

NEW eHEALTH PARADIGMS WITH CLOUD COMPUTING

Paolo Barichello - Stockholm, 13 November 2012

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“Cloud Computing for e-Health - A new framework”



ONLINE DIGITAL SIGNED CLINICAL DOCUMENTS / YEAR

Laboratory Reports: 528.000

Radiology Reports: 132.000

Anatomy pathology Reports: 10.000

Transfusion Reports: 12.000

Emergency Reports: 70.000

Discharge documents: 35.000

Patient Records: 35.000

Radiology images: 15 Terabyte

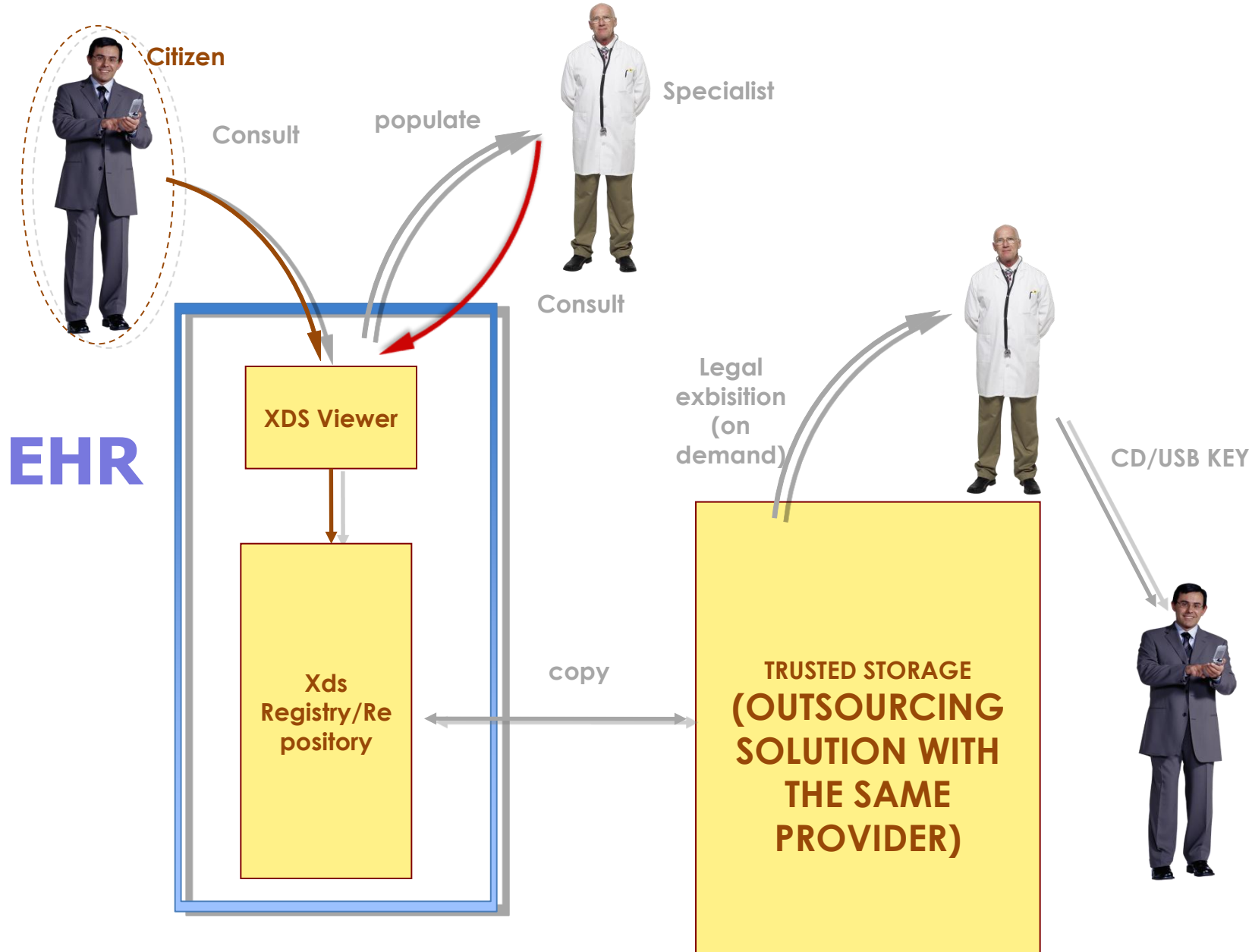


OLD ARCHITECTURAL PARADIGM FOR EHR IN LOCAL AREA

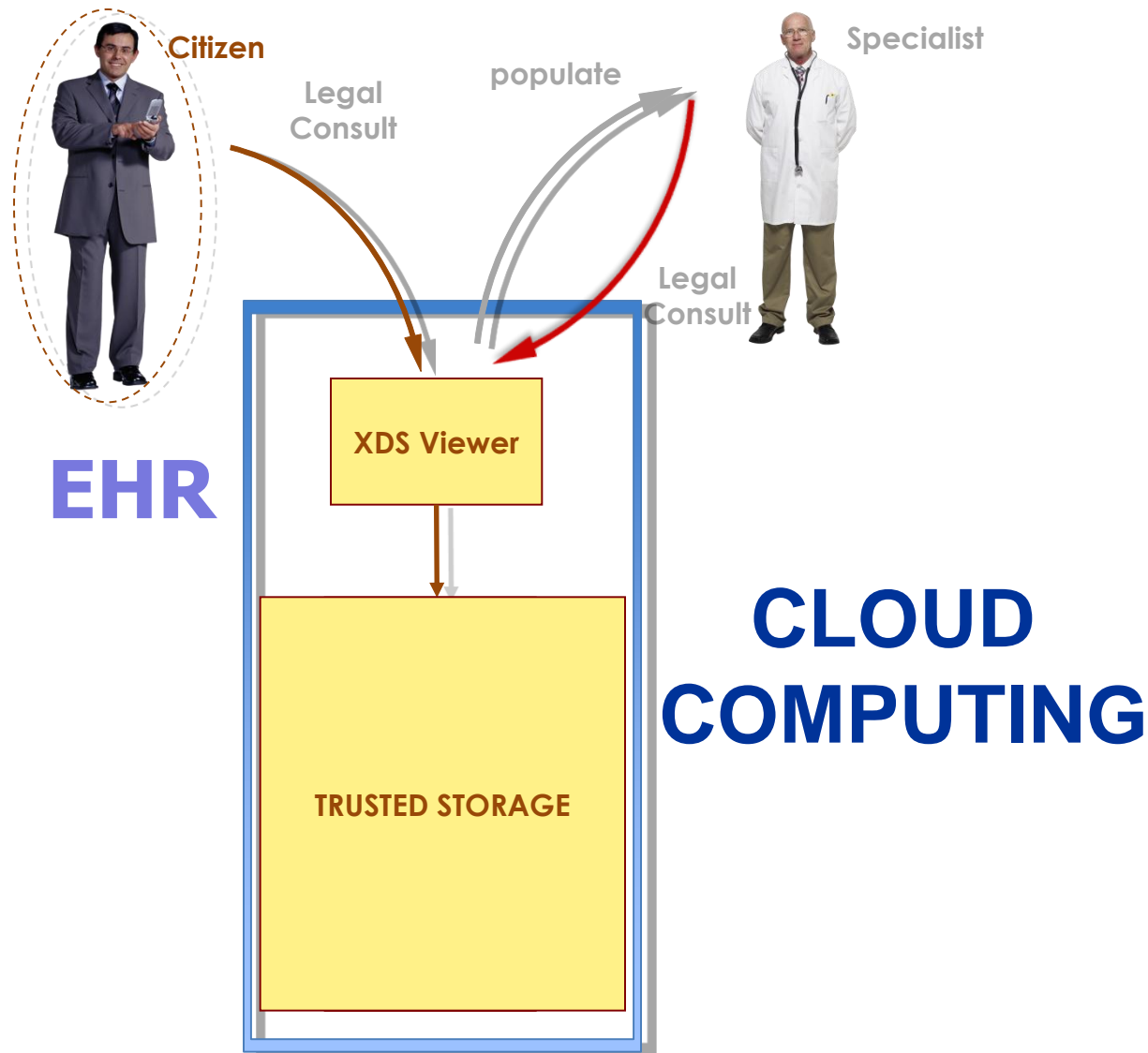
The Repository is dedicated for operational consultation by local citizens and clinical operators. THIS SYSTEM IS limited in the hospital;



OLD ARCHITECTURAL PARADIGM FOR EHR IN LOCAL AREA



NEW EHR PARADIGM IN CLOUD IN ULSS 8



A NEW DEFINITION OF EHR IN CLOUD FOR LHA ULSS 8

A on-line Health Dossier application insisting on preservation system

- **Full access to legally archived documents:**
 - **Full legal validity**
 - **No expiry**
- **Cloud XDS Repository**
- **Cloud XDS Registry**
- **Connection to Regional Health Network**

Citizens have no more to go to hospital to obtain their legal medical record (on paper or digital)





SUSTAINS PROJECT

Sustains is a project involving 16 partners from 12 European countries. ULSS 8 Asolo represents Italy.

The project aims to study and implement services that allow direct access by citizens to their health data online.

**Sweden
Italy
Spain
Great Britain
Luxembourg
Greece
Belgium
Denmark
Finland
Estonia
Slovenia**



ELECTRONIC HEALTH RECORD



The cloud-based Electronic Health Records solution implemented by the Hospital of Castelfranco Veneto facilitates the possible introduction of the Regional Health Records based in cloud computing in all the 59 hospitals in the Veneto region.

ELECTRONIC PATIENT RECORD

Because with cloud computing it is not necessary to implement in every hospital an interoperable local repository (technology level is different between hospitals in the region).

with local interoperability paradigm it is not possible to guarantee same service levels, because there are different management teams, different suppliers and different agreements.

Hospitals will use the ULSS 8 cloud platform to obtain the objective: The REGIONAL EHR



CLOUD TO TREAT

CLOUD TO SHARE CLINICAL INFORMATION TO TREAT DISEASES

CLOUD TO IMPROVE DIAGNOSTIC AND CLINICAL TREATMENT

THE REAL GOAL WILL BE REACHED WHEN CLOUD WILL BE INVOLVED IN CRITICAL PROCESS (NOT ONLY IN OFFICE AUTOMATION) LIKE

- CRITICAL CARE**
- EMERGENCY**
- ONCOLOGY AREA**



CLOUD PROVIDER RELIABILITY

The provider must be able to support a complex context and above all must be familiar with the ICT infrastructure hospital.

It is important the reputation of the provider.



HOW IT OPERATORS CHANGE

- **From IT Manager to Service Manager;**
- **Attention to Core Business;**
- **Culture for the control;**
- **Quickly respond to sudden needs that can not implemented internally.**



CLINICAL CLOUD

The cloud is a solution that can improve the situation of innovative hospitals.

But also it is an opportunity for hospitals that can avoid delay in many phases of a digital system implementation because:

- They do not need their own technology platform;
- They can have an ict department reduced;
- Many operations for customization services are unnecessary.



