

ITMO SOFT

The Greek Perspective of Interoperability in Medical Informatics

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IT penetration in the Greek Hospitals

- ✓ Low Penetration
- ✓ Usually Fragmented Approach
- ✓ In Most cases solutions based on outdated technologies
eg. DOS
- ✓ Very few skilled IT personnel. In the IT departments of 112 public hospitals:
 - Only 48 people have university degree (not necessarily IT)
 - 37 TEI
 - 141 high school graduates

Productive (?) Applications

- ✓ In a study out of 112 public hospitals the following percentages indicate some form of coverage of the corresponding field:

Invoicing	53%
Admissions	70%
Purchase Dept.	46%
Warehouse	65%
Outpatients	44%
Accounting	73%
Payroll	38%
Emergency Dept	9%
Personnel Dept	48%
Medical Supplies Dept	38%
Drugstore	71%

IT project in Progress (Public Sector) – (I/IV)

- ✓ Currently 3 year contracts for 5 Regional Health Authorities have been signed involving:
 - 25 Hospitals
 - 39 Health Centers
 - 122 Primary Practices
 - 3.050 Users
- ✓ In these projects, HL7 Connectivity is envisioned

IT project in Progress (Public Sector) – (II/IV)

- ✓ 7 bids for Regional Health Authorities are under evaluation involving:
 - 40 Hospitals
 - 30 Health Centers
 - 67 Primary Practices
 - 4.639 Users
 - HL7 Connectivity

IT project in Progress (Public Sector) – (III/IV)

- ✓ A bid for Military Hospitals is under evaluation.
 - 7 Hospitals
 - 560 Users
 - In this interoperability requirements are asked without explicit mentioning of HL7
 - Image interoperability via DICOM is asked.

IT project in Progress (Public Sector) – (IV/IV)

- ✓ 2 bids for Regional Health Authorities to be submitted until the 9th of June
- ✓ 2 bids for Regional Health Authorities are under preparation
- ✓ 1 Bid for the most major Hospitals is under preparation
- ✓ General Observation: very ambitious projects but severely under-budgeted

Interoperability Existing Situation

- ✓ There is no much concept of interoperability
- ✓ Very few working interoperable implementations, mainly between HIS and LIS in the private sector
- ✓ Usually in small depth

HL7 Hellas

- ✓ Founded on June 2003
- ✓ Enlarged on Feb 2004
- ✓ Scope
 - Promote HL7 interoperability issues
- ✓ Currently has 13 industrial members and 6 Academic or non – profit organizations
- ✓ Recently 2 SIGs commenced operation
 - SIG TIG
 - SIG HIM
- ✓ Site <http://www.hl7hellas.gr/>



HL7 Hellas SIGs

- ✓ SIG TIG (Technical Implementation Guidelines)
 - Technical Scope
 - Adapt Messages for HIS <-> LIS connection for Greece
- ✓ SIG HIM (Healthcare Information Management)
 - Medical Scope
 - Medical Codifications & Classifications
 - Patient administration
 - Observation reporting
 - Patient referral



Problems of Interoperability in Greece (I/II)

- ✓ Several Ministries involved eg:
 - Health
 - Welfare
 - Development (trade – industry)
 - NSSG

Problems of Interoperability in Greece (II/II)

- ✓ Lack of Standardization
 - Patient Code
 - Supplies
 - Chargeable Services
 - Diseases
 - Medical Actions
 - Medical – Nursing Actions
 - Drugs
- ✓ Lack of appropriate funding

The way forward (I/II)

- ✓ Ministry of Health Legislation
 - Currently under Public Consultation
 - Caters for:
 - Interoperability between Systems and Services
 - National System for Health Information
 - Open Health Forum
 - Health Standardization

The way forward (II/II)

- Through:
 - ❑ Health Observatory
 - ❑ National Center for the Quality of Health Services
 - ❑ Institute for Training and Education of Human Resource in Health
 - ❑ Center for the Management of Health Information and the Support of Health Systems
- ✓ HL7 Hellas Working Groups
- ✓ Existing & future contracts will put the problem in a timeframe

Risks

- ✓ Structural Activities
 - Will take substantial time to deliver
 - Is questionable whether they can co-ordinate with existing projects
- ✓ Voluntary activities are unclear whether they will be adopted
- ✓ Existing projects are overambitious while under-budgeted
- ✓ Health Informatics Market
 - Still at its infancy & fragmented
 - Highly volatile on the Public sector pace