

Health Insurance in Estonia

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Topics

- Estonian health insurance system
- Payment methods and pricing

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HEALTH SYSTEM FINANCING IN ESTONIA

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Health financing sources in Estonia – 2007.a

Revenue source	%
PUBLIC SECTOR	75,6
<i>Government</i>	9,9
<i>Local municipalities</i>	1,7
<i>Health Insurance</i>	64,0
PRIVATE SECTOR	23,3
<i>Private insurance</i>	0,3
<i>Out of pocket payments</i>	21,9
<i>Other sources</i>	1,1
EXTERNAL SOURCES	1,1

Total health expenditures % GDP

Estonia – 5,4%; EU – 8,9% (2006.a); EU (members since 2004) – 6,1% (2006.a)

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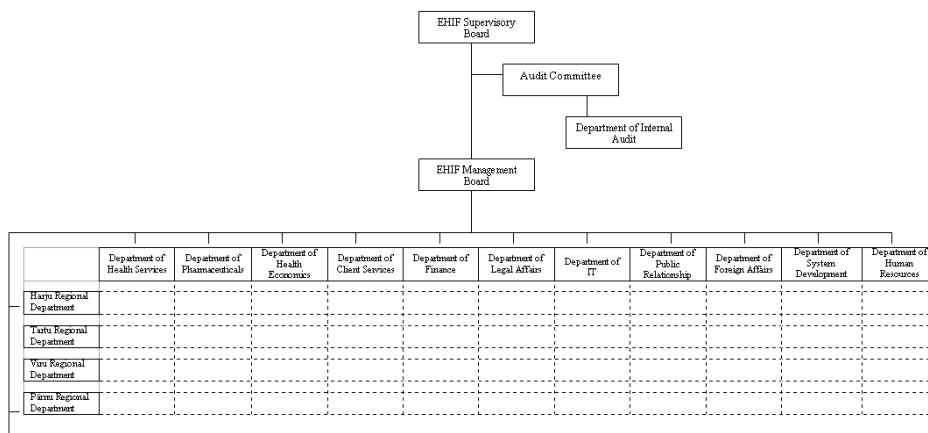
History of Health Insurance System

First sickness funds were established in 1913 and re-established in 1991 after Soviet occupation

Three phases since 1991

- Regional non-competing sickness funds (22 in total)
- Regional sickness funds coordinated by central sickness fund (since 1994)
- One Estonian Health Insurance Fund (EHIF) with regional departments (since 2001), where number of regional departments has been reduced to 4

Organizational Structure of EHIF



Mechanisms of Representation

Tripartite supervisory board with 15 members

- 5 state representatives
 - Minister of Social Affairs, Minister of Finance and Chairman of the Parliamentary Committee of Social Affairs (*ex officio*)
 - 1 member of parliament (nominated by the Parliament)
 - 1 public servant from ministry of Social Affairs (nominated by the Government)
- 5 employer representatives and 5 beneficiaries representatives
 - List of representing organizations is designated by Government
 - Nominated by Government according to the proposal made by representing organizations

Legal Status and Ownership

EHIF has been operating as public independent legal entity

- Founded in the public interest by separate act (since 2001)
 - Between 1994-2001 the legal status of EHIF was blurred due to changes in public administration legislation
- Has full right to enter into contractual arrangements
- Public service regulation does not apply to EHIF (i.e. EHIF staff does not follow civil servant regulation)

EHIF is an owner of its assets and is fully liable for its obligations with all its assets

Forms and Scope of Governmental Supervision

EHIF has quite broad autonomy to contract with service providers but Government supervisory and participatory role has been maintained

Establishment of system (objectives and principles) – Parliament

Contributions definition and coverage (eligibility) – Parliament

Co-payments – general regulation by Parliament; actual co-payments by providers

Benefit package – general regulation by Parliament; actual benefit package by Government

Provider payment methods and Prices – Government; price calculation methodology by Ministry of Social Affairs

Contracting – basic principles by Parliament; specific principles by Supervisory Board of EHIF

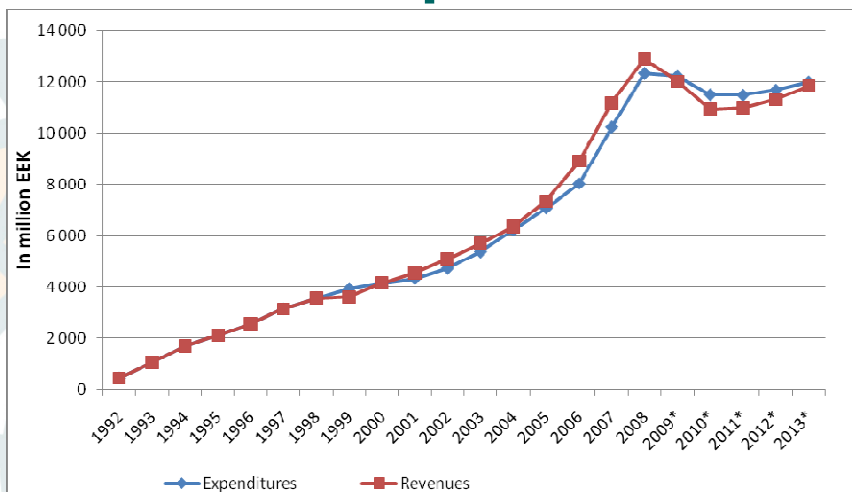
Waiting time limits – Supervisory Board

Budget – forecast by MoF; the line-items in detail by Supervisory Board

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Revenues - Expenditures





Payment methods and pricing - Family medicine

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Family medicine

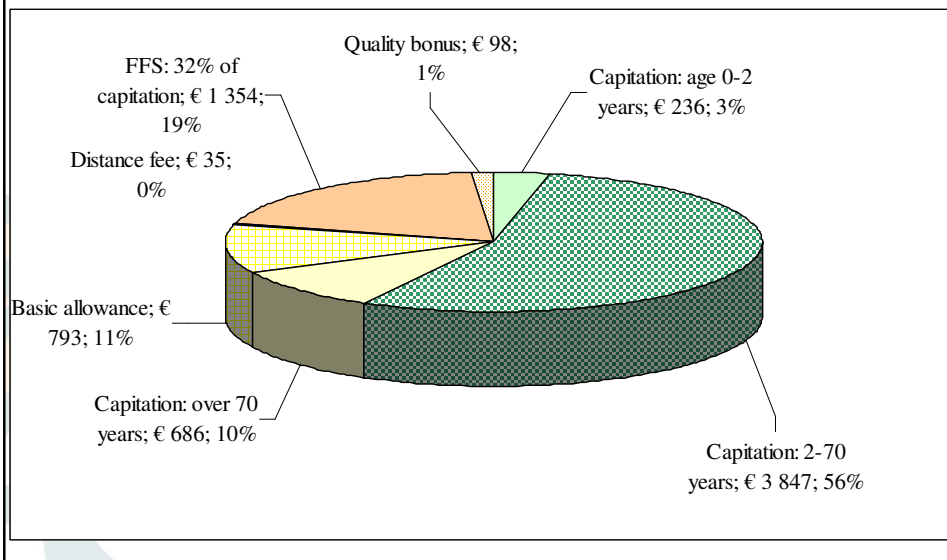
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Family Physicians

- Capitation (age adjusted)
- Basic allowance (lump sum payment)
- FFS based additional fund to cover the agreed list of diagnostic services (27%-32% of FP-s capitation budget)
- Some additional payments for FPs in remote areas
- Quality bonus system

Revenue of the average FP in 2008 in month (in total 7049 EUROS)



Costing model for FP-s

- Costing methodology is approved by Ministry of Social Affairs
- Price calculations are revised if the financial data (according to the annual report) of at least 6 FP from 6 different counties are submitted
 - The submitted data should follow the agreed form

Capitation

- In case of minimum practice (1200 persons) the costs and revenues should be equal
- Includes the following costs:
 - Labor (FP, nurse, assistant)
 - Salary + training costs
 - Medical equipment and medicines
 - Other costs (e.g. IT)
- Labor costs (FP and nurse) are allocated to the different capitation age groups according to expected work load
 - Number of visits in different age groups is the basis
- Other costs are summed up and divided by number of patients in minimum FP practice

Basic allowance

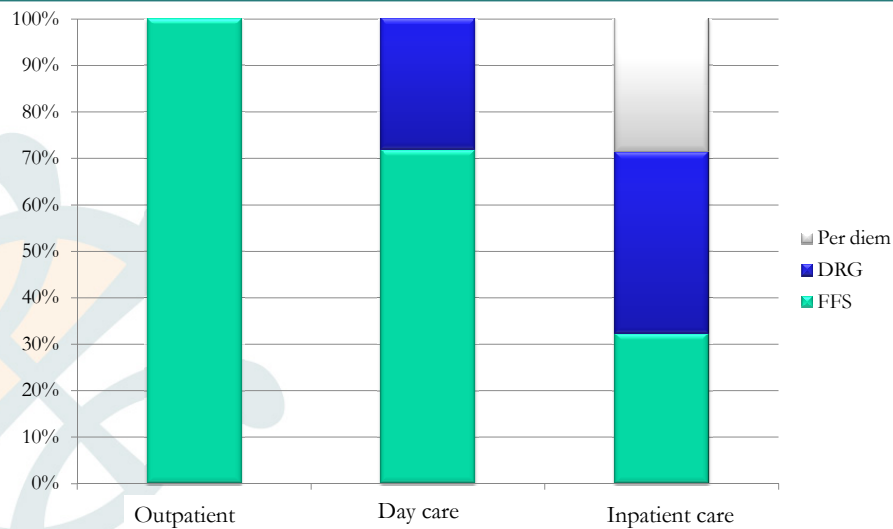
- Covers room and transport costs
 - Room costs
 - 52 square meters
 - Market rental price according to the expert appraise
 - Incl depreciation, maintenance, utilities
 - Transport costs of home visits and conduct
 - Cost based taking into account expert opinion

Specialist care

Payment methods – specialist care

- Per diem
 - Different day fees and day limits by specialties
- Fee-for-service
 - Detailed service list (more than 1000)
- DRG
 - Nordic version

Mix of payment method in specialist care (2008)



Estonian DRG history

- Spring 2001 – decision by management board
- 2002 – EHIF started to co-operate with Nordic Centre
- 2003 – the agreement of co-operation and using NordDRG with Nordic Centre
- 2004 – introduction of DRG as payment method
- fine tuning the system (incl. pricing method)

Case-costing and prices: rules of DRG based payment

- All inpatient cases and surgical outpatient cases are going under the grouping
- DRG system doesn't apply to:
 - non-acute care cases, psychiatric cases, rehabilitation cases, chemotherapy
 - referred (higher level hospital "gets" the DRG) cases
 - outliers
- For these cases the funding is based on fee-for-services
- DRG-based funding is calculated with formula:

$$\text{Total sum of the bill} = 0,3 * \text{sum of the bill with FFS} + 0,7 * \text{DRG price}$$

70:30 principle (hypothetical example)

Patient's primary diagnose: **O46.8** (*Other hemorrhagia in antepartum*)
 NCSP: -
 DRG: **384** (*Other antepartum diagnoses w/o medical complication*)

FFS based services:

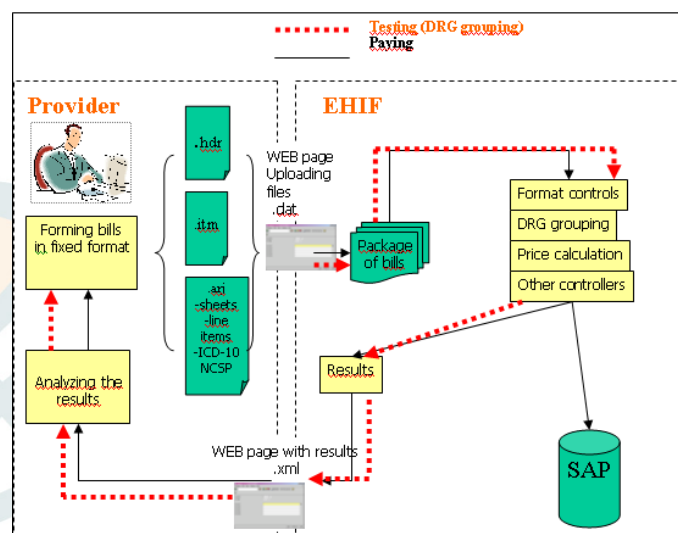
Per diem (1 day)	EEK 927
Sonographic procedure (x2)	EEK 408
Cardiotocographic procedure	EEK 198
CRP in quantitative method	EEK 150

Sum of FFS based bill: EEK 1683

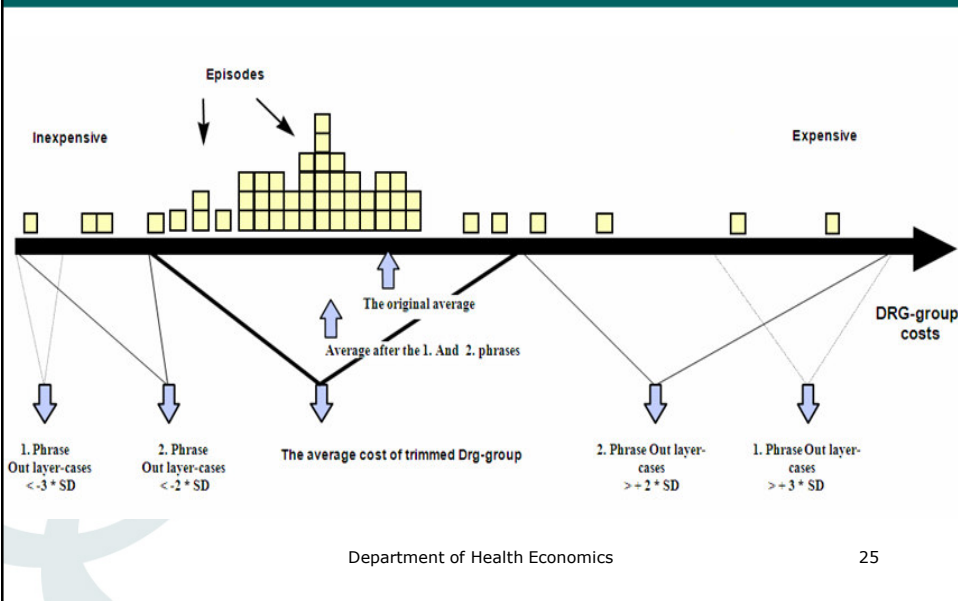
Price of the corresponding DRG EEK 1892

TOTAL SUM = 0,3 * 1683 + 0,7 * 1892= EEK 1829

Electronic data transmission



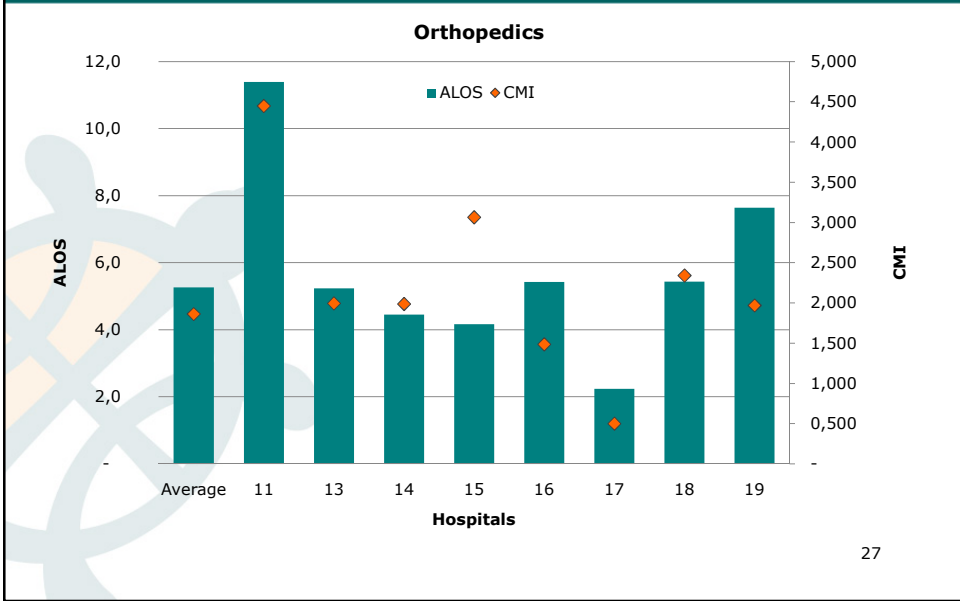
DRG pricing methodology



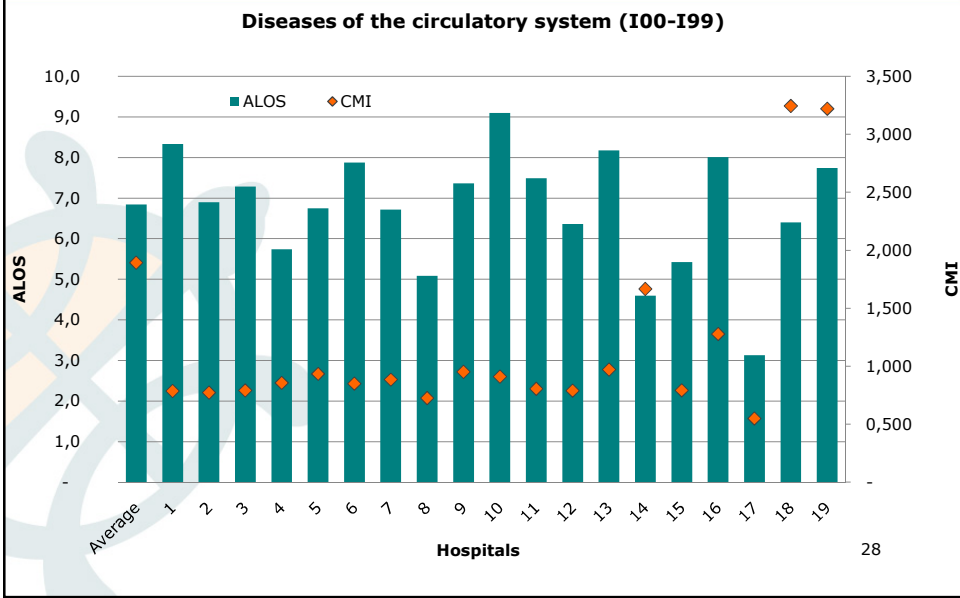
DRG as tool for benchmarking and analyses

- 2005
 - the regular feedback to hospitals started
 - data were sent to hospitals by e-mail four times a year
- 2009
 - the range of indicators was broadened
 - the way of presenting the data was changed:
 - indicators (twice a year)
 - report about DRG system performance (once a year)
 - the access to data was changed, data are available only on the webpage of EHIF (no files by e-mail):
 - access to the indicators is restricted by username and password for group of hospitals
 - access to the report is free

ALOS and CMI by specialties e.g. 2008, orthopedics



ALOS and CMI by main diagnoses e.g. 2008, I00-I99



Costing methodology for fee-for-service list

How to set prices?

- The price setting is dependent of available cost information
 - The purchaser is usually not aware what are the actual costs and what are the optimal costs
 - Anyway, some kind of costing information (might be even expert opinion based) is needed

Pricing in Estonia

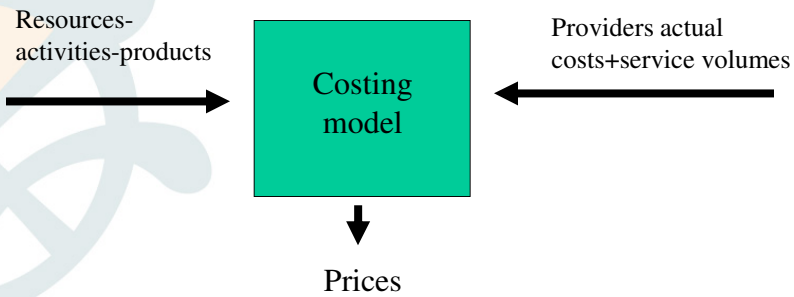
- First price list was taken over from Germany in the beginning of nineties
- Next step was to start calculate own prices based on co-operation with specialties
 - The service “descriptions” were mostly basing on specialties “expert” opinions
 - More actively lobbying specialties got better prices
- In 2003 EHIF started “ABC” (activity based costing) project

Why ABC?

- There were ongoing public discussions that EHIF’s price list is not reflecting the “actual” costs
- The providers and doctors pressure was so strong and there was needed some kind of “counterblow” and to make pricing as transparent as possible
- The aim was to involve all providers and specialties very actively to the whole process
 - Specialties had to describe their activities and resources needed as inputs
 - Providers had to provide cost information according to the same logic

Costing model

Inputs - Outputs



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Main phases of ABC based pricing

Mapping of inputs (services, activities, resources)

- All inputs get name, ID, measure unit, optimal use of resources, cost of resources

Relating inputs (e.g. what activities are related to what services; what resources are needed to perform what activities) and agreeing on **use of different resources per activities or per service**

Calculating **unit cost for resources and standard cost per service**

Example of costs by resources

Doctors (basic) related costs include:

- Salary
- Taxes
- Training
- Office costs
- Clothes
- IT workplace
- Management/administration

Rooms (basic) related costs

- Amortization
- Maintenance
- Renovation

Example: personnel unit cost

Salary and taxes per

- Salary per year= agreed hourly wage*260(working days)*8(hours per day)

Other costs (training, office costs etc) per year

- Average cost per year by one worker

Yearly costs are summed up and divided by **optimal working hours**

Optimal working hours per year =
(260working days-vacation- national holidays- training 5 days) x 0,85 x 8hours

Example: support services unit costs

ID	Name	Unit cost
OST4401	Catering 1 day	80,00 kr
OST4402	Laundry 1 kg	20,00 kr
OST4404	Sterilization 1 unit	123,00 kr
OST4405	Waste management 1 kg	20,00 kr
OST4407	Laboratory costs per visit and per bed-day	20,12 kr
OST4413	Patient administration	6,80 kr
OST4426	Digital filing	10,00 kr

Controlling the model

- Described costs and actual costs are compared
- Providers (at least three representing different levels) have to submit their data
 - Financial reports according to the set format (by resources and cost types described in the costing model)
 - Service volume

Ultrasonography from abdomen

Price **240,46 kr**
Costs from activities **226,36 kr**
Costs from materials **14,10 kr**

COSTS FROM ACTIVITIES

ID	Activity of resource	Cost driver	Unit costs	Amount
600024	Ultrasound by doppler	min	10,90	20,00
PER0140	Radiologist	min	6,62	1,00
PER0511	Nurse	min	3,37	0,50
PIN2530	Ultrasound procedure room	min	0,36	1,00
SDM251	Ultrasound machine(doppler)	min	1,67	1,00
SDM251	Transducer	min	0,56	1,00
600042	Patient registration	min	2,79	3,00
PER0404	Desk clerk	min	2,51	1,00
PIN2530	Desk of radiology	min	0,28	1,00
COSTS FROM MATERIALS				
YKM25K	Ultrasound basic materials	unit	4,10	1,00
OST4426	Digital filing	EEK	10,00	1,00

Challenges with costing model

- "Costing model" does not mean that all costs are reasonable and have to be covered by EHIF
- Actual costs of providers are very different
 - E.g. free technology, low cost drugs
 - EHIF targets "average", but each provider is special
- Optimal resource utilization is set according to "average" hospital
 - Smaller hospitals face higher costs (however, in case of DRG's they are overpaid)
- Compromise between "ideal" vs "actual" situation
- For EHIF it is difficult to control the real situation in hospitals



Thank you!

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