

# Flexible Integrated Medical System

History of a Project

# László Zsonda, MD

## Head physician

Creator of the system

Owner of licence

Internal medicine, pathology  
and emergency head  
physician

This project has been  
awarded the Gold medal at  
the World Licence Exhibition  
and, also, has received  
several other prizes.



# The Prime Minister of Hungary, Mr Viktor Orbán congratulates to Mr Zsonda

2002.

The Prime Minister of Hungary  
congratulated to Mr László Zsonda  
on the international success of this  
project..



# Congratulations by the Former President of the Hungarian Republic, Dr Árpád Göncz

Following his international success on the project Mr László Zsonda was invited by Dr Árpád Göncz, the President of the Hungarian Republic



# Appreciations from Prof. Dr. Ede Teller, Nobel-Prized Nuclear Physicist

Mr Ede Teller is giving some useful pieces of advice to Mr László Zsonda on the developing of the consulting system and is assuring him of his support



# The American-Hungarian Medical Association

Prof. Dr. Péter Forbáth

Dr. Sándor Matolcsy

Prof. Dr. William Ganz

The leaders of the American-Hungarian Medical Association paying attention to the progress of this project.





# Dr. Árpád Gógl Árpád and Dr. István Mikola, Former Ministers of Healthcare in Hungary

Mr Árpád Gógl and Mr István Mikola,  
former Ministers of Healthcare in  
Hungary, also paid special attention  
to the evolution of the telemedicine  
project.



# Farkas Bertalan Hungarian Astronaut

Mr Bertalan Farkas, our one and only astronaut up to now, has been very interested in the aviation's and astronautics' medical aspects of the project.





# **Flexible Integrated Medical System**

An International Success

# The project has already been presented on several American scientific conferences

The presentation of the project arousing interest of the audience



# Successful Presentations of the Project at Other International Scientific Events

- Saudi Arabia
- Czech Republic
- Ghana
- Iran
- China
- Romania
- Spain
- Slovenia
- The Ukraine



# Flexible Integrated Medical System

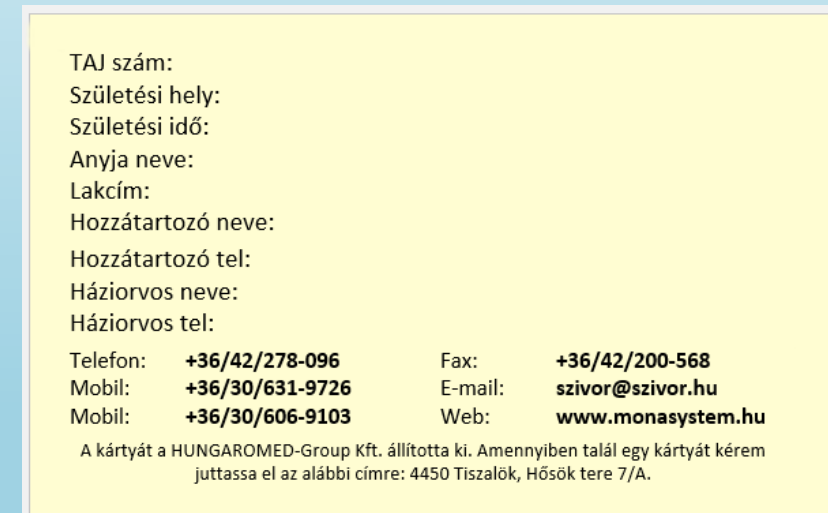
The System

The basis of the system is a plastic card that contains all important data of an individual user and, also, it is considered to be the main identifying means for a patient

Front view



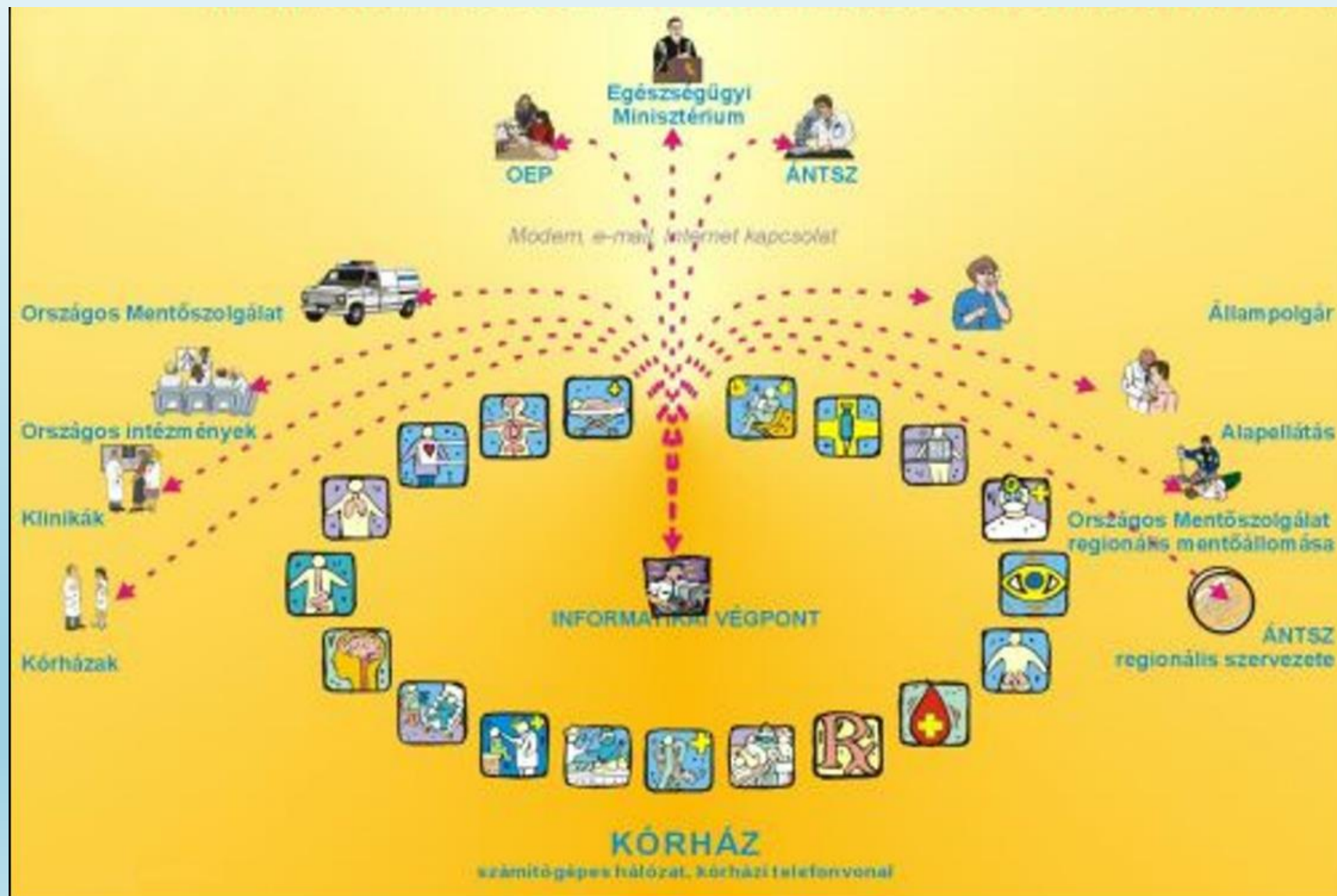
Back view





# The structure of the system

The system is able to interact with the IT systems of various healthcare institutions. All individual units of a healthcare system (national/international) can be contacted, including hierarchic units of those.



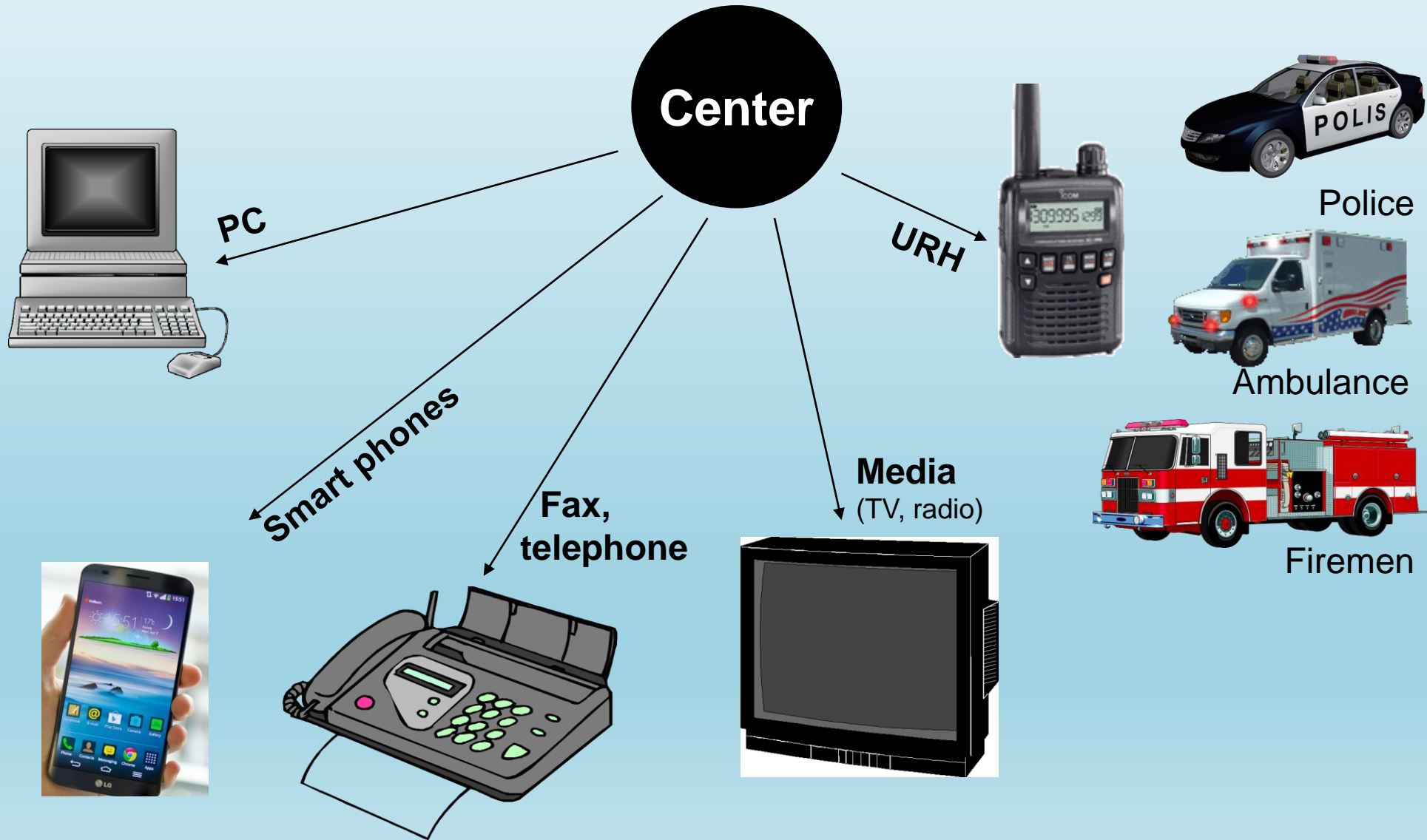


# The International Healthcare Consulting Center in Tiszalök (Hungary)



This is the International Healthcare Consulting Center every healthcare alarm signal comes into.

# Communicational Infrastructure of the Center



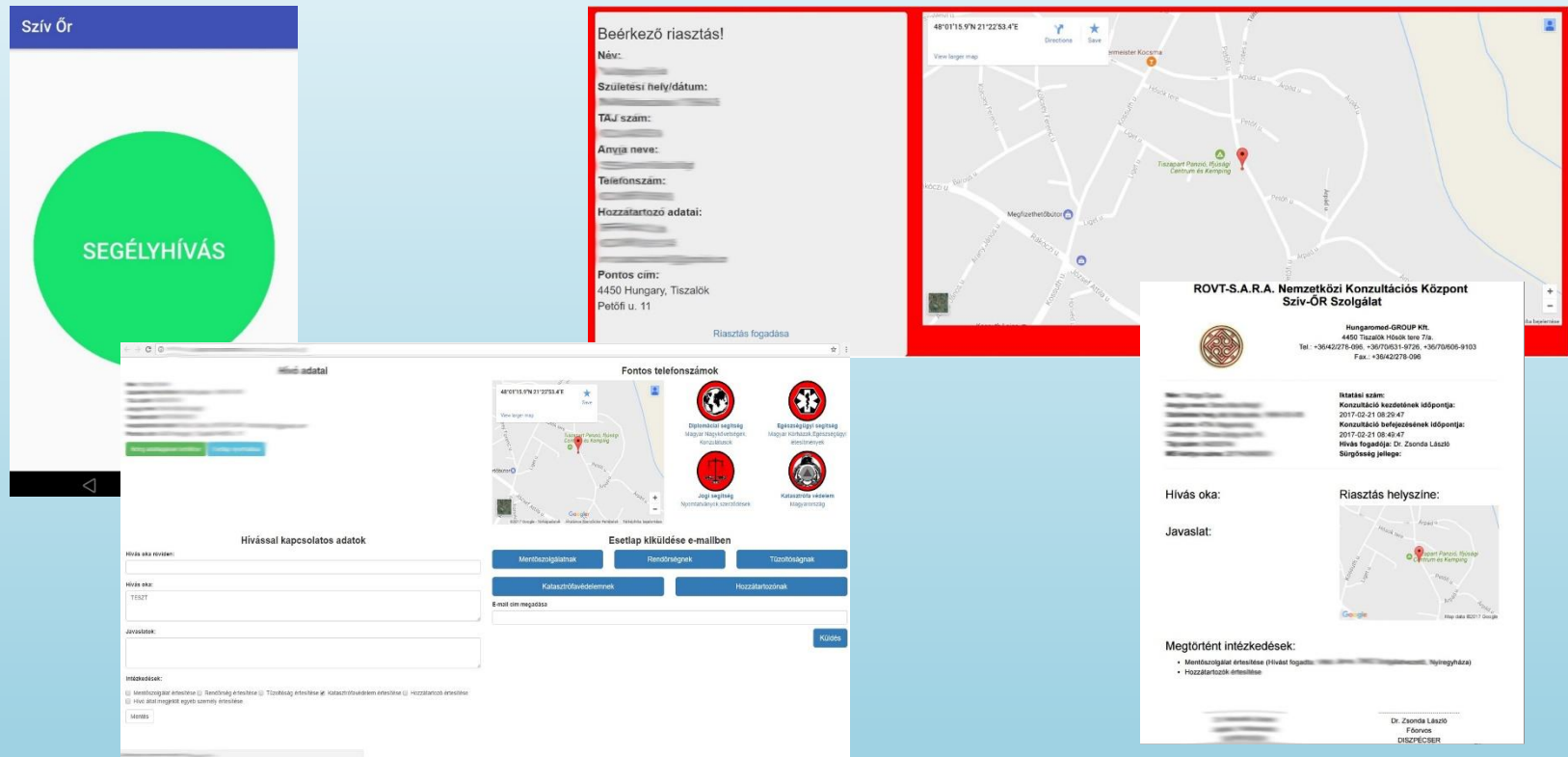


# Contacting Individual Users



Individual users will be able to send results of medical analyses/examinations to the center and get professional medical assistance.

# Our User-Emergency System The 'Heart-Guardian' Application



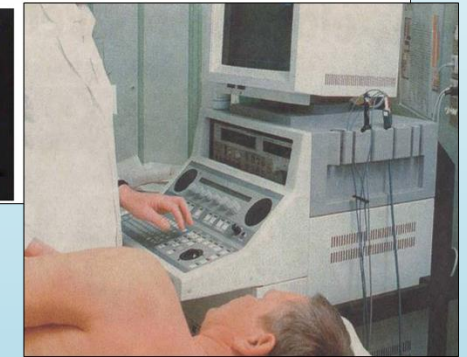
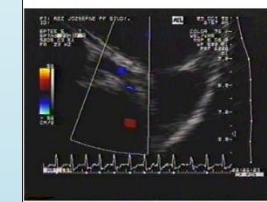


The application - downloadable on smartphones - makes our center contactable any time. The Center, based on data received from the application, will locate the patient geographically (GPS).

# Processing of Incoming Results

Tranzakció azonosító:	191	Beteg azonosító:	125/888
<b>Küldő kódja</b>	<b>Megjegyzés</b>	<b>Küldés dátuma</b>	
36920010101523	[Teszt] Balatonfüred Haemodinamikai Labor. Köszönettel: Dr. Zsonda László Tel.: 87 / 584- [Teszt] A felvételt a titkárság számítógépről küldték. Ezen a gépen a megnézéshez szükséges [Teszt] szoftverek telepítésre kerültek. Székelyné Krisztina	2003-05-22 09:25:00-04	
<b>Saját kód</b>	<b>Diagnózis</b>	<b>Kiértékelés dátuma</b>	
	Kedves Apó Főorvos Úr! A coronarogramát megnéztem. A felvételt kiváló minőségben létezik. A felvételt alapján úgy tűnik, hogy a betegnek nincs bal coronaria betegsége. Gyanús számomra a CV kezdeti szakasza, de ha ez mégis szűkület akkor nem hiszem, hogy szignifikans lenne. Udv. Nasri	2003-05-22 09:46:48-04	

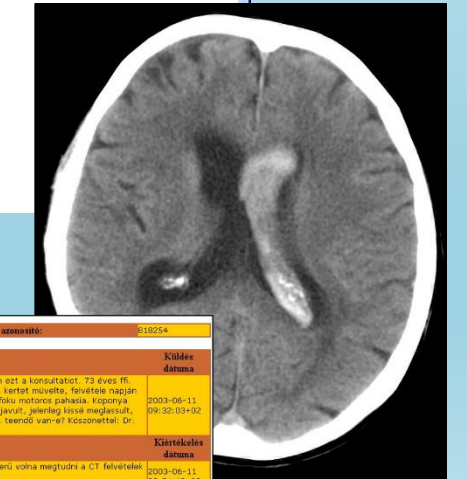



Tranzakció azonosító:	41	Beteg azonosító:	32213
<b>Küldő kódja</b>	<b>Megjegyzés</b>	<b>Küldés dátuma</b>	
3	[Szeged II. Belklinikai Teszt]	2003-05-08 09:02:54+02	
<b>Saját kód</b>	<b>Diagnózis</b>	<b>Kiértékelés dátuma</b>	
3			


**Államok**  
A korábban készült mellkas rfg. felvételen bal oldalon az alsó tüdőmezőben intratracheális  
megvilágítás látható. Emellett egy bronchiektázis is látható. Az anteroposterior mellkas rfg. felvételen a bal oldali infiltrátum lényegesen  
megnagyobbodott. A közegérfolyadék szintje a felvételen nem mérhető. A látottak alapján  
diagnosztikai pneumonia valószínűsíthető. Kérlek továbbá, szükség esetén mellkas rfg.  
kontr. javasolt. Dr. Erdélyi László lhyreg@hca.btg.oztaly

2004-04-09 16:32:01-04



Tranzakció azonosító:	209	Beteg azonosító:	618254
<b>Küldő kódja</b>	<b>Megjegyzés</b>	<b>Küldés dátuma</b>	
3	Tisztelt Professor Úr! Monasztrom gyakorlatosa céljából kérem ezt a konsultációt. T3 éves ffr. Korallomában prostata cc. 20 évvel ezelőtt, eddig jó volt, kettőt művelte, felvétele napján egyben feve, zavartalan találtak. ST: Belsővírnyálóg. meg. Kp. foku motoros parkasza. Kóroponya CT-n a ferri sárcsák ábrázolódtak. Dehydratáció a neur. statusus javult, jelenleg kisse megcsökkent, járása enyhén szűles. Vegetatívum hiányosulycott; idegseb. teendő van-e? Köszönettel: Dr. Gottschál Márton 93-502041	2003-06-11 09:32:05+02	
<b>Saját kód</b>	<b>Diagnózis</b>	<b>Kiértékelés dátuma</b>	
3	Tisztelt Főorvos! Az esetleges teendők megvitéséhez előszerző volna meg tudni a CT felvételen készítése és az ictus közötti eltelt időt. Tiszteltel, Dr. Vető Ferenc	2003-06-11 09:54:13+02	

The Consulting System is able to provide all divisions of national/international healthcare with consulting services



# Flexible Integrated Medical System

Special cases



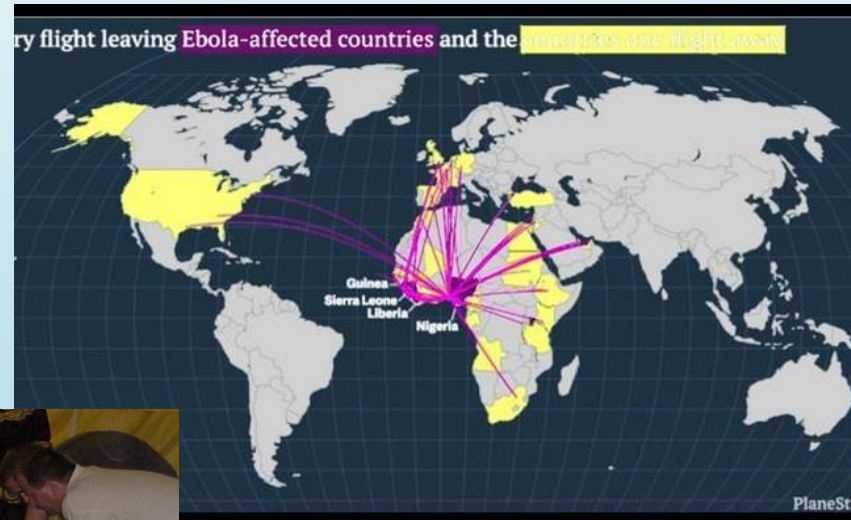
# Transportation of Personnel and Transportation of Freight

Our Consulting System  
is able to offer its  
services to personnel  
and freight  
transportation  
companies all over the  
world.



# Outbreaks and Disasters

Our Consulting System is able to provide those in need with healthcare services even in critical situations like outbreaks or disasters.



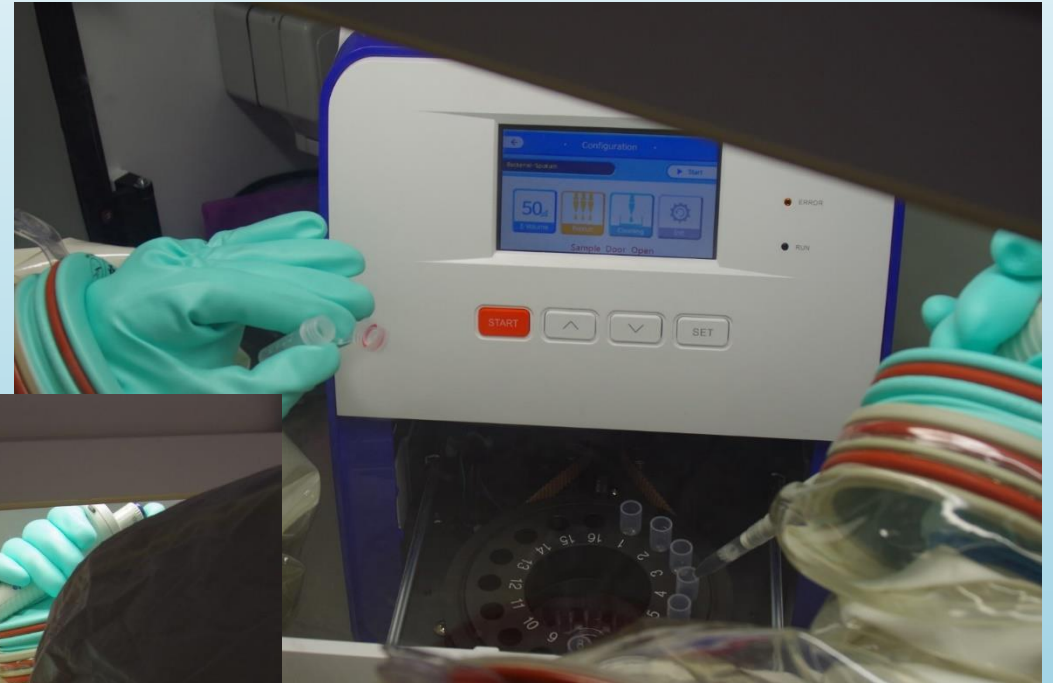


# Immediate Diagnose of Infectious Diseases



Our system ensures all healthcare institutions connected to it will be able to establish quick diagnoses of infectious diseases if occurred.

# Our System in Military Environment



See how the system can work in mobile containers of the military.

# Flexible Integrated Medical System

Data safety

# Data safety

- Our central database is stored on a server which has got a multi-protective function as well. Thank to that function access to the system is only allowed through securized contact elements (HTTPS, SFTP, VPN).
- While creating the database we took proper care of separating the various divisions. That means no single application is able to require all data of an individual patient at a move. Access to data is only allowed within the necessary limitations of a certain case.
- The applications dispose of neither ways of accessing the database nor of access data.
- In every single case the applications communicate with the central server with the help of API keys.
- On a 4-time daily basis a backup saving of the database is done onto a backup server which exists only on this purpose and it is inaccessible from the outside.



**Thank you for your kind  
attention!**