Realising the Value from Health Data ~ Improving Care and Research

JOINT EVENT

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EMIF

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Trying not to forget the future
Emphasizing the purpose
Facing a new paradigm of health information uses

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The loss of reliability in data extraction from clinical histories: the source of the flaws and the usefulness of training.

[Article in Spanish]
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Abstract

BACKGROUND: Clinical epidemiological research often requires using data stored in clinical records. There is a paucity of systematic studies of errors in the data extraction process from clinical records in the medical literature. In order to assess the increment of reliability in data extraction from clinical records due to training, we estimate the degree of agreement in the data extraction process from clinical records of rheumatoid arthritis patients.

MATERIAL AND METHODS: Test-retest, quasi-experimental study. A random sample of clinical records was selected from a rheumatoid arthritis patients register. The degree of agreement between the two observers, before and after a specific training, was estimated with kappa and intraclass correlation coefficients.

RESULTS: Following standardized ranking of the degree of agreement, we observed that 5 out 19 (26%) studied variables improved significantly after training and 14 (74%) remained with the same degree of agreement or did not change significantly. At the end of the study, only two variables received a degree of agreement less than good whereas six did so before training. The improvement was noted in the clinical variables.

CONCLUSIONS: It is possible to have a systematic approach to the source of errors in the use of data from clinical records. The training of observers has a significant impact on the degree of agreement and therefore improves reliability. The training in the extraction and management of clinical information may contribute to the improvement of validity and reliability of observations in medical practice.

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XXI century Facts:

• EHR
• Specific Formal Institutions
• Growing body of Knowledge and Skills
• Some examples of real activity
• Added value to the process – (medical encounter a research encounter)
• New Paradigm. Clinical practice: information management to decision making
• Patient empowerment, owner of his data
• Transparency itself drives improvement, social enhancement and data quality
Changing the course to

• Be able to share the results of research, clinical guidelines and patients without problems and safety data

• Widwning of the role of health information technology (TI) to improve the delivery of care.

• Adoption of the new culture to the access and exchange of information changes to promote transparent, secure electronic information flow. Both the patients and the providers want the health information to be shared between systems

• Incorporate as an obliged task the education of clinicians, technology developers and patients about the fears associate to privacy protections
• Interoperability efforts should drive rewarded reforms aimed at shifting towards quality results instead of the quantity of services provided.

• Health IT provides new opportunities to involve patients and caregivers and can empower patients to learn and communicate more easily on your health, be personalized, participate in shared decision making, and manage their care in a comfortable and meaningful way.
THE IDEAL. The promised land

- Integration of traditional public health data, clinical data and data on social determinants of health
- Make informed interventions and anonymous data shared with scientists to accelerate the translation of evidence into practice.
- Health IT is important to advance in a learning health system that uses the knowledge gained as part of the care experience to promote continuous improvement and innovation.
- Compatibility will facilitate better control of health outcomes, as well as efficient use of resources and cost analysis, particularly for care in multiple systems and environments.
The ideal

• Given the rich and diverse sources of digital data available for research purposes and analytical tools become increasingly powerful and sophisticated, researchers and clinicians will have the opportunity to **generate scientific evidence quickly and efficiently**.

• To reinforce and require the availability of high-quality evidence for patients and doctors to help them **make informed decisions** that will maximize the benefits and minimize the risks and to improve individual and community health.
Flaws:

• FROZEN STAGE ?.
• Outcomes based health policy. It is long known. No news.
• Varibility of clinical practice/health services uses. it is known.
  • Main cause: clinicians manage different information. Different decisions.
    • Evidence Based Medicine
• Few examples of innovation through Health data use/reuse
• One and only example of info caregivers: European Institute for Innovation through Health data

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Flaws

• This is still a very technical process that must be complemented with sound purposes, links with the clinical context, and dissemination of achievements.
  • Lack of COMMUNICATION TO SOCIETY
  • NO PRESENCE OF CLINICAL CARE PROVIDERS:
    • Why?.
    • Different objectives or targets?

• MORE EXAMPLES OF ACTIVITIES NEEDED.
Wishes

- Health IT should be easy to use and able to integrate and display information in a meaningful and achievable way.

- Health IT Stakeholders can take advantage of this opportunity to continue working together to address the flawed issues of interoperability, ease of use, privacy, security and data management.

- Given the sensitive nature of patient data, the evolution of skills, privacy and security policies require special attention.

- Policymakers and the private sector have the opportunity to ensure that the growing health IT infrastructure creates an equitable learning health system that leads to high quality care, lower costs and a healthy and committed population.

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To be continued ..... 

Thanks so much