



UNIVERSITY OF MIAMI
MILLER SCHOOL
of MEDICINE

Telehealth Medical Program

REN Haiti

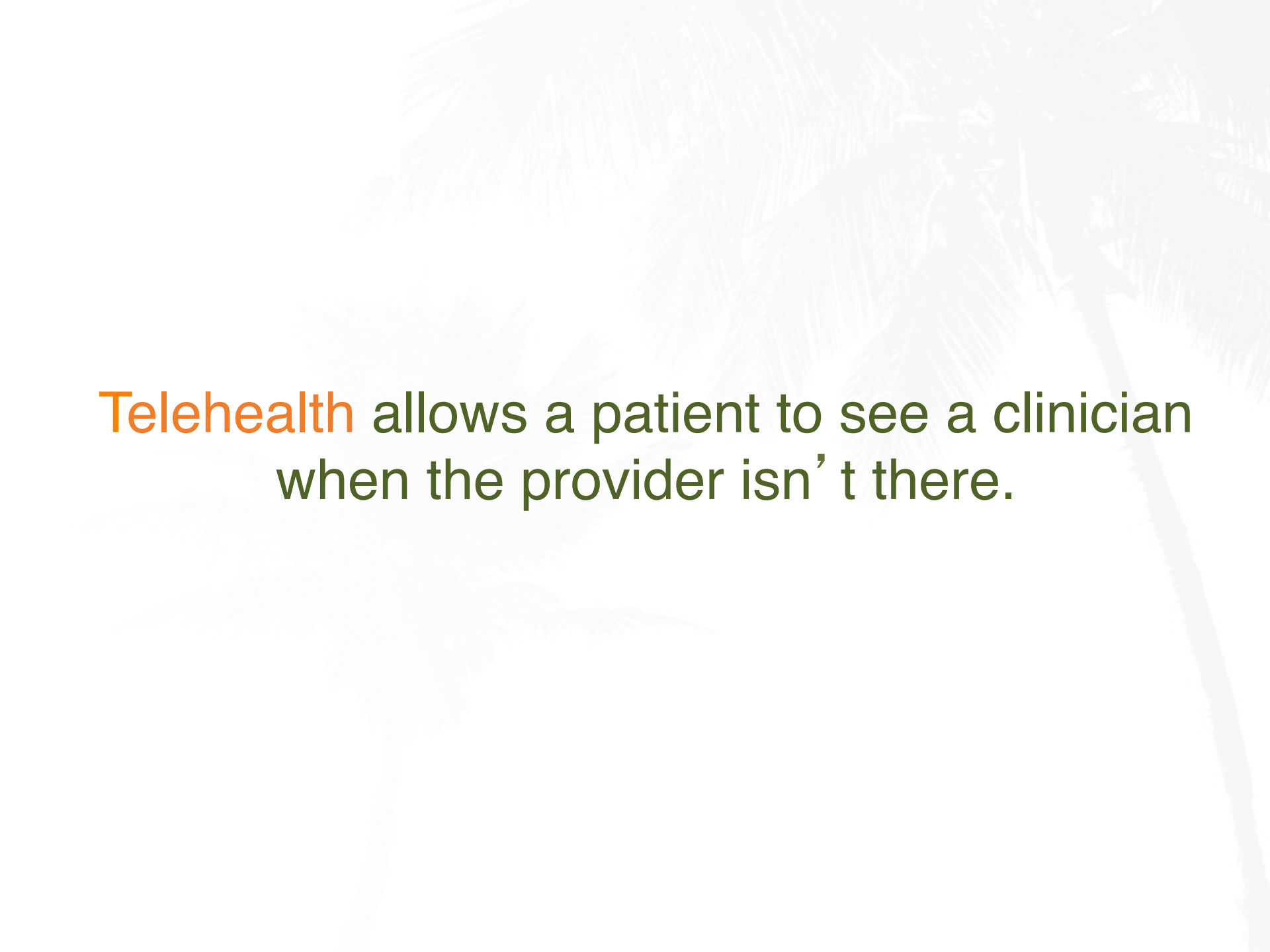
Scott C. Simmons, MS
Director of Telehealth

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Associate Dean for TeleHealth & Clinical Outreach

A word cloud centered on the theme of telemedicine. The most prominent words are 'patients', 'care', 'health', 'telehealth', 'system', 'service', 'information', 'technology', 'clinical', 'treatment', 'management', 'support', 'medical', 'used', 'services', 'outcomes', 'data', 'home', 'remote', 'results', 'studies', 'stroke', 'diabetes', 'population', 'subjects', 'diagnosis', 'access', 'research', 'communication', 'analysis', 'monitoring', 'program', 'model', 'quality', 'satisfaction', 'included', 'general', 'however', 'digital', 'clinic', 'new', 'evaluation', 'important', 'level', 'randomized', 'case', 'increased', 'controlled', 'diagnostic', 'life', 'methods', 'increase', 'depression', 'internet', 'many', 'images', 'technologies', 'consultation', 'network', 'approach', 'disease', 'trial', 'cancer', 'support', 'rural', 'telephone', 'interventions', 'well', 'primary', 'control', 'impact', 'effects', 'programs', 'conducted', 'knowledge', 'symptoms', 'models', 'practice', 'groups', 'potential', 'therapy', 'hospital', 'cases', 'work', 'group', 'applications', 'years', 'electronic', 'review', 'assessment', 'acute', 'high', 'significant', 'hospitals', 'need', 'first', 'affective', 'chronic', 'provide', 'improved', 'associated', 'remote', 'cost', 'management', 'with', 'process', 'at', 'risk', 'evaluated', 'follow-up', 'compared', 'major', 'future', 'different', 'developed', 'e-health', 'consultations', 'improve', 'children', 'mobile', 'via', 'community', 'number', 'rebased', 'development', 'method', 'based', 'delivery', 'design', 'heart', 'video', 'application', 'participants', 'design', 'based', 'delivery', 'design', 'heart', 'video', 'application', 'participants'.



Telehealth is the technology-mediated provision of health services & education where & when they are needed

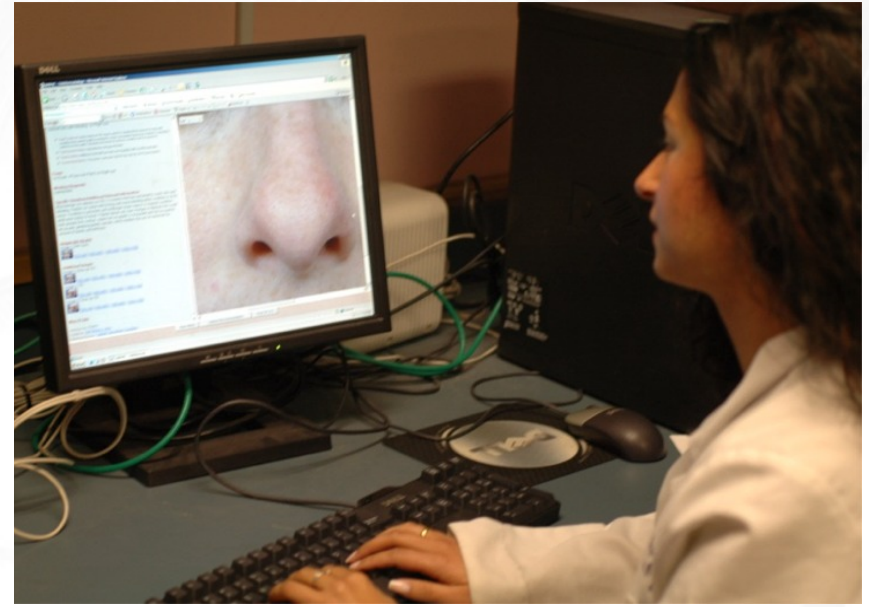
The background of the slide features a faint, light-colored image of several palm trees against a white background. The trees are positioned in the upper and right portions of the frame, with their fronds extending across the top and right edges. The overall aesthetic is clean and minimalist.

Telehealth allows a patient to see a clinician when the provider isn't there.

Operational modes



Synchronous/interactive



Deferred/asynchronous
“store-and-forward”



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TELEHEALTH

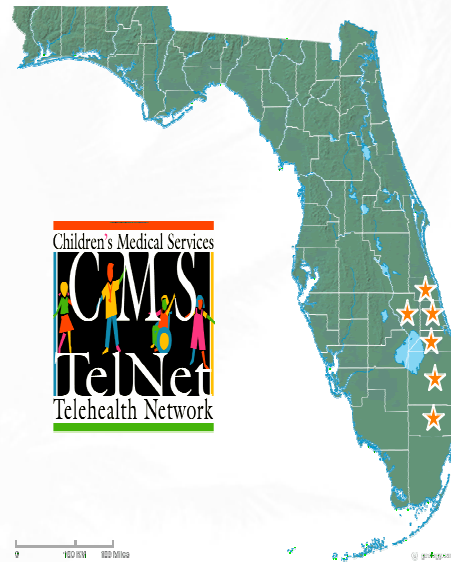
A few examples...

Store-and-forward teledermatology



- Completed 3-year contract with DoD
 - 31 bases in 17 states
- Royal Caribbean
 - For RCL employees
- Indian Health Services
 - Up to 75 sites in 29 states

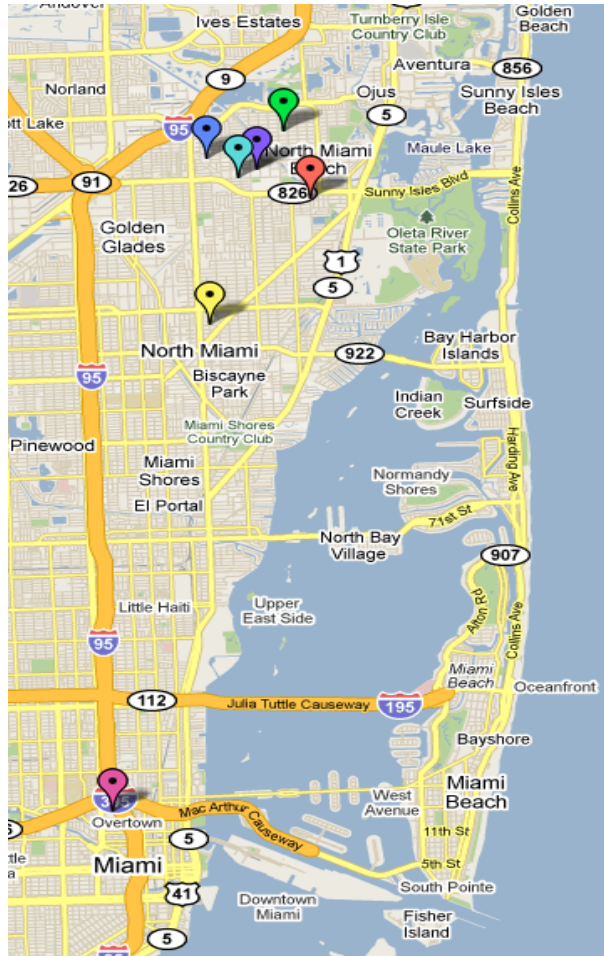
FL Department of Health: Pediatrics



- Tele-dermatology
- Tele-nutrition
- Tele-genetics
- Tele-psychiatry



Miami-Dade School Telehealth



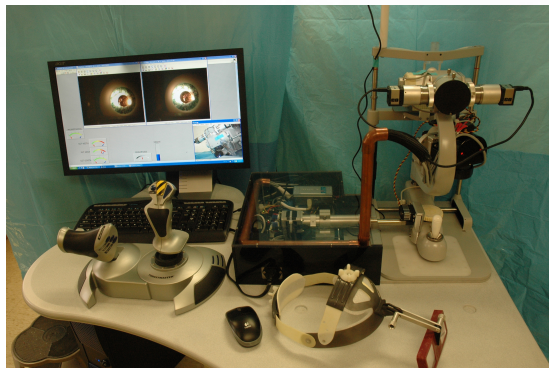
- 6 schools in N. Miami Beach
- Peds 1^o care
- Specialty care



Teleophthalmology



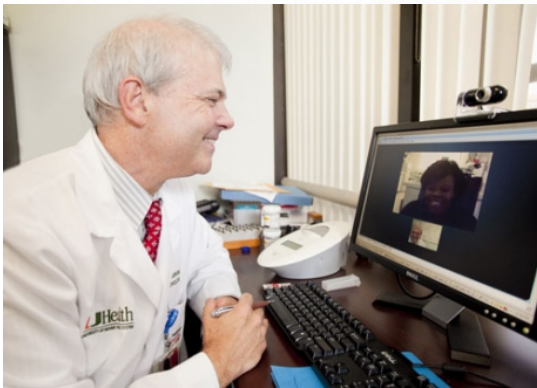
- Remote-controlled 3-D slit lamp
- Retinopathy of prematurity for NICUs
- Standard tele-ophthalmology for anterior & posterior segments
- Optical coherence tomography



Telepathology



- Intraoperative frozen sections
 - 4 hospitals
 - BioImagene platform
- Oversight of field hospital lab in Haiti



Videophones for elder care



- UM Center on Aging
- Family caregivers

Distance education



- Grand rounds
- Special lectures
- Medical, nursing and allied health education
- Patient education
- Public health

Interactive Distance Learning: Pan-American Virtual Conferences in Dermatology



Argentina
Bahamas
Brazil
Chile
Colombia
Dominican Republic
Ecuador
Guatemala
Honduras
Mexico
Panama



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INTERNATIONAL HUMANITARIAN ASSISTANCE & DISASTER RELIEF

A little history...

UM Family Residency, Cap-Haitien

- Goal: Rebuild the primary care work force
- Partners: Ministry of Health & Universite d' Etat d' Haiti
Faculte de Medicine
- 23 graduates since 1998
- ARNPs trained in Cap-Haitien
- Provide HIV services: Cap-Haitien & clinics in the North
- USAID support, >2,000 patients

TH for humanitarian assistance & disaster response



- Dominican Republic (Oct 2008)
 - Ophthalmology, pediatrics
- Guyana (July 2009)
 - Renal transplant (WRAMC)
 - Infectious disease
- Haiti (Jan 2010 – present)
 - Teleradiology
 - Pediatric subspecialties
 - Trauma and critical care
- Dominican Republic (May 2011)
 - Teledentistry

UM/Project Medishare: Telehealth in Haiti Earthquake Relief

- **Real-time**

- Inpatient bedside rounds by UM Trauma team in Miami
- UM pediatric specialist consults
- Leased Access Haiti internet services
- Donated high-bandwidth satellite links and Polycom, Tandberg, and Cisco videoconferencing systems

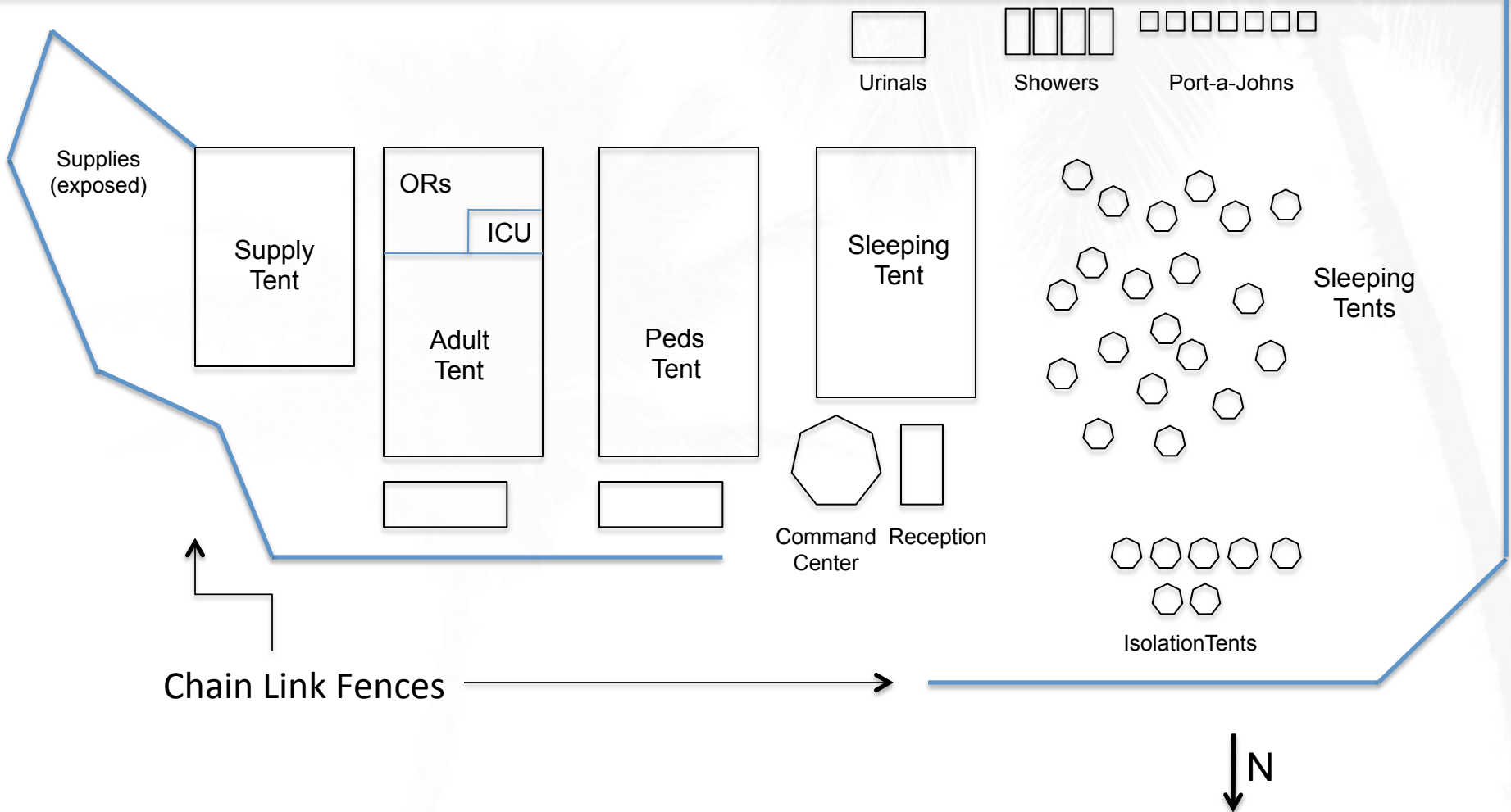
- **Store-and-forward**

- Swinfen Charitable Trust: global specialist network
- Teleradiology, donated PACS/DICOM gateway, MedWeb

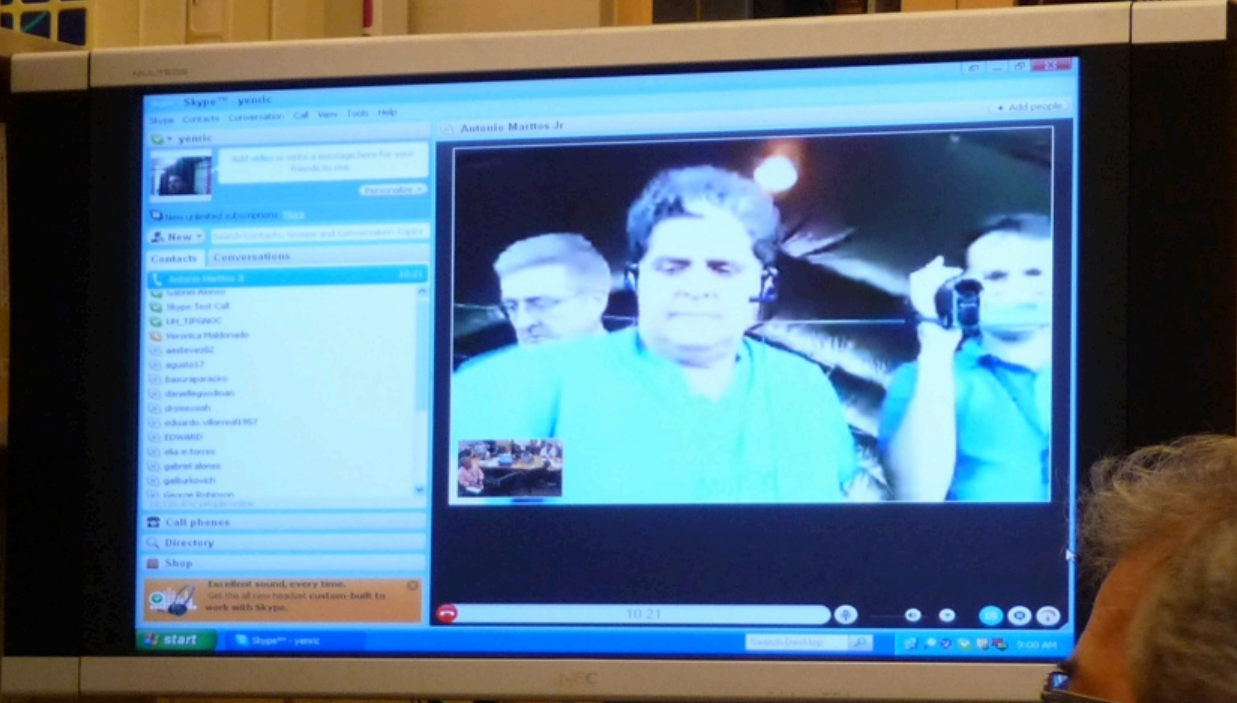


UMH-Haiti Site Layout

Airport Wall









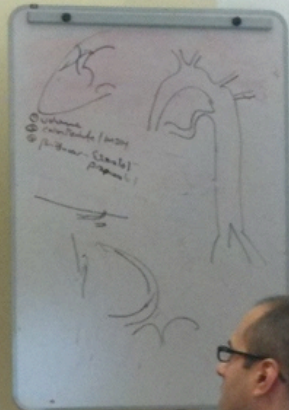
RYLAND
EMERGENCY

INTOUCH HEALTH

inmarsat
HUGHES

CAUTION
HOT SURFACE

inmarsat





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REN HAITI

Telehealth Medical Program Overview

Telehealth medical program

- Goal: Build sustainable indigenous telehealth capacity for clinical services & health sciences education
- Objectives:
 1. Identify telehealth sites
 2. Determine telehealth systems
 3. Plan a Haitian Telehealth Resource Center



Telehealth will enable medical expertise & oversight, education & training between Haitian sites & connected international partner sites.

Identify Telehealth Sites in Haiti

- Assess facilities: readiness, willingness
- Hospitals, larger clinics and schools
- Reach out to other NGO-supported health initiatives to jointly leverage telehealth
- Determine telehealth systems
- Plan rollout: training, implementation

Haitian Telehealth Resource Center

- Develop & maintain policies, procedures & best practices for clinical telehealth
- Gateway for videoconference bridging, scheduling, database hosting
- Platform for real-time & online health professional training & education for clinical, administrative, technical personnel

Humanitarian telehealth



- Reducing barriers to charity care
 - Travel
 - Security/safety
- Training of in-country health professionals
- Pre-travel screening & post-travel f/u

UM TeleHealth's strengths

- Systems engineering
- Telehealth operations
- Standard operating procedures & standards
- Telehealth in humanitarian assistance & disaster relief
- Industry relationships

Telehealth medical program summary

Build a sustainable indigenous telehealth capacity for clinical services & health sciences education, including a Haiti Telehealth Resource Center.



The background of the slide features several palm trees in a light, faded grey color, set against a plain white background. The trees are scattered across the frame, with some appearing more prominent than others.

Convenient, *connected* care.

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