



# MedNet International Foundation

**A Consortium to Accelerate Development of Networked Health Services and Education**

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***MedNET is a consortium of public and private organizations, linking to create a nationwide education and health services support system that will utilize broadband networks to link medical colleges, hospitals, urban clinics and rural primary health centers.***

The MedNet India Project has the goal of improving the health and well being of Indian citizens by improved and timely access to the highest quality medical education and information. This will be achieved using computation and broadband communications technologies to create a network of nodes for health information and disease monitoring that can be accessed by individuals and institutions throughout the state and the country. Content and services will be received and delivered to improve the health of the population through better education of medical professionals, better information access by the physician in the district, better gathering of health data, and better access of the patient to the physician. The approach will allow both raising the ceiling (better quality) and lifting the floor (more quantity with wider reach) with the focus always being on quality. MedNet will use an approach of partnering with existing local champions and service providers, public and private, to create fast track projects that can scale to state or national level.

Strategies to enable this are:

- Train the health care provider at the city, district and block level with quality courses that enable them to provide quality service to the populace.
- Provide state-of-the-art medical education content to medical colleges and medical research centers, increasing current capacity and creating the next generation of medical professionals
- Implement multi-way medical conferencing and diagnostic procedures to disseminate specialist services out to rural and poor urban areas
- Augment existing public health surveillance networks with informatics tools for timely collection of high quality demographic and disease data as well as for modeling and data mining to recommend preventive action.
- Use high performance grid computing and storage to support world class biomedical research

A set of fast track projects will demonstrate and test key aspects of technologic infrastructure and local relevance. The projects will focus on areas of high medical need, such as HIV/AIDS, and broad relevance, such as surgery, so that the projects can scale to state and national levels. They include:

- interactive video conferencing to train-the-trainer in HIV/AIDS medical practices. This project has been initiated in Pune, Maharashtra, and will scale based on available network connectivity. This type of tele-education training is also suitable to ride on top of telemedicine networks to train remote health care workers.
- state-of-the-art training of interns and surgical staff in orthopedics through collaborative networked presentation of live surgery accompanied by anatomic imagery and three-dimensional models. The Sanjay

Gandhi Post Graduate Center in Lucknow has proposed an advanced surgery training center to receive and to initiate such training programs.

- use of open source learning management systems to map and analyze medical and public health curricula, and to support structured generation of online curricula. A workshop has been proposed that will bring together curriculum analysts nominated by the Medical Council of India, medical educators, and systems developers from groups such as C-DAC.
- an overlay of bioinformatics software on existing health surveillance networks, to upgrade the quality and timeliness of data collection for infectious diseases. ICMR has offered to have their Tuberculosis Research Center or their AIDS center, with their related networked outposts, as the focus for such an effort.

Memorandums of Understanding are needed to initiate analysis of infrastructure needs, to create organizational frameworks, and to seek funding to implement fast track projects. Possible further MoUs will be required as public-private partnerships or Indo-US collaborations are planned.

## MedNet Consortium Members:

### **SUMMIT, Stanford University**

SUMMIT (Stanford University Medical Media and Information Technology) group has been a world leader for over a decade in using media-rich content and information technology for medical education. Established in 1990 at the Stanford University School of Medicine, SUMMIT has developed several unique software applications and a large repository of digital content, matched with sound pedagogy, for medical students and trainee physicians.

### **Center for Clinical Global Health Education, Johns Hopkins University**

The Johns Hopkins CCGHE provides clinical care training and research for health care providers in resource-limited settings with activities ranging from an in-country "train-the-trainer" nursing program for HIV/AIDS care to live clinical education webcasts. Currently CCGHE faculty teach a telemedicine training program, "Principles of Antiretroviral Therapy in HIV-Infected Patients," with a series of clinical case-based lectures and interactive discussions.

### **IEEAF**

The Internet Educational Equal Access Foundation is a non-profit organization with the vision to create frameworks, partnerships, and alliances between universities and other educational leadership groups to globally accelerate the growth of the next generation internet.

### **GMRE**

The Global Medical Research Exchange (GMRE) initiative is a worldwide application that exemplifies the collaborative capabilities of the Grid for high bandwidth utilisation of IP for medical purposes.

### **Capital Technology Information Service, Inc**

CTIS is a 17-year-old health informatics company that is committed to providing proven high levels of return on investment and measurable value to its clients across the full spectrum of disease management, using the electronic health record (EHR), good clinical informatics driven IT solutions and building of the informatics grids to support various healthcare networks. CTIS plans to reuse for India its knowledge and technologies that has been developed using proven National Institute of Health informatics experience and will support a wide range of healthcare networks, including surveillance, prevention, epidemiology studies, training, clinical research and care support.

### **AcrossWorld Communications, Inc**

AcrossWorld is a venture funded, Silicon Valley-based company with the "know-how" and the "know-who" to tap into and accelerate emerging markets, using strategic deployment of information and communication technology based solutions