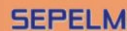


Euro-Mediterranean Internet-Satellite Platform for Health, medical Education and Research
www.emispher.org
co-funded by the European Union,
EUMEDIS B7-4100/2002/2165-083 P110



EVMU - The EMISPHER Virtual Medical University

In this second Newsletter we report on the EMISPHER Virtual Medical University (EVMU) for e-learning (teleteaching).

The main medical partners involved in the EVMU are:

- CICE - Centre International de Chirurgie Endoscopique, Clermont-Ferrand, France (Co-Leader);
- ASU - Ain Shams University, Cairo, Egypt (Co-Leader);
- ANDS - Agence National de Documentation de la Santé (Ministère de la Santé), Algiers, Algeria;
- NIFRT - Nasser Institute for Research and Treatment (Ministry of Health and Population, MOHP), Cairo, Egypt;
- FMPC - Faculty of Medicine and Pharmacy of Casablanca, Morocco;
- Tunis - Faculty of Medicine of Tunis, Tunisia;
- ISTEM - Continuing Medical Education and Research Centre, University of Istanbul, Turkey;
- SEPELM - Société Européenne pour l'E-Learning Médical, in combination with UMFV - Université Médicale Virtuelle Francophone, Paris, France;
- IsMeTT - Istituto Mediterraneo per i Trapianti e Terapie ad Alta Specializzazione, Palermo, Italy;
- Charité Hospital, Berlin, Germany.

In the EVMU it is planned to use real-time broadcast of lectures, surgical operations, pre-recorded video sequences etc., as well as web-based e-learning applications.

The target population of the EVMU is comprised of medical students (both undergraduate and postgraduate), university hospital staffs, general practitioners and specialists, health officers, and citizens.

Seven medical specialities have been selected for the educational programme of EVMU:

- endoscopic surgery (CICE, ISTEM, FMPC)
- gynaecology-obstetrics (ASU, CICE, ISTEM)
- reproductive medicine (FMPC, CICE)
- infections diseases (CICE, ANDS, FMPC)
- interventional radiology (FMPC, CICE, Tunis, ASU, ISTEM)
- liver transplantation (NIFRT/MOHP, IsMeTT)
- tumour diagnosis and therapy (Charité, ISTEM, ASU)

The Université Médicale Virtuelle Francophone (UMVF), involved through project partner SEPELM, already has a certain experience in tele-teaching and e-learning. In particular, the UMVF has created digital campuses proposing pedagogical contents validated at national level and accessible via Internet (www.umvf.org, école de e-learning).

EMVU has started work after two exploratory workshops (Clermont-Ferrand, CICE in January 2003, and Casablanca, Faculty of Medicine and Pharmacy in June 2003).

Some of the pedagogical contents are presented on www.emispher.org and on various CD-ROMs. Through recorded videos and live video transmissions over the satellite-based network of surgical operations, EVMU hopes to enhance the effectiveness of the medical education in this region.



EMISPHER Consortium meeting in Casablanca
(9-12 October 2003)

The priorities for selecting the pedagogical programme are based on the following criteria:

- needs expressed by the recipient countries;
- contents validated by experts;
- the proposed contents on the platform (selection, translations, digitalization, re-writing, page layout, preparation of multimedia contents, availability experts and teams) have been defined.

The e-learning programme has been accepted at the end of May 2003 as multimedia data base for the following topics :

Gynaecology-Obstetrics

A national French course of gynaecology-obstetrics is already on line, with free access to all.

For undergraduate students:

<http://www.uvp5.univ-paris5.fr/campus-gyneco-obst/cycle2/default.asp?frame=sommaire>

For postgraduate students:

<http://www.uvp5.univ-paris5.fr/campus-gyneco-obst/cycle3/sommaire.asp>

Surgery and Endoscopic Surgery

CICE pedagogical web site: <http://www.endosurg.org> contains a database of up-to-date surgical techniques and offers a forum allowing on-line chatting with experts and surgeons.

Turkish Association for Trauma & Emergency: <http://www.travma.org>

Turkish Association for Endoscopic-Laparoscopic Surgery: <http://www.elcd.org> includes information on endoscopic-laparoscopic and minimal invasive surgery:

Reproductive Medicine

In Cooperation with Professor Jean-Luc Pouly of the Department of Gynaecology from Clermont-Ferrand

<http://perso.wanadoo.fr/fivnat.fr>

a web site about reproductive medicine that contains educational and epidemiological data.

The EVMU Gateway

As central gateway to the contents of the EVMU, a dedicated section of the EMISPHER website has been created: <http://info.emispher.org/virtual.htm>

Each partner will present their own contents as well on their own website. Every page will be reachable from the EVMU gateway.

This method allows liberty and independence between the partners, allowing each of them to work at their own pace, based on their own design and contents, choosing their level of interactivity and access.

For each topic, the gateway will propose title, expert author, location, date, and keywords.

The satellite network as a tool for teleteaching

Live surgical operations from operating theatres, live lectures, etc. to one or several sites simultaneously (point-to-point or multipoint) will soon be reality, when the network between the 10 partners will be operational by the end of April 2004.

For these transmissions a video programme is prepared that will be communicated on the various web sites listed in the EMISPHER portal. The programme will list:

- Live broadcasting schedule, according to the yearly teaching programmes of the various partners institutions
- Monthly video programme

The EMISPHER partners have defined certain policies for the development of pedagogical contents for the project:

- Respect the charter of the Health On the Net (HON) <http://www.hon.ch/HONcode/Conduct.html>, a code of conduct for medical and health web sites.
- Each pedagogical topic will contain title, author, date of release, date of up-date, keywords and if possible, a short summary.
- Quality of the contents: contents are to be validated by the workgroups, working towards diploma-earning.

Further Actions

The partners have also discussed some further actions to be envisaged beyond the content building:

- To propose a first video broadcasting programme based on the schedule of equipment installation at the various partners' sites and the needs expressed by those partners already equipped;
- Advertise on the various relevant web sites, tabloids, medical magazines, etc. as soon as the satellite dishes and telemedicine workstations are installed;
- To evaluate the EMISPHER internet-satellite platform as pedagogical tool (questionnaire, evaluation, final validation of the e-learning / tele-teaching activities.



First EMISPHER Conference in Casablanca
(9-12 october 2003)

eTEN Project: MEDASHIP

MEDASHIP: Medical Assistance for Ships,

Duration: 4/2002-12/2003

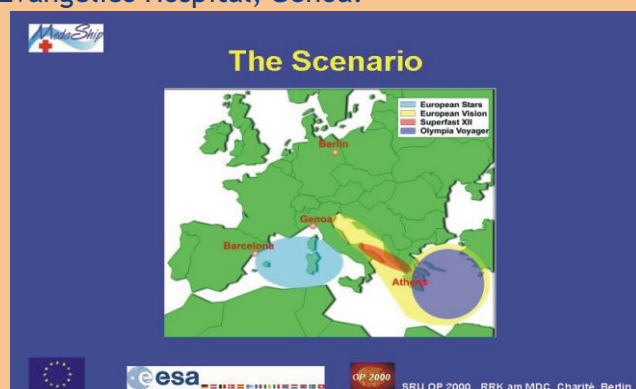
Participants: D'Appolonia S.p.A. (IT); Centre for Law Ethics and Risk in Telemedicine, Avienda (UK); Eutelsat (FR); National Centre for Scientific Research, NCSR Demokritos (GR); SRU OP 2000, Charité, Berlin, (DE); co-funded by the EC under the eTen Programme, Contract No. C27271

Project Coordinator: F.Bagnoli (D'Appolonia)
<http://www.medaship.com>

An integrated solution for health services on board ships is not readily available in Europe or elsewhere in the world at the present time. Such technologies also have a vital role to play in providing medical care to passengers and crews on board ships and can dramatically improve the quality of medical care on board suitably equipped ships. These considerations led D'Appolonia in Genua, an Italian Engineering Company, which started few years ago some experimental activities in this domain, to form a group including a telemedicine tools developer and satellite carrier for the final assessment and running of the service, aiming at validating it in the day-by-day clinical practice.

During the validation phase the service has been tested on board of three ships (European Stars of Festival Cruises, Olympia Explorer of Royal Olympia Explorer) and in the ferry boat sector (Superfast XII of Superfast Ferries)) having the possibility to connect to three land medical centers, participating in the project:

- Charité Hospital, Berlin;
- Sotiria Hospital, Athens;
- Evangelico Hospital, Genoa.

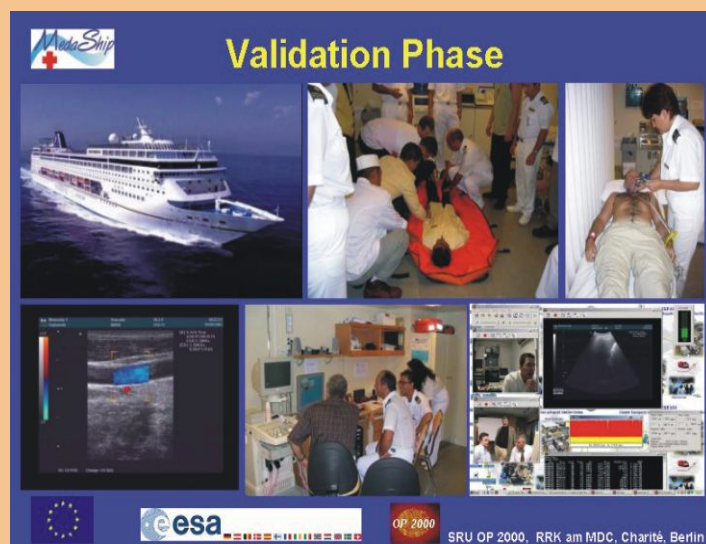


During the project, which represents a further step towards the commercialization of the telemedicine service, technical issues have been finalized and other aspects (like medico-legal and business aspects) have been dealt with.

The services offered by MEDASHIP fall into two distinct categories: medical services and technical services. The medical services that are provided include telecardiology, ultrasound examinations and videoconferencing using the WoTeSa/WinVicos system. (This is the same system as will be used for the real-time telemedicine applications in EMISPHER.)

The technical services offered to the shipowners include the onboard installation and integration of the MEDASHIP service, the updating and retrofitting of structures already available on board and the design and development of medical facilities during the construction phase of the ship. The principal aim is to provide existing vessels and new builds with a turnkey platform and infrastructures for all medical services to be used on board. Other telecommunication services can also be integrated into the MEDASHIP service so that all services can be provided on a single platform. The telemedicine service will offer the shipowner the opportunity to install a satellite communication system on board.

This could be also used profitably for different other applications including videoconference, television channels, GSM and wireless telephony via satellite, remote banking services, fast internet and fleet management.



In the market validation phase the MEDASHIP consortium has investigated and developed two business models on the commercial delivery of the MEDASHIP service to its potential customers. The models are the "ticket price" and the "additional insurance" model. In the first of these models telemedicine services are paid through a slight increase in ticket price charged to cruise or ferry passengers. In the second model passengers will be offered the opportunity to buy an additional insurance for telemedicine services. These models have been developed after extensive discussions with the interested parties, including shipowners and travel insurers.

Preliminary results indicate that the MEDASHIP service is sustainable on a commercial basis.

COLOPHON / IMPRINT

- ♦ Content of Leading Article on EVMU by CICE, Clermont-Ferrand
- ♦ Editors of the EMISPHER Newsletter :
 - H. Kessis, ANDS
 - C. van Doosselaere, EHTEL
 - T. A. Roelofs, Charité

EUMEDIS Project: EMPHIS

EMPHIS (Euro-Mediterranean Public Health Information System), 09/2002-08/2005, EMPHIS Consortium of 19 international partners, under the leadership of Fondation Merieux

Project Coordinator H. Deboi FONDATION MERIEUX

<http://www.emphis.org>

Distance Learning at the service of Public Health

EMPHIS is one of the 5 projects in the Healthcare sector currently co-funded under the EUMEDIS programme.

The EMPHIS project intends to develop information systems within public health practice, care and education in the Mediterranean region, using as pilot projects

- the strengthening of disease surveillance in tuberculosis (TB);
- the development of a decision support tool in the control of zoonotic cutaneous leishmaniasis (ZCL) based on a geographic information system (GIS);
- the active exchange of data and counseling in nosocomial infections (NI).

Modern information and communication technology (ICT) tools will also be used to develop distance learning modules in public health and to disseminate information among end-users. The challenge of the distance learning component of EMPHIS project is to produce educational supports that can exploit the flexibility offered by the new technologies, in order to overcome possible geographical, material and human limitations to the use of EMPHIS products.

Needs analysis and innovative technologies are the strengths of the project. Through needs analysis, two types of targets have been identified:

- institutional, useful for carrying out national programs and projects; and
- academic, necessary for access to basic and continuous education.

Three obstacles remain, however, before the accomplishment of these objectives: *economic*, *organisational* and *pedagogical*

The main economic obstacle is the very high cost of pedagogical resources, both initial and maintenance costs. This limits the access to distance learning to only those countries or organisations with sufficient availability of money.

The EMPHIS project overcomes these problems by using XML (Extensible Markup Language), in association with a specific method for producing pedagogical supports. This lowers the price 5 to 10 times.

The organisational obstacle consists in questioning traditional professional practices and the organisational culture surrounding these practices. In order for the new tools to be effective, the actors must own them. The EMPHIS project aims to overcome this issue by promoting incremental changes, thereby allowing organisations and professionals to change their instruments and methodologies at their own pace, from a light change to, over time, a complete one. Technological solutions make these many changes over time almost free of charge.

The main pedagogical obstacle is that of pedagogical innovation. Professionals have their own methodology and it can be difficult and even unjust to ask them to abandon it. The EMPHIS project therefore proposes different pedagogical models, covering a great variety of methodologies, and offers tools through which it is possible to adapt each model to the clients' needs. It is also envisaged to create different kinds of material supports.

The final network proposed by the EMPHIS project is composed of three main areas, covering the entire Euro-Mediterranean region: area North (France, Université de Technologie de Compiègne), area South (Tunisia, Université du Centre), area East (Lebanon, Université Saint Joseph). They accompany the end users in their adaptation to distance learning technologies at the level of pedagogical engineering and use of technical tools.

The end goal of the three geographical areas will be to transfer their competencies as much as possible to the end users, in order to continue the process that EMPHIS has begun and further the dissemination of distance learning tools even beyond the life of the project.

Emphis Dissemination Office, Departement of Public Health, Turin, University via santena 5 bis, I-10126 Torino, Italy. , e-mail silvia.rovere@unito.it

EMISPHER International Dissemination Conferences

- Casablanca (Morocco): "Medical E-Learning", 9-12 October 2003 Host: Faculty of Medicine and Pharmacy Casablanca, FMPC, (Prof. Mohamed Kebbou)

- Cairo (Egypt): "Public Health in the Euro-Mediterranean Region", 19-22 February 2004 Host: Ain Shams University (Prof. Gamal Wafa)

- Nicosia (Cyprus): "Continuity of Care", 24-27 June 2004 Host: University of Cyprus (Prof. Marios Dikaiakos)

- Istanbul (Turkey): "Telemedicine: Best Practices", 16-19 September 2004 Host: ISTEM, Istanbul University (Prof. Cavit Avci)