

Interview with Mr. Ilias Iakovidis about the eHealth Week conference

eHealth Week, which is a joint event combining of the European Commission's High Level Ministerial Conference and the World of Health IT Conference & Exhibition will be held in Budapest in 2011.

This was the occasion to have an interview with Mr. Ilias Iakovidis PhD, who is currently Deputy Head of the "ICT for Health" Unit at DG INFSO, European Commission and is responsible for the eHealth research program direction and implementation. He is also in charge of the coordination of the international cooperation with non-EU countries, in particular with the US. He also worked on policy and support to large scale deployment of eHealth in EU as described in the eHealth Action Plan of which he was the main co-author, EC Recommendation on cross border Interoperability and Communication on telemedicine. In 2001, Ilias Iakovidis has been elected fellow of American College of Medical Informatics for his contribution to the field. We asked Mr. Iakovidis to talk about those possibilities and benefit that eHealth Week provides for the host country.

Will you be so kind as to give us some example of the great achievements of eHealth?

It is obvious that people often forget that imaging was part of eHealth and what we can do now in digital instead of film and others is an example of digital root of hospitals. Today radiology, all the handling and automatic processing of imaging – usual Xrays, PETs, CTs or even the 3D ultrasounds and a lot of non-interventional therapy – even is became part of IT.

Secondly, what is quite new and by the help of which for the first time we were able to approve the health outcome benefit of eHealth is the telemedicine in the diagnostic, therapy and monitoring of cardiovascular diseases (e.c. heart failure) where we have shown that telemonitoring of patients at home could reduce the mortality with 34% and decrease the hospitalization by 26%.

Another success is a kind of modeling and simulation of human body for personalizing the treatment. Taking the geometry and physiology of a patient's heart, we can put the model of that heart in a computer. Then we can test what is the best surgery root of operation before cutting the patient. Everything can be done virtually by the help of the computer before a serious operation or any drug can be tested: what kind of drug treatment, in which combination is the most appropriate for the given patient. So doctors can actually test what is the best product in that specific case.

There is also the question of gathering medical records in a hospital: IT can put together a lot of patient data and provide evidence if a procedure or drug is really efficient or not. So eHealth can really change the way of getting information about evidence and can give an answer what is the best and most cost-effective by the help of gathering data. Somehow it is a dashboard of information that never existed before. Nobody could go and read thousands of medical records.

Let's look a little bit into the future. What is the core of eHealth plans?

What we have decided is to focus on telemedicine and helping to expand it in Europe. We are trying to show to everybody that it is the real life not only existing in some hospital in a certain region. So the plan we have in the commission is to see if we can roll out throughout Europe something that has been proved to work in the region of Italy, Spain, Denmark or Germany. To give the possibility for everybody – that is one of our big plans.

Our second important aim is to get patients more active. Doctors often face with problems of passivity of patients. We try to do something to get the patients engaged and online. This is the way to go, – for example we can give them tools, such as mobile smart phones to keep medical records, to book appointment etc. To do something in order to get patients to manage their chronic conditions and stay in a good shape instead of living with symptoms that keep them at home.

We also cooperate with state secretaries of all Member States to see how we can share patients' summaries and medical records across the borders for public health, for research or for helping mobility of the patients. If a patient is in another country and there is some emergency status it is important to get the patient's summary quickly: what drugs he takes, what kind of allergy he may have etc.

Health care is very much like a local art because every company that wants to bring an IT solution has to create that solution for that specific user. As it works in this very special way the question is: how we can do some universality in this matter to make IT solutions really compete on European bases standards and procedures.

How do you see the IT gap between Europe and the US and how Hungary fits in that picture?

We have deployed eHealth in Europe generally much more than in the US. In Europe 80% of GPs are using computer maybe not for everything but using IT and being online four times higher than in the US where it is only 20%.

Hospital environments in general are about the same. Of course you can find very prominent hospitals with fancy technologies but overall hospitals are in the same situation. So looking it as a regional health information network we are the first in the world especially in the Nordic countries, even US are taking example of Denmark and other European countries. We have more experience here in Europe; we have started much earlier, almost 20 years ago. But the stages of development are not the same, there is a huge difference for example between countries like the Scandinavian Denmark and Hungary. I think Hungary is doing very well at policy level but we need to decide what to monitor in each country and start measuring in a consistent way. So we agreed with the OECD countries to create universal type of indicators that would be applied on the ground and offer a basis for comparison for all Member Countries. Now we can not compare, partly because publications are so different, not even compatible. What you call medical records in Hungary it is not the same as medical records in Finland so we will agree on some basic indicators that we can compare.

Accordingly there is a need for kind of unified standards of medical records...

To define unified standards is one of the main aims of eHealth for 20 years. We are working on standard of patients' summary and we are working on components of medical records that can be standardized. Imagine a castle build of LEGO pieces where each LEGO is a standard. We just need to make sure that everyone agrees how to build this castle consistently using the same or compatible standards. In Europe each country and each region has its own procurement for standards. The commission is trying to solve it by making it global, so we partnering with the US and trying to build a LEGO castle globally.

The European Commission in cooperation with the United State are searching for the common global standards and try to find a global solution for the problem. On the 17th of December, 2010, Commissioner Kroes has signed a Memorandum of Understanding (MoU), with Secretary Sebelius in which EC and US declared to work together on interoperability and global standards.

What benefits do you expect from this year eHealth Congress in Budapest and what can be its benefit for Hungary? What is the lesson we can learn from the last year eHealth Congress held in Barcelona?

Since 2003 we have been organizing yearly ministerial meetings in the spring presidency. The special benefit is for you in a sense that this is the first time when the conference is held in Eastern Europe and the first time when we can get central European countries to focus on their problems. Whatever your priorities are you can put them in a ministerial setting to get some high level decision making. Moreover you may even propose some kind of declaration that we always try to do during these events: to come together and agree on a target.

In my opinion a joint declaration is required because in eHealth you have three parties: the authority, the providers and the industry. You are not able to achieve any success if all three of them don't speak the same language and have the same target. Unless that all three come together it can not happen in a big scale, just pilots that are finished within a few years.

Let's see what you can learn from last year. That was the second time when we brought the policy makers in the ministerial event next to the exhibition of the suppliers. They could put their hands-on and see what the market can deliver and what they have in the store. It is important because sometimes the market could be far from what is in a minister's mind and couldn't deliver the applications he imagines. So if we mix the implementers and the decision makers they can learn each other what is realistic and what the opportunities are. That is the added value that you can learn from last year and we will see whether we can repeat that experience.

There is an IT generation gap. How can eHealth help them?

We don't expect and dream that elderly patients will be the major online users but we can help them by creating user friendly and easy-to-use applications. We have a lot of human-computer interaction technology problems to solve. It is not only for elderly people but also for busy doctors, who want simple and useful tools. And it is a little bit the problem of interfaces but also semantic richness.

Do you think security, ethical and legal questions can be solved globally?

Concerning privacy protection: in telemedicine one issue is how to make it legal, the second one is how to make it reimbursable – from this aspect this is a business model, and the third issue is how you really make people trust. In conventional medicine that is being practiced for thousand years, is about my trust in a human being (usually a doctor). I trust him and hope that he won't misuse my data and the knowledge about me. Now what happens in telecare centers or hospital information systems when I have to transform my trust from a human being to a system? This is a huge gap.

A European directive is coming into force that regulates this question. It will be intersected and translated to national settings depending on the culture of the people. You have completely different culture of people in some countries with respect to the system that is managed by national or regional government. Ultimate trust is very much depends on the culture based on the history of relationship between the citizen and the state or the citizen and the system.

What is the size of the European eHealth market from business point of view?

The eHealth market is the third health care market after pharmaceuticals and medical devices.

It is the fastest growing market and its present value in Europe is EUR 15 billion per year. Although it is the third pillar in size, it is a new kid on the block and is still "kind of wild western". It doesn't have all the regulations, certifications and testing. Any supplier can say he follows the European law and standards and you have to trust him. We are not there yet to do certification, accreditation assessment and something like that. So it is a wild in a sense. Despite all these issues it is still the fastest growing segment of the three industries.

Do you know any Hungarian eHealth initiatives that worth to develop or you have your own solutions?

The event is a joint cooperation between the Ministry of Health and the EU and there is also a health IT exhibition and conference. We want to introduce the European initiatives and would like to come to know the Hungarian initiatives and marry them. We have initiatives for the active and healthy ageing population. Also we bring solutions to the problem of getting patients on board, getting cross border and certifying the market, those four initiatives will come from Europe. And the Ministry of Health will bring the

Hungarian ones, that's what we try to marry in the conference. And the exhibitors will be there to provide information what the market can deliver now.

How do you see the present situation of eHealth among your audience?

Let me use a kind of clustering of stakeholders' authorities, companies and professionals and patients. Because we introduced several articles and a directive and after organizing eight ministerial conferences everybody knows about eHealth, and authorities are aware that such things exist and have actual benefits. Industry is also there for a long time waiting for the good, optimal times. Companies in the industry know that health is the next main issue, so they are convinced too by the possibilities of eHealth.

The hardest part is health professionals and patients so our internal strategy is to focus on them and go to medical congresses. I stopped going to eHealth congresses. I only go to medical congresses to talk to medical doctors, to train new generation of doctors. Anyhow the next step is to convince the professionals and patients. For example very few people are aware that telemedicine saves people and money.