From Theory to Reality
Health Data Management in a Complex System

Eloria Vigouroux-Zugasti, Christian Bourret & Sylvie Parrini-Alemano
Laboratory of DICEN IDF - University of Gustave Eiffel / CNAM
Val d’Europe / Serris, France

Presenter : Eloria Vigouroux-Zugasti (eloria.vigouroux-zugasti@u-pem.fr)
Resume

With the recent promulgation of the General Data Protection Regulations (DGPS), data management is becoming a crucial strategic issue in organizations. The quality of data dissemination is of utmost importance in the healthcare environment. Indeed, medical confidentiality is closely linked to the dissemination of personal information inherent in the patient's record.

Yet, how can a complex system, composed of multiple multidisciplinary actors (medical, paramedical, administrative, etc.), deal with the potential disclosure of personal data? What steps can be taken to manage this risk? How to ensure legal compliance with medical confidentiality, while ensuring the interoperability of professionals and the quality of care?

To answer these questions, a case study was conducted in the Multidisciplinary Care House of Mimizan (France, Landes, New Aquitaine Region). The goal was to investigate the importance of data management for traceability of care. This medical organization is composed of medical and paramedical professionals, but also a relatively large administrative team for such an institution. Nevertheless, it manages to set up, at the initiative of the professionals, both flexible and structured processes, allowing optimal follow-up of patients, while guaranteeing respect for their personal information.
Outline

I – Study Background

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III – Analysis of Data Management (DM) Processes

IV – Organizational Processes: Guaranty for the Quality of DM

V – General Lack of use of the National Digital Health Record

Conclusion
I – Study Background

Challenging health context

- Rural population with a high aging index
- Density of specialists lower than national averages
- Unfavourable Public Health context (white areas, medical desertification, etc.)
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Management of de-materialized health data in a complex system
• Exploitation of personal data remains a sensitive topic, despite the various national and European laws
• Clustering of health professionals endangered the protection of health data records
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Study case : Multiprofessional Care House of Mimizan (MCHM) – one of the biggest and most dynamic MCH in France
II – Methodological Approach

Why study the case of the MCHM

• Representative of the movement of territorial restructuring in the field of health (conditions of implementation and daily functioning)
• Meet the whole public health objectives
• Attractiveness of the project
• Its territory offers most of the current and forthcoming public health services
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Health Records Management in the MCHM

- 30 people involved in daily operations of the MCHM, subjected to the institution’s collective agreement
- Medical database software (Weda), used by surrounding external collaborators
- Different levels of accreditation for patients’ data access
II – Methodological Approach

Study’s goals

• Identify the organizational model and rules implemented by the MCHM’s team = qualitative approach (observations and focus groups)

• Investigate the daily work practices and confront point of views

• Investigate data management policy (interviews) and professional uses of patients’ health records
III – Analysis of Data Management (DM) Processes

Data ethics and dissemination quality: starting point of the MCHM

• Essential to give access to the right information, at the right time: selective transmissions of data
• Smoothing organization of data sharing
• Limiting the risks linked to the poor dissemination of data
III – Analysis of Data Management (DM) Processes

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Informational lean management for no unnecessary information
- Performance thanks to very low entropy
- Hierarchy in information management
- 0 useless information
IV – Organizational Processes : Guaranty for the Quality of DM

The human relations theory as a leading light

- Mobilization and involvement of the whole staff to improve the processes’ efficiency
- Essential that the direction of quality action be collegial
- Increase of performance can only be achieved through the collaboration with the departments involved in the approach
IV – Organizational Processes: Guaranty for the Quality of DM

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Leadership: team, quality and performance management

• Cooperation and trust: key resources for the management of complex systems
• Clear commitment of each member of the group
V – General Lack of use of the National Digital Health Record

“It is not designed for medical practice. In case of emergency, it becomes counterproductive” : “raw” data instead of ”valued” data

Need for a info-ethical approaches or “information lean” : for the DMP to be relevant, it is essential that it be analysed, organized and structured in valuable data sets

Need for a co-producted innovation, in a spirit of active interdisciplinary collaboration
Conclusion

What about risk assessment?

Impact of emotional intelligence for management quality

Larger scale of investigation to compare and generalize the results
Thank you for your consideration

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eloria.vigouroux-zugasti@u-pem.fr
christian.bourret@u-pem.fr
sylvie.parrini-alemanno@lecnam.net