

Norvēģijas valdības divpusējā finanšu instrumenta grantu shēmas „Īstermiņa ekspertu fonds” īstenoto projektu rezultāti, izveidotā sadarbība un ietverto tēmu aktuāli jautājumi



EEZ finanšu instruments  
Norvēģijas finanšu instruments

norway  
grants 

## Tematisko semināru cikls „MAZS PROJEKTS LIELAI IDEJAI”

2010.gada oktobris – decembris

**22. novembris 13.00 –16:00**

**Esošā situācija un vīzijas par e-veselības attīstību Igaunijā**

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*Sociālo lietu ministrijas E-veselības departamenta vadītāja  
(Igaunija)*



võrdsed võimalused inimväärseks eluks

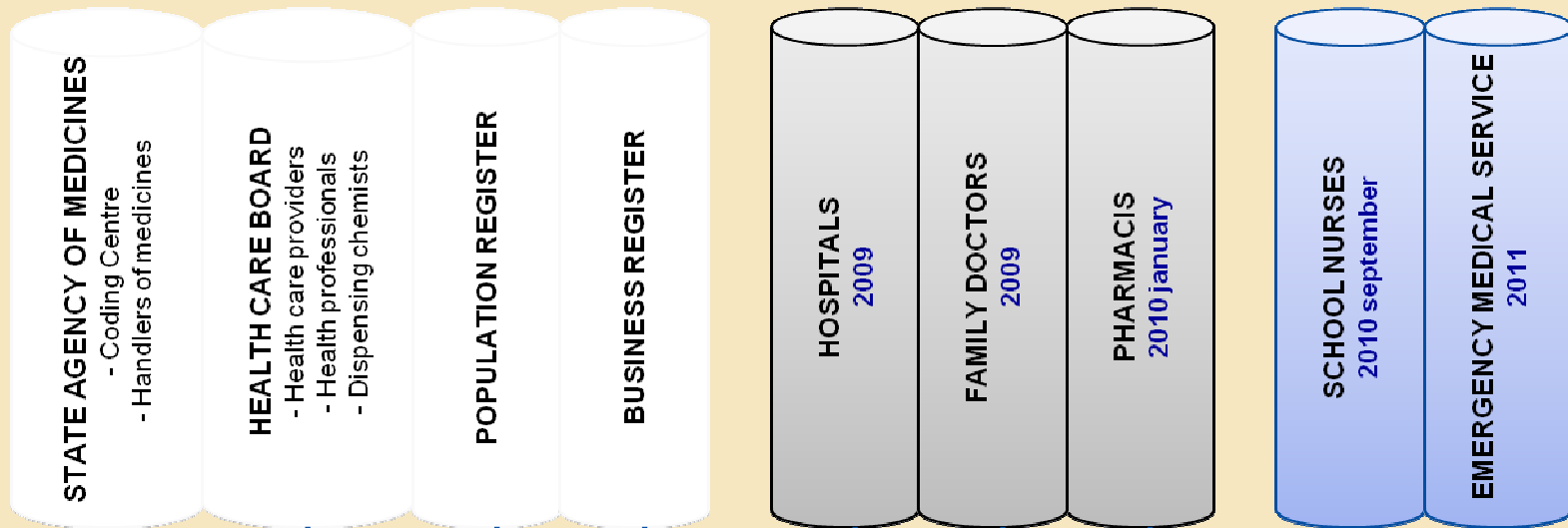


sotsiaal  
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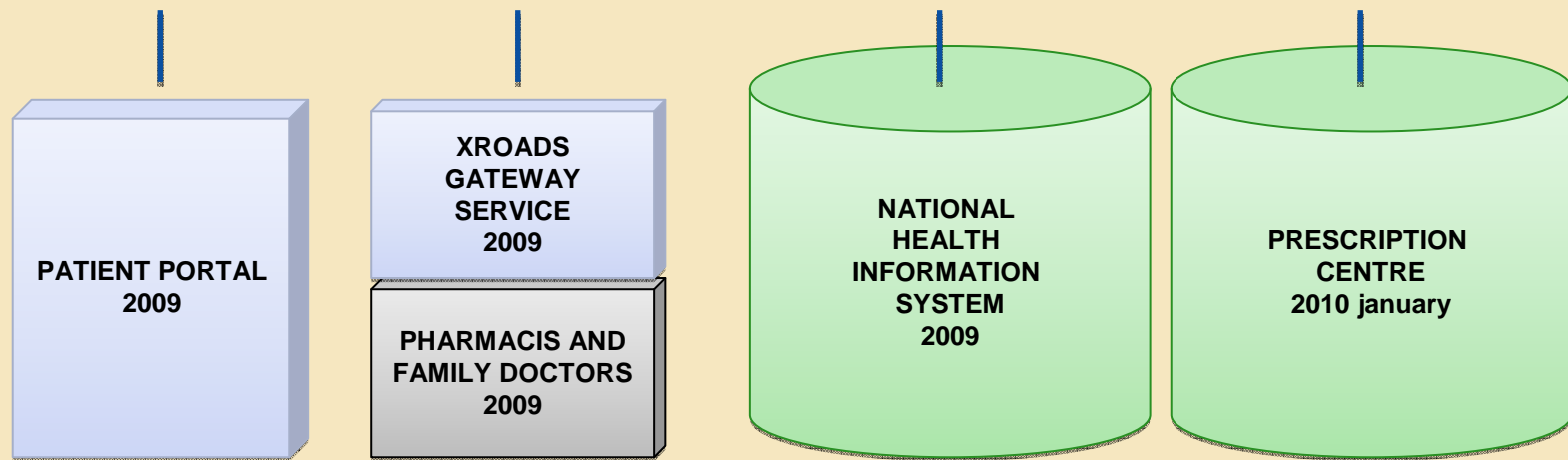


## eHealth in Estonia

- ▶ Nationwide health information system (from December 2008)
  - Discharge letters (epicrisis), out-patient consultation notes, dispensed medication information, digital images (index) and reports, day-surgery discharge letters, birth-epicrisis, timecritical data
- ▶ e-prescription system (from January 2010)

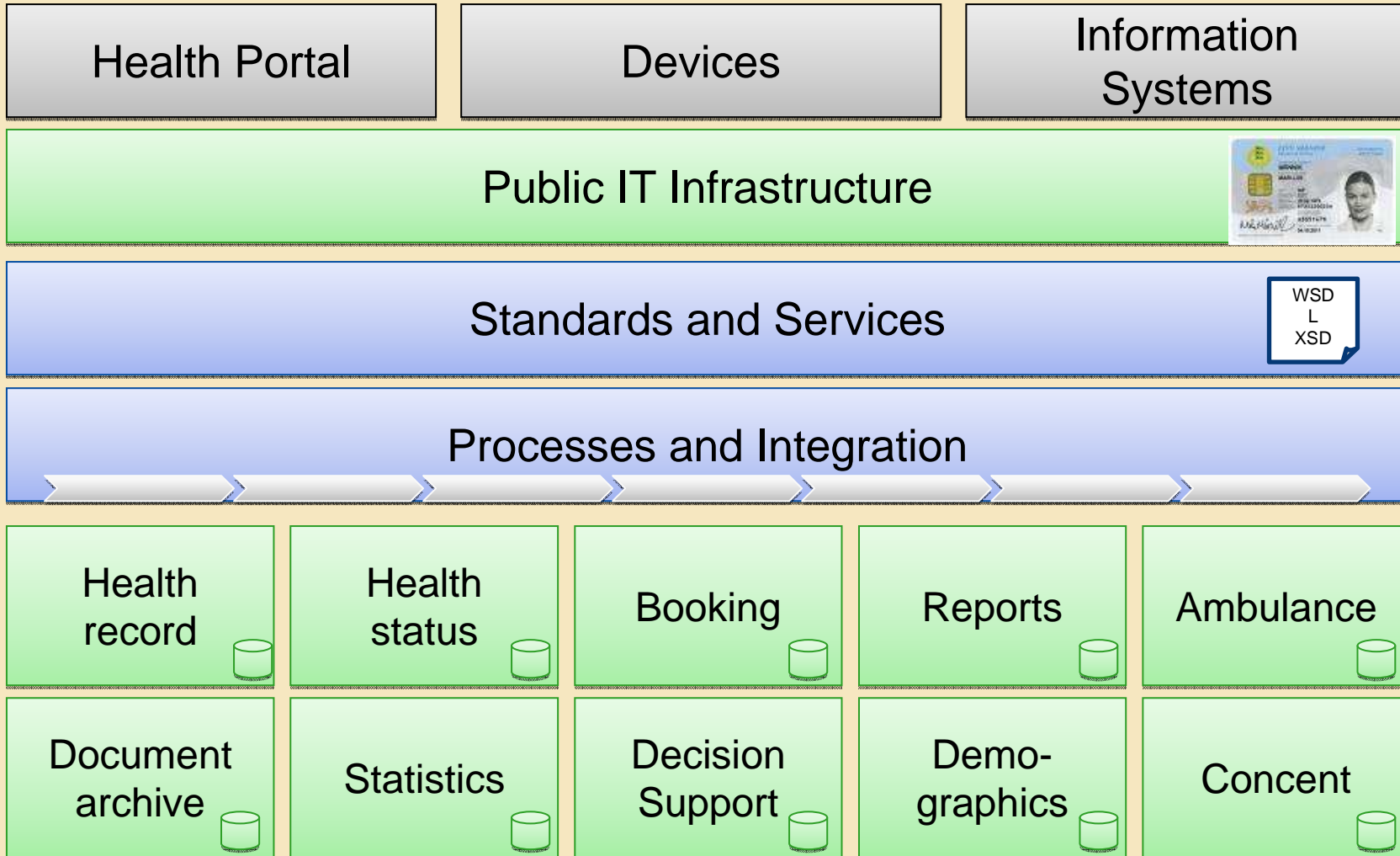


X-Roads, ID-card, State IS Service Register





# EHR Central Functions





## Healthcare IT in Estonia

- ▶ Relatively consolidated Healthcare software market
- ▶ Electronic Health Records implemented inside hospitals and in most centres of family doctors
- ▶ Major hospitals starting to provide access to their IT systems to external parties
- ▶ Good Internet access
- ▶ Expectations from patients to get e-services



## Legal environment of eHealth

- ▶ The Health Information System Act is being prepared to
  - ▶ regulate the development and maintenance of the health information system
  - ▶ Lay down the necessary requirements to the patient, health service provider, etc
- ▶ Debate of the bill
  - ▶ Government (spring 2007)
  - ▶ Parliament (autumn 2007)
  - ▶ Accepted 20.12.2007
- ▶ Government regulatory act of Health information system  
15.08.2008
- ▶ Ministerial act for digital documentation
  - ▶ Updated regulatory
    - ▶ Documentation data sets, stakeholders and implementation schedules



## Financing

- ▶ Central systems

Developing costs (SF) 2,3 mln €

E-Health Foundation - state budget 1.5 mln € - 2010

- ▶ Medical service providers through contracts



## Data access policy: opt out

All healthcare providers must send data to EHR

- ▶ Regulated by the law
- ▶ Access only to licensed medical professionals
  - ▶ The attending doctor concept
- ▶ ID card for authentication and digital signature
- ▶ Patient has the right to close his/her own data collected in the central database (*opt out*)
- ▶ Patient can access their own data
- ▶ Patient can declare their intentions and preferences
- ▶ Patient can monitor visits to their EHR



## Current Situation 08.11.2010

▶ There are **3 279 001** documents in the Estonian EHR

▶ Discharge letters (epicrisis)	260 435
▶ Out-patient consultation notes	400 735
▶ Dispensed medication information	1 987 735
▶ DICOM images ( index)	307 485
▶ Image reports	313 963

▶ More than **445 400** citizens have digital medical records in EHR , it is 33% of the population



## Current Situation 12.10.2010

- ▶ Usage of the EHR by doctors
  - ▶ Nr of the doctors who has send documents – **2824**
  - ▶ Nr of the doctors who has look documents-**3010**
  - ▶ Totally **4604** doctors have used EHR, which is more that **82%** of all registred doctors in Estonia
  - ▶ They have looked documents of **47385** patients



## Availability of Discharge Letters Year 2009

North Estonian Regional Hospital	Tartu University Clinic	East Tallinn Central Hospital
27661	31914	24038
82%	74%	84%

These 3 hospitals cover more than 60% of in-patient cases in Estonia



# ePrescriptions

	Januar y	Februa ry	March	April	May	June	July	August	Septemb er
Number of e- prescriptions issued	278 957	407 609	520 000	387 000	381 836	408 713	386 493	435431	538 738
% from prescriptions issued*	40%	58%	74%	55%	55%	59%	55%	62%	77%
Purchased prescriptions	150 009	221 800	322 000	288 000	292 207	318 968	314 414	333018	402901
% from purchased prescriptions*	21%	31%	46%	41%	42%	46%	45%	48%	58%

\*estimation based on 2009 numbers - 700 000 prescriptions monthly

\*\* 13.04 recommendation to the doctors: not to use e-prescription



## EHR technical information

- ▶ Availability during last 12 months – 99,20
- ▶ Number of messages during 2010 – 22 043 356
- ▶ Database size 817 GB
- ▶ Average response time for request – 4 sec



## Lessons learned:

- ▶ Standardization and acceptance by all stakeholders
- ▶ Regulatory environment before system development tenders
- ▶ Stakeholder inclusion
- ▶ Reuse of existing know-how and infrastructure



**Thank you!**

**Questions?**

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