Supporting care professionals where they are most needed

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

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
Déploiement du RAFT
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 tele-ultrasonography and tele-electrocardiography
Docteur DIARRA Mamadou Bocary
Cardiologue Hôpital du Point G
- Bamako -

Bamako, 18 octobre 2006

RESUME D'OBSERVATION MEDICAL

Date naissance : le 15 juillet 2000
POIDS : 18kgs, TAILLE : 1,25m
ASLO : négatif
HIV : négatif
GS RH : A négatif
CRP : positif
Ag Hbs : négatif
HCV : négatif
Type d'hémoglobine : AA

MOTIF D'EVACUATION :
Bilan complémentaire et cure chirurgicale éventuelle d'une cardiopathie

ANTECEDENTS ET FACTEURS DE RISQUES :
Né à terme,
La maman de l'enfant absente, le papa n'arrive pas à satisfaire à l'enseignement de profession, niveau collège et à 500km de Bamako.

HISTOIRE DE LA MALADIE :
Cardiopathie manifestée par des dyspnées et squatting qui vont motivés à l'hôpital Mère-Enfant.

EXAMEN CE JOUR :
Etat général bon, Apyrétique, Eupnéique au toucher, Hippocratisme digital, non cyanosée.

EXAMEN CARDIOVASCULAIRE :
Pouls périphériques présents, absence de signe périphérique d'insuffisance, pas de souffles thoraciques, pas de souffle périphérique, pas de souffle à l'oreille, pas de souffle aortique, pas de souffle pulmonaire.
New diagnostic tools with remote expert support

- Obstetrical/abdominal ultrasonography
- Electrocardiography
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). E-courses 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)
Project « Altiplano » in Bolivia
Need for more evaluation & evidence
réseau RAFT network
Soutenir les professionnels de santé là où on en a le plus besoin.
Supporting care professionals where they are most needed.


Distance continuing education sessions are webcast on a weekly basis using the Duddl low-bandwidth environment. The program is defined by an international educational committee.

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