

Establishment of the South American TEMOS Branch

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Introduction: The Telemedicine for the MOBILE Society (TEMOS) project is a global network of hospitals for traveling people using telemedicine through satellite and terrestrial links for exchange of patient data, medical consultation and telemedical education. The Institute of Aerospace Medicine at the University Hospital of Aachen, Germany, is the world telemedical reference centre and TEMOS project leader. The ESA (European Space Agency) is an intergovernmental organization with a mission to provide and promote the exploration of space science, research & technology and space applications. The TEMOS project is partly funded by ESA as part of the “ARTES 3” Telecommunications Programme. The South American Branch of TEMOS is led by Brazil and is currently being established in the city of Porto Alegre.

Objectives: The South American branch of TEMOS that has been established in Brazil aims to: (1) optimize diagnostic methods and treatments; (2) ensure up-to-date knowledge in medical practice; (3) update the information system about South American hospitals guaranteeing an adequate treatment for patients; (4) provide teleconsultation and second specialized opinion for medical cases; (5) install the South American telemedicine reference center in Brazil.

Methods: It was divided into 5 steps: (1) the establishment of adequate telecommunication technologies by means of IP, ISDN and satellite; (2) the implementation of videoconferences for telemedical education, case report discussions, teleconsultation, second medical opinion, patient’s data transmission and analysis; (3) the evaluation of hospitals; (4) the conduction of scientific evaluation and research; (5) the enlargement of the network through marketing activities.

Results: (1) IP and ISDN lines were established; (2) Two videoconferences between German physicians and researchers and Brazilian medical students, medical doctors and college professors occurred in April 2006; (3) In July 2006, a reference hospital in Porto Alegre underwent TEMOS certification; (4) The South American branch of TEMOS home page is available as a source of information source and the marketing of the project.

Conclusion: The success of the first videoconferences from DLR/Germany to PUCRS Univ. School of Medicine, Porto Alegre, Brazil, has motivated the implementation and the widespread of the TEMOS South American branch. A telemedical application of the videoconference system and hospitals evaluation are planned to start in 2006.