



TELEMEDICINE DEVELOPMENT IN NIGERIA

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Presentation Scope

- Introduction
- Disasters in Nigeria
- Need for Telemedicine Development
- Benefits
- Implementation of Pilot Scheme in Nigeria
- Challenges
- Conclusion



INTRODUCTION

- Global disaster challenges (Natural and human induced-climate change).
- Tsunami, Earthquakes, Hurricanes, Volcanic Eruptions.
- 250,000 people died due to disasters that affected 200 million in 2008. (ISDR 2009)
- The total economic cost for 2008 was US\$180 billion.
- Disasters Remains Potential Threat to National Development. (Damage of physical assets and loss of infrastructure).

DISASTERS IN NIGERIA

Oil Spill in the Niger Delta



Source: sdnigeria's photostream

DISASTERS IN NIGERIA

Floods (Flood in Kubwa, Abuja 31 August 2009)



Source: Daily Nation Oct. 2nd 2009

DISASTERS IN NIGERIA

Gully Erosion



Source: http://www.kwenu.com/publications/orabuchi/2006/erosion_home.jpg

DISASTERS IN NIGERIA

Fire Disaster and Bush Burning

Pipeline Fire in Lagos



Source: http://newsimg.bbc.co.uk/media/images/44662000/jpg/_44662252_ap.jpg

DISASTERS IN NIGERIA

Drought and Land degradation



Source: http://www.treehugger.com/_41435182_drought416.jpg

DISASTERS IN NIGERIA

Desertification



Source: http://www.nhrc-qa.org/en/images/newspost_images/desertification.jpg



NEED FOR TELEMEDINE DEVELOPMENT IN NIGERIA

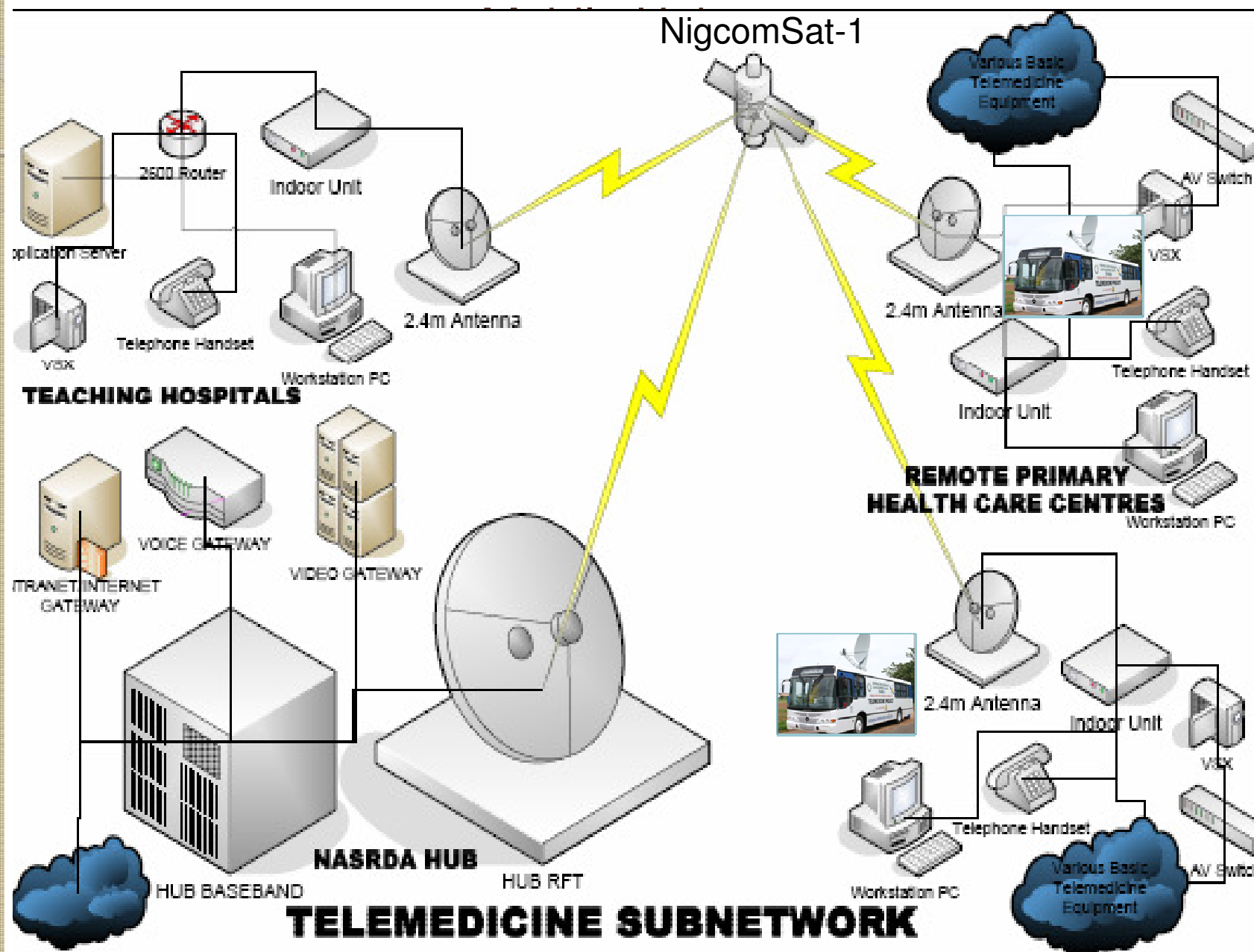
- 70% Occur in Rural Settings.
- Satellite Communications prerequisite for emergency healthcare services (Telemedicine, Teleconsultation, and Telediagnosis).
- Telemedicine (E-Health): is an integrated system of health-care delivery that employs telecommunications and computer technology as a substitute for face-to-face contact between health service provider and client.



BENEFITS FROM DEVELOPMENT OF TELEMEDICINE IN NIGERIA

- Supports health-care delivery in distant remote sites and villages.
- Connect primary care physicians, providers, specialists and patients.
- Offers improved access to quality healthcare delivery.
- Cheap healthcare delivery.

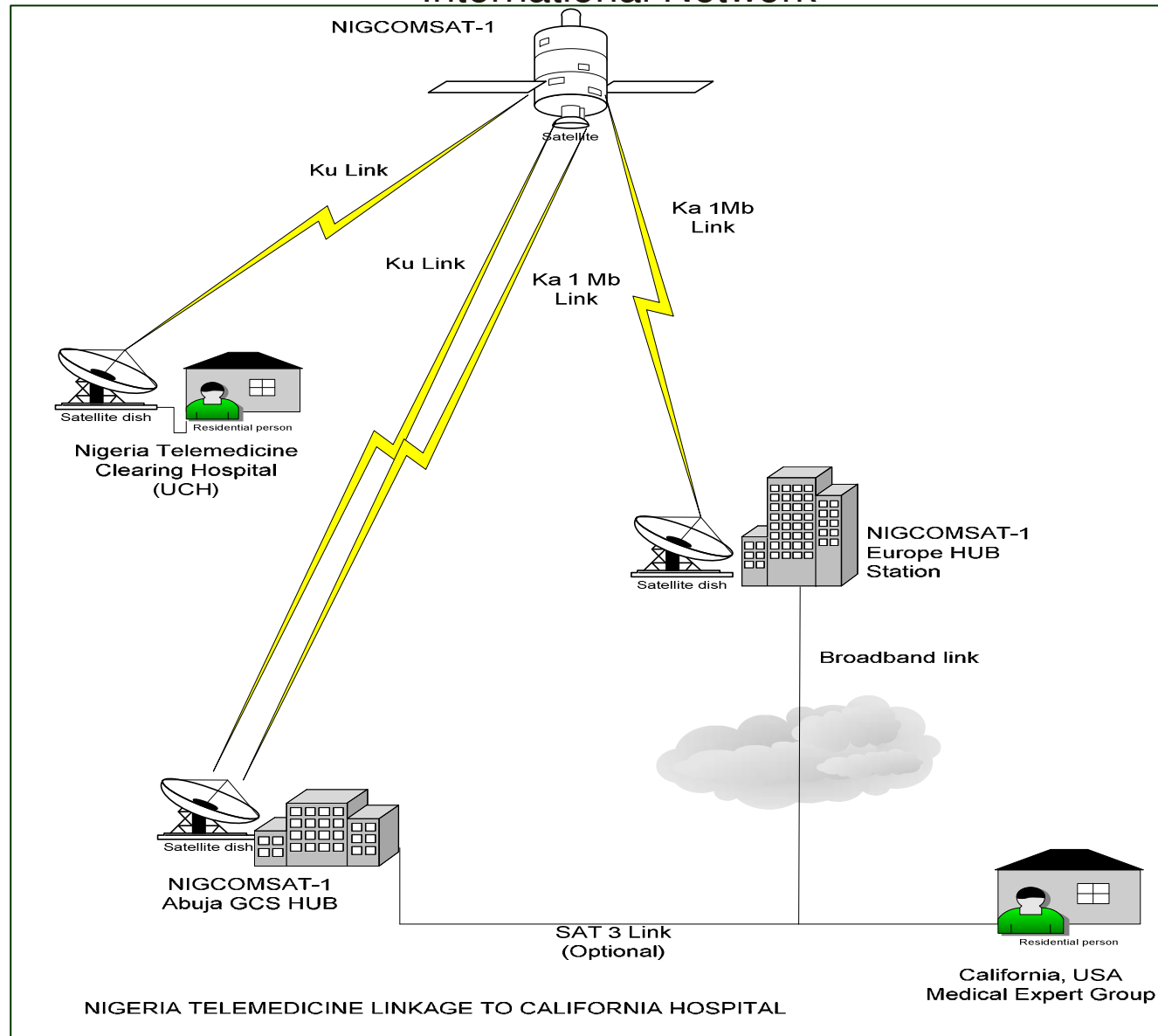
IMPLEMENTATION OF PILOT SCHEME IN NIGERIA



IMPLEMENTATION OF PILOT SCHEME IN NIGERIA

Link to overseas hospital for second opinion and referral services

International Network





IMPLEMENTATION OF PILOT SCHEME IN NIGERIA

- Pilot Project was designed in Collaboration with Ministry of Health.
- The sub-networks integration commenced in March, 2007 with the Network Operation Centre (NOC) situated in Nigeria.



IMPLEMENTATION OF PILOT SCHEME IN NIGERIA

- The integration of the sub-network:

Eight Remote Terminals

One Mobile Unit

Commissioned on 17th January, 2008.

IMPLEMENTATION OF PILOT SCHEME IN NIGERIA

Remote Terminals of the Project



IMPLEMENTATION OF PILOT SCHEME IN NIGERIA

Mobile Unit





IMPLEMENTATION OF PILOT SCHEME IN NIGERIA

- Remote Terminals and Mobile Bus are equipped with basic diagnosis equipment such as:
- Cameras
 - General Examination Camera
 - Image & Illumination System
- Diagnostic Scopes
 - Electronic Stethoscope
 - Ear, Nose & Throat (ENT) Scope
 - Ophthalmoscope
 - Dermoscope



IMPLEMENTATION OF PILOT SCHEME IN NIGERIA

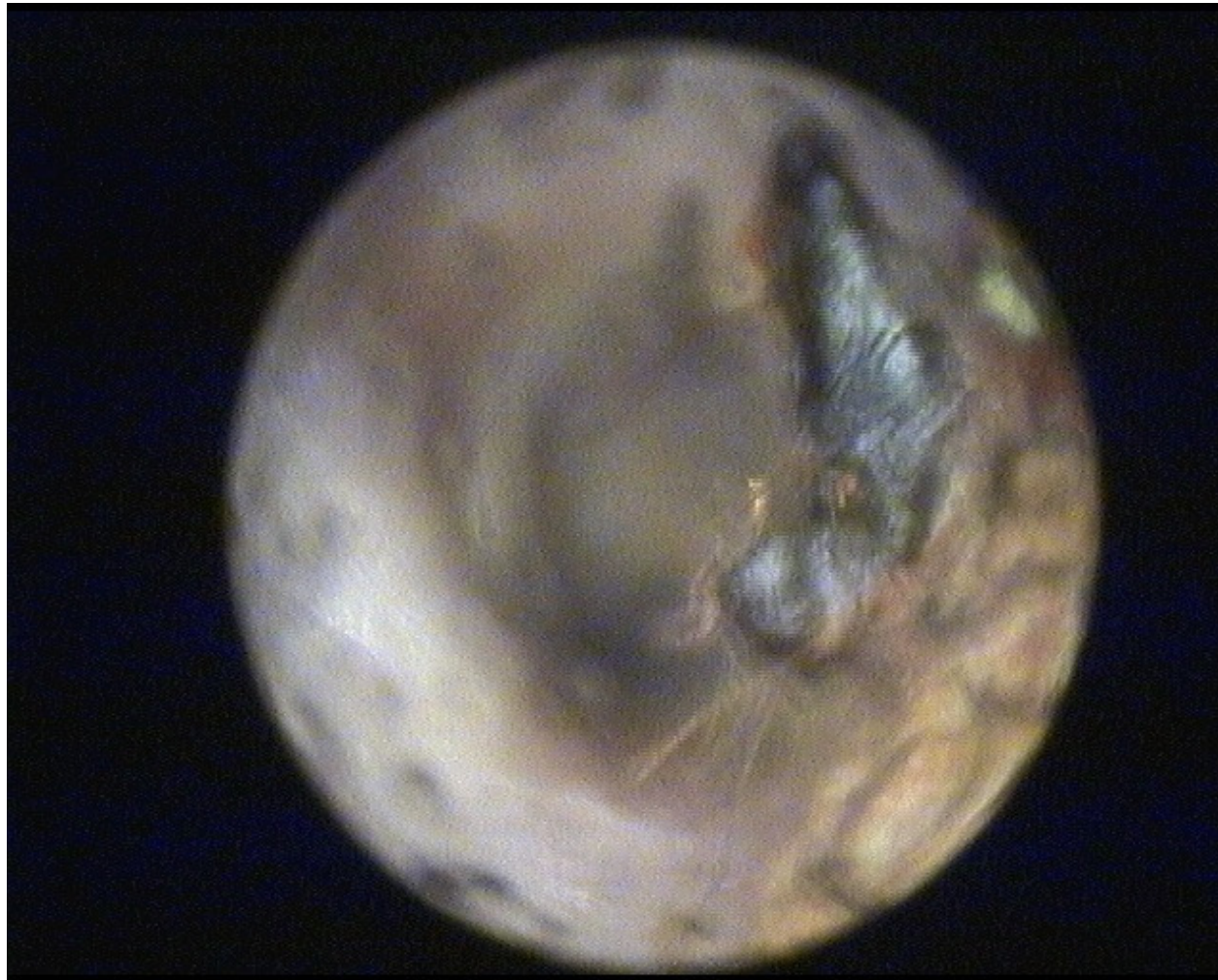
- Medical services
 - + Specialist Referral Services.
 - + Patients' Remote Consultations.
 - + Remote Patient's Monitoring.
 - + Medical Education.
 - + Medical Health Records and Information Databank.

IMPLEMENTATION OF PILOT SCHEME IN NIGERIA



Skin infection Examination

IMPLEMENTATION OF PILOT SCHEME IN NIGERIA



Inner picture of the ear drum

PILOT SCHEME

- **Diagnosis Report from 6 Months Project Operation**

Cases of Malaria Diagnosed across the Nation

Centre	Number	Total No. Of Patients
FMC, OWO	40	359
FMC, OWERRI	227	767
FMC, GOMBE	491	2,230
UMTH, MAIDUGURI	994	4,428



IMPLEMENTATION OF PILOT SCHEME IN NIGERIA

- **Diagnosis Report from 6 Months Project Operation**

Case of Cataract Diagnosed Across the Nation

Centre	Number	Total No. of Patients
UCH, IBADAN	521	1,147
FMC, OWO	31	359
FMC, OWERRI	140	767
FMC, GOMBE	114	2,230
UMTH, MAIDUGURI	600	4,428



CHALLENGES

- De-Orbiting of NigcomSat-1
- Funding
- Institutional



CONCLUSION

- Pilot Project is a Success
- Benefits out-weighs cost
- Project Replication



Thank you

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