

## Interview with Hubert Eisl, CIO ELGA GmbH, Austria Healthcare and ICT, how far is Austria?

**Healthcare and ICT, we are talking about it already for years. We need more collaboration and preferably through standards. IHE plays an important role. What about healthcare and ICT in the other European countries? Is interoperability possible or is it fiction? IHE Netherlands talks to Hubert Eisl, CIO GmbH ELGA, Austria.**

Regarding the application of eHealth, Austria is an average European country. Most GP practices are computerized. The exchange of electronic patient records is very common in that country as well as the electronic transmission of laboratory data. The individual Austrian hospitals are run at a regional level. The general health is a national matter. The new Health Care Act of 2005 granted priority to the promotion of ICT in Healthcare. In 2005 a strategy on eHealth was formulated giving further meaning to this. This strategy includes an electronic medical record and an Austrian eCard with an electronic ID functionality for health insurance and social security for all Austrian citizens. This eCard was the first manifestation of the Austrian eHealth policy. The infrastructure developed for the eCard offers no opportunity for storage of factual information of any kind. For this purpose ELGA plays an important role. ELGA means Electronic Gesundheitsakte, or Electronic Health Record. In 2006 the preliminary organization was started, in November 2009 ELGA GmbH was founded and the work was considerably intensified.<sup>1</sup>

### What is ELGA?



Hubert Eisl previously worked for an Austrian bank, an international consulting firm and the social security agency, where he was responsible (among others) for the IT master plan consisting of 60+ projects. One of the projects he had under his wing, was the realization of the master patient index. Since May of this year Eisl is CIO ELGA GmbH. A conscious choice. "ELGA is one of the most interesting projects in Austria. Moreover ELGA is focused on healthcare. A perfect combination for me and so a great next step in my career", said Hubert Eisl. ELGA has the goal of achieving a secure platform for exchanging electronic patient information and services for electronic prescribing and dispense, electronic radiology, the electronic exchange of laboratory results and an

electronic letter of resignation. For this purpose the architecture and standards will be developed further and the next document types will be coming soon. Hubert Eisl says: "Internationally, we are participant in epSOS. In addition we do a lot of public relations toward physicians, pharmacists and in the future all the eight million Austrian citizens. Purpose of this public relations is to explain the usefulness of the ELGA and increase the acceptance".

### eMedication

"Within ELGA we are working on a number of key components in the infrastructure. eMedication is the first application that will be visible for Austrian citizens. A central database will contain all prescribed and dispensed medication for all patients. For example, a doctor prescribes a new drug out, then the system checks whether there is interaction between previously prescribed and/or dispensed medication (including a list of approx. 300 interaction relevant OTC (over the counter) products). Of course the system does not know whether these medications are actually taken by the patient. But within the application several warning signs are installed. Is there interaction between drugs, the system will inform the doctor who can take, within the system, various measures. Propose the prescription of other medication, change the medication intake or informing

the patient about possible side effects. We're talking here about the prescription process. Looking at the distribution process, the system will show which warning signals are accepted, approved and which are not. It is up to the pharmacist and / or physician to decide what is actually done with these warning signals. Eisl enthusiastically tells more about the eMedication pilot performed in three regions in Austria, an urban area in the district of Vienna, a rural region in Tyrol and a mixed region in Upper Austria. In each region there is a hospital, several doctors and pharmacies. In the rural area there are dispensing doctors. "With this pilot we reach three hospitals, approximately 150 doctors and 30 to 40 pharmacists. The pilot is launched in April 2011. We evaluate at the end of 2011. By then we know what we might have to change to the architecture for the roll out of eMedication Austria wide in 2012. "

### **Role IHE**

IHE is one of the determining factors in ELGA, we learn from Eisl. "The Federal Health Commission has recommended IHE as the standard in 2007. This was during the preparatory work. All components within ELGA use IHE abstractions. The key components like the master patient index, the healthcare providers index, the protocol system and the authorization system use IHE profiles to facilitate communication between the local affinity domains. The documents, such as radiology images and lab data are stored locally. They remain at the source. Other information, such as medication data, are in the central database. IHE is therefore important for ELGA, because after all IHE provides the basic infrastructure. Each local hospital can decide for itself how they deliver such radiology images. They must however adapt their PACS in such a way that they can provide images to ELGA via IHE. "

### **eRadiology**

Asked whether Austria has already achieved some things in terms of sharing images, Hubert Eisl replied: "Yes, but we have now only a push model. With ELGA we move from a push to a pull model, in which the images can be requested at any time. This must still be realized. Through the master patient index we, in the future, will be able to see where documents are available for a certain person. Also, we can then retrieve these documents. With the pull-model, patients or doctors who are authorized to access the data, can retrieve the information whenever they need it. Because the basic components are being developed at this moment, this is not yet possible. Now, the images are sent. In principle, we proceed in 2012 to the pull model. By then we start connecting ten to twenty affinity domains to the central components. More and more documents will then be available for consultation. "

### **Involvement**

ELGA, it's hard work. But Austria is already well on its way. How did she manage to convince care-providers, users and suppliers? Hubert Eisl: "We talk a lot. Through various committees, both political and non-political, we are working on the commitment of the parties involved. These committees are made up of all decision makers. The parties who also financing the project, the ministry, the social insurance institution and the provinces. They are the founders of ELGA. We also have a committee which includes representatives from patient organizations and future users of the system. Also with this committee, we discuss our plans and schedules. It is important to keep in touch with all organizations involved in the realization of ELGA. Within the various projects it is determined who the stakeholders are. These stakeholders will then be involved in these projects, Decision making takes a bit longer, but these decisions will be widely accepted"

### **Lessons**

What are the lessons learned in Austria in recent years in the area of ICT and healthcare? Eisl: Compared with the preparation phase of the project, the establishment of ELGA GmbH with a clear decision structure is a great advantage. The tasks and responsibilities are clearly assigned to the various working groups. In addition, we find it very important to keep in touch with the stakeholders, patient organizations, doctors et cetera. Discuss

topics with them, and ultimately convincing them. Finally there is the legal basis. There is a draft bill at an Austrian level which will go to parliament within the next month. I expect that in three months we will have the legal basis for ELGA."

### **Shift**

Hubert Eisl was one of the speakers at the recent IHE Netherlands annual conference of 2010, where he gave further explanation of ELGA. What does he think of the developments in healthcare and ICT in the Netherlands? "The Netherlands has been working on a national EHR at the time that the IHE standards were not yet so advanced. Some things - such as the master patient index within AORTA (eds.) - are implemented according to proprietary standards. In the Netherlands they are currently shifting from using their own standards to a solution based on IHE. Since we in Austria started development of the national EHR later, we can use the fact that IHE has made significant advancements. "

More information:

[www.ihe-austria.at](http://www.ihe-austria.at)

[www.ihe-nl.org/uploaded/FILES/IHE-NL\\_Hubert Eisl\\_ELGA.pdf](http://www.ihe-nl.org/uploaded/FILES/IHE-NL_Hubert_Eisl_ELGA.pdf)

<sup>1</sup>The first paragraph of the article is based on information from the website of Nictiz.