

Telemedicine and e-Health for International Cooperation

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Medicine challenges

- Increase of elderly people
 - Chronical diseases
 - Cardiovascular diseases
 - Cancer
 - Neuropathologies
- Infectious diseases
- Genetic causes of diseases
- Diseases prevention (epidemiology)
- Rehabilitation
- Home care assistance
- Citizens/patients ask for more information

Change of Paradigm

- Cost containment
- Changing demographics
- Peripheralization of Health care delivery
- Changing disease patterns
- Impact of ICT in supporting clinical decisions
- More informed and expectant patients
- Well-being factor (wellness paradigm)
- Moving information and knowledge
- Creation of health network

Internet in medicine

- Diffusion of Internet services in healthcare;
- Building of web sites and portals in medicine fields;
- To share and to access to clinical information (protocols of care, guidelines, etc.);
- Teleconsulting and telediagnosis in peripheral health structures and also at home.

Telemedicine

“Telemedicine is the delivery of health-care services, where distance is a critical factor, by health-care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, and for the continuing education of health-care providers as well as research and evaluation, all in the interests of advancing the health of individuals and their communities.” (WHO, Geneva 1997)

Telemedicine Service

- **Teleconsulting** (clinicians → clinicians)
- **Telediagnosis** (clinicians → physicians)
- **Telemonitoring** (clinical centers → patients)
- **Telesurveillance** [i.e. home telecare] (health structure → patients)
- **Tele-emergency** (first aid centers → health operators → ambulances → patients)

Telemedicine Applications

- TeleCardiology
- TeleRadiology
- TelePathology
- TeleOphthalmology
- TeleHomeCare

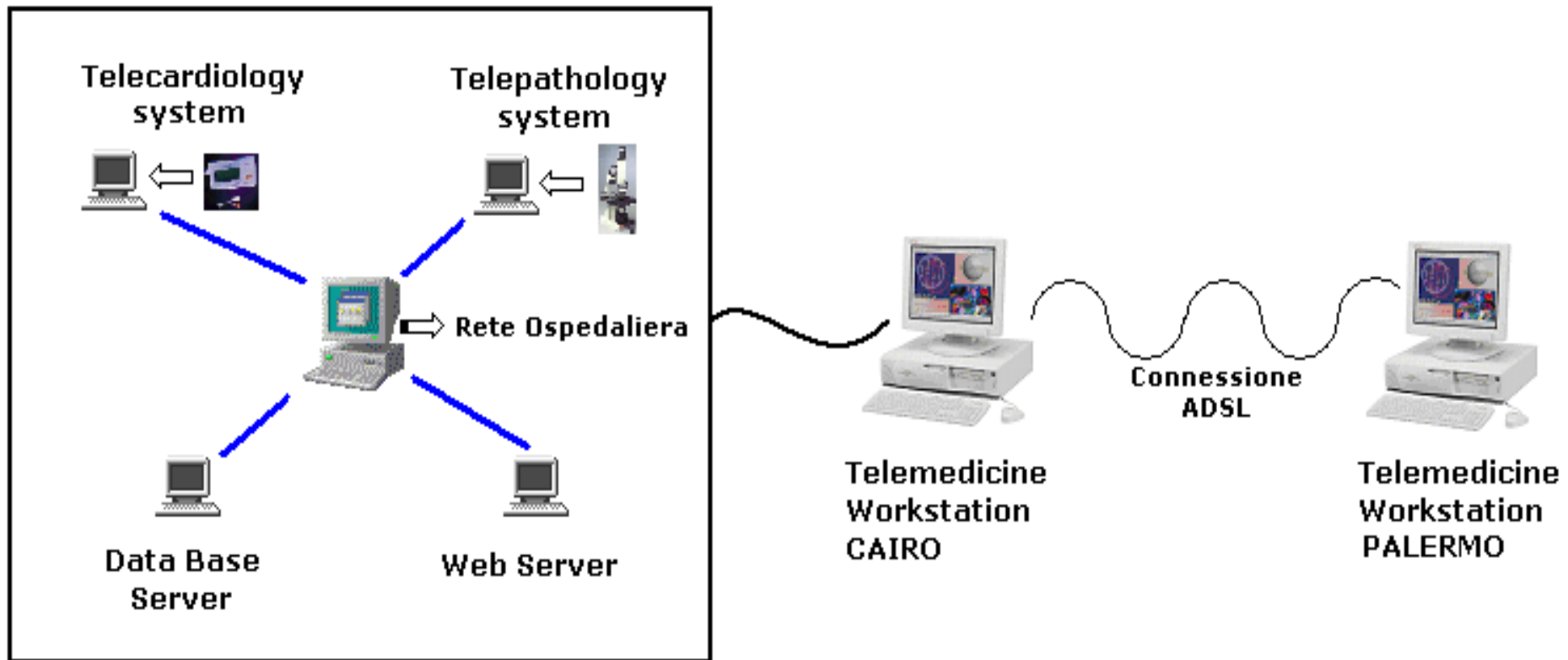
Italian Cooperation in e-Health and Telemedicine:

- **Developing** of health network;
- **Interconnecting services** and actors of healthcare system between Italy and developing countries.
- **Spreading** information to several structures, local care units, hospitals, GPs etc.

Bilateral cooperation in Telemedicine and Health Informatics between Italy and:

- **Egypt**
- **Romania**
- **Hungary**
- **Greece**
- **Croatia**
- **Poland**
- **Slovenia**
- **Bulgaria**
- **Albania**
- **Bolivia**
- **Australia**
- **Canada**

Telemedicine Project: Italy (Palermo) – Egypt (Cairo)



Towards Hospital Networks in Africa

Trought Cairo it will be possible a connection with several Italian Hospitals in Africa, supporting diseases on:

- Cardiology
- Oncology
- Infectious disease (Malaria, Hepatitis, HIV/AIDS,...)
- Ophthalmology
- Neurology
- Pediatrics

IITM

**International Institute of
Tele-Medicine**

@ITIM

**ITALIAN ASSOCIATION OF TELEMEDICINE
AND MEDICAL INFORMATICS**

International Year of Science and Technology for Africa

**THE ROLE OF TELEMEDICINE
AGAINST DISEASES AND IN HEALTH PROMOTION**

Conferenza Internazionale / International Conference

30 Novembre / Novembre 30, 2007

Senato della Repubblica

Via di Santa Chiara 5, Roma

Italy and Africa Cooperation in Telemedicine and e-Health

■ Countries:

- Egypt
- Uganda
- Libya
- Cameron
- Republic of Côte d'Ivoire
- Burkina Faso
- Madagascar
- Senegal
- Congo
- Djibouti
- Tanzania
- Tunisia
- Nigeria
- Ruanda
- ...



PATOLOGI
oltre frontiera

PROJECTS AGAINST CANCER

THE MISSION

**Potentiate SURGICAL
PATHOLOGY laboratories
present in developing
countries or create new
ones**

EXAMPLES OF SURGICAL PATHOLOGY SITUATION IN SUBSAHARIAN COUNTRIES

	<i>inhabitants</i>		<i>pathologists</i>
<i>TANZANIA</i>	<i>30.000.000</i>		<i>9</i>
<i>ZAMBIA</i>	<i>10.000.000</i>		<i>1</i>
<i>MADAGASCAR</i>	<i>18.000.000</i>		<i>9</i>
<i>R.D.CONGO</i>	<i>70.000.000</i>		<i>10</i>
<i>ITALY</i>	<i>60.000.000</i>		<i>2500</i>

Experience in Telepathology between Italy and some African countries

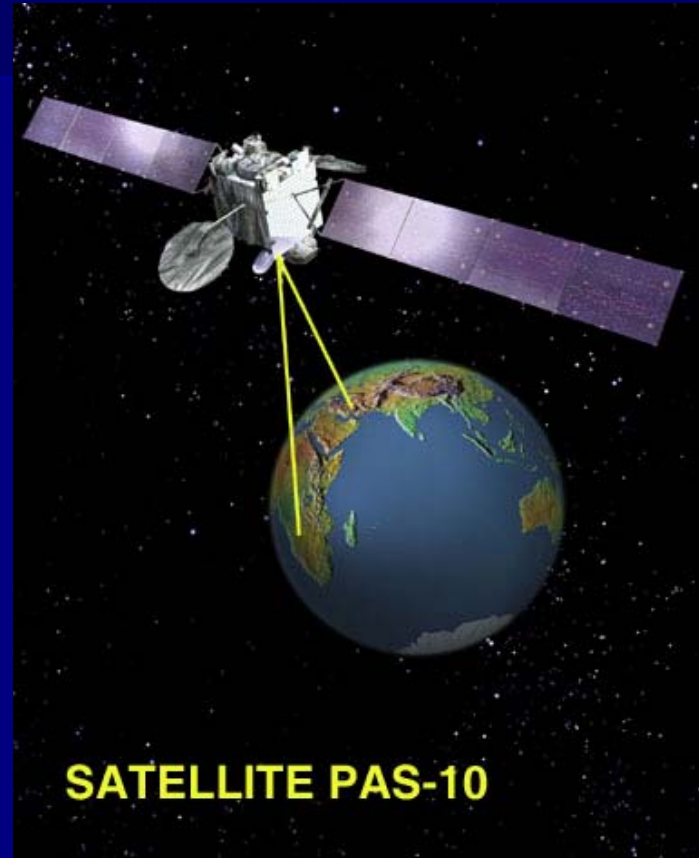


**In this conditions
in 2004 was born**

TELEPATHOLOGY

ZAMBIA

PROJECT



OUR METHOD

- To built small histopathology laboratories managed by local technicians
- To form new technicians to smear and reed pap test and to made histological slides
- To help the studies of new local specialists
- To employ telepathology for the final diagnosis



THE SCANNER INSTALLATION



THE ORGANIZATION OF REGULAR DIAGNOSTIC ACTIVITY WITH VOLUNTEERS EUROPEAN PATHOLOGISTS