The Greek ePrescription System and Patient Summary

Athina Triantafyllidi,
Director IDIKA S.A

Description of the Greek ePrescription System

❑ The Greek ePrescription System is a nationwide widespread web based application for the creation, transmission, dispensing and monitoring of medicine prescriptions and diagnostic referrals .

❑ The most important e-health initiative in Greece and the biggest e-government application with up to 850.000 transactions per day.

❑Prescription based on active substance supported for the first time - patients can choose   for   the   first   time   the   drug   they   wish.

❑ The system has been developed by IDIKA SA – a public owned company specialized in IT products for Social Security and Health Service public organizations.

❑ Two phases –pilot phase Oct 2010-May 2012, full production June 2012 –today.

The Greek ePrescription Size

- ✓ **43.000** doctors

- ✓ **11.900** pharmacies

- ✓ **5.500.000** prescriptions/ month

- ✓ **2.000.00** diagnostic referrals/ month

- ✓ **2.900.000** patients served /month

The National e-P system: Overall structure

1.

2

4

5.

6.

3.

8.

7.

Doctor

INTERNET

Pharmacy / Lab

eP DATABASE

Verification of executed Prescription by scanning (off-line)

Control / on-line payment / other

HC ORGS / EOPPY
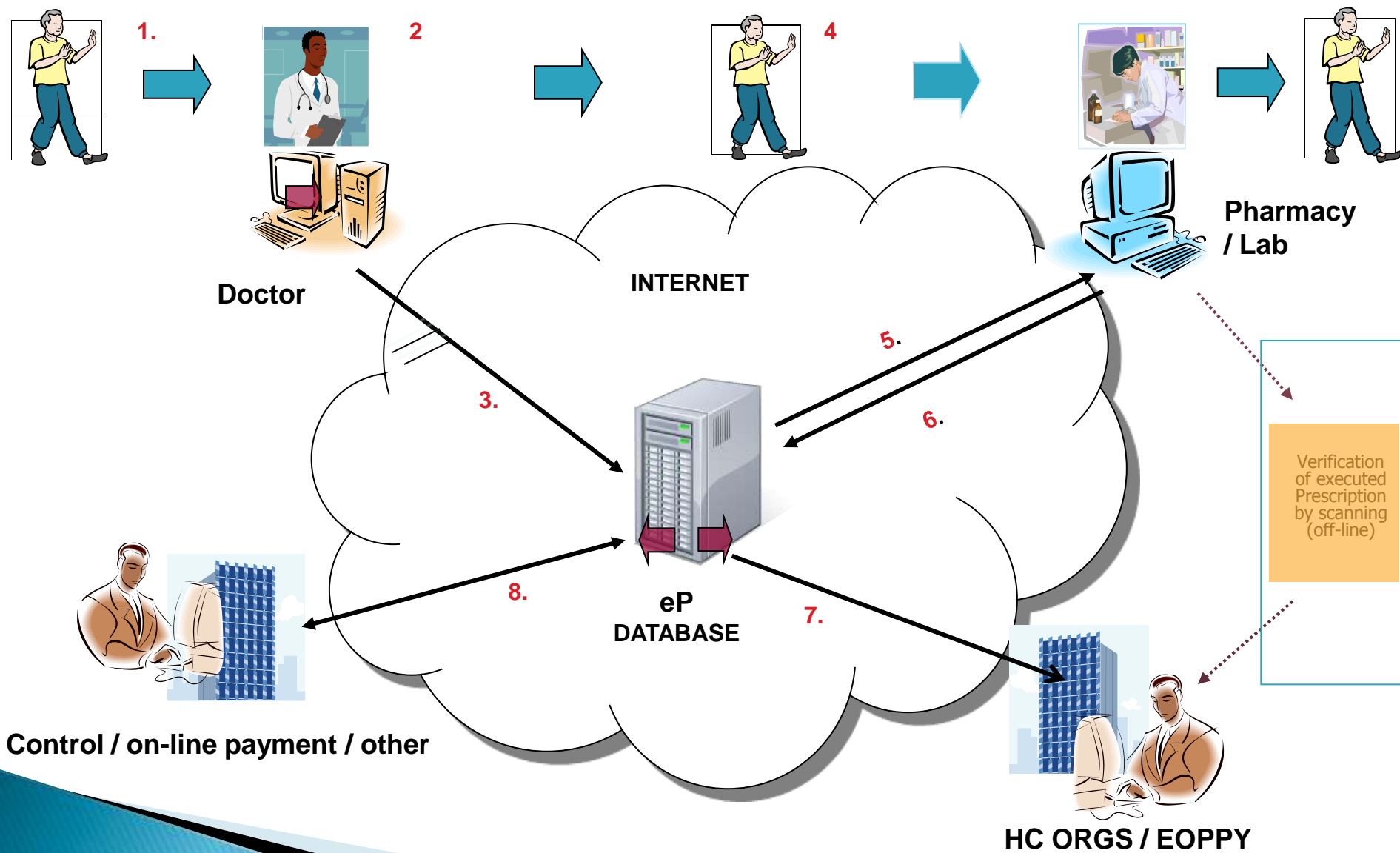
Functional Architecture

Patient Data
- Demographic data
- Patient Summary
- Social Security Coverage

Good Practices
- Theraupeutical Protocols
- Diagnostic Protocols

Patient transactions
- Medical Visits
- Prescriptions
- Referrals or clinical tests
- Access Rights

Portal
- Secure – Authorized Access
- Communication and forums

Business Intelligence
- Data Analysis
- Risk Management
- Fraud Detection.

Interoperability
- Medicine's National Database
- National Social security Registry
- Doctor's and pharmacist's software
- Hospital's ERP's
- EPSOS Standards

Health Professionals' transactions
- Physicians
- Pharmacists
- Laboratories

Financials
- Clearance
- ePayments
- Access to financial data

ePrescription Benefits (1/2)

❏ Ruled based prescription and referrals validation

❏ Compatability between diagnosis and drug prescribed

❏ Direct prescription execution and expenditure control

❏ Allignment with guidelines and prescription rules

❏ Patient Medication Summary

❏ Monitoring of prescribing behavior

❏ Electronic drug validation and control of the validity, legality of drug movement to the supply chain

ePrescription Benefits (2/2)

☐ Accurate statistical data ensuring complete transparency and important contribution to the decision making policy

☐ Reduction of medication costs

☐ Standard & Dynamic administrative reports generated for Ministries, SSFs, etc

- Average Price Per Prescription - trends

- Prescription expenditure

- Issued/Executed Prescriptions per Day / Month

- Number of Beneficiaries served by the E-Prescription System

- Number of Doctors and Pharmacists who prescribe electronically per day

- Dynamic reports on demand

▸ NSRF 2007-2013 Resources exploitation for system improvement

▸ The Operational Impovements include:

  ✓ Gradual integration of approved therapeutic protocols introduction of diagnostic protocols

  ✓ Digital signs

  ✓ BI system

  ✓ Interoperablity with doctors IT systems, Laboratories IT systems & Hospitals ERPS

- Although only recently introduced (2010), already covers more than 98% of all prescriptions prescribed today

- Its introduction helped improve patient services

- It proved a very useful tool for containing unnecessary expenditure, related to (excessive) medication use.

- It is already a valuable source of planning, control and transparency data for the Greek healthcare system.

- It was build under pressure - Its completion (full functionality) is an on-going process … and a major challenge …
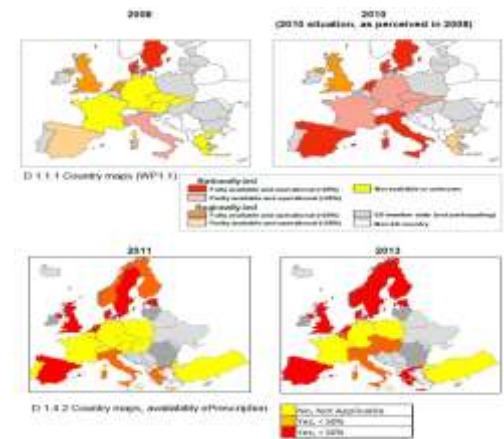
Quite recently the law 4328/2013 was voted by the Greek Parliament. It has to do with the National Primary Health Network, in which (Article 51, paragraph 4) the patient summary is institutionalized.

- Based on the European Guidelines

- Compatible with EPSOS NCP

Towards a national EU patient Summary

❑An extension of e-Prescription services
- ❑Based on Patient Summary Guidelines
- ❑Created in two steps
    1. Medication Record and Health care encounter reports from Health Care Providers
    2. Mediated by a doctor

❑Continues process of creation of reports to be incorporated into PS by family physician or other Health Care Providers

❑Cross border consent and security policy

The process of developing the e patient summary

✓ Patient Summary search from doctor (Primary Health Care (PEDY),Healthcare Units(Hospitals) →display patient information after patient's permission

✓ Electronic prescription insertion and execution

✓ Patient Summary research where all patient information will be displayed after e prescription execution

✓ Design and development of electronic hospital discharge

✓ Patient Summary research with the inclusion of the hospital discharge data

✓ Recall of patient consent

✓ Patient Summary search – Message for rejection

According to EpSOS Approach:

Patient Summary is a standarized set of basic medical data that includes the most important clinical facts to ensure safe and secure healthcare.

The Patient Summary includes:

✓ General information about the patient

✓ Medical summary of most important clinical patient data

✓ List of current medication

PATIENT General DATA

Identification

> National Health Care patient ID

Personal information

> Full Name

> Date of Birth

> Gender

Contact information country of stay

> Address

> Telephone No

> Email

> Preferred HP/Legal organization to contact

> Contact Person/ legal guardian (if available)

Insurance information

> Insurance Number

PATIENT CLINICAL DATA
Alerts
> Allergy
> Medical Alert Information (other alerts not included in allergies)
History of past illness
> Vaccinations
> List of resold, closed or inactive problems
> Surgical Procedures prior to the past six months
Medical Problems
> List of current problems / diagnoses
> Medical Devices and implants
> Major Surgical Procedures in the past six months
> Treatment Recommendations
> Autonomy / Invalidity
Medication Summary
> List of current medicines
> (All prescribed medicines whose period of time indicated for the treatment has not yet expired whether it has been dispensed or not)
Social History
> Social History Observations
Pregnancy history
> Expected date of delivery
Physical findings
> Vital Signs Observations

Diagnostic tests
> Blood group

PATIENT ADMINISTRATIVE DATA

Country
> Country

Patient Summary
> Date Created
> Date of last update

Nature of the PS
> Nature of the PS

Author organization
> Author organization

❑1/1/2015: Starting of the Productive Operation with the integration of the Hospital EVAGELISMOS to the system

❑1/3/2015: Integration of the hospitals served by IDIKA S.A IT systems (EVAGELISMOS, GENIMATAS, IOANNINA, KAT, ΠΠΓΝ PATRAS, NIKAIA, TZANEIO, METAXA, IPOKRATEIO ATHENS, IPOKRATEIO THESSALONIKI, RODES, LAIKO, AG.ANDREAS PATRAS)

❑ 1/6/2015: Gradual expansion to all Country's Hospitals

Patient Summary Benefits

- Continuity of healthcare

- Improvement of clinical procedures

- Quality and security of clinical services

- Rationalization of expenses

THANK YOU FOR YOUR ATTENTION