E-cards and e-Health - an ethics point of view

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Abstract: This paper present the role of ethics using the electronic data, specifically electronic card. According with the EU development of a solution for provide information on the patient’s medical history, about his or her diseases, treatment made and of course about payment for private medical services.

The security is very important and helps us to assure the confidentiality of the data, but, in the same time the accessibility for medical data.

Key Words: ethics, electronic card, e-Health

1. Introduction

Developing the e-Health in the world reflects the course of a normal evolution of the society. The way to recognise the implication of e-Health is not very smooth but is important to reflect the changes in the society according to the rights and the duties of the people, with the development of a moral community. [1]

The issue value must be perennial, even if we must analyze the new topics in the same way with the old topics.

In the centre of introducing electronic health card is the patients and its rights.

Of course, new law and ethical regulations would be necessary for this new records form, additional to store data on e-card.

The impact of this new way of storing data must be objective monitoring, in order to maintain rigorous scientific and ethical standards.

Of course the ethic evaluation is not simple; we can’t divide the think in good or bad, in white or black; it is a complex analyze, with several shade, with moral problems dilemmas and quandary.

2. EU Commission view.

The principal directives give by EU related with e-Health and e-cards are: [6, 7]

- Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions: e-Health - making healthcare better for European citizens: An action plan for a European e-Health Area, 30 April 2004
- Communication from the Commission: Follow-up to the high level reflection process on patient mobility and healthcare developments in the European Union, 20 April 2004
- Presidency conclusions, Brussels European Council of 25 and 26 March 2004
- Opinion of the European Economic and Social Committee on the European health insurance card, 18 June 2003
- Presidency conclusions, Brussels European Council of 20 and 21 March 2003
- Communication from the Commission concerning the introduction of a European health insurance card - Com(2003) 73 final, 17 February 2003
- Presidency conclusions, Barcelona European Council of 15 and 16 March 2002
- 30 April 2004 Communication from the
Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions: eHealth - making healthcare better for European citizens: An action plan for a European e-Health Area, 30 April 2004

- 25 and 26 March 2004 Presidency Conclusions, Brussels European Council
- Communication from the Commission to the Council and the European Parliament - Building our common Future - Policy challenges and Budgetary means of the Enlarged Union 2007-2013
- 20 February 2004 Report from the Commission to the Spring European Council

2. Aspects of Health and e-Health in Romania

Information and communication technology has penetrated our society, but unfortunately Romania has not a very good experience about e-cards. We must also mention that in the last period a lot of Romanian projects develop medical informatics program. [4]

Now, the process of political decentralization in Europe from the national level moves alongside the important enlargement of the European Union and we consider that the future is for the collaboration of the National Health Care systems in Europe. According with the necessity of re-organization its health system, Romania is adapting health care system to E.U. standards. So, e-cards must be a future objective of our system, and we must be prepared, according to the entire problem, including ethical.

The participation of Romania in Q-Rec project, leads by Eurorec Institute which have the aims to establish the certification mechanism of Electronic Health Record prove that Romania is interesting in developing e-Health products. [3]

3. Health e-cards – medical aspects

Electronic health records are essential for develop a modern medicine and is a key for diagnostic, therapeutic and financial actions.

More and more people from the entire world, including EU, use the internet for their education, communication and now for health. The citizens become consumers of the e-Health and ethical and best practice need standards from good development the new way of approaching the medicine. [9]

Few countries introduce this e-card, with friendly aspects, like in the next picture (fig 1,2):

![Fig.1.](image1)

![Fig.2.](image2)

To be able to use patients date means in the same time to be able to have this data.

Minimum information’s on the e-cards are: (fig.3)

![Fig.3.](image3)

The important problems / barriers for developing e-cards for the authorities in all country are:
- organisational
- difficulty to integrate the eHealth services in
health system
- difficulty to harmonise the health system from different country and from different region
- financial
- the cost for implementing the eHealth at the health system and also at the individual level (computers, internet access, software) – even if in time the system will save money
- the cost to develop an safe industry for manufacturing the e-cards
- cultural and communication
- language barriers- Europe is a multilingual space
- depersonalization of communication
- ethical
- capacity for developing a system which is safe and the accessibility of the data are in strict connection with the level of competences and accessibility
- technical program
- compatibility of platform
- accommodation to the new technologies

The principal problems in using e-cards could be view in the fig 4.

4. Ethical implication
The greatest influence of e-card could be reducing bureaucracy, developing a modality for interconnecting the patients’ data with de health system indifferent where is situated. [5]
The principal problems are present in the next figure (fig.6):

It is very important to develop informatics skills in health system and after that to educate the consumers about using e-cards, in order to resolve these problems. (fig.5) [2]

One of the most important problems is confidentiality versus accessibility to health data.
It is very important to assure the accessibility of data for physicians, pharmacist or insurance company, but also is very important to develop different level for accessibilities according with their position in health care system. Unauthorized use data is possible and also is very difficult to control all the time who is allowed to modify the data from e-cards. [6, 8]
Another problem solved by e-cards is the possibility to
avoid the queue to the health insurance company and the possibility from all kind of health services to control very easy if the person have or not assurance.
Unfortunately the e-cards don’t resolve the problem of accessibility the data on emergency, because usually the doctors or nurse don’t have time to look on the e-cards and in the same time mobile device from e-cards are not available. In the same time in the emergency, some time is important to have a quick reaction, so is also important to know how to manage without e-cards.
Extension the e-cards at the pharmacist level could means a rapid way for communication between doctors and pharmacist.
For the ambulatory, general practitioners or specialist doctors this e-cards could also be a link between them and a good opportunity to have complete information about the patient.
A possible application of e-cards could be the registration of the record about vaccination.
Also e-cards could be an important source of information about efficiency of health system and to recognize where is better to interpose for increasing the used of health system.

5. e-cards – a student’s point of view - a case study

For increasing the using of electronic records it became more and more important to develop the informatics abilities of medical and nursing student. How they appreciate the e-cards it is seeing in the next graphics, which are the result of a study made on Transilvania University of Brasov and to University Iuliu Haţieganu Cluj Napoca.
The study group comprises of 174 students with a minimum of 18 and a maximum of 47 years. The study was realised in December 2008 – January 2009.
At the question connected with The electronic Health card where the student could choose between the next answer:
a. have the advantage to increase the accessibility of medical information about the patients
b. realized the quick up-gradation of information
c. have a high security level and don’t put problem about patients confidentially
d. it is easy to made
e. it is easy to made
the majority of student (58%) think that e-cards are an advantage and 67% of them think that it could be realized a quick up-grade of information (fig.7)

According with this graphic only a reduce number of students think that in the e-cards could be data about religion or economic status. (Fig. 8)
5. Conclusion

The e-Health has a positive influence on the whole insurance climate and on the relationship between insurers, insured people and the state administration and the client's satisfaction with the service grows. Clients' confidence in the e-cards is increases and their utilities are more and more large.

Technology is advancing so fast and a lot of changing are influence our daily lives.

The Health eCard put the patients and its needs in the center of health system and is in the same time the future of ‘patient informatics’; ecards offers a secure, proven and very easy-to-use method of involving patients and help doctors.

Democracy in the information age could also be a guaranty of a good development in the era of e-Health.

In future the smart card will replace the existing health card and spread the electronic records to all citizens.

Also e-cards will facilitate the people mobility in all the world.

References:


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