

## Innovative Approaches to Management Health Needed to Make Ecosanogenesis

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**Abstract:** In this study we analysed the field of ecosanogenesis in correlation the health workplace, the health of consumers, and the health of the environment. Concerns of this vast area are primarily related to the implications of technology and various health products, because their effects are far more extensive and more generalized. This concept involves man to major issues, human actions and their results, nature and society, material and spiritual culture in a global relational context. If health depends on the relation human - product - nature, and promote better health will depend on optimal functionality of this relationship. Innovation as a result of research and inventions, in the service ecosanogenesis, offers a balance and sustainable development progress for sure, we could call it positive progress. Health classic resources financing, general taxes or health insurance contributions, are becoming increasingly inadequate, regardless of the type of health system, national health system or health insurance system. From increasingly many factors adversely affect the health of the population impersonal, that are not the result of human action or inaction in terms of his daily activities eg: environmental pollution, deforestation, use of non-biodegradable products etc. In conclusion we describe the innovative approaches to management health in context of ecosanogenesis.

**Keywords:** information technology; innovation; medical research

**JEL Classification:** H15

### 1. Introduction

Health systems are resource intensive for the past 30 years recorded a continuous increase in the level of resources required, increase mainly due to: aging; drug discovery more efficient and more advanced technology, but also more expensive; increasing the number of persons requiring and receiving healthcare.

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Allocation of financial resources within the health care providers (clinics, hospitals, laboratories, etc.) is done on the “money follows the patient”, although desired. Financing is one of the main factors determining the sustainable functioning of the health system and create favourable conditions to meet the needs and demand of the population in health care quality and adequate volume. The correct and timely regulatory levers allow the system funding increase equitable access to medical services, ensure the rational and efficient use of resources and promotes positive motivation of health care providers.

Although with the introduction of mandatory health insurance has increased the financial stability of the system and improved public access to basic health services, a number of issues have not been resolved. The remains substantial share of the population outside the system of mandatory health insurance, especially among self-employed persons, low-income and predominantly rural. Inequities persist, both vertically and horizontally, in financial contributions to health arising from reduced flexibility mechanisms collection and training of healthcare insurance funds and the lack of objective criteria for assessing the degree of social vulnerability population categories for allocating budgetary resources.

The relatively high burden of contributions from the state budget mandatory health insurance fund for a wide range of categories, without taking into account their real income and capacity to pay insurance premiums. The lack of competitiveness in the procurement of services and providers rigidity of payment of mandatory health insurance funds, which does not take into account regional differences and socio-demographic structure encourages equalizer artificial disproportionate distribution of providers with duplication of functions, which increases the financial burden on budgets and public funds for health. No real mechanisms were implemented to increase efficiency, both technical and allocate as the health system or provider leverages motivation for developing performance. Medical institutions remains limited rights to manage their own resources and means obtained for sustainable development. There remain a number of discrepancies between the functions and responsibilities as delegated their decision.

Lack of resource use rules, imperfect mechanism for calculating the cost of care, inefficient negotiation process because of rigid tariffs undermine the financial security providers and medical staff motivation to turn honest. It is significant participation of local government health infrastructure development in the territory. Persist in inertia investments in disease and not health, but it is increasingly obvious and justified the need to invest in prevention and health promotion, both externally funded programs, as well as vice tax applying to market products with increased risk for health, the orientation of these funds to the Ministry of Health. Ongoing national programs do not receive adequate funding, relative to their real needs and costs.

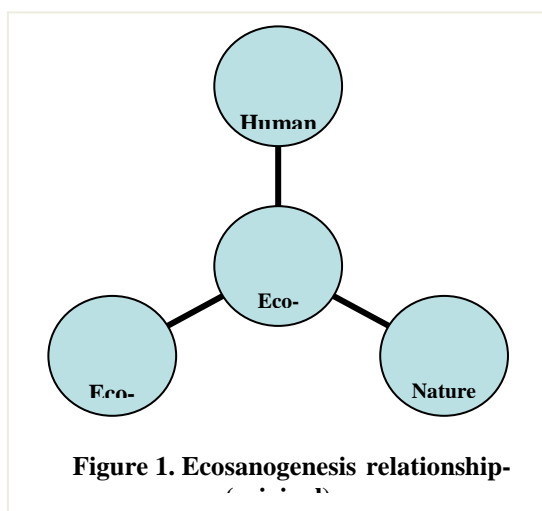
European Commission presented a multiannual program for action on health 2014 - 2020. This program addresses the need to support Member States in an effort to improve the health of citizens and to ensure sustainable healthcare systems in line with the Europe 2020 Strategy .

## 2. Results and Discussions

Ecosanogenesis concept requires that an objective requirement, because man can only survive in a healthy environment. Field of ecosanogenesis covers both workplace health, the health of consumers, and the environment. Concerns of this vast area are primarily related to the implications of technology and various health products, because their effects are far more extensive and more generalized. This concept involves man to major issues, human actions and their results, nature and society, material and spiritual culture in a global relational context.

If health depends on the human - product - nature, and promote better health will depend on optimal functionality of this relationship (fig.1). Concept aims and objectives ecosystem management quality production correlated with environmental requirements.

These objectives are related to the interests of consumers and producers and environmental issues raised by advanced biotechnology principles and eco-economy.



European society is characterized by high costs for the health system and a workforce increasingly smaller due to medical reasons and aging. These issues put

enormous pressure on economic and social system. Personal lifestyle and environmental factors are the most significant risk factors that influence health. e-Health is a relatively recent term used for the practice of using electronic processes and communication. In recent years, focusing on investment in e-health was made as part of e-health.

Currently, the medical system in Romania is still dominated by the public health system is financed through a combination of employer and employee contributions to the National Health Fund (FNS) and direct allocations from the state budget.

Romania has a single integrated system (SUI), a solution aimed at more efficient management of the National Unique Fund for Health Insurance by collecting online and real-time processing of all medical information of patients insured.

By June 2013, out of SUI, Romania has implemented the following medical sector-specific IT systems:

- classification system diagnostic groups (Diagnosis Related Groups - GDI); the electronic prescription (RE);
- health Insurance Card System (SCAS) - under implementation;
- the electronic management of patient records - during the auction.

In Romania, telemedicine has generated increased interest in the last nine years, the first such centre is located in Targu Mures. Through telemedicine means the electronic transfer of medical data (high definition images, sounds, live video recordings on the patient) from one place to another, from a distance. This transfer of medical data may use different types of technology, including but not limited to the technologies listed below - telephone lines, Internet, Intranet and satellite. Telemedicine is used by suppliers in increasingly more medical specialties including dermatology, oncology, radiology, surgery, cardiology and psychiatry.

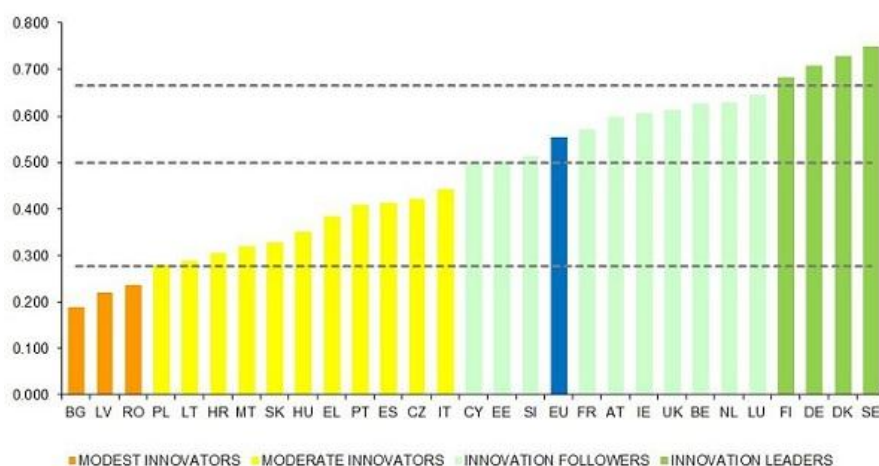
Romania currently has no express authority appointed to coordinate e-Health policy and technical partner for the European Commission common objectives such as, for example, interoperability, Ministry of Health is the only institution that covers all medical activities carried out country.

Manual used to assess innovative activities and innovative performance measurement in OECD countries and the EU: *The Measurement of Scientific and Technological Activities* (Third edition, 2005). According to the Manual, innovation refers to all stages of the innovation process: scientific, technological, organizational, financial and trade leading to the implementation of innovations.

Components of innovative performance, according to “*The Measurement of Scientific and Technological Activities* (third edition, 2005)”, are: research activity, development activities, with some degree of novelty, support activities such as

training and market research, implementing activities dedicated to innovation developments, such as new marketing methods or new organizational methods, different product or process innovation.

According to the latest sources of innovation synthetic index is quite modest to us, the modest innovators in the cluster. In 2014 Romania has climbed two places in the ranking (Fig.2). Synthetic Innovation Index has a direct correlation with the percentage of GDP for research, development and innovation.



**Figure 2. Source- Union Innovation Scoreboard, 2014**

World Health Organization (WHO) launched in 2013 “Report on Global Health - Research for ensuring universal access to health care”, making a call to all countries to ask them to invest and help achieve such research that aim to provide universal access to health, according to the needs of individual countries. Through research we can put a number of questions about how to achieve universal access to health services and find answers to improve human health and increase welfare. All countries should be both producers and consumers of such research. Creativity and skills of experts should be used for the investigations not only in academic centres, but also in public health programs, close to those who ask and offer medical services.

Since 2010, all hospitals (427) and all family doctors in Romania (over 11,500) have minimal facilities, IT. A 2008 study indicated that 411 public hospitals under the Ministry of Health had an average of about 8 hospital beds to a computer, half of which is used in the clinical and pre-clinical.

Cloud Computing (latest technology ICT) refers to the storage, processing and use of data on computers and remote computers that can be accessed through an

Internet connection. Implementation of Cloud technologies in the public institutions can help increase service efficiency, reduce management costs and increase the availability of services. In Romania there are multiple initiatives for Cloud Computing in several public institutions. In the absence of harmonized legislation on the operation's cloud, these initiatives remain only “internal” or private Cloud sites, cannot really benefit from the latest technology.

The main benefits of the introduction of IT technology in the health system are reduced costs, improved service and a more rapid delivery of new services: model that allows sustainable cost reduction for IT services in the public sector, including hardware, software and operations; reduce costs for migration to new platforms services; reduce the number of applications and services (redundant) in the public sector; reduce time and cost for the acquisition of new services; switch IT investments to more efficient computing platforms; promote the use of green IT by reducing the total energy and the surface properties of the government data center. Implementation the IT Infrastructure in the Cloud is faster, safer and constantly updated with the latest application versions and updates.

It is important to reduce carbon emissions by optimizing the use of data center resources, removing redundant services and purchase of ecological systems to reduce energy consumption and increase security in the data center by implementing standard security solutions, updated and tested. Data will be much less susceptible to loss because the backups for data in a Cloud environment will cause the data to be safer. The data will be inaccessible by assailants in a Government Cloud-based cyber infrastructure of public institutions as cyber security specialists will be able to offer non-stop monitoring and protection. Cloud government must be formed on a Romanian state-owned infrastructure.

### **3. Conclusion**

Solutions to solve the widening gap between health expenditure (which are in continuous growth) and financial resources allocated to health is to identify new sources of funding, through the realization ecosanogenesis.

Identifying new sources of funding for health cannot be achieved only by means of research, innovation and ICT.

In a first step, it is necessary to disseminate information about ecosanogenesis, educating people in the spirit of the requirement of quality goods that are not produced at the expense of the environment and human health. ICT can support this process through the Internet, dedicated software (e-health, e-learning, newsletters, social networks etc.).

Also be aware and informed properly authorized state institutions in policy environmental, economic and health. In this respect, sociological research, comparative studies and statistical modelling can provide a serious support decision making at national level.

Only in this way can fulfill ecosanogenesis one of its most important to require proper management and to have a preventive role, to prevent spasms and irreversible developments on human health and the environment.

It is important to balance the allocation of financial resources (territorial and between categories of services) and cost control; reducing inequities in access to services offer; improving satisfaction of care providers and users; reducing inappropriate use of modern technologies.

It is necessary to introduce controlled competition (between the public and / or private insurance organizations etc.); establishment of contractual relations between suppliers and buyers of services; pay doctors and institutions based on performance criteria; introduction of mechanisms for ensuring the quality of health care; introducing modern management methods in health services management.

Creation software, like DRG System (System Diagnostic major groups) CNAS used to finance public hospitals, which should be fairly finance all health care providers (clinics, hospitals, laboratories, rehabilitation centers etc. ).

It is necessary to restructure the funding sources of the health sector by giving greater importance to obtain new sources of funding to come directly from those individuals and companies who, through their work or lack of action, disturbances of the state of population health (food producers with a strong detrimental impact on health, the companies that pollute the soil, water and atmosphere etc.).

In this context, research, innovation and ICT specialists can provide support by: use mathematical modelling to identify interdependencies between home use of products harmful to health and health status indicators.

#### **4. Acknowledgment**

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