

HISCOM – INTER INSTITUTIONAL COMMUNICATION PLATFORM



T-Systems provides to its customers integrated healthcare IT systems, reliable and high-standard IT solutions and services that satisfy the latest standards. One of the most important components in the company's product portfolio is its inter institutional communication platform connecting healthcare stakeholders with real-time services.

T · · Systems ·

HOSPITAL INFORMATION SYSTEMS COMMUNICATION (HISCOM*)

- Providing data & document in real time.
- It is fully integrated with existing healthcare information systems.
- Complies with EU directives on data privacy.

Up to now, it has not always been possible to access data securely, because different hospital (HIS), patient (PIS) and laboratory (LIS) information systems use different communication interfaces and consequently do not understand each other. For this reason, doctors continue to exchange important test results and patient data on paper. According to the findings of studies, up to a quarter of this information never actually reaches the intended recipient. In urgent, life-threatening care situations, exchanging information in paper form can cost valuable time. When acutely ill patients are admitted to hospital, their life may depend on access to patient records held at other hospitals. In most cases this is not possible or takes too long. In emergency situations, therefore, doctors must themselves again quickly collect information that is important for treatment.

SEAMLESS COMMUNICATION BETWEEN EVERY HEALTHCARE INSTITUTION

Based on our research and development, we have built a system based on hardware and software, which is functioning as basic healthcare communication platform with following attributes:

- It was built for healthcare only.
- It is based on recent international healthcare communication standards and protocols.
- System is able to forward healthcare data of different healthcare providers to each other.

HISCOM will allow health service providers to achieve online communication with one another. By using HISCOM, users will be able to continue the professional work they have done so far in their own familiar information technology environments, in other words, there will be no need to replace information technology systems.

From a health point of view, HISCOM will make it possible to store the medical histories of patients requiring care in electronic format and to make the patient documentation available directly from the system of health service provider, not by being carried by the patient. Although HISCOM's main function will be data transfer, will also able to provide various other supplementary services. The HISCOM system will also enable the display of interpretable data, transform and manipulate the transferred data, as well as being able to carry out queries using data mining techniques. HISCOM is an intelligence system, which performs some of its operations on the sender's and/or recipient's side (for example, data transformation), and other operations on its central system (for example, routing or data mining).

In designing HISCOM and creating its components, the primary concern was to meet the needs of the health sector for having integrated data management. It makes use of communication models and protocols that are used in healthcare (HL7, DICOM, etc.).

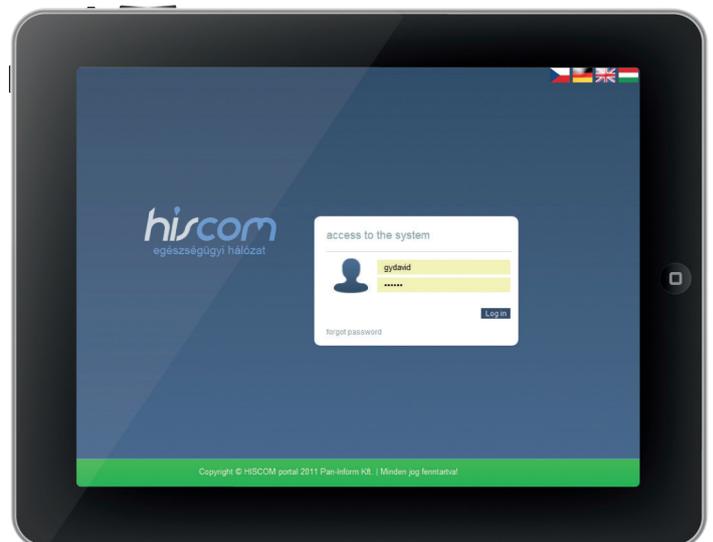
HISCOM's performance is achieved precisely by the fact that it does not aim to handle all data communication, but rather to provide the best possible solution in a well-defined target area.

The technical-technological solution provided by HISCOM will thus far exceed all the previous development efforts, for example the personal chipcard, where the strictly personal data can be destroyed or fall into unauthorized hands if lost. It will ensure truly online communication, which will be suitable for coded data transfer, as well as the exchange of documents. HISCOM won't store the data, (unless the datacenter service is also needed underneath), and no data media will be needed to use it, thus the system will be fully in compliance with the strictest data protection regulations.

Due to its simplicity and robust structure, HISCOM will be easy to operate, with relatively low costs, while its up-time will be high and it will remain in operation even when the institution's patient documentation system is down.

HISCOM will provide the backbone, much like a town's "public utility network": it will connect the healthcare stakeholders and provide real time services. As a result, the system will facilitate the development of healthcare information technology applications, which will not just be specific for a particular institution, profession or activity, but will go beyond that and be suitable for regional, national or international, inter-regional use too.

The HISCOM was built in such a way, that it should be easily extendable with new communication protocols, and should provide conversion platform between different protocols.



*Hospital Information Systems Communication

T-SYSTEMS MAGYARORSZÁG ZRT.

1097 Budapest, Könyves Kálmán körút 36.

www.t-systems.hu