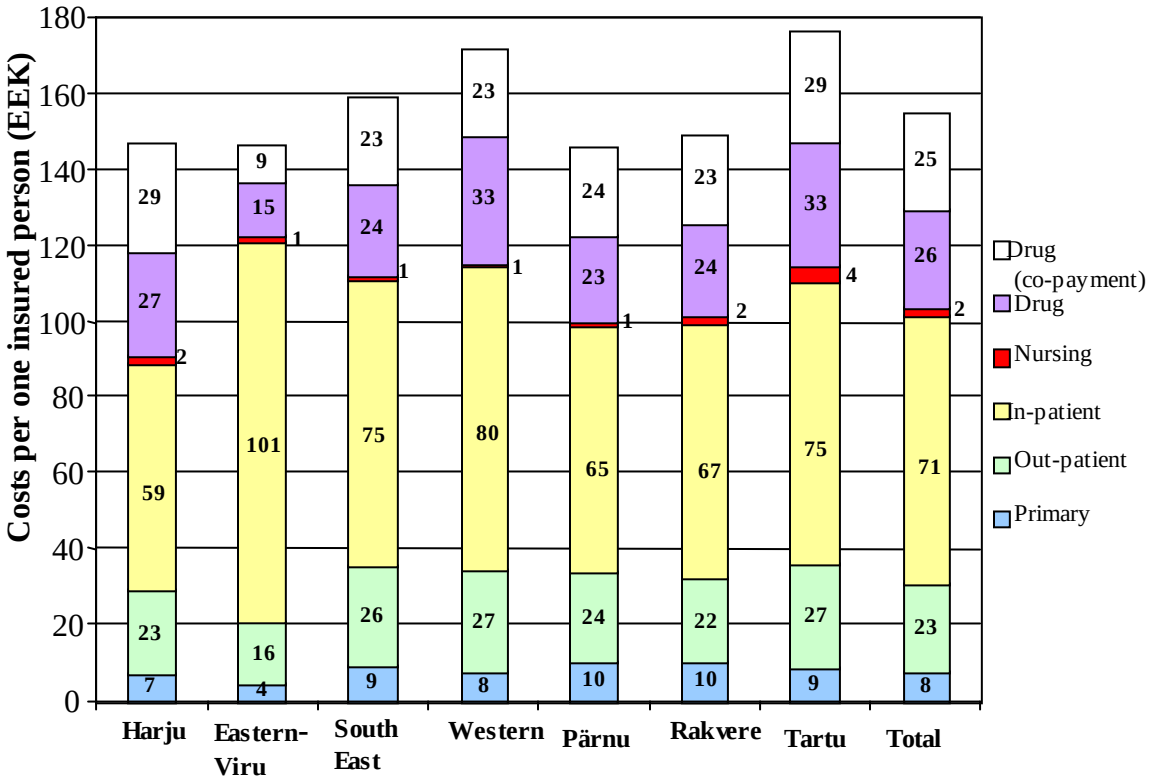


Figure 2. Compensations for medicinal products and drug co-payment per one insured person by health insurance regions

Summing up the mental health related costs analysed in this paper, we can see that the estimated costs exceed 300 million EEK. Table 19 gives the summary of these costs that were possible to work out.

Table 19. Estimated costs of mental health (million EEK)

Emergency medical aid		**4,3**
Health services		**136,4**
Primary health care		9,9
Specialised medical care	Out-patient	29,8
	In-patient	91,1
	Rehabilitation	0,9
	Emergency care of people not covered by health insurance	2,4
Nursing care		2,3
Patient's co-payment in paying for health services		?
Drugs		**65,2**
Reimbursed drugs	Benefits for medicinal products	33,6
	Patient's co-payment	31,6
Other drugs		?
Promotion		**1,8**
Welfare		**100,5**
Temporary incapacity for work		**?**
Prolonged incapacity for work		**1,5**
Other costs		**?**
TOTAL		**309,7**

Some cost indicators are based on the 2003 budget (emergency medical aid, promotion, welfare services) and the rest on actual costs of 2002. These cost categories have been marked with a question mark that the author could not calculate even roughly. Therefore the total costs of 300 million EEK are considerably underestimated.

Recommended reading

Kiivet R, J Harro (eds). Eesti rahva tervis 1991 – 2000. Tartu 2002 [kättesaadav ka inglise keeles: www.sm.ee]

Highlights on health in Estonia. European Communities and World Health Organization, Copenhagen 2001 [kättesaadav ka inglise keeles: www.who.dk]

Kunst AE, M Leinsalu, A Kasmel, J Habicht. Social inequalities in health in Estonia. Main Report. Tallinn 2002 [kättesaadav: www.sm.ee]

Health care systems in transition – Estonia. European Observatory on Health Care Systems 2000

Eesti Tervishoiustatistika 1992-1999. Sotsiaalministeerium, Tallinn 2000 [kättesaadav ka inglise keeles: www.sm.ee]

Eesti Tervishoiustatistika 2000-2001. Sotsiaalministeerium, Tallinn 2002 [kättesaadav ka inglise keeles: www.sm.ee]

Eesti Vabariigi Ravikindlustusseadus. RT 1991, 23, 272; RT 1999, 7, 113; 29, 397; 2000, 57, 374; 84, 536; 102, 675; 2001, 42, 233; 47, 260

Ravikindlustuse Seadus. RT I 2002, 62, 377

Tervishoiukorralduse Seadus. RT I 1999, 10, 133; RT I 1995, 57, 978 ;RT I 1997, 86, 1462

Tervishoiuteenuste Korraldamise Seadus. RT I 2001, 50, 284; RT 2002, 57 360; 61, 375

Eesti Haigekassa Seadus. RT I 2000, 57, 374; RT 2002, 57, 357; 62, 377

Sotsiaalmaksuseadus. RT 2000, 102, 675; 2001, 50, 285; 59, 359; 79, 480; 91, 544; 95,587; 2002, 44, 284; 62, 377

Eesti Vabariigi Põhiseadus. RT 1992, 26, 349

Võlaõigusseadus. RT I 2001, 81, 487

Sotsiaalhoolekande Seadus. RT I 1995, 21, 323

Paavel, V (eds). Psüühilise erivajadusega inimeste hoolekanne Eestis. Käsiraamat. 2000/2001.

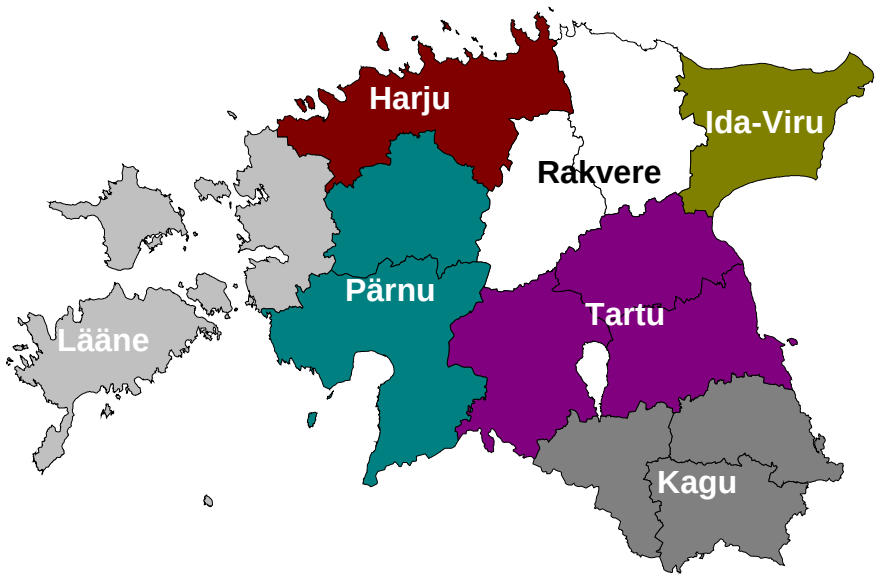
Appendix 1. Background information on health insurance regions

Persons covered by health insurance and population by health insurance regions

Health insurance region	Number of insured	Proportion of insured by region, %	Population	Insurance coverage, %
Harju	504 779	39,3	523 588	96,4
Eastern-Viru	164 215	12,8	177 471	92,5
South-Eastern	98 860	7,7	107 252	92,2
Western	68 726	5,4	74 525	92,2
Pärnu	119 947	9,3	127 826	93,8
Rakvere	97 578	7,6	105 878	92,2
Tartu	230 750	18,0	244 702	94,3
Average			**1 361 242**	**94,4**

Source: Statistical Yearbook of Estonia 2002.

Regions of health insurance



Appendix 2. Social benefits payable in case of mental disorders to 16-year-old and older persons by paid amounts and persons granted support in 2002

Diagnosis group	Name	Moderate		Serious		Deep		Total	
		Amount	Persons	Amount	Persons	Amount	Persons	Persons	Persons
F0	Organic mental disorders	40	67	303	215	141	63	484	345
F1	Mental and behavioural disorders due to psychoactive substance abuse	4	7	39	31	3	1	47	39
F2	Schizophrenia, schizotypal and delusional disorders	47	79	580	425	28	12	656	516
F3	Mood affective disorders	15	25	67	52	3	1	85	78
F4	Neurotic, stress-related and somatoform disorders	4	7	15	12	0	0	20	19
F5	Eating disorders, non-organic sleep disorders, sexual dysfunction	0	0	3	2	0	0	3	2
F6	Disorders of adult personality and behaviour	5	8	33	25	0	0	38	33
F7	Mental retardation	16	26	109	79	73	34	198	139
F8	Disorders of psychological development	0	0	1	1	0	0	1	1
F9	Behavioural emotional disorders with onset usually occurring in childhood or adolescence	0	0	0	0	0	0	0	0
Total		**131**	**219**	**1 151**	**842**	**249**	**111**	**1 531**	**1 172**

Appendix 3. Breakdown of psychiatric treatment costs by regions of health insurance (thousand EEK)

Health insurance region	Out-patient (thousand EEK)	In-patient (thousand EEK)	Total (thousand EEK)	Proportion of out-patient specialised care, %	Costs per one insured (EEK)
Harju	7 877	27 874	35 751	22	71
Eastern-Viru	1 893	16 067	17 959	11	109
South-Eastern	1 962	6 957	8 919	22	90
Western	1 377	4 830	6 208	22	90
Pärnu	2 186	7 353	9 539	23	79

Health insurance region	**Out-patient (thousand EEK)**	**In-patient (thousand EEK)**	**Total (thousand EEK)**	**Proportion of out-patient specialised care, %**	**Costs per one insured (EEK)**
Rakvere	1 546	5 811	7 357	21	75
Tartu	4 914	16 749	21 663	23	94
Total	**21 754**	**85 641**	**107 395**	**20**	**84**

Appendix 4. Specialised medical care costs of mental disorders per treated person by counties

County	Out-patient		In-patient		Total	
	No of people	Per person	No of people	Per person (EEK)	No of people	Per person (EEK
Tallinn	23 971	397	2 502	9 519	26 473	1 259
Harjumaa (exc. Tallinn)	5 675	330	720	8 499	6 395	1 250
Hiiumaa	676	428	89	6 564	765	1 142
Eastern-Virumaa	9 129	291	1 937	8 595	11 066	1 745
Jõgevamaa	2 460	408	263	8 006	2 723	1 142
Järvamaa	2 105	300	289	10 164	2 394	1 491
Läänemaa	1 601	346	320	9 015	1 921	1 790
Western-Virumaa	3 657	421	441	8 247	4 098	1 263
Põlvamaa	2 887	334	345	6 627	3 232	1 006
Pärnumaa	5 266	436	573	8 454	5 839	1 222
Raplamaa	1 898	283	345	8 670	2 243	1 573
Saaremaa	2 379	422	247	8 191	2 626	1 153
Tartumaa	9 154	455	929	8 644	10 083	1 209
Valgamaa	1 951	350	309	8 265	2 260	1 432
Viljandimaa	3 694	312	710	9 878	4 404	1 854
Võrumaa	2 705	347	408	6 475	3 113	1 150
Total	**79 208**	**376**	**10 427**	**8 738**	**89 635**	**1 349**

Appendix 5. Breakdown of nursing care costs in case of mental disorders by counties

County	People	Costs (thousand EEK)	Cost per treated person (EEK)	Costs per one insured (EEK)
Tallinn	74	830	11 221	2,1
Harjumaa (exc. Tallinn)	6	55	9 179	0,5
Hiiumaa	-	-	-	-
Eastern-Virumaa	15	111	7 405	0,7
Jõgevamaa	7	41	5 787	1,2
Järvamaa	10	91	9 076	2,6
Läänemaa	15	32	2 157	1,3
Western-Virumaa	17	129	7 597	2,1
Põlvamaa	8	22	2 722	0,7
Pärnumaa	15	111	7 384	1,3
Raplamaa	2	16	7 975	0,5
Saaremaa	7	22	3 197	0,7

Tartumaa	18	138	7 653	1,0
Valgamaa	9	28	3 115	0,9
Viljandimaa	12	655	54 586	12,4
Võrumaa	9	28	3 126	0,8
Total	**224**	**2 309**	**10 308**	**1,8**

Appendix 6. Number of psychiatrists and psychiatric beds by regions of health insurance

Health insurance region	Number of psychiatrists*	Number of beds**
Harju	71	316
Eastern-Viru	17	150
Kagu	8	25
Western	6	24
Pärnu	7	30
Rakvere	3	0
Tartu	50	309
Total	**162**	**854**

*Physicians by speciality as of 31.12.2001
**Number of beds by psychiatric profile as of 31.12.2002

Appendix 7. . Active ingredients in case of which a 100% reimbursement applies since 1st October 2002 in the event of mental disorders

ATC-code	Active ingredient	Diagnosis
N03AF01	*Carbamazepine*	(F00-F09); (F10-F19.4-7); (F20-F29); (F30-F31); (F32/33.2-3); F60.3; (F70-F79)
N03AG01	*Valproic acid*	
N05AC02	*Thioridazin*	
N05AD01	*Haloperidol*	
N05AD03	*Melperone*	
N05AF01	*Flupentixol*	
N05AF03	*Chloroprothixene*	
N05AF05	*Zuklopenthixol*	
N05AH02	*Clozapine*	
N05AL05	*Amisulpride*	
N05AX08	*Risperidone*	
N06AA09	*Amitriptyline*	
N06AA10	*Nortriptuline*	

Appendix 8. Costs of psychotropic compensated medicinal products by drug families and compensation percentage (thousand EEK)

Drug family		Compensation			Total (thousand EEK)
		100	**50**	**75/90**	
Anxiolytics and hypnotics		1	1 494	0	1 495
Antidepressants	Nonselective monoamine inhibitors	1 174	396	527	2 096
	Other antidepressants	0	290	0	290
	Noradrenergic and specific serotonergic antidepressant	0	412	0	412
	Reversible type A monoamine oxidase inhibitors	0	77	0	77
	Selective NA and 5HT reuptake inhibitors	6	619	0	625
	Selective 5HT reuptake inhibitors	1	12 311	1	12 313
	Selective NA reuptake inhibitors	0	65	0	65
Antipsychotic drugs	Conventional antipsychotics	11 152	659	5	11 816
	Type SDA antipsychotics	2 965	83	0	3 048
Naltrexonum		0	53	0	53
Carboxamide derivatives		1 277	35	0	1 311
Total		**16 574**	**16 494**	**533**	**33 601**

Appendix 9. Costs of different health insurance benefits and drug co-payment in case of mental disorders per one insured person by counties