



# **XDS in France**

## **Success stories and future project**



# Introduction

In France, XDS is more and more recognized as being a valuable way to exchange data in healthcare. It has been successfully implemented in 2 major projects:

- ALFA LIMA in Brittany;
- Emosist in Franche-Comté.

and is the basis for the infrastructure of many other projects currently under development.

But XDS is not only recognized by local projects as an operational way to interconnect, it is also integrated as an interoperability basis at the national level for the national PHR project (DMP).

This presentation will introduce the conditions under which the successful local projects implemented XDS and the lessons that can be learned for their experience. It also addresses the orientations chosen for XDS implementation in the larger scale project of DMP.

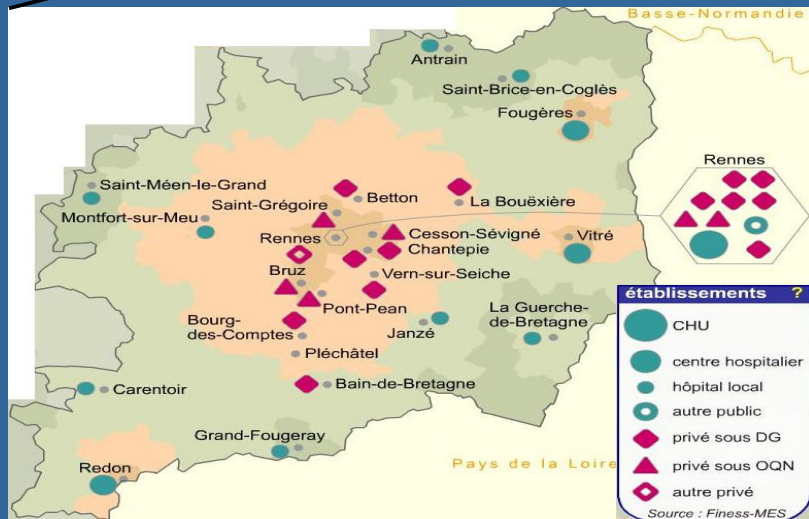
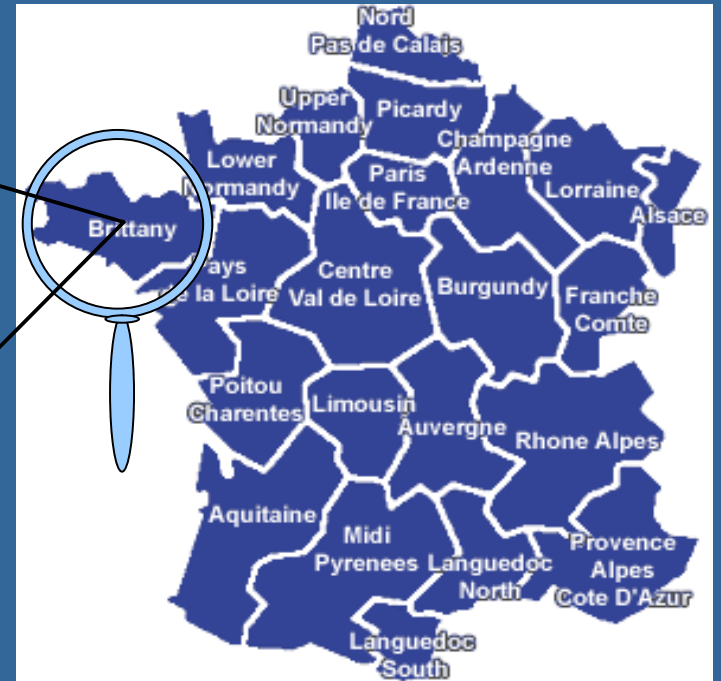
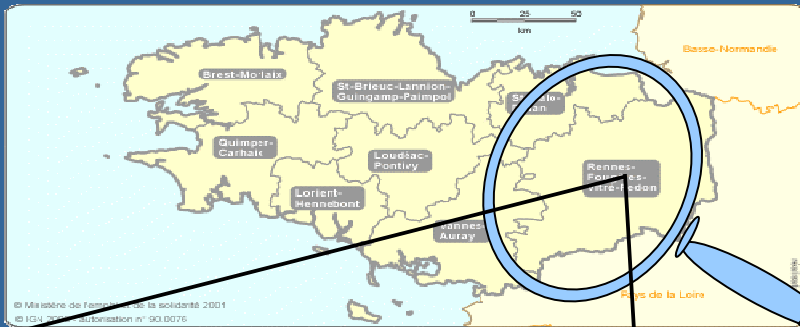


# ALFA-LIMA project in Brittany

*From theory to practice*

# ALFA-LIMA project in Brittany

## Brittany ?



3 facilities specialized in breast cancer:

- CHU de Rennes;
- Centre E. Marquis de Rennes;
- Clinique mutualiste de la sagesse.

# ALFA-LIMA project in Brittany

## How it all started

- Specialized facilities working together on breast cancer (within the Institut de cancérologie de Rennes) requiring interoperability for their information system for:
  - sharing patient directory;
  - sharing documents;
  - preparing interdisciplinary meetings on patient's case.
- Requirement forwarded to SIB to act as project manager.

# ALFA-LIMA project in Brittany

## How it went

- As a result of SIB's technological watch, XDS has been selected as being the best suited “standard”.
- A specific group of users has been associated with the project from the beginning for detailing of the needs as well as promoting the project among practitioners.

# ALFA-LIMA project in Brittany

## What was done

- Providing of central infrastructure, development of all XDS components and integration in the existing hospital information systems.
- Meta-data defined in collaboration with the user group and with input from national publications (national French extension defined by IHE France working group).
- XDS completed with other IHE and non IHE functionalities (patient identity management (PIX), authentication, healthcare professionals directory (PWP), mail, patient consent, submission of documents from a database of structured health data (CDA)...).

# ALFA-LIMA project in Brittany

## Difficulties faced

- Collaboration of a user group is a necessity but needs a lot of efforts:
  - difficulty to go from general needs to detailed functional specifications (content of the records);
  - difficulty to get input for meta-data definition from healthcare professionals for lack of use for them because it is too formal for care network use (e.g. healthcareFacility, eventCode, practiceSettingCode...).
- Patient identity management is a whole process that isn't solved by only implementing IHE PIX profile, it still needs human action within an identity-vigilance body to solve conflict.
- Vendors of legacy systems not always ready to adopt IHE profiles.

# ALFA-LIMA project in Brittany

## Lessons learned

- Success of the project is closely linked with promotion to the healthcare professional by peer.
- Value of a national effort to lean on for meta-data definition even though a closer collaboration is needed.
- Step by step progression with initial simplification of complex issue as a way to success. Waiting for an ideal product (with security, consent management, etc.) leads to an ever delaying of start.

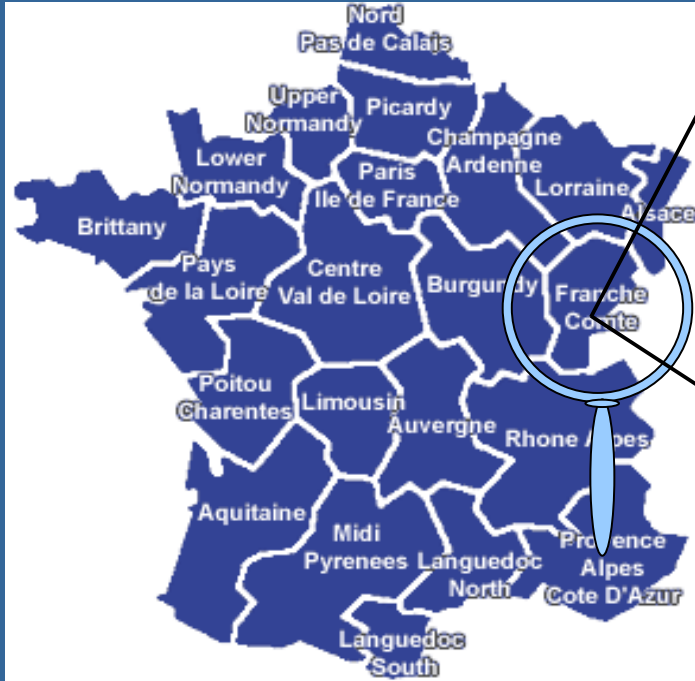


# Emosist project in Franche-Comté

*Following the interoperability thread*

# Emosist project in Franche-Comté

## Franche-Comté?



A big university hospital and many smaller facilities (around 60).

# Emosist project in Franche-Comté

## How it all started

- Shared health records among small communities already in the culture of Franche-Comté's healthcare professionals.
- Initial need for identity management and cross-referencing to allow “functional” interoperability between communities led to use of PIX.
- Decision to follow up by building an XDS affinity domain including hospitals as well as “stand alone” practitioners for shared EHR between communities.

# Emosist project in Franche-Comté

## How it went

- Procurement for a “standardized” existing solution around IHE because of the small size of the project:
  - use of existing products promoting interoperability;
  - lowest development costs as possible;
  - easier interconnection with future local and national projects.
- ⇒ SQLI (French software and computing services company) selected as the project manager
- Wish for use of structured documents postponed due to lack of adequate products at the time (project started in 2004).

# Emosist project in Franche-Comté

## What was done

- Providing of central infrastructure and software sources to software vendors (for “provide and register documents”, “query registry” and “retrieve documents” transactions).
- Meta-data based on input from SQLI based on its experience “tempered” by Emosist requirements and national publications (national French extension defined by IHE France working group).
- XDS infrastructure completed with three pre-requisites: patient identity management (PIX), healthcare professionals directory and authentication/authorisation functionalities.

# Emosist project in Franche-Comté

## Difficulties faced

- Selecting the right contractor with the right level of “standardized” product.
- Use of structured documents not a common functionality for on the shelf products and need specific development.
- Even with provision of sources, success in integrating exchange functionalities in existing products varies from vendor to vendor.

# Emosist project in Franche-Comté

## Lessons learned

- Provision of sources is important to speed up the adoption rate but not enough.
- Once a core group of healthcare professionals are used to relying on shared records it is easier to get from small communities to open communities mixing specialities.



# DMP project

## *XDS going nation-wide*

# DMP project

## Scope: the whole French territory



# DMP project

## How it all started

- Legal requirement:
  - Dossier Médical Personnel (Personal Health Record) established by a 2004 law to improve coordination of care.
- Priority given to a quick adoption:
  - Make it easy for vendors to develop product with DMP-connectivity capacity by using widely used standards and profiles.
  - Make it useful for the healthcare professionals by taking their usual practice into account.
  - Make it easy to use and safe for the patient.

# DMP project

## How it will go

- Document content and medical meta-data defined with healthcare professionals thematic working groups (children health record, radiology, laboratories...).
- Technical specifications for central infrastructure and medical softwares (provision of connection modules for medical software vendors under study).
- Procurement for central XDS infrastructure.

# DMP project

## Difficulties faced

- Scope of the project requires coordination with a large population (vendor, healthcare professionals, patients...) and the related timeframe.
- Large healthcare professionals population of various specialities leads to interoperability challenge with all medical softwares of the market.
- Law constraining functionalities that may not be the object of stable standards yet.

# DMP project

## Lessons learned

- Interoperability framework will be published for easier integration in medical softwares.
- User working groups led by healthcare professionals.
- Review of timeframe to allow coordination with the various actors.

# Thank you for your attention

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