

**Challenges in Medical Patients' Data Management:  
a comparative analysis (United States, United  
Kingdom, France and Quebec – Canada)**

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# Introduction

- Cooperation in the framework of **professional Master degrees** of the Universities of Marne-la-Vallée and Compiègne.
- Interdisciplinary approach about information-communication and quality management (with a **constructivist** vision).
- **Methodology** : mainly qualitative, **documentation** analysis and **interviews**.

# 1 – Specificity of Medical Patients' Data (1/2)

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- 1 - Medical patients' data :  
**sensitive** (critical),  
**personal** with strong concerns of confidentiality (**privacy**).
  
- 2 - Different levels of **storage** and **management**.  
(For example in France, the **compartmentalization** between **State** and **Sickness Insurance**)

# 1 – Specificity of Medical Patients' Data (2/2)

- 3 - Restricting legislation:
  - . “Health Insurance Portability and Accountability Act” (**HIPAA**) in USA.
  - . “*Commission Nationale de l’Informatique et des Libertés*” (**CNIL**) in France + European directives.
  - . “*Commission d’Accès à l’Information*” in Québec (Compostelle).

## 2 – Different responses within specific national contexts (1/5)

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- Needs of data management at **3 levels**:
  - **macro** (States),
  - **meso** (hospitals),
  - **micro** (doctors and patients).

## 2 – Different responses within specific national contexts (2/5)

- In USA:
  - issues of different legislations between **Federate** States and **Federal** Government levels.
  - The **NHIN** (National Health Information Network) project.
  - Data Management in **HMO** (Health Maintenance Organizations) such as Kaizer Permanent.

- Office of the National Coordinator for Health Information Technology (ONC)
  - Request for Information (RFI) on National Health Information Network (NHIN)
  - ... *As the nation embarks on the widespread deployment of EHRs, a variety of concomitant challenges and barriers must be addressed. One of these is **interoperability**, or the ability to exchange patient health information among clinicians and other authorized entities in real time and under stringent security, privacy and other protections ...*



## 2 – Different responses within specific national contexts (3/5)

- In UK:
  - The new project of Electronic Health Record (**EHR**) of the National Health Service (NHS) in the specific programme « Connecting for Health » with a strong task force in national project management articulated in five regional clusters (North East, North West, West Midlands, Eastern, Southern, London)
    - now with some problems.

- What is the EHR?
  - *The Electronic Health Record (EHR) is a new computer-based system adopted by the NHS organisations in Wirral. It stores your health records 'electronically', which allows doctors and other health professionals to access up-to-date information about you and your health ...*

## 2 – Different responses in specific national contexts (4/5)

- In France, 3 different projects :
  - **1 Réseau Santé Social**: a technological network for transferring paying back data (electronic sheets: “*feuilles de soins électroniques*” which correspond to the main French specificity -since 1927- in paying by acts)
  - **2 SNIIR-AM**: “*Système d’Information Inter Régimes de l’Assurance Maladie*” one of the most important datawarehouses in the world.

## 2 – Different responses in specific national contexts (5/5)

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- **3 DMP:** The “*Dossier Médical Personnel*” in France with great ambitions with limited means now in limited experimentations by industrial consortiums (private).



- **DMP et autres dossiers médicaux 09-03-2006**

- *Le DMP concerne la **coordination** des soins entre tous les professionnels de santé, de ville ou d'établissement de soins, médecins traitants ou spécialistes et professionnels de santé non-médecins.*

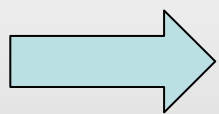
- Il a vocation à être complémentaire aux dossiers médicaux informatisés qui existent déjà. Il facilitera les échanges entre ces dossiers, sous le contrôle du patient.*

### 3 – Same Challenges converging in Interoperability (1/2)

- If different responses exist, finally the challenges tackled are roughly the same :



- Data **property**.



- Data **access** and management of access authorizations.





- The good level of **data storage** and data management; even at the regional level



# 3 – Same Challenges converging in Interoperability (2/2)

The challenges :

-  - The issue of shared medical secrecy / **privacy**.
-  - Doctor's **collective** responsibility / **individual responsibility**.



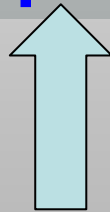
### 3 – Same Challenges converging in Interoperability (3/3)

All these challenges converge to a central one:

to solve the problem of the **compartmentalization**

and the main response is:

by the **interoperability** of the different levels





## Conclusion (1/2)

- The challenges of Medical Data Management need responses which take into account:
  - the complexity of the management, and
  - the contradiction between the traditional opposite levels :
    - » individual / collective,
    - » public / private
    - » centralized/shared

## Conclusion (2/2)

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- Health organizations are organizations which **strongly** highlight our society challenges about:
  - Information management,
  - Knowledge,
  - Services.

Thank you very much for your attention

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Questions ?