BUILDING A HOSPITAL INFORMATION SYSTEM ARCHITECTURE

A Portuguese experience
BUILDING A HOSPITAL INFORMATION SYSTEM ARCHITECTURE
A brief presentation of Centro Hospitalar Vila Nova de Gaia/Esposinho

- Health workforce:
  - Doctors: 736
  - Nurses: 986
  - Technicians: 207
  - Auxiliary: 785
  - Administrative: 277
  - Staff: 84
  - Management: 16

- Healthcare Activities:
  - Outpatient: 467,691
  - Emergency Dept: 176,573
  - Surgery Conven.: 10,499
  - Surgery Ambul.: 11,731
  - Discharges: 24,464
  - Beds: 570
  - Index Case Mix: 1.1970
From 2007 till 2011 we evolve from HIMSS stages 1 to 5 (not yet official)
Still we face important challenges to attain and overcome

- Centralized Scheduling of clinical acts like consultations and Exams
- A Patient Administration System based on a very old database. Oracle 7.3, without any support of WebService or HL7 interoperability
- Patient Identifier Cross Reference (PIX) IHE profile. Changes at the patient state are not automatically reflected in all systems
Still we face important challenges to attain and overcome

• Security is an issue:
  – We need to introduce strong mechanisms like smart tokens for authentication and other security services
  – Privacy requirements and attributes need to be harmonized between different authorities
  – Business Continuity is not support in a IT disaster recovery plan as it should
Still we face important challenges to attain and overcome

- In organization terms, the obvious mixing and performance dependence, between the IT Function and the Health Equipment's function, is not yet recognized, as it should, under the same organization unit that could be called Health Technology Department
- At national level I feel IT Function is already considered essential to healthcare day to day operations. Though there is space to improve governance and management maturity
THANK YOU

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Building a hospital information system architecture, a Portuguese experience

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