

Improving data quality by conducting systemic changes in the collection process

Perspectives from the French Technical Agency for Information on Hospital Care

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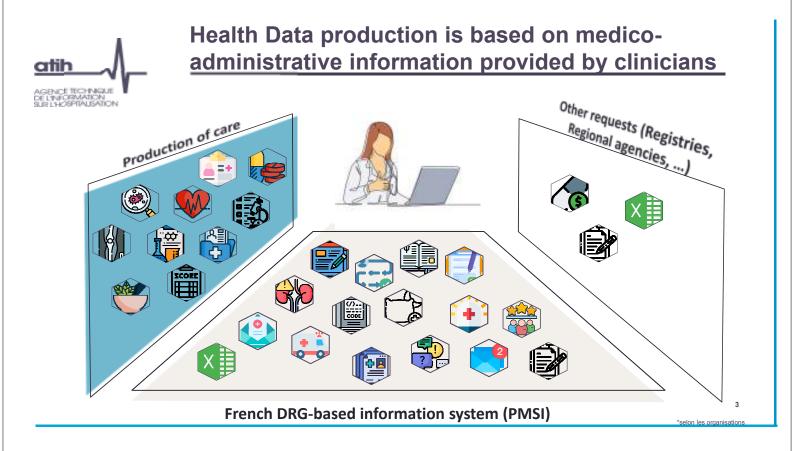
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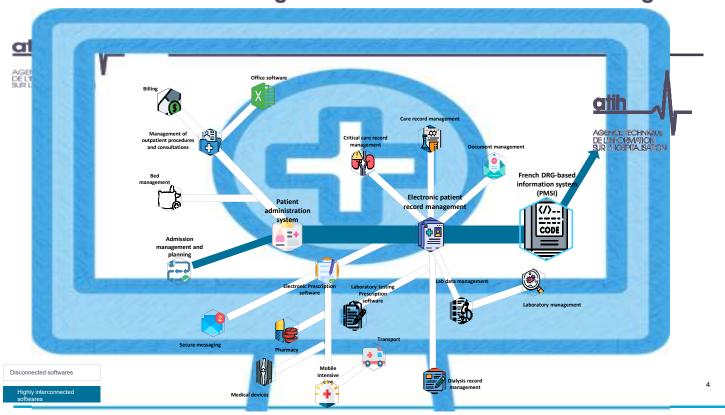
Requests for Health Data vs.

Hospitals Information Systems' capacity to produce them

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Entering health information involves using





2021-2022

How we conducted this work

2019-2021 : Initiating the state of the art

How can we characterize the difficulty of producing collections on the part of hospital facilities?

How does the market work for software publishers involved in the production of health data collection?

What directions can be proposed to improve the performance of the Healthcare Data production system in Hospitals?

Proposals

- worked on by the project group : seminar and strategic committees
- and presented at the General Directorate for Healthcare Services at the Ministry of Health



We conducted a threefold study using quali and quanti methods

Production process study

- O Dozen semi-guided field O Six guided interviews interviews with medical information teams
- Quantitative online survey of 1427 healthcare institutions conducted in January 2022.

Software editors study

- with the most established or innovative publishers of health information systems (HIS)
- Quantitative analysis of
 A report was provided the French national database on HIS software companies implemented in hospitals.

International study

- 7 guided interviews with national and local organizations in three countries (Australia, Denmark, England).
- and several cross-cutting workshops were organized at the ATIH to identify priority areas for action.



Current status of the Hospital Healthcare data production systems in **France**

And short-term issues



In summary: dysfunctions at all levels of the process and some good practices





Deployment



Stabilization

- Multiple requests
- Multiple access points • Competing demands
- ■ Regular blockages at the system level
- Increased complexity and granularity
- **➡** Increased production difficulty
- Benchmark: <a> mandatory standards for software publishers
- automated data exchanges

- Medium and long-term evolutions are unknow
 - Unability to anticipate
- Lack of systemic consideration of user constraints
 - A trial and error approach
- Benchmark: deployment period of at least 6 months
 - data quality & availability

- Lack of dedicated software/form solution for collections
- Manual entry time
- **Crystallization of artisanal** production processes
- human ressources costs
- Data collection performance
 - Data concentration technologies



The hospital information system and the software publishers' market

- A fragmented software publishers market
- O A mosaic of publishers within the same institution
- On-premise implementation → local deployment of solutions, → complexity in managing versioning → compatibility issues
- Integration with the rest of the information system (IS) through a point-to-point approach in the absence of interoperability standards
- Multiple requests from different state agencies and a very short timeframe for implementation
- Permanent home-made solutions





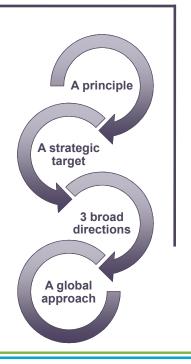
The challenge arising for the French hospital discharge data collection in 2022

How can we continue to ask the Hospital for more medical information without any risk of blockage of the entire Hospital Health data production system?



Data serving Health

Proposal to improve the efficiency of the health data production and collection system in hospitals



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A principle

Information entered once for multiple uses



Massive reduction in the manual burden of collecting and entering information.

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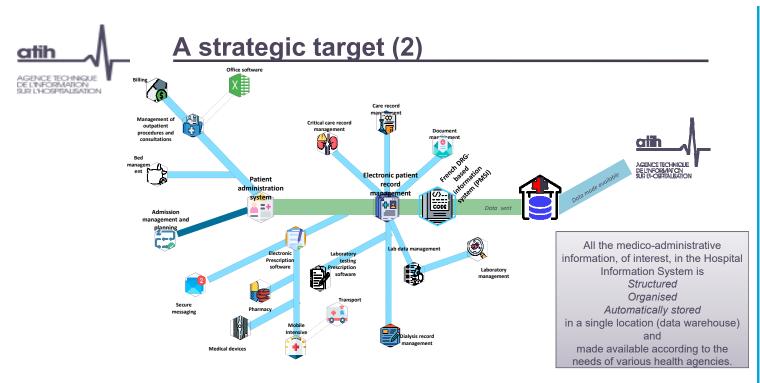


A strategic target (1)

Automation Collect **Hospital Health Data** of the of Structured Information Systems Load reduction Standardized data (conforming to standards) **Capture Automated operations** Reprocessing (no human intervention) and the **Transmission Availability Frequency**

Research Epidemiology Coordination

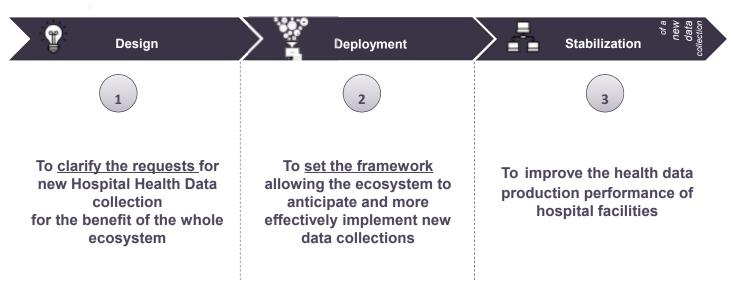
> **Towards greater** efficiency in the **Hospital Health Data** production system



→ Volume

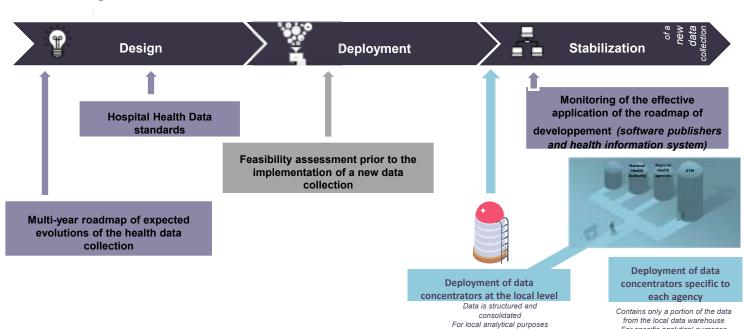


Three broad directions



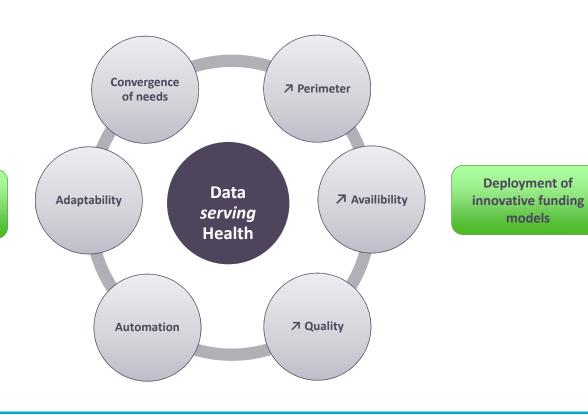


An operational approach consisting of six main initiatives





Reduction of the administrative burden





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