K. Ganapathy
Past President, Telemedicine Society of India
President, Apollo Telemedicine Networking Foundation
Neurosurgeon, Apollo Hospitals Chennai

Former Secretary & Past President, Neurological Society of India
Former Secretary, Asian Australasian Society of Neurological Surgery
Past President, Indian Society of Stereotactic & Functional Neurosurgery

Towards Touching A Billion Lives !!!
March 24th 2000
Launch of Telemedicine

“I think it is a very wonderful contribution to the healthcare of the people who live in rural villages and I hope that people all over the world will follow your lead, because if they do then the benefits of the Hi-tech medicine can go to everyone and not just people who live in big cities”
March 24th declared IMA National Telemedicine Day
Evolution & Growth of Apollo Telemedicine: A Snapshot

First Satellite-based TeleMedicine Centre (Apollo Aragonda)

- Largest Oldest Multi Specialty Telemedicine Network in South Asia
- Over 150 Owned & Franchised Teleclinics across 17 countries
- Over 8600 Rural Teleclinics with CSC (Govt of India)
- Over 92,000 Video-based Tertiary teleconsults in 25 specialities
- Over 287,000 Voice-based Triage consults
- Over 95,000 Video-based Primary Teleconsults
Apollo Telemedicine: Snapshot (contd...)

- One of the largest Medical Response Centres globally handling primary consults, remote patient care/monitoring
- First to start Telehealth Technology Course - Anna University Oct 2003
- Largest number of teleconsults & CME programs provided to 42 countries in Africa under the PAN African e Network project GoI
- Part of National Task Force on Telemedicine and other GoI Committees
- Organised International Telemedicine Conference 2007 Chennai
- 230 TM presentations in Regional, National and International Conferences in 15 years, 105 publications in Regional, National and International Journals
- Inter Apollo Hospitals Grand Rounds in 6 different specialties
Afghanistan, Colombo, Dhaka, Maldives, Muscat, Iraq and Nepal
Teleclinics across 17 countries

First Telemedicine Service to a whole country

Republic of Macedonia

- Suva-Fiji Islands.
- Dhaka-Bangladesh
- Ruwi-Oman
- Colombo-Sri Lanka
- Rampura- Bangladesh
- Abuja-Nigeria
- Baghdad-Iraq
- Yemen
- Lagos- Nigeria
- Port Harcourt-Nigeria
- Abuja-Nigeria
- Tashkent-Uzbekistan
- Ntungamo-Uganda
- Rata- Srilanka
- Yangoon- Myanmar
- Kumasi-Ghana
Unconscious head injury patient

Photographs of pupils taken with Digital camera at the GB Pant hospital Port Blair, Andaman and Nicobar administration and e mailed to Prof K. Ganapathy Sr. Consultant Neurosurgeon at Madras along with CT pictures. CT showed primary injury to the Brain, which does not however require surgery. Treatment carried out by local doctor with assistance of teleconsultant. Patient discharged after 10 days.
Tele evaluation Saves the Patient’s family from Bankruptcy
Telecamp @Ajmer, 11th & 12th Feb 2012. 527 teleconsults in 13 specialities in 2 days with 9 tertiary Apollo Hospitals in India. World’s largest.
#Apollo hospitals network to be linked via eICU to offer quality critical care

The 5th edition of the three day ‘CRITICARE APOLLO 2014’ hosted by the department of Critical care, Apollo Health City, Hyderabad, was formally inaugurated by Dr Prathap C. Reddy, Chairman, Apollo Hospitals Group. Also present on the occasion were Dr Hari Prasad, CEO - Central Region, Apollo Hospitals Group; Dr VK Bhargava, Sr. Physician, Apollo Health City; Dr Rajib Paul, Sr. Consultant Physician, Intensivist & Program Director, Apollo Criticare; Critical care specialists Dr Subba Reddy, Dr Sahoo, Dr Sai Praveen; Dr Zaki Ahmed, Dr Srinivas, Dr Sudeep and faculty & delegates attending the Criticare Apollo 2014.

Speaking on the occasion Dr. Prathap Reddy said Apollo’s philosophy from day one has been to bring in high end care within the reach of common man. As part of this, Apollo is bringing the latest – PROTON technology to India for the first time in this part of the world. eICU is one more technology which helps to remotely monitor and aid in treating critical patients in ICUs, in any part of the world from a Command Center in a hospital like Apollo Health City. eICU makes a huge difference to health care, there aren’t many specialist intensivists but eICU will help in connecting where ever they are and seek their expertise in diagnosing and treating a patient in a remote hospital. The smaller hospitals can connect through this and offer the best ICU care at their hospitals.”
Apollo I-SEE-U Project
Gets the HIMSS Asia Pacific Elsevier Award
For Outstanding ICT Innovation in Healthcare
On 15th Sept 2014
Tele Radiology

Apollo Tele Radiology Services Work Flow

- MRI
- X-Ray
- CT-Scan
- Hospital/Scan Centers
- Internet
- Apollo Tele Radiology Reading Centre
- ATRC

1 Mbps
Pan-African e-Network

Heralding new era in providing
Tele-Education & Tele-Medicine
amongst the African countries

CME Studio at the PAN Complex at Apollo Hospitals, Chennai, India

04/08/2009
CME on Management of Brain Tumours 04/2009
Snap shot of 4/29 participants
Ibadan University, Lagos GH, Mauritius & Seychelles
Harvard Business School MBA Programme mentor mHealth study.
Georgia State University Ph.D programme Addl advisor

Telemedicine in India: The Apollo Story

K. Ganapathy, M.Ch, FACS, FICoS, FAMS, Ph.D
Addl Raviendra, B.E. M.Phil

Summary
Telemedicine and neurosciences

K. Ganapathy, MD.
Department of Neurosurgery and Telemedicine, Apollo Hospital, Chennai, India

Review Article
Telehealth in India: The Apollo contribution and an overview

K. Ganapathy
President, Apollo Telemedicine Networking Foundation, Apollo Hospital, Chennai, India

ARTICLE INFO
ABSTRACT
Telehealth in India: The Apollo contribution and an overview
K. Ganapathy
President, Apollo Telemedicine Networking Foundation, Apollo Hospital, Chennai, India

Keywords: Telehealth, telemedicine, neurosciences

Introduction
"The future isn't what it used to be" - Mark Twain

"Nothing can be done in a crisis" - Alexander Graham Bell

"Telehealth" came here "in a crisis" on March 20, 1976 when he inadvertently spilled honey on himself, while making he's first telephone call. Little did
Will mHealth Be Accepted in India?  
Results of a Pan-India Survey

INDIA READY TO USE MOBILES TO BRIDGE HEALTH CARE ACCESS GAP

HELP ON A HAND PHONE

SURVEY ON mHEALTH POTENTIAL IN INDIA  
(Oct 2012 to Apr 2013)

55% (urban/ rural) showed a very strong intent to use mHealth.

Total number of responses: 1,866

STATES: Tamil Nadu, Andhra Pradesh, Gujarat, West Bengal and Chattisgarh

Urban 69%  
Rural 31%

Smart phone use

Urban areas 46%
Rural areas 22%

Unaware that a mobile phone can be used for internet

Urban areas 21%
Rural areas 53%

Awareness of mHealth

Rural areas 48%
Urban areas 72%

Already used phone for health care service at least once

Urban areas 28%
Rural areas 17%

18-year difference in the life expectancy between Madhya Pradesh (56) & Kerala (74)

In Dec 12 teledensity in Kerala was 100.76 vs 52.23 in Madhya Pradesh

Entire surgery webcast live viewed by 7878 individuals from Bagmati kirtipur, New Mexico, New Jersey, Uttar Pradesh, Texas, blue Ridge, Tamil nadu, Jharkhand, Tokyo, Kerala, Maharashtra, Bangalore, Hyderabad

About 30 complex surgeries and interventional procedures - Bariatric, robotic, spine transmitted thro VC and also webcast in 2013
Apollo Hospitals signs MoU with CSC to provide telemedicine services in rural India

New Delhi: Apollo Tele Health Services, a group company of Apollo Hospitals Enterprise Limited, on Thursday signed a memorandum of understanding (MoU) with the Common Services Centres Scheme (CSC) of the Department of Electronics and Information Technology, Ministry of Communication and Information Technology, to provide healthcare to rural patients using telemedicine.

In 16 months Village Level Entrepreneurs in 8634 existing CSC - internet enabled kiosks have been trained to ask for and receive primary health care. Sophisticated tele triage will eventually ensure tele referral to neurosurgeons directly from villages.
Women VLE from Tamil Nadu Ms. Jayanthi K leads in tele-medicine. She has completed more than 70 Apollo tele-medicine transactions in the month of February and March 2015.

From February to March 2015, she has done 72 transactions, an average of more than a transaction a day. As on date she has completed more than 170 transactions.

Feature of video conferencing to have consultations with doctors from Apollo Hospitals using the Apollo Telemedicine service from the APMA CSC portal.

**CSC Initiative**

**CSC SPV Launches Health Hunkama**

“Free” Health consultation for patients from the doctors of Apollo Tele-Health.
Promoting Health Literacy the eWay

Will dissemination of authenticated, validated health information to rural India with 2-way audio video using multi-point VC radically transform healthcare outcomes?

PATIENT EMPOWERMENT
A story from rural Tamil Nadu

15th Feb 2013
- 44 Fortnightly Sessions
- 7,071 Attendees

25th Feb 2015

Knowledge Empowerment has greater importance than Antibiotics in healthcare

Can one promote Stay Healthy & eWellness using ICT? Can one quantify the results of such intervention? Is Knowledge Empowerment = Patient Empowerment = Better Compliance?
• Yale Institute of Management Yale School of Management MBA Candidate, 2014
• Ross Business School, University of Michigan – mentoring a group of 4 MBA students

International Interviews
• McKinsey Venture Academy London e Economist Intelligence Unit (part of The Economist Group)
• Aligning eHealth Initiatives for Results: WHO’s Department of Knowledge Management and Sharing
• Value-added services in health microinsurance – ILO
• “Frugal solutions” The Universe Foundation, Denmark

Harvard Business School Mentoring in mHealth @ ATNF

knowledge.wharton.upenn.edu/india/article.cfm?articleid=4675

K. Ganapathy, is categorical that telemedicine is the way ahead. "We can't go far with conventional brick-and-mortar hospitals," he says.
Himachal Pradesh

Telemedicine @ 16,000 ft
Fig 2. Distribution of IAN & NSI Members in Metros, State Capitals, Tier II cities, Tier III cities and Rural India

Explanatory Note: 3666 is the total membership of IAN & NSI analysed. 178 individuals in this group are members of both societies (4.8%). 27 overseas members and 268 members (both societies) whose addresses were incomplete have been excluded. Associate members, Members, Life Members have all been grouped as one.
6th International Conference on
Transforming Healthcare with IT 2015

16th - 17th October
Bangalore, India.

We invite you to be a part of
TransformHealthIT
2015, Bangalore, India.

An exciting confluence of minds from the field of Healthcare and Information Technology will meet, discuss and disseminate the latest happenings in the field of Healthcare IT.

This edition brings together 60 speakers from over 14 countries addressing over 500 delegates. The event will spark a breakthrough in collective thinking on solutions that address challenges in adoption of IT in healthcare, not only in India but across the globe.

The Conference attracts a focused audience which includes owners of Hospitals, CEO's of Healthcare Units, CIO's and CXO's, Senior Healthcare professionals, Domain experts from IT companies,

Organizers

Supported By

Marketing and Communication Partner

NASSCOM

infocurex

Apollo

P1

SITeH

ITMSS
It is 15 years since we embarked on Telehealth. Our universe has changed. India should no longer follow high standards. We must set them. We no longer should be striving to achieve world class. The world should strive to achieve India Class. Nothing can stop an idea whose time has come. Creating awareness & convincing Society that Geograpy has become History should be followed by bringing order. It is time for