

Brazilian National Telehealth Project

Telehealth Support for Primary Health Care in Brazil - Pilot Project



Francisco Campos
Secretariat of Management of Work and Education in Health
Ministry of Health - Brazil

Ana Estela Haddad
Director of Management of Education in Health

Brazil

184.000.000 inhabitants
27 states
5.563 cities

40% of the population in
metropolitan areas



Primary Health Care in Brazil

- The Family Health Teams are composed by:
 - 1 Medical Doctor, 1 bachelor-degree Nurse, 1 Dentist
 - 2 technical-degree Nurses and 4 to 6 Community Health Workers



- PHC in numbers:
 - 30,000 teams, covering 90 million people – one half of Brazilian population
 - Played a major role in the reduction of children mortality in the last decade



Telehealth Support for Primary Health Care in Brazil - Pilot Project

Objectives:

- Improve quality of primary care
- Qualify family health teams workers

Permanent Commission of eHealth: mission

Edict MoH number 561/2006

- 1- Standards for information sharing, privacy and security
- 2- Sustainability and reimbursement
- 3- Infra-structure and cooperation with other areas of Government
- 4- Review and propose law and regulation for eHealth policy

National Plan for eHealth Development in Brazil



Telehealth National Pilot Project

Participant Institutions:

- Ministry of Health
- Ministry of Education
- Ministry of Science and Technology
- Ministry of Defense
- Ministry of Communications
- Department of State - Federal Government
- Bireme/OPAS/WHO
- Brazilian Society of Community and Family Medicine

Telehealth National Pilot Project

Participant Institutions:

1. USP – State University of São Paulo
2. UFMG – Federal University of Minas Gerais
3. UERJ – State University of Rio de Janeiro
4. UFCE – Federal University of Ceará
5. UFAM/UEA – Federal and State Universities of Amazonas
6. UFRGS – Federal University of Rio Grande do Sul
7. UFPE – Federal University of Pernambuco
8. UFG – Federal University of Goiás
9. UFSC – Federal University of Santa Catarina

Telehealth National Pilot Project

Coverage:

Nine State Clusters implementing Telehealth in 900 health units supporting about 2,700 Health Family teams, covering 11,000,000 inhabitants.



Selection criteria for 900 health units

Priority Criteria:

- Cities with geographic access barriers
- Cities with population less or equal 100,000 inhabitants
- Cities with Health Family Strategy coverage equal or greater than 50%
- Cities with IDH less than 0.500 (low human development)

Project coverage in different regions of the state should not be more than 20% in metropolitan areas and at least 80% in municipalities not belonging to metropolitan areas.

Qualify family health teams workers

Competence Certification

Continuing Education

Contextualização

Specialization Practice Activities

Interactive Teleducation

“Colaborative Learning Network”

National Telehealth Project

Pilot Fase
900 health unit

2nd Formative Opinion

“Supervised Distant Practice Training”

New Interactive Technology Tools

Virtual Man, Knowledge Units, Simulators

Virtual Library to Primary Care

Primary Health Care (PHC)

Scientific Evidence, Evidence-based Health, Commentated Clinical Cases, courser...

Specialized Formative Second Opinion

- ◆ Promotes on-job training.
- ◆ Problem Based Learning (PBL).
- ◆ Evidence-based Health.
- ◆ Adoption of a socially accountable approach to producing graduates that meet regional needs.
- ◆ Strategy to establish a epidemiologic surveillance.
- ◆ Allows the establishment of knowledge stations (Info-poems)

Redes



Núcleos de Telessaúde



Pesquisa

Entre com uma ou mais palavras
 Telessaúde Brasil

www.telessaudebrasil.org.br

Temas Prioritários

Saúde da mulher câncer de mama, câncer de colo uterino	Saúde bucal câncer de boca
Saúde mental drogas, alcoolismo	Saúde materno-infantil pré-natal, puericultura
Prevenção de doenças cardiovasculares cardiopatias, doenças vasculares	Doenças respiratórias infecções agudas, asma
Diagnóstico em oftalmologia	Hanseníase
Telemedicina	

Diretrizes em APS

- Cadernos de Atenção Básica
- Diretrizes da SBMFC
- Diretrizes Clínicas da AMB

Capacitação em APS

- Objetos de aprendizagem
- Animações do Homem Virtual
- Curso de capacitação

Destaques

III Mostra Nacional de Produção em Saúde da Família - 5 a 8 Agosto 2008

Estudos relevantes para APS

- Prática de exercícios físicos para asmáticos
- Corticóides para o tratamento da asma

[ver mais](#)

Notícias Telessaúde

- Telessaúde Brasil é iniciativa selecionada para conferência em Belaggio
- BIREME planeja a reestruturação da BVS APS e Portal Telessaúde
- Teleconsulta: Pé diabético Manaus/Parintins
- Telessaúde SC chega a 58 municípios
- Seminário de Telessaúde no Amazonas
- Teleassistência em São Gabriel da Cachoeira
- Municípios paulistas recebem a equipe do Núcleo São Paulo

Notícias



Espaço de registro, publicação, e acesso integrado à informação de boa evidência em APS e telessaúde, além de informação sobre o Programa Nacional de Telessaúde e a Rede Telessaúde Brasil.

Cooperative Effort Strategies

- Mais Saúde
- Continuing Education(CIES)
- Pró-Saúde,
- SVS (Health Surveillance Secretary)
- RET-SUS (Technical School)
- Health in School Program



The National eHealth Primary Care Program, remote assistance and continuous education, initially rolled out across nine states and 900 municipalities



Ministério da Ciência e Tecnologia

Ministério da Educação

Ministério da Saúde



The Telemedicine University Network, RUTE, initially connecting 57 University Hospitals, collaborative research and education across all federal states



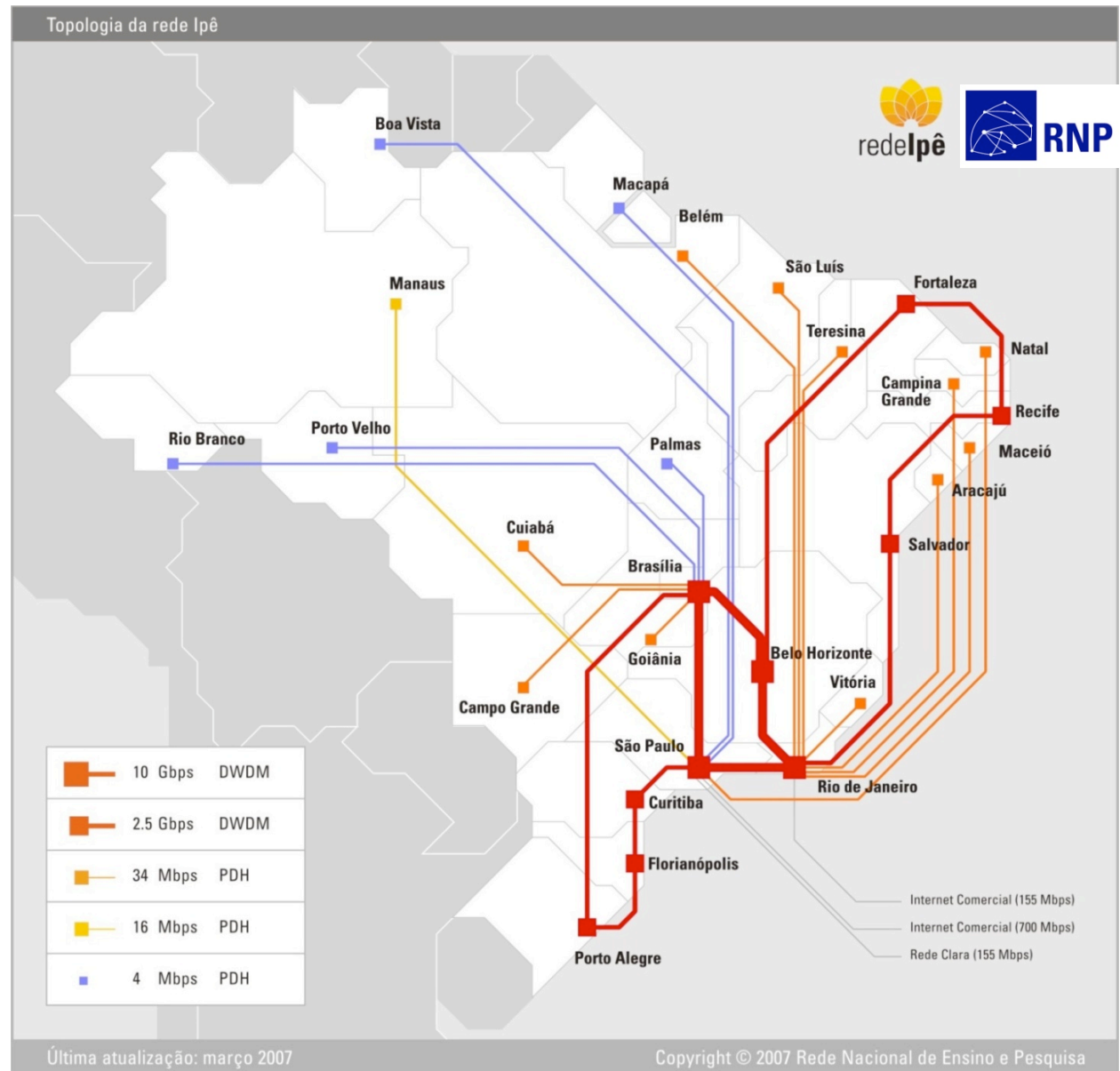
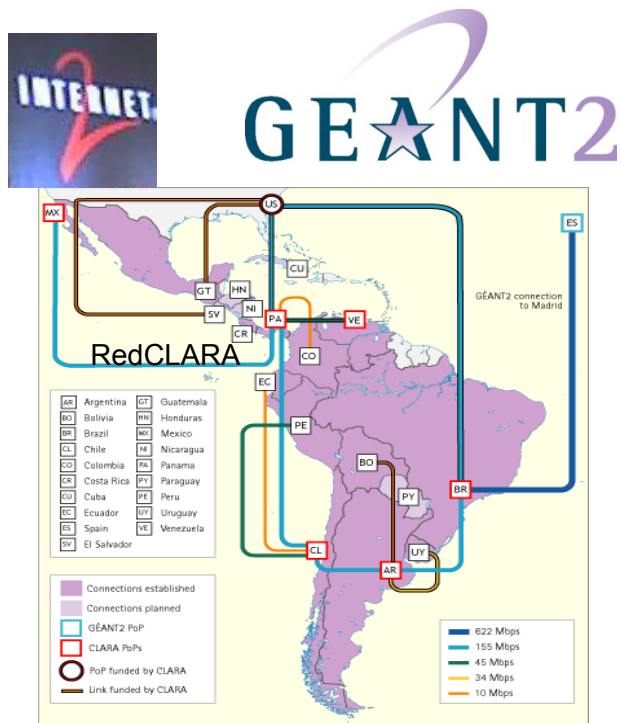
Departamento de Gestão e da Educação na Saúde

Secretaria de Gestão do Trabalho e da Educação na Saúde

Ministério da Saúde



Learning and Research National Network



Rede Nacional de Ensino e Pesquisa (RNP) is a not-for-profit corporation incorporated under the laws of Brazil that interconnects over 350 education and research institutions, helping an estimated public of over a million users, and linking all the Brazilian regional academic networks.

Evaluation

- data for establishing the base line
- process monitoring
- outcome evaluation

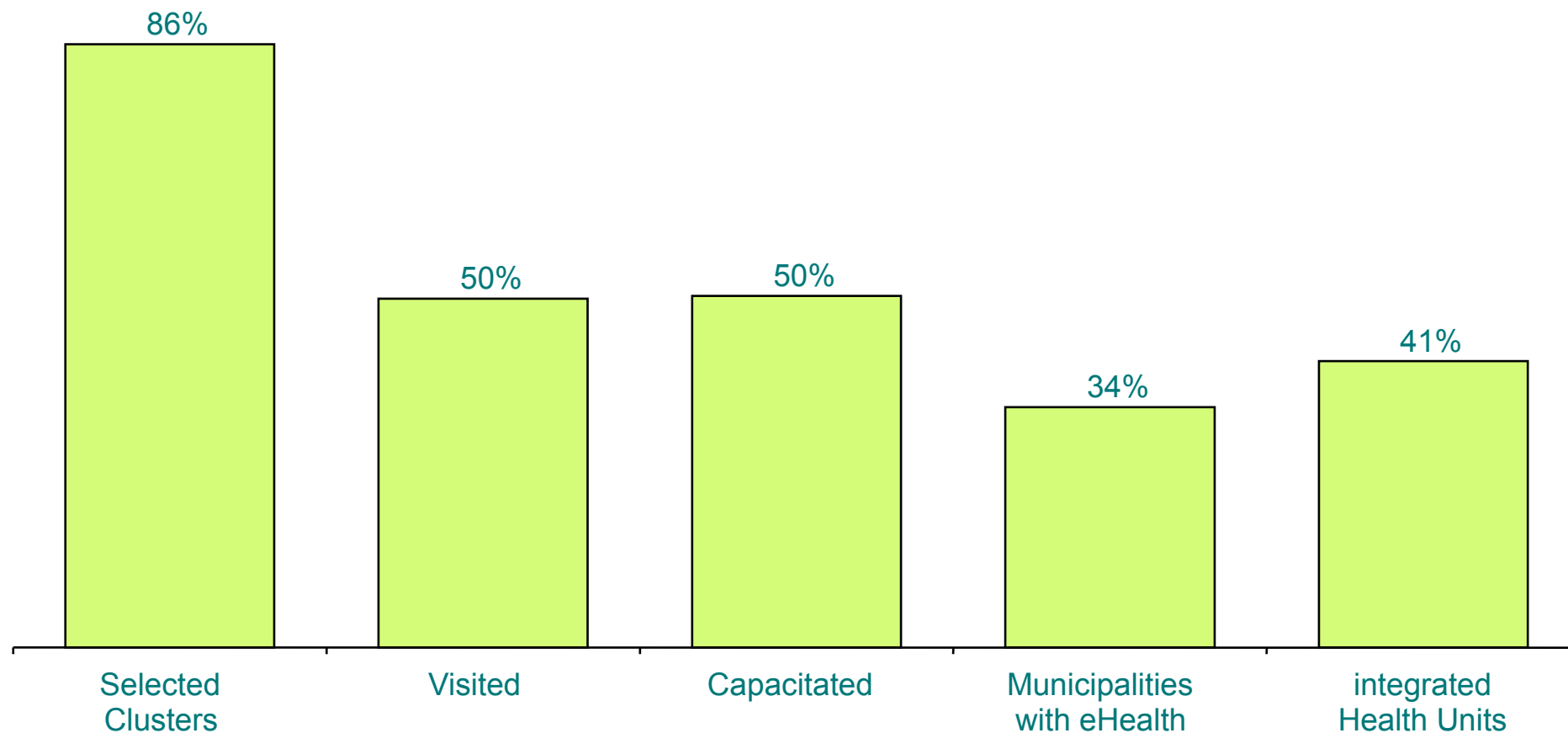
Base line: socioeconomic and epidemiological information, health family teams profile

Process monitoring: verify the quality of the processes developed by the health family teams, accessibility and use of the available Telehealth tools

Outcome evaluation: team level of orientation for primary health care, impact on population health indicators

Telehealth Brazil

Deployment Status



Universities infra-structure



Teleconsultation
room



Videoconference
equipment

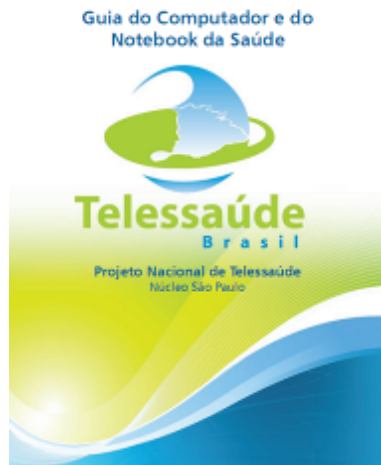


Servers



Printers

Health microcomputer



Digital photographic machine with adaptors

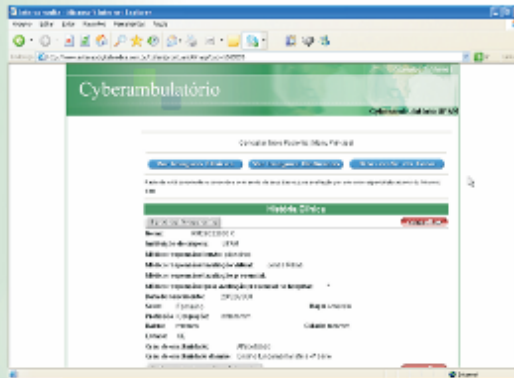




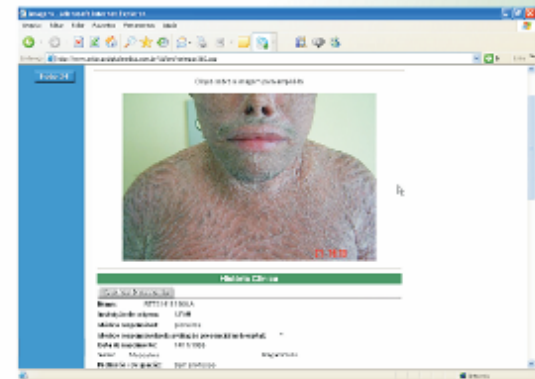
Cyberambulatory

Tele dermatologia e Cyberambulatório

O Programa Assistencial de Segunda Opinião Formativa em Dermatologia - Teledermatologia vem sendo desenvolvido, em caráter definitivo, desde novembro de 2006.



Todos os casos são cadastrados no Cyberambulatório, um web-programa desenvolvido pela FMUSP, que consiste no cadastro de pacientes, avaliação inicial da ficha clínica e uma segunda opinião realizada por um especialista.

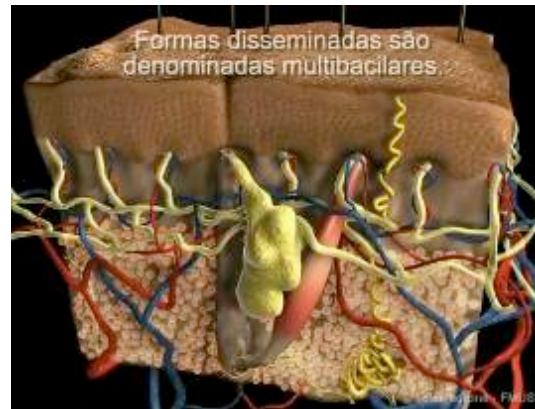


Virtual Man - 3D Graphical - Learning Object

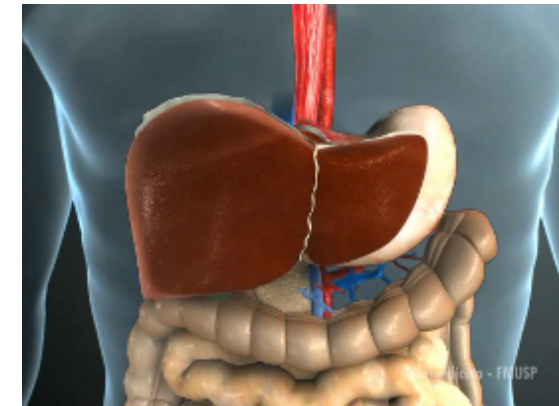


Saúde | Educação | Cultura
www.projethomemvirtual.org.br

70.000 of Technical
hours work



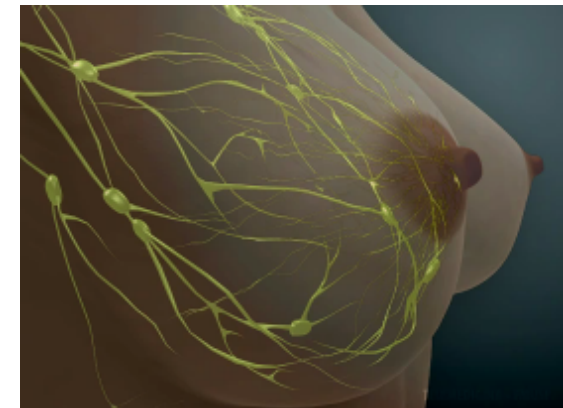
Leprosy



Viral Hepatitis

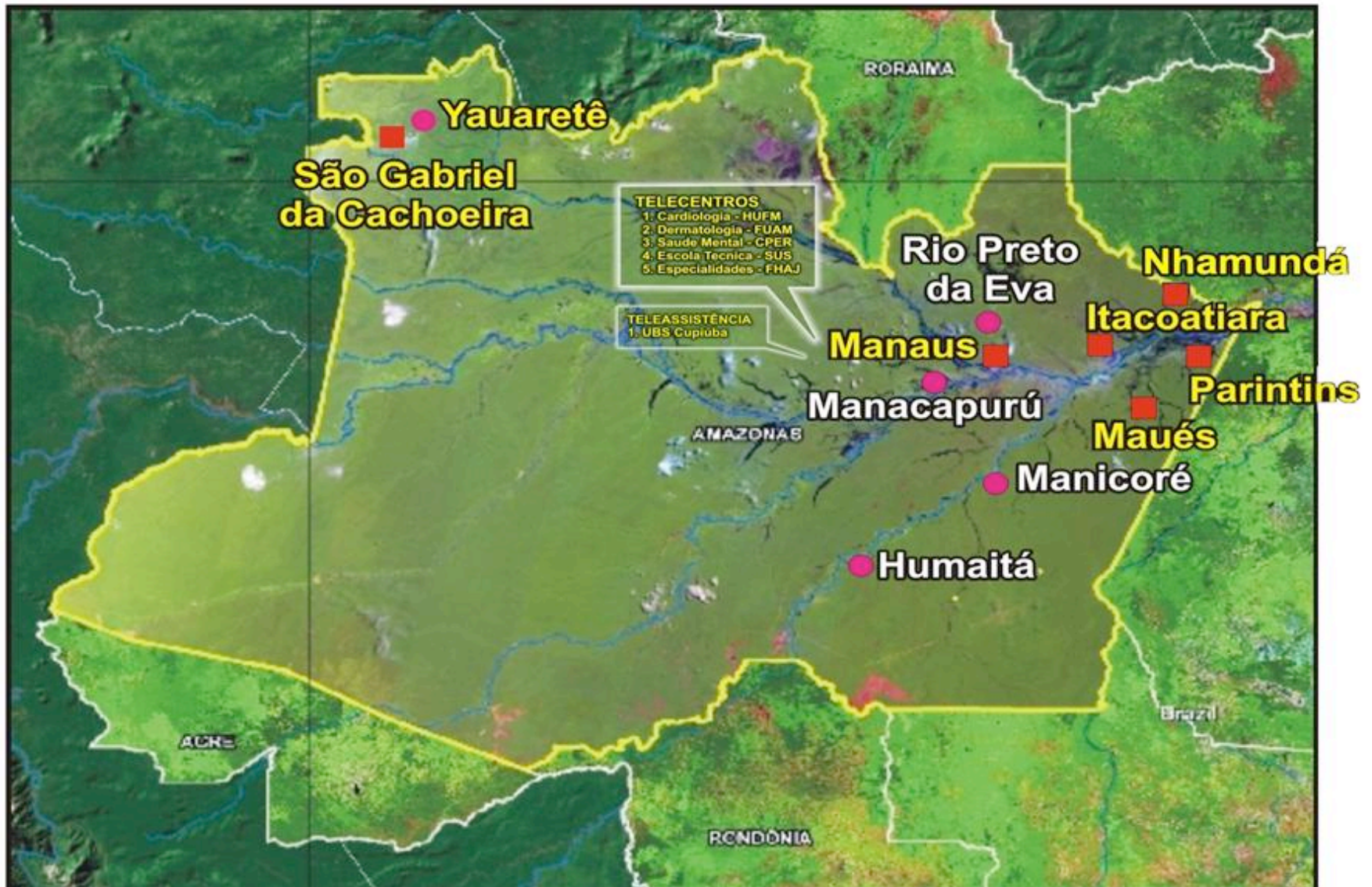


Melanoma



Mama Cancer

State of Amazonas



● NAsH O. Cruz ● NAsH A. Montenegro ● NAsH Carlos Chagas



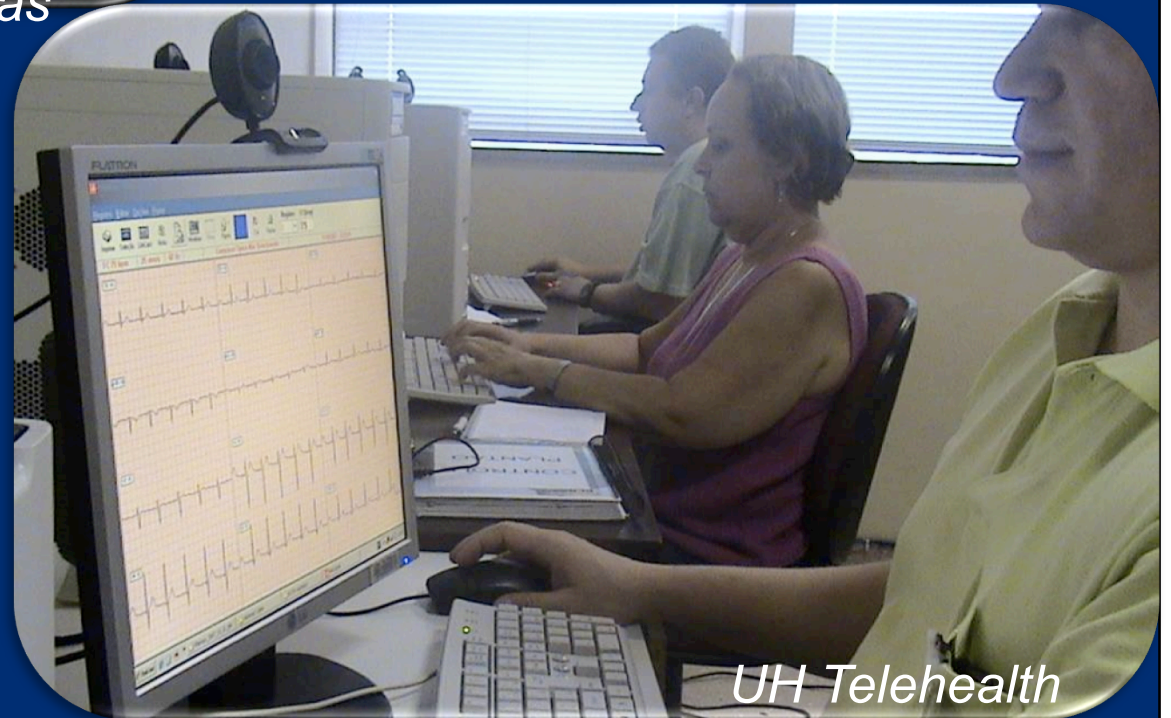
**NAsH Osvaldo
Cruz**

Telecardiology and tele-electrocardiography



*Minas
Novas*

Teleconsultations
on line and off line
in some specialties



UH Telehealth



System operation should be as simple as the local users

**Technology is the way of doing not the objective itself.
Consequently it should be according to
the real local conditions**



Lessons Learned

- A long debate with civil society is a key step.
- Social participation is essential
 - including teachers, students, local health system workers and managers.
- A nationwide joint effort from MoE, MoH, Universities and civil society is required.

“The future has already arrived. It is just not evenly distributed”

Amazonia



São Paulo



Rio de Janeiro

