# **E-HEALTH - A SOLUTION FOR A BETTER HEALTH SYSTEM**

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Abstract: : At the beginning of the millennium, it appears that the health sector has become a primary sector more than ever, directly influencing economic development and welfare default. In the era of the information society, great importance is given medical services, based on the idea of backlash from the patient / user care, its ability to deliver what he wants. Patients need to be identified needs so that medical personnel to meet their health using appropriate techniques and procedures. The state of health is influenced, in large measure, the quality of health care services for their area and how to organize them. To this end, we approached this work, highlighting the importance to be attached to the presence of information technology in the health field, highlighting facilities offered by them. E-health allows the use of information and communication technologies in the health sector, making medical records, electronic prescriptions, facilitating access, increasing quality of care, reducing costs and streamlining health systems. Thus, we addressed the need for computer implementation, and we present some of the computer components to health: file electronic health cards, health care systems, electronic prescriptions and new concepts emerging on the market, respectively, telemedicine and m-health. In conclusion, we emphasized that e-health involves not only the use of new technologies, but also the adoption of more efficient working methods, thus electronic services play a key role in developing an integrated European medical markets and are essential to allow growth restriction excessive costs.

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## 1. Introduction

Given the aging population, public health systems are under pressure - national governments increasingly rely more on IT solutions to solve this problem. Information technology brings changes in European health system, but not at the pace desired by the EU. The European Commission has started to promote the use of IT solutions in the health sector, considering that electronic services play a key role in developing an integrated European medical markets are essential to limit excessive growth in costs. In the EU, health expenditures account for between 4% and 11% of GDP and between 10% and 18% of total public expenditure.

Modernizing medical and clinical investigation process in Romania is based, essentially, on the widespread adoption of the most current tools of information and communication technology. Computerization of health issues is currently enjoying an extensive interest from doctors and computer specialists.

If medical facilities are to succeed in controlling costs, medical personnel must perform accurate electronic patient data records. A major requirement arises with the introduction of new information technologies in health care is the legal aspect of the integrity, security and privacy, especially when it comes to data that contain information about a person's medical history.

Health systems financed by dues payers are becoming more expensive because of an increased demand for services, particularly in the aging population. It is estimated that by the middle of this century, about 40% of the EU population will be over 65 years and will decrease the number of workers whose contributions allow payment of health expenses of this population.

The EU has identified e-health as one of the six emerging markets that Europe has the potential to become a world leader, being the third European health industry size, as the pharmaceutical industry and medical devices.

While most European physicians store and transmit information by computer, only very few of them use other electronic applications such as electronic prescribing and remote monitoring, allowing patients to be under medical supervision without having to go to the infirmary. Also rarely practiced border exchange of data on patients, which is a big problem in a world becoming more mobile.

## 2. PROMOTING E-HEALTH

In the Digital Agenda for Europe, in April 2011, one of the major objectives has resulted in the promotion of e-health, in order to establish the foundations for a new Action Plan for the period 2012-2020. In this respect, Commission has launched a public consultation on ways in which information and communications technology (ICT) can be used to improve the quality of care through a questionnaire aimed at obtaining the views and suggestions on the following aspects:

- benefits and opportunities of e-health;
- ways of solving interoperability issues of e-health technologies;
- improving legal certainty about e-health;
- role of innovation and research in e-health.

It has also launched a consultation by a European High Level Group specially created to advise the European Commission on the functioning of AAL Joint Programme ("Ambient Assisted Living" - Ambient Assisted home), where citizens, companies and researchers were invited to share ideas on how best to use information and communication technology (ICT) to provide European citizens aged more autonomy and, more generally, to establish new ways of putting ICT services to serve the most vulnerable members of society.

Digital Agenda commissioner Neelie Kroes' public consultation is the first step towards achieving the target of doubling by 2015, the number of elderly people leading an independent life. In this respect, ICT has great potential to improve, quite specifically, quality of life and health of older people and other vulnerable members of society ". It is imperative to get as many views for improving joint program of support for autonomy at home, involving both the European Commission and EU Member States. Through this program, will ensure that ICTs will enable a more independent and dignified life for elderly people who are socially isolated, vulnerable, suffering from chronic diseases or have disabilities, improving quality of life of vulnerable and elderly people by keeping costs of health and social services to low and opening new market opportunities for industry and service providers in the EU.

There have been numerous research projects ambient assisted at home, some implementing its success is a powerful. From these projects can remember, social robots for elderly care (social eldercare robots) that can provide assistance in daily activities (lifting or cooking, or an alarm, if built camera, record fall a person).

Another example is an environment such as 'smart home' ('smart home' environment), the cameras 'Intelligent' activities people interpret and communicate changes in behavior emergency centers. Advanced research work to develop exoskeletons controlled by the brain, external devices that respond to nerve movement of feet, making the mobility of vulnerable people. Currently in Europe, both public and private sector invest over a billion euros in research and innovation to improve the quality of life of older people: about 600 million in AAL Joint Programme, 400 million in program EU Research Framework over 50 million so far in the EU program to support ICT policy.

AAL program bringing together 20 Member States (Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Poland, Portugal, United Kingdom, Romania, Slovenia, Spain, Sweden, the Netherlands and Hungary), three associated countries (Switzerland, Israel and Norway) and the European Commission supports solutions that can be brought to market within two to three years and may become commercially viable. These solutions create new business opportunities that materialize in huge savings in the cost of social and medical. For example, remote support solutions (telecare) home care can reduce costs by up to 30%.

European Union pays attention allocated funding for the development of e-Health. Activities related to the operation on "Computerization hospital" have the burden of health care development by implementing an integrated information system, providing access for citizens and healthcare information services such as e-health.

National implementation of e-health has the potential to benefit the public sector, private and public, increasing institutional transparency and credibility, improve quality of care, streamline patient care and reduce waiting times, lower costs and optimizing workflow. The implementation involves creating a structure for electronic medical records supporting information exchange and standardization, networking medical information between different care centers to coordinate responses in the event of a threat to health, ensuring medical services online and the development of remote consultations.

In this way, notes that the eHealth applications occupies an increasingly important role in clinical practice, 70% of European doctors use the Internet and 66% use computers for consultations.

## 3. E-HEALTH SERVICES

The term encompasses a wide e-Health services and systems that are on the border between medicine and information technology.

# a. Electronic health records (EHR) and electronic patient document (PHR)

Electronic health records, is a growing concept that can be defined as a systematic collection of electronic information about patients' health be taken separately, or of patient populations. It is basically a digital recording that includes a range of detailed or summary form data (demographics, medical history, medication and allergies, immunization status, laboratory test results, radiology images, vital signs measurements and information medical costs) that is able to be distributed in different

contexts of care. To support the implementation of such records, Syonic, in 2007, introduced a comprehensive system of electronic health records management, called ICMed, which since 2009 also supports electronic patient documents, so that the number files managed by ICMed reach 3 million.



# b. Healthcare information systems

This system completes the previous concept, electronic health records by providing software solutions for programming consultation, patient data management, business planning management, settlement services to insurers and other administrative tasks surrounding health. ICMed modular computer system allows the management of all activities at the medical center, effectively covering needs at reception, schedules, receipts, returns, storage, communication lab, pharmacy, accountancy. Indicators of the real-time situation management business, budget, epidemiology, demography and quality.

## c. Telemedicine

It is a branch of medicine which is based on the transfer of medical information through electronic environment facilitating:

- remote support or intervention of a consultant,
- providing a second opinion and optimal decision on case management,
- ☐ increase medical efficiency due to direct implications on cost/benefit...

This type of medicine may involve teams of health care professionals who collaborate and share information on patients through digital infrastructure.

Based on ICMed infrastructure, Syonic has developed a system of telemedicine in cardiology since 2009, which allows recording ECG signal in a certain location and view it in another location, along with the entire clinical picture of the patient.

## d. M-health

m-Health involves the use of mobile devices in collecting data on the total and the health of the patient, providing information to health care professionals, researchers and patients, real-time monitoring of patient vital signs and direct provision of care (via mobile telemedicine). Syonic has provided first m-Health applications platform mobile web since 2009 and since 2010 is addressed to patients with terminal native applications on smart phones.

- **e.** In addition to the components mentioned are very important in medical research through eHealth heterogeneous data management and **medical knowledge management**. Syonic is a research partner in consortia with prestigious research institutions in Europe, and the result of the work lies in products and solutions, including the form of knowledge base.
- **f. Health smart cards** are a safe carrier portable records, improve security and confidentiality of patient information, and reduce healthcare fraud. Card can be assigned but other meanings can thus become an instrument of payment or guarantee of assured quality. Patients may benefit from electronic health card at Syonic private, allowing access to emergency medical summary sheet, transfer the prescription to the pharmacy electronically (e-prescription), physicians secure access to electronic medical

records.

g. Limitation e-mail or electronic transmission of prescription information is formulation terminal prescribing doctor of pharmacy management system. This has been since this summer, replacing or in some cases complete a paper prescription, improving patient safety by reducing the possibility of errors due to numerous causes including prescription handwriting illegible or ambiguous terminology. Electronic prescribing system at Syonic is based on online architecture ICMed and electronic health cards as a tool to confirm the transfer prescription.

## 4. INTEGRATED INFORMATION SYSTEM FOR HOSPITALS AND MEDICAL FACILITIES

Th	e concept	of "E-He	alth	" made	the developm	ent of an	ıntegr	ated syste	m that
provides:									
	decision	support	to	access	information	directly	from	without	losing
	information,								
	complex reporting and real time.								

□ complex reporting and real-time;

audit mechanisms, reporting;

□ increase productivity;

□ control and optimal allocation of resources.

Making unique patient records can lead to the creation of a patient's history, which allows connecting local medical institutions at the same sources of information, thus optimizing the flow of information between patient and institutions involved.

Using such a solution has a number of advantages for each party involved in the delivery of health care: patient, medical staff, administrative staff, suppliers of materials and medicines, institutions with decision-making at local and national level.

Benefits of implementing ICT in the health sector can be summarized in:

- ☐ improve patient access to information;
- □ reduce human error diagnostics by accessing patient history;
- ☐ minimizing costs;
- quick response to eliminate bureaucracy and simplifying methodologies;
- ☐ improving the quality of services provided by the institution;
- ☐ improving the administrative capacity of the institution to be able to fulfill the roles and objectives;
- ☐ information security (removing human error);
- □ joining with cash flows IT vertical horizontal (across departments) and external flows (foreign citizens as beneficiaries);
- ☐ improving the patient's physical and psychological.

Regarding this system, we have following steps, each with a number of actions:

## 1. Accept:

- ✓ record patient medical information;
- ✓ create a complete medical history sheet by implementing electronic health records (HER) for each patient;
- ✓ create a unique implementation used as a bar code attached to the patient record, accessible to all hospital departments;
- ✓ traceability patient patient consideration since inter-disciplinary examination for a particular department, physician and bed to release;
- ✓ finding a patient based on complex search criteria.

## 2. Imaging:

✓ Managing Files X-rays per patient;

- ✓ Attaching X-ray images of the patient's electronic record and view them from any department of the medical establishment;
- ✓ Ability to search individual files X-ray;
- ✓ Archiving information containing X-ray.

# 3. Pharmacy:

- ✓ managing prescription medications during treatment directly from each patient department;
- ✓ manage daily inventory quantities on drugs;
- ✓ statistical information on medical stocks;
- ✓ allocation based medicinal doses of active substances;
- ✓ integration with standard list of drugs issued by the Ministry of Health;
- ✓ analysis of drug consumption;
- ✓ highlighting drugs for each patient.

# 4. Laboratory:

- ✓ manage requests for medical tests and their costs;
- ✓ identify samples based on barcode;
- ✓ centralization results from all laboratory equipment attached to the system;
- ✓ create unique test sheet.

# 5. Supply chain:

- ✓ centralized allocation of food rations for patients admitted;
- ✓ set daily menu based on disease;
- ✓ develop daily food requirements based central menu to set the kitchen;
- ✓ save the form of templates menu;
- ✓ projected food needs for the next period by taking into account existing stocks;
- ✓ automatic generation of medication orders to suppliers for each product.

# 6. Health at work:

- ✓ health records management at work;
- ✓ managing occupational risks associated personnel based on job;
- ✓ schedule automatic periodic tests and investigations.

## 7. Management:

- ✓ implementation of annual limits/monthly department;
- ✓ analyzing and managing funds remaining after using medicines and sanitation materials for each department;
- ✓ monitoring of reactants / investigation;

# 8. Report:

- ✓ acquisition of real-time internal reports or other institutions (e.g. MS, CNAS etc.);
- ✓ report in different formats MDB, as required NSPHHSM, XML, as required by Health Insurance Companies;
- ✓ flexible configuration tools reports, each user can define and configure feature and method of viewing reports.

## 9. Portal:

- ✓ component patients;
- ✓ provides information on medical institutions involved in the project activity;
- ✓ provides access to informational resources on electronic health data sheet (EHR);

✓ provides information for individuals (timetables, notices).

## 10. Remote Medical Services:

- ✓ training continues for the medical community (doctors and nurses) that make medical units connected to the system;
- ✓ real-time diagnosis of critically ill patients requiring transport to other centers, transmitting information about patient's vital parameters ECG, X-ray and ultrasound.

## 5. TELEMEDICINE

Telemedicine has the potential to improve the lives of everyone, be they doctors or patients. In remote rural areas, where a patient can find hundreds of kilometers from the nearest hospital, telemedicine means access to health care. In emergencies such access can mean the difference between life and death, in those cases where rapid diagnosis is required and also a rapid intervention, existing telemedicine can be critical.

Also, telemedicine has the potential to improve health care worldwide by diversifying health services, which are offered communities and individuals without access to these services both in the urban and rural. In addition, telemedicine can help attract and maintain in rural areas of health professionals through continuous training and collaboration with other professionals in the field.

When in very different health activities were introduced Internet usage for health care, we say that there is e-health. Many of the activities relate to administrative functions such as registration stocks of drugs or processing complaints from patient refuses, but are a series of activities related to improving clinical care and health patient refuses. Thus, the activities of telemedicine and e-health start to converge to the same thing - increasing the quality of care and improving social health.

Internet has the potential to revolutionize health care by providing access to almost limited to information on health care products and services sites e-health. Millions of consumers around the world use the Internet to obtain health information that directly affects their lives, making this form of telemedicine important new way to improve health.

There are over 30,000 sites related to e-health, offering a mixture of health and medical care, plus hundreds of thousands of individual pages dedicated to certain conditions. In this way, it is possible that users who have the time and skills needed to filter the abundance of information can become as knowledgeable in certain disease areas as doctors by profession. But what is noteworthy is that in terms of quality, information is still scarce and medical Internet marketing is usually not supervised. Under these conditions, health providers and consumers to be cautious and appreciate correctly if the information, product or service is appropriate.

Telemedicine is based on using two different technologies: store and forward technology and two-way interactive television.

Store and forward technology (store and forward) is asynchronous and is used for transferring digital images from one location to another. Image obtained with a digital video camera is stored on magnetic media and then transmitted to the destination. It is used typically in less urgent cases, the diagnosis and outcome of medical consultation should be obtained within 24-48 hours. Digital image can be transmitted between two points within the same building or different buildings or in

different localities or between any two points on the globe. Applications that use this technology are mainly teleradiology, telepathology and teledermatology..

Teleradiology is used application of telemedicine, is considered "ancient" applications with the remote images, the apparatus comprising image capture and display connected to the ends of a communications network. Images of X-rays transmitted through the network are displayed on a monitor receiver and interpreted by an application-diagnostic quality. The images will be interpreted by a specialist radiologist who will issue the final diagnosis. In this way, costs are limited to digital transmission frequencies and equipment acquisition. Latest news in this field refers to the integration of teleradiology technology communication systems and image archiving. At this point, the integration works only for teleradiology applications that run at the level of institutions and aims to increase quality and lower costs for diagnostic teleradiology services.

Two-way interactive television technology is synchronous and can be used in areas such as psychiatry, internal medicine, cardiology, pediatrics, obstetrics and gynecology, etc., could be used for a checkup "face to face" between doctor and patient. Telepsychiatry is not only the first application of telemedicine, but remains the most popular system based on video techniques, the simulation is indispensable consultations. From a technical standpoint, a quality system is adequate if telepsychiatry psychiatrist can observe the patient's pupillary One of the main goals of telemedicine, agreed from the beginning was to provide remote medical consultations. Interactive video technology allows the patient to be seen by remote doctor, the patient may also be accompanied by local general practitioner (GP) to present its case. Besides the actual discussion, specialist and can provide different data about the patient: evaluation stethoscope, ophthalmic, medical records, laboratory results, endoscopic examinations, radiology, pathology, cardiology, etc.. The only limitation is that the specialist can not palpate the patient, but nevertheless consultations were declared satisfactory, both by patients and by physicians.

The main barriers to telemedicine are related to:

- ➤ Patient satisfaction which involves communication, patients want to talk to the doctor who treated him and his doctor know and feel what is the condition for them;
- Assessment results decision makers want to know the added value of telemedicine to substantiate any investment decisions in this area;
- ➤ Safety, standards and protocols considering the rapid changes in technology used in telemedicine, most technical standards and guide educational practices / clinical development are either in early or do not exist. The lack of standards can have serious implications in the efficacy and safety of telemedicine;
- Payment of telemedicine services health insurance systems have proved reluctant to pay telemedicine services, including state-funded programs, which is covered only part of the costs of these services. Thus, without appropriate payment of services of telemedicine long-term survival is questionable. In the private sector there is little information regarding the spending rate telemedicine coverage by citizens. According to available data, only a small fraction of individuals covered their payment telemedicine services, even though the vast majority pays for radiologists and other medical services that provide results in images, in one form or

- another. It should also be noted that no organized private communities in this area have not been quick to act in order to develop telemedicine;
- ➤ Professional License although telemedicine technology has no limit, however, health professionals must be licensed and be within the law of the State to act. Therefore, licensing issues between states are seen as potential barriers to the expansion of telemedicine;
- Security and privacy lack of standards relating to privacy and information security can affect a number of legal aspects of telemedicine, with profound implications acceptance of telemedicine services by the population. The problem affects mostly the remotepsychiatry, telemedicine belt detox/rehab and other applications of telemedicine, which implies a social stigma on the patient (such as AIDS). This is where the difference between standard documents used in medicine and how to record data in telemedicine. Generally, records are maintained as part of the consultation documentation. Doctors shows a lesser discretion compared with conventional medicine, in the sense that there is no adequate legal neglect deletion of information need, which leads to an uncertainty of patient doctor confidentiality;
- ➤ Telecommunications infrastructure the cost of using advanced telemedicine applications can be prohibitive in many geographic areas because of the high cost of telecommunications services. One way that governments can eliminate the drawback is the use of telecommunications systems in several directions. It is recommended that infrastructure is used both for health education (tele), as well as for administrative or other services not necessarily related to health, leading to dispersal costs more operators.

Telemedicine remains an area that is evolving very rapidly, which requires flexibility and creativity to meet its challenges. Moreover, telemedicine raises a number of legal, technical and economical to be resolved before proliferate. Therefore, it is necessary for policy makers to find ways that can coordinate their policies and programs of telemedicine. To solve all the problems raised by telemedicine and turn it into a viable alternative requires concerted action by governments, professional medical associations and the private sector.

Despite these barriers, telemedicine services bring benefits to both health care providers and recipients of services for patients.

For physicians, telemedicine development means:

- better communication between doctors distant, possibility of contacting specialists, without moving the patient partnership between doctor and other medical specialists in support of establishing a rapid diagnosis and appropriate therapeutic attitudes;
- increased satisfaction recipients of healthcare services;
- save time for family doctors who do not have to do home visits so frequent in patients with chronic diseases;
- better knowledge of the health of patients through access to his medical records stored in digital format;
- increasing access to resources (specialized medical equipment and information) for doctors in rural areas, reduce isolation from the environment state medical university centers;

 continue to improve the training of doctors, through access to professional networks and expertise, using modern tools and videoconferencing elearning.

<u>Public health system</u>, development of telemedicine means:

- reduce costs by avoiding duplication of examinations and medical tests, allowing medical staff to have access at all times to patient's medical records that you care;
- reduce expenditure by reducing the number of days of hospitalization, the readmissions and emergency room visits to hospitals;
- continuous monitoring of vital parameters opportunity for remote, realtime, avoiding congestion or emergency room salons and allowing, in addition to reducing costs, increasing quality of care;
- reduce mortality by providing remote consultations regarding first aid and call 112 emergency services, providing preliminary information on the severity of the patient's situation.

For patients, the development of telemedicine means:

- ✓ reducing trips to the doctor, the hospital admissions and emergency room visits to hospitals for conditions that are not emergencies;
- ✓ reducing geographical isolation, increased accessibility to services provided by medical specialists for patients to distant hospitals, especially those in rural areas;
- ✓ save time and reduce travel costs in other cities for diagnosis;
- ✓ prevent complications by allowing immediate application of fair treatment;
- ✓ increase comfort by recording and transmission of medical data from home chair for diagnosis and treatment by physician behavior;
- ✓ reducing prolonged hospitalization.

## 6. HEALTH CARDS

Since 2000 private medical services market has emerged a new product dedicated to patients, namely health subscription. 's Release was not spectacular, and this is the reason why until new health insurance (2005-2006) knew of the existence of neither health subscriptions. Companies in that time have brought this product in Romania just because it exists in clinics abroad. Subsequently, health subscription developed with occupational health services, when covered initially, by law, only those services required. Gradually, health subscription package introduced in other services. Employers offer these subscriptions, as well as motivational package for employees based on economic growth in that period. Although currently passes health services market has about 10-12% of all private medical services market share of majority is on corporate subscriptions. There is reluctance on the part of individuals to enter directly a health plan because there is still the mentality that prevention is money thrown out the window monthly "treat me only when I am sick". That is why health insurance dynamics in Romania frail and subscriptions market stagnates for years.

In the case of subscriptions, and the health insurance (the principles are the same), there is the disadvantage that the patient loses all over late deposit. This is because many subscribers do not use health services package or are not obliged to use the insurance policy. Also, the existence of an intermediary who in turn wants to get a profit making policies to be expensive to cover a small area of health care or to be reimbursed important part of the real price.

The storage card - from November 2011 appeared a new product on the market, brand Gral Medical, namely: Favor Card with accumulation. The main facilities are:

- the money he accumulates, and they remain on the card as long as the owner wants. In other words, the amount accumulated on the card is lost at the end;
- Gardul de sănătate cu acumulare Favor
- ✓ can be used by all family members (parents, children, siblings, etc.);
- ✓ provides maximum flexibility in storage (monthly, occasionally or both) and access to all medical services with significant reductions of up to 20%.

Favor Card with storage is based on a research study conducted in a network of clinics Gral. The study was conducted by Gral Medical in October 2010-august 2011 in cities: Bucharest, Craiova, Ploiesti, Pitesti and Focsani.

Patient behavior towards private health services highlighted as a red line, a product must allow: flexibility, access to any service and low prices. Under these conditions the accumulation Favor card combines all three attributes together. If a standard requires a monthly subscription contractually storage card offers flexibility in choosing the type of storage (for monthly accumulation user can move to the occasion). If a traditional health plan arondeaza automatically to a doctor patient coordinator, or there is a short list of medical services to build Favor card allows the patient to schedule any doctor and wants to access any service without being limited by certain conditions.

Health card - card these kinds of securities to be issued since the end of 2010 and include custom data, like identity card, people should wear in your wallet, because only his presentation will be eligible for medical services. Each card will have a chip that will be stored information about the owner, the name and personal identification number to diagnosis, blood group, RH, quality of donor organs and



prostheses information on special treatments, proof of payment health insurance contributions and consent on organ donation. Health Card will not affect anything either number or quality of health services, and in case of loss or theft, can be recovered.

**European card** entitles the insured to receive necessary medical care during a temporary stay in a Member State of the EU and Iceland, Liechtenstein, Norway and Switzerland, but does not cover the situation where an insured person goes into a state EU membership in order to receive medical treatment for underlying conditions driving. It is not mandatory and is not subject to border presentation. European health card holders are entitled to equal treatment even



if they have no health card, could be eventually forced to contactees insurer to request a provisional certificate by fax or e-mail. In some countries, medical care is free. In others, the patient must pay the bills, but the amount will be refunded, partly or entirely.

European card of health insurance is free, rising from the house health insurance is valid for six months from the date of issue and only people insured under the national health system are entitled to this card.

Card use leads to the following facilities:
□ patients will get rid of bureaucracy and trips to the insurance fund to prove that the insured when they need medical leave;
□ authorities will know exactly how many medical services were performed on a patient and are real needs in the system;
□ for any medical benefit, the doctor will insert their card into the system with the patient, so that one without the other will not work. This system will significantly reduce fraud because before going on to be used CNP sites for people to settle medical treatment without being present in the same doctor's office. Insured recommend always carry with them the cards, because their absence will settle only emergency services. All chips will have security and storage of data.

# 7. CONCLUSIONS

Quality of care is materialized in the type of care that is expected to maximize the size of welfare, taking into account the balance of gains and losses affecting the health services as a whole.

Waiting longer to receive consultation is another real problem in Romania, excessive bureaucracy, and legislative regulations also require periodic renewal by doctor prescription for long-term treatment, thus leading these people crowding the door doctor, increasing during waiting and the doctor lost some time filling scripts at the expense of providing advice.

It should be stressed that the Hospital Information System is essential to reorganize health networks, even though today is a relatively heterogeneous applications of various (health system management, the technical, financial and administrative) being processed at a broader level within different organization of the health system.

eHealth is the generic term used for the set of tools based on ICT used to help prevent, diagnose, treat and monitor health and lifestyles and to improve these processes. Refers to relationships between patients and healthcare providers, the transmission of information between institutions, communication between patients and the healthcare professionals, including information networks in the field, electronic health record and personal portable communication systems used to monitor and helping patients.

The European Union is moving towards a "European eHealth Area", coordinating actions and promoting synergies between related policies and stakeholders in order to develop better solutions to prevent market fragmentation and spread best practice. The specific objectives are to create a structure for electronic medical records, supporting information sharing and standardization, the establishment of networks of medical information between different care centers to coordinate responses in the event of a threat to health, ensuring medical services on line such as information on healthy lifestyles and disease prevention, and developing remote consultations (prescribing services, reference and electronic reimbursement). To ensure the success of this project, it is necessary to take into account the needs of citizens, patients and healthcare professionals and their involvement in implementing strategies and projects.

After the set we see that cooperation between medicine and information technology is not only beneficial but necessary, our country needing an integrated health system, interoperable, standardized so that health information networks to link hospitals, laboratories, pharmacies, primary care centers and social centers, a patient-centered health system, characterized by communication in a secure manner (standardized messaging systems) for tele-medicine services.

Development of patient empowerment and responsibility for their own health condition is the main solution to prepare the health system for a growing aging population. Given the aging population, public health systems are under pressure, health budgets are getting smaller, while the demand for health services is increasing, governments increasingly rely more on IT solutions for the solve this problem. In a changing climate, proper use and maintenance of a health record I think it is the responsibility of the clinician responsible for the patient, and write all file parts of health (clinical history, logic diagnosis, clinical examination and the patient, prescriptions and prescription treatments, diagnoses and summaries of sheet).

Information technology has changed the culture of the work environment that covers patient care by clinician, the possibility of electronic health records is a database with complete medical records of patients database (medical records, medical records review, medication and so on), and can be accessed by physicians and other authorized persons, is extremely useful in emergencies. With a simple search, medical staff can provide history and medical data of a person.

Given the necessity electronic patient record, we find that the health system must be reconfigured from scratch, decentralized, and interconnected with other European systems, adapted to the changes caused by the knowledge society. Now talk of globalization, a European Union where boundaries disappear and the citizen moves from one country to another freely, but moving and health issues it has.

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