# Supporting care professionals where they are most needed

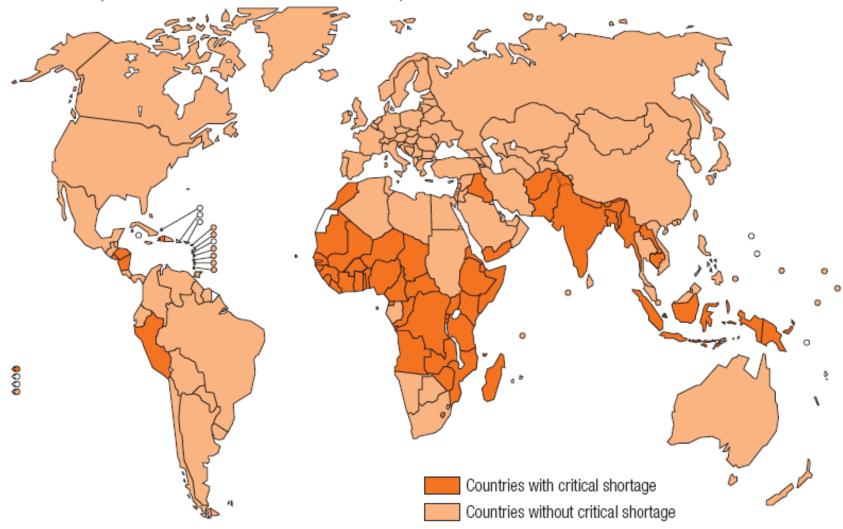
Prof. Antoine Geissbuhler, MD Dr. Georges Bédiang, MD Geneva University and Hospitals

ITU Telecom World Geneva, 2011



#### « Supporting care professionals where they are most needed »

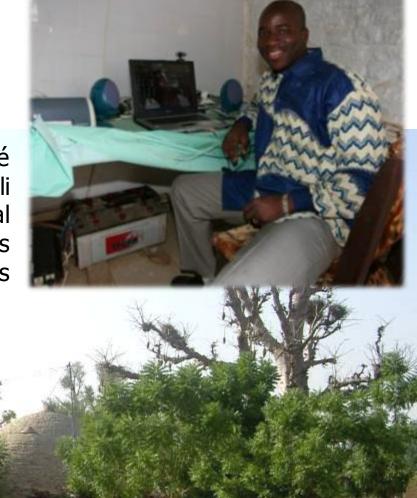
Figure 3 Countries with a critical shortage of health service providers (doctors, nurses and midwives)



Data source: World Health Organization. Global Atlas of the Health Worldorce (http://www.who.int/globalatlas/default.asp).

## De-isolating care professionals

Dr Diakaridia Traoré
Rural hospital in Dimmbal, Mali
800 km away from the capital
120 km away from the first Internet access
20 km away from telephone access







#### RAFT: a collaborative network





 Project initiated at Geneva University Hospitals and Geneva University



 World Health Organization Collaborating Center for eHealth and Telemedicine



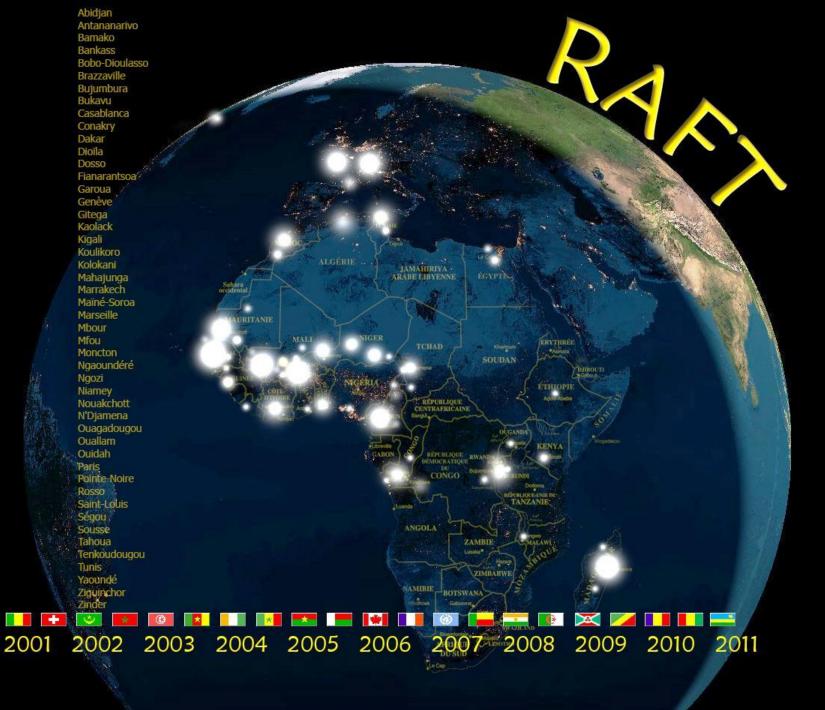






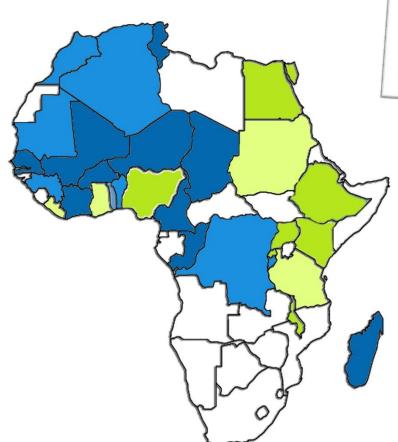
 UNESCO chair for telemedicine and distance learning

Partnership with Francophone institutions



### A network of people

- National focal points
- Medical coordinators
- Technical coordinators

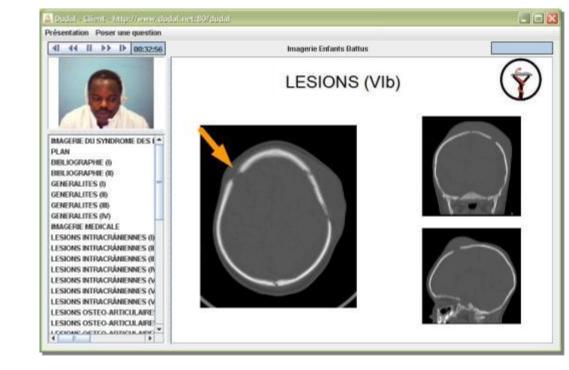




- Importance of social engineering
- Getting the buy-in from all stakeholders
- Initial workshop to launch activities in a country
- Annual meeting of all coordinators

# Low-bandwidth distance education

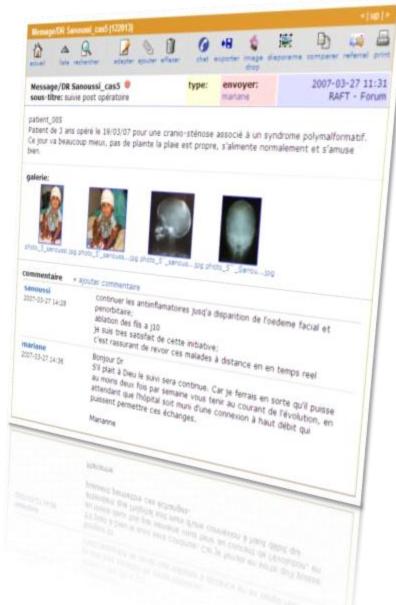
- Interactive webcasting
- 20-30 kbps bandwidth
- 100+ simultaneous sites

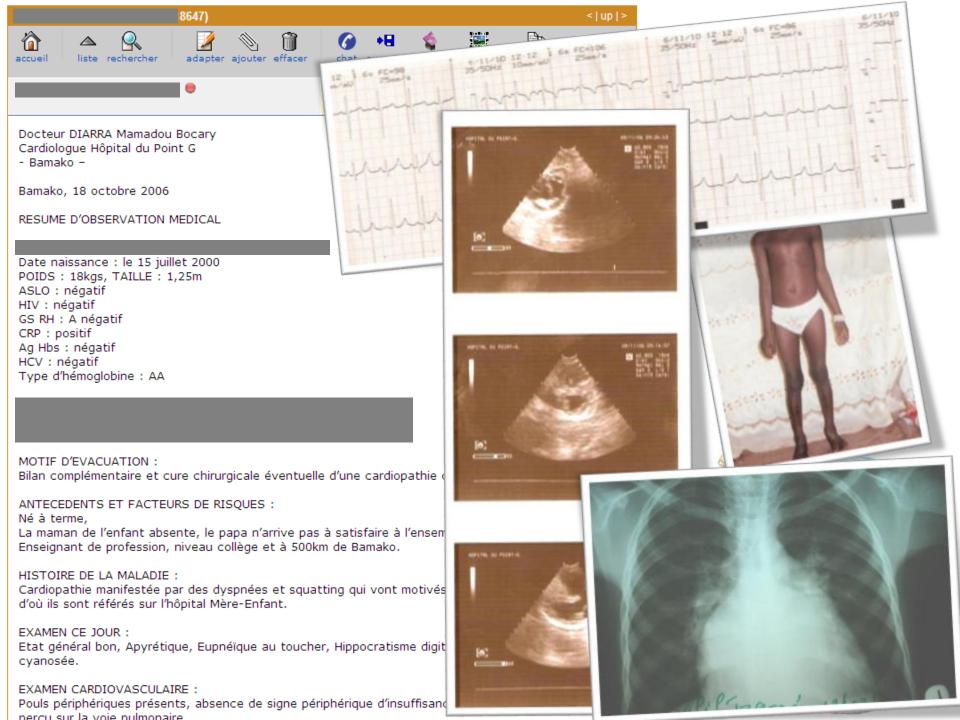




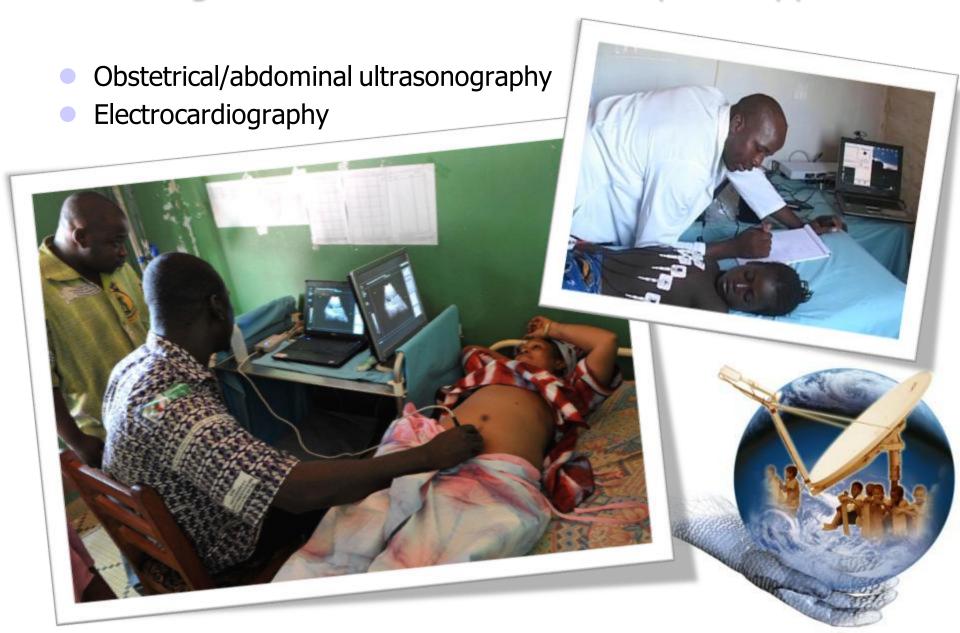
# Teleconsultations via virtual communities of experts

- Asynchronous collaboration of identified and approved participants
- Secure access
- Mostly used for discussing difficult cases
- Specific applications in pathology, dermatology, ophthalmology, radiology, including teleultrasonography and teleelectrocardiography





#### New diagnostic tools with remote expert support

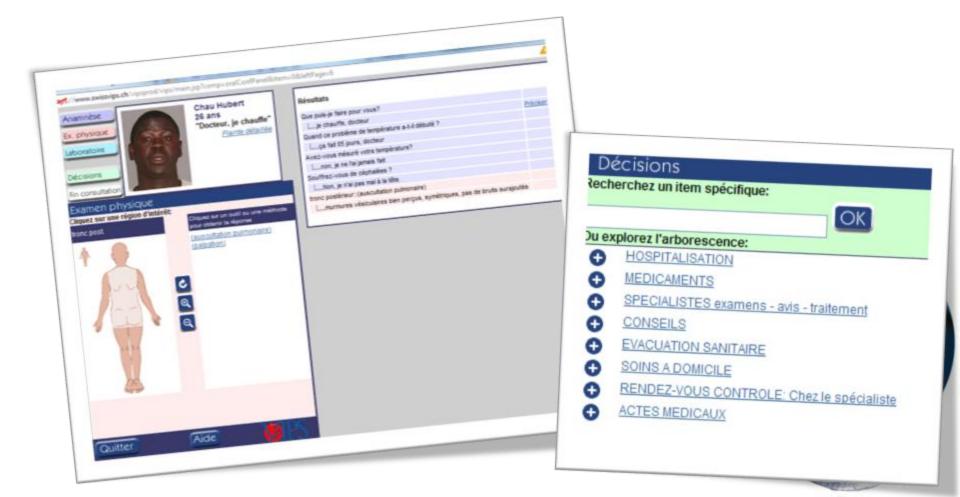


### Tele-echography



### VIPS: a virtual patient simulator

- To develop operational skills in unfamiliar contexts
- Based on the « white page paradigm »



#### Deployment status as of 2011

- Project started in 2001, now active in 18 countries, with a network of 30 local coordinators and a team of five collaborators in Geneva
- 16 hours of e-courses per month, 80% of which are now produced in Africa. On average, 15 different sites are connected for these courses (record to date: 42 sites with a total of 1000+ participants). Ecourses are generally followed by 30 minutes of discussion involving all participants
- Currently, the network is mostly deployed in reference hospitals (35 active sites in national and regional hospitals), and in some remote sites (30 district and rural hospitals)



#### Towards certificates and diplomas

- Teaching activities are recognized by CAMES
- Pan-african training program for specialists (Jinou)
- CAS awarded by the Senghor University
- Development of a learning management system for evaluation and distance tutoring







#### Towards life-long learning

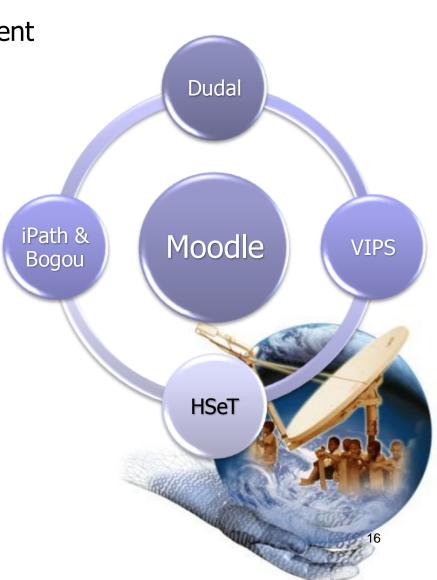
 Integrate e-courses, e-learning, patient simulator and teleconsultations

Identify and track learners

Couple training and evaluation

 Enable more sharing of professional experiences between learners

- Proximity tutoring
- Certification



#### The « scale-up project » in district hospitals

- Industrialize the deployment in district hospitals
  - Level of care and isolation most consistent with telemedicine applications
- Evaluate new diagnostic tools coupled with remote support
- Team-up for the implementation of public health and clinical information systems
- Experiment with portable platforms
  - To make use of the fast-growing cellular telephony infrastructure





#### Development of local expertise centers

- Centre d'Expertise et de Recherche en Télémédecine et e-Santé
- Team of 10 people, based in Bamako, active in training, operational coordination, development and evaluation of tools for telemedicine and eHealth, involved in the large-scale deployment of hospital information systems nationwide
- Directed by le Dr Cheikh Oumar Bagayoko MD, PhD, lecturer in medical informatics at the Mali University Faculty of Medicine
- Able to obtain competitive funds





#### Towards quality and trustworthy online information

- Collaboration with the Health-On-the-Net Foundation
  - Certification of trustworthy web sites based on a code of conduct
  - Assistance to improve the quality of websites
- Representations in Mali and South Africa







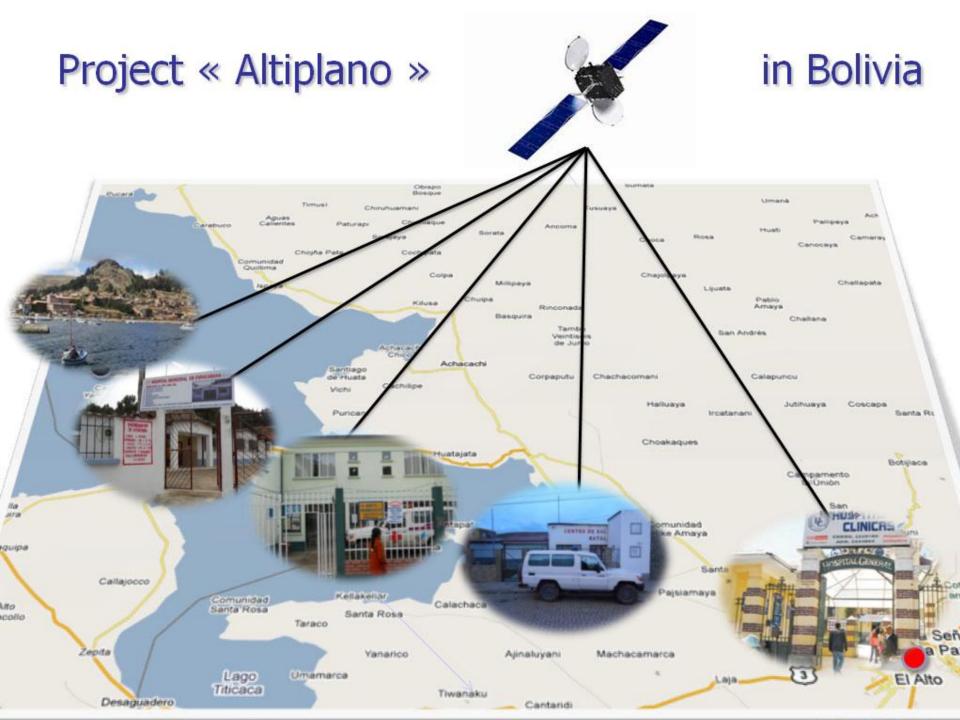
#### The Africa Build project

- Develop excellence centers for healthcare, teaching and research in Africa
- Priority domains: AIDS and reproductive health
- Financed by the European Union
- Partners in Africa: Mali, Cameroon, Ghana,
   Egypt
- Partners in Europe: UPM (Madrid), Uni Geneva, WHO, Antwerp Tropical Institut

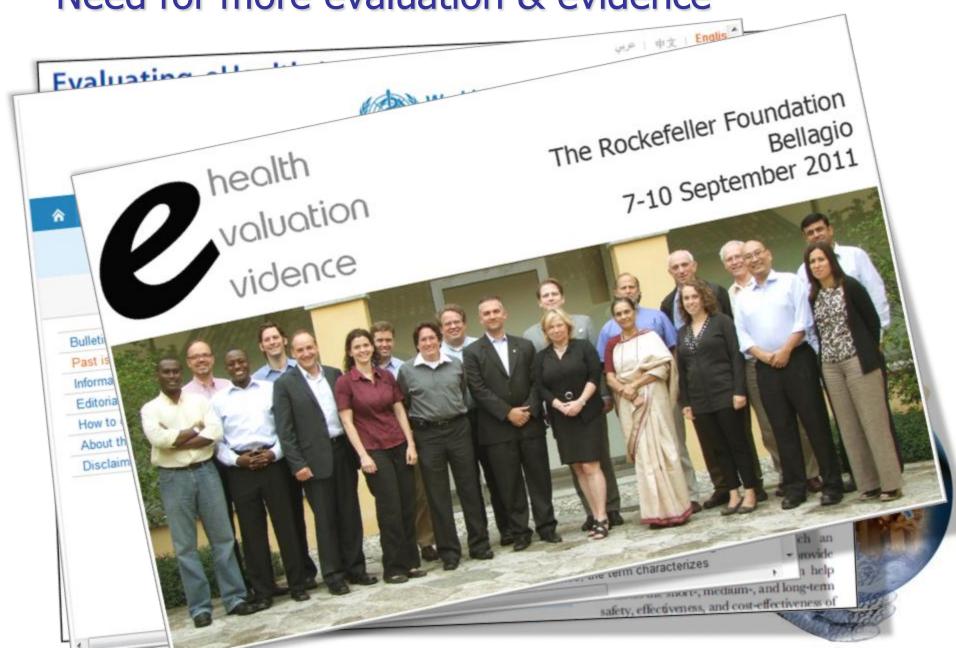


### Telemedicine with Kandahar (Mirwais hospital)





### Need for more evaluation & evidence









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#### Welcome Message

The Geneva Health Forum (GHF), a key event for those wishing to hear the voice and insights of the



#### Submissions

Geneva Health Forum invites you to submit your project or research abstract



#### GHF12 Calendar

Important dates for the up and coming Geneva Health Forum 2012

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