

Flu can now be diagnosed through a PC



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Imagine that you could visit your physician without leaving your livingroom sofa, for example when you do not want to spend time waiting in front of the consulting room, or when your doctor's office is too far away. Modern information system and telemedicine make it possible. Marcel Reboš, general manager of Cisco Slovakia described its benefits for healthcare institutions and patients.

able to offer a variety of services to improve overall healthcare system. The next level should be implementation of collaboration technologies to help medical staff to work efficiently and enable patients to access healthcare services from remote areas.

Is there any example which would demonstrate any tangible benefits of the use of ICT in healthcare?

One of the excellent examples is the British Hospital Nottingham Trust. The introduction of new information system resulted in time saving that equates to total annual cost saving of over £75,000. Moreover, the hospital reduced patient waiting times by a third. The Hospital's old system of administering relied on a pager/phone system involving seven steps with several iterations. The administration was complex, inefficient, raised questions about safety, and had poor levels of staff satisfaction. After embracing innovative technology, the hospital dramatically improved operational efficiency saving 8,000 clinical hours annually.

What is the main contribution of telemedicine?

Our healthcare system is influenced by several factors. Our population is aging, we have a shortage of healthcare profes-

sionals, and the sector's resource requirements are greater than its revenues. If this trend continues, we will soon find ourselves in a very difficult situation. That is why we need to dramatically increase our healthcare system's effectiveness. Telemedicine can address the lack of physicians and nursing staff by taking over some of their activities. Consider chronically ill patients. In financial terms, a 10% increase results in a 0.5% decrease in GDP in the current system. With telemedicine it would be possible for these patients to receive part of their healthcare remotely. The ultimate goal is to offload the specialists so they are available for the critical tasks. Any situation where healthcare activities can be performed by either the patients themselves, or by an assistant, is an ideal candidate for telemedicine. The patient data can then be made available remotely to the physician by means of routine data collection through specialised equipment. Telemedicine is indeed one of the most progressive areas in healthcare.

Video plays an important role in telemedicine. How can your video solution TelePresence be used for healthcare?

TelePresence enables the transfer of high-quality audio and life-size video. It creates an

immersive experience where the participants feel the conversation takes place in the same room, even though they can be hundreds of kilometres apart. We have developed a special technology for healthcare area called HealthPresence. Its basic infrastructure is provided via TelePresence technology and the actual patient examination is done by additional biometric devices, such as thermometers, blood pressure meters, heartbeat meters, ECG, sonographs. It is even possible to perform ear, nose and throat examinations by the means of a special digital camera. Special integration software is responsible for recording, processing and transmitting data from the add-on equipment. All this together creates an environment that most patients experience during an in-person visit to a physician.

Does it mean we will no longer have to wait in crowded waiting rooms just because we have the flu?

Exactly, that is the vision, although it may take some time to come true. Many patients are currently not able to operate equipment on their own. They need the assistance of a trained professional or qualified nurse. Still, it has a broad use. It helps solve the lack of qualified professionals or specialists in more remote locations or smaller hospitals. It can also be applied in retirement homes or social institutes. It also helps the physicians themselves. For example, consultations with patients treated for liver cancer no longer requires the participation of a surgeon, gastroenterologist and oncologist in the same geographical location. Any specialist necessary for such a consultation can be present via video conference.

The Slovak healthcare system currently struggles with funding problems. Is it worth even speaking about modern technologies such as telemedicine?

Actually it is. The modern technology could become one of the ways of curing the ailing Slovak healthcare system. Though their provision costs may seem initially high, in the end they will bring immense savings and benefits. Unfortunately, Slovakia is still lagging very far behind in terms of introducing e-healthcare services.

Cisco is one of the key technology partners of the eSO1 pilot project implemented within the e-Health program. What exactly can your company offer?

Any e-Health services need first and foremost, a fast, secure and reliable infrastructure. Cisco is networking company and our solutions integrate data, voice and video into reliable and secure infrastructure. This is foundation for healthcare institutions to be

