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Estonian Health Insurance Fund

Paying hospitals in Estonia:
moving towards needs based planning and providing the right incentives

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Challenges facing Estonian hospital sector

Still too many hospitals

- 78 hospitals for 1.4 million people in 2000

Hospital treatment is inefficient

- fee-for-service payment system encourages production of services over treating patients most effectively
- ALOS still 9 days
- no delineation between acute and long term care

Waiting times for hospital elective services increasing

Hospital sector investments erratic, hospital infrastructure deteriorating

- capital investment financing was 2% of total health expenditure in 2000 compared to 10% in OECD countries

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Key hospital financing reforms: 2002-2003

- Introduction of case-based hospital payment system to give additional incentives for efficiency
  - NordDRGs
- Untying contract planning from historical hospital services production, planning according to patients' needs
  - needs assessment
  - monitoring waiting times and prioritizing queues
- Optimization of hospital capacity
  - hospital mergers
  - separation of acute care from long-term care
- Inclusion of capital-cost to the price and regulating high cost capital investments
  - inflating prices by capital cost and "certificates of need"
- Legalising co-payments for hospital care

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Case based hospital financing: introduction of NordDRGs in 2003

Nordic DRGs (Diagnosis Related Groups)

- Used by Nordic countries
- 498 DRGs
- Based on ICD-10 and NOMESCO-NCSP classification

Why NordDRGs?

- Number of cases too small to develop Estonian own unique system
- Currently available data fits the best with the NordDRG locic, e.g. AR-DRG (Australia) requires detailed information on co-morbidities
- Nordic countries are near-by, technical support available

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Estonia toolkit for introducing DRGs

Sound methodology

- Nord DRGs
- Adoption of NCSP coding

Sound data on hospital case-mix

- Excellent database on hospital production

Sound information about hospital cost

- Case costing derived from fee-for-service data

Sound IT support

- Never enough of it

Quality assurance

- EHIF commissions disease management guidelines and medical audits
- Regular medical documentation controls based on random case selection

Change management

- Gradual introduction:in 2003 50% of case cost based on DRG
- Invest in training of hospital staff
- Simulation of DRGs and feedback to hospitals
- Get support of progressive hospital directors

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Estonian DRG TOP 10 based on case cost*

DRG	Name	% of cost	Cost (EEK)
373	Normal delivery without complicatoins	2,95%	45 231 195
430	Psychoses	2,88%	44 184 304
105	Procedures with heart valves w/out catheterisation	2,80%	42 870 424
483	Tracheostomy, expt face, neck and lower jaw diagnoses	2,69%	41 219 090
112	Percutaneous cardio-vascular diagnoses	2,65%	40 598 849
211	Hip and femur procedures, patient age > 17, without complications	1,88%	28 778 315
39	Procedures on lens, w/ or w/out vitrectomy	1,64%	25 149 968
140	Stenocardia (*angina pectoris*)	1,64%	25 071 615
14	Certain cererbrovascular diseases, expt transitory ishaemia	1,52%	23 264 651
359	Procedures on uterus and ovaries, nonmalignant tumors without complications	1,52%	23 195 885
Total			**1 533 194 564**

* Preliminary results

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Estonian DRG TOP 10 based on number of cases*

DRG	Name	% of cases	Number of cases
467	Other factors influencing health status	4,53%	14 398
381	Abortion by cervical dilatation, currettage, aspiration currettage or hysterectomy	3,41%	10 831
373	Normal delivery without complications	3,13%	9 950
134	High blood pressure	1,77%	5 629
284	Slight skin disorders w/out complications	1,70%	5 383
430	Psychoses	1,68%	5 348
42	Intraocular procedures, expt iris, retina, lens	1,62%	5 157
243	Medical back problems	1,62%	5 143
70B	Otitis media, age 0-17, w/out complications	1,59%	5 047
364	Dilatation and curretage, conisation, nonmalignant tumour	1,57%	5 000
Kokku			**317 526**

* Preliminary results

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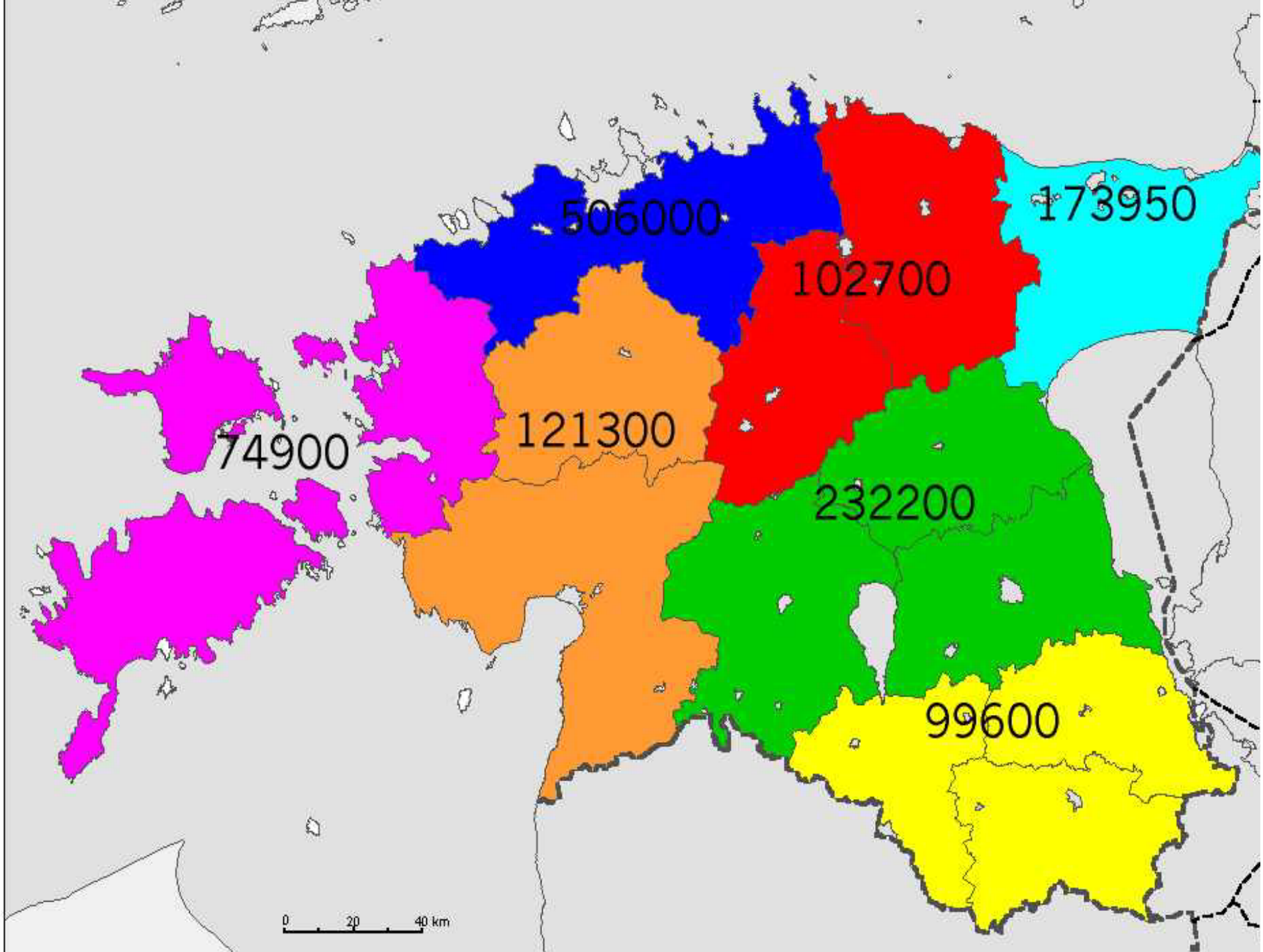
Needs assessment and contract planning

- Analyze service utilization variation among 7 population pools as proxies for need
  - Utilization of data warehouse concept
  - Data warehouse is an IT tool for regular extraction of data from the EHIF database
  - Needs assessment pivot table
- Verify analysis with GPs to separate supply induced demand from medical need as much as possible
- Plan contracts according to needs assessment results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Needs assessment and contract planning in EHIF

- Analyze service utilization variation among 7 population pools as a proxy for need
  - Utilization of data warehouse concept
  - Data warehouse is an IT tool for regular extraction of data from the EHIF database
  - Needs assessment pivot table
- Verify analysis with GPs to separate supply induced demand from medical need as much as possible
- Plan cost-and-volume contracts according to needs assessment results

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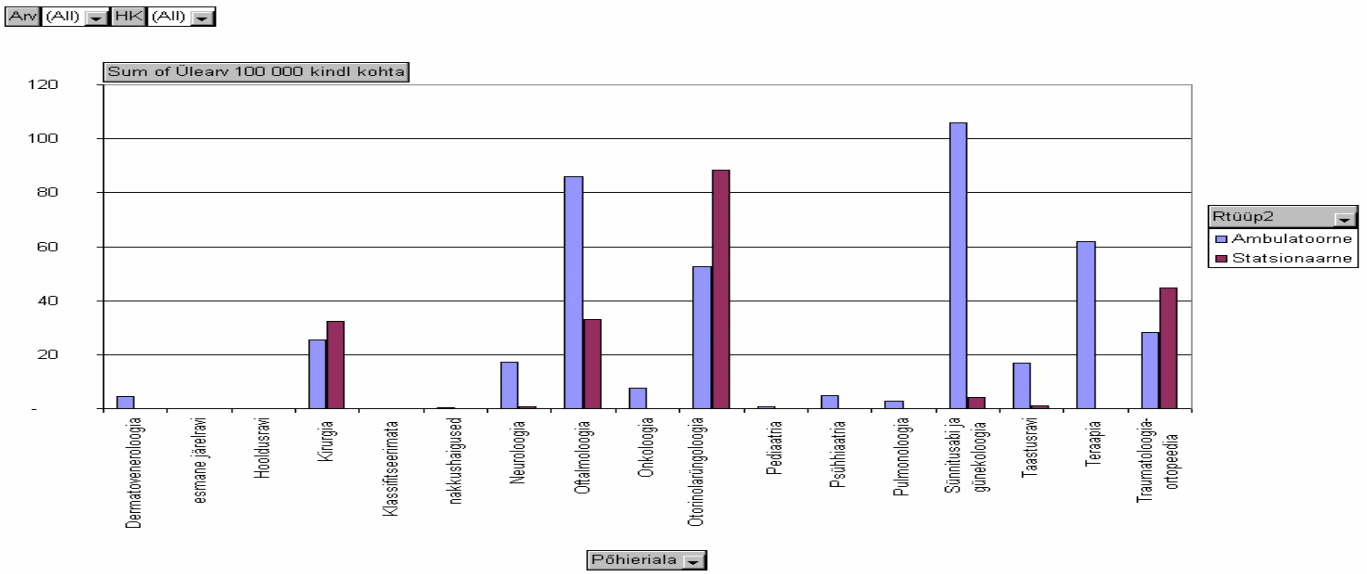
Structure of EHIF cost-volume contract

Specialty	Ambulatory patients	Cost per case	In-patients	Cost per case	Total
Cardiology	1000	50	100	5000	550 000
General surgery	1000	50	200	5000	1 050 000
…					
Contract reserve (5-15 %)					100 000
Total	2000		300		1 700 000

Monitoring hospital waiting times

Standard waiting times reporting introduced in 2002

- reported by hospitals, breakdown by specialty and by EHIF branch
- standardised for population (per 100 000 people)
- some action must be taken if waiting times are longer than 6 months



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Prioritizing queues

Application of prioritization protocols

- joint replacement and cataract surgery queues
- evaluate need, e.g.
  - physical impairment (visual aquity, functional mobility)
  - pain
  - ability to work, give care to dependents, live independently
- protocols based on New Zealand experience

People with higher needs needs are treated faster

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Optimization of hospital capacity

Implemented through

- Rational "Hospital Masterplan 2015"
- Legal hospital reform: incorpororation under private law as foundations (trusts) or joint stock companies
- Hospital mergers – internalise efficiency problem to hospital management
  - In 2001 EHIF had 17 hospital contracts in Tallinn
  - In 2002 EHIF has 4 hospital contracts in Tallinn
- Supported by EHIF contracting
- Development of conceptual solution for long term care
- Solving health sector investment financing problem

	1993	1999	2001	2015
Number of hospitals	115	78	67	13
Number of hospital beds	14 377	10 358	9160	3500
ALOS	15.4	9.9	8.7	4

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Hospital capital investment financing reform

Key reform features

- capital cost will be included in the EHIF price in 2003
- hospitals will pay capital charge on assets they have received free of charge from the State
- hospitals will make their own investment decisions
- for expensive investments "certificate of need" is required, issued by the State Health Board
- policy will be additional incentive to divesting unnecessary hospital buildings and equipment

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Regulating co-payments for hospital services

Health Insurance Law 2002 legalises co-paymens for hospital services

- Co-payment base rate for standard accommodation conditions is Euro 1.6 per hospital day in 2002
- Co-payment can be charged for up to 10 days per admission
- Co-payment will be adjusted annually based on inflation rate

Co-payments can be charged for above standard care

- Standards yet to be defined

Patients are charged full cost if the want to by-pass queues

- on the condition that by-passing does not increase waiting times for other patients in the queue