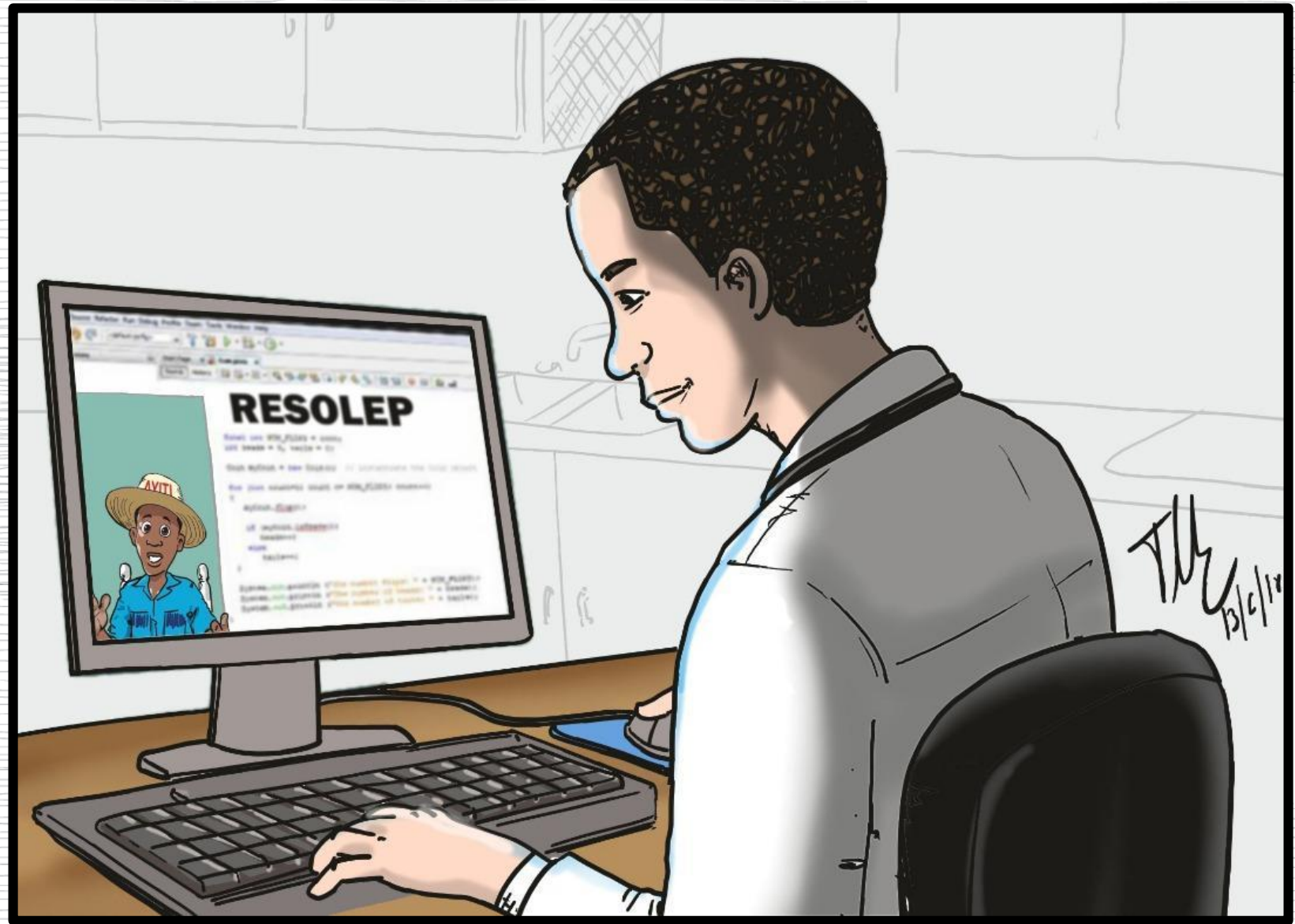


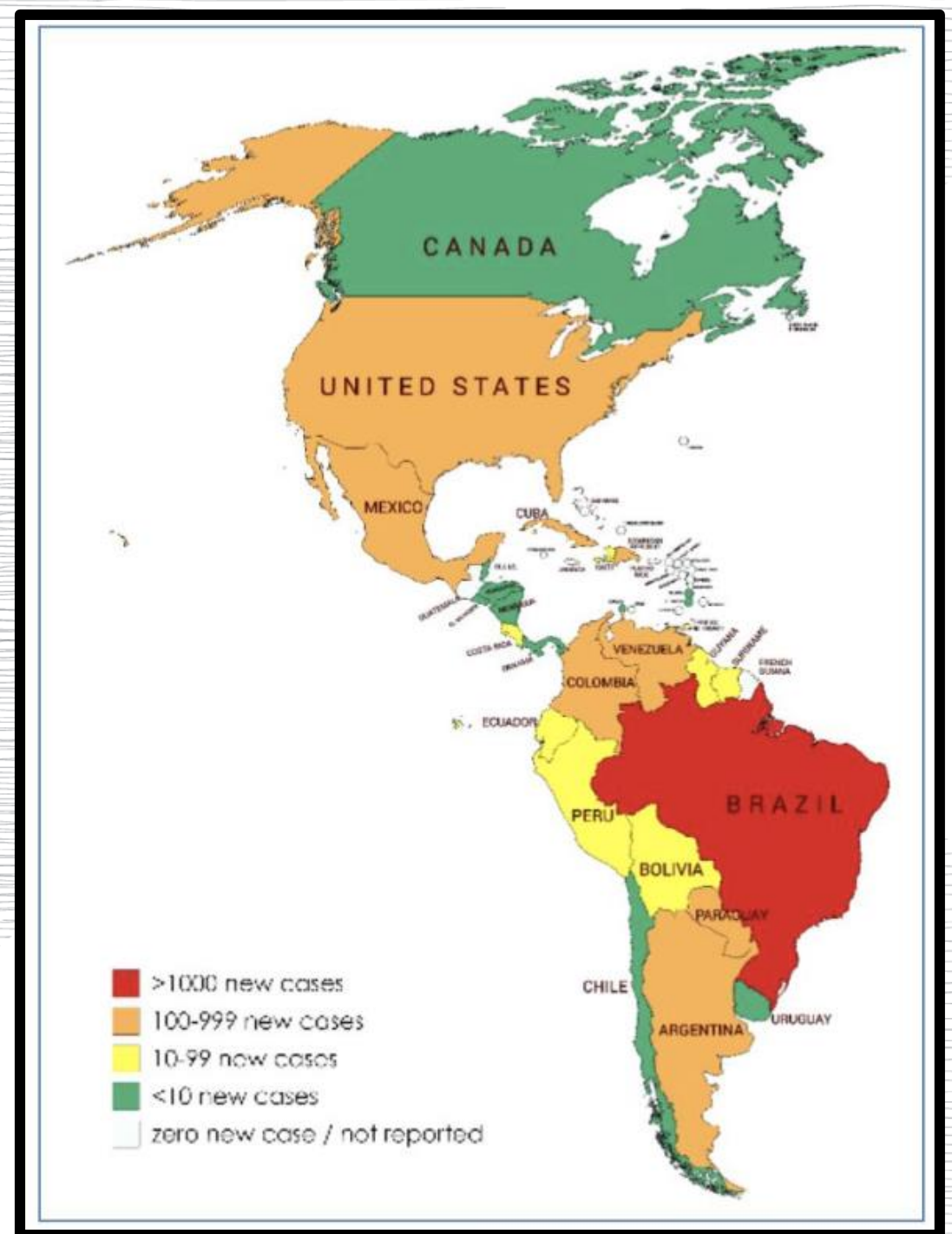
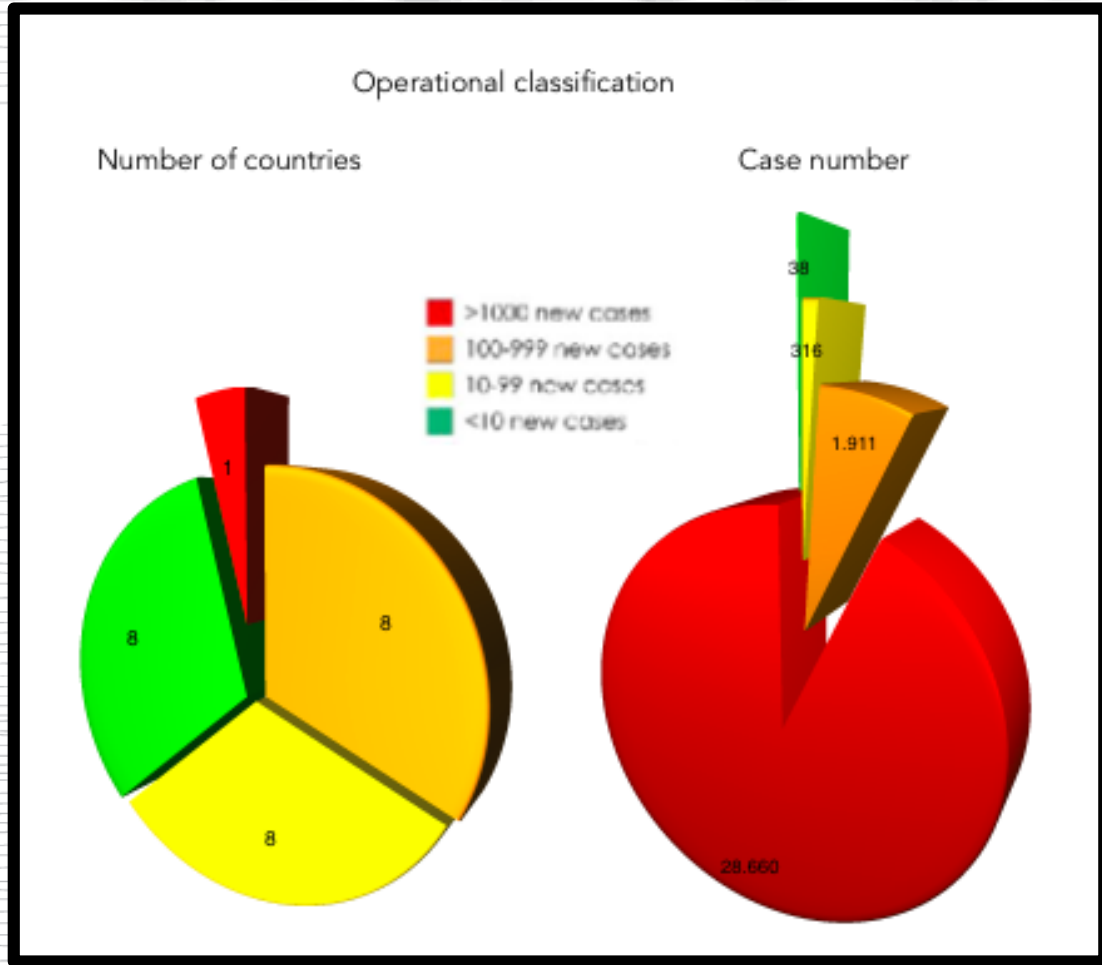
New technologies to facilitate the access to specialized care for leprosy patients

PAHO/WHO experiment for the region of the Americas



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# Disease burden in the region of the Americas (2018)

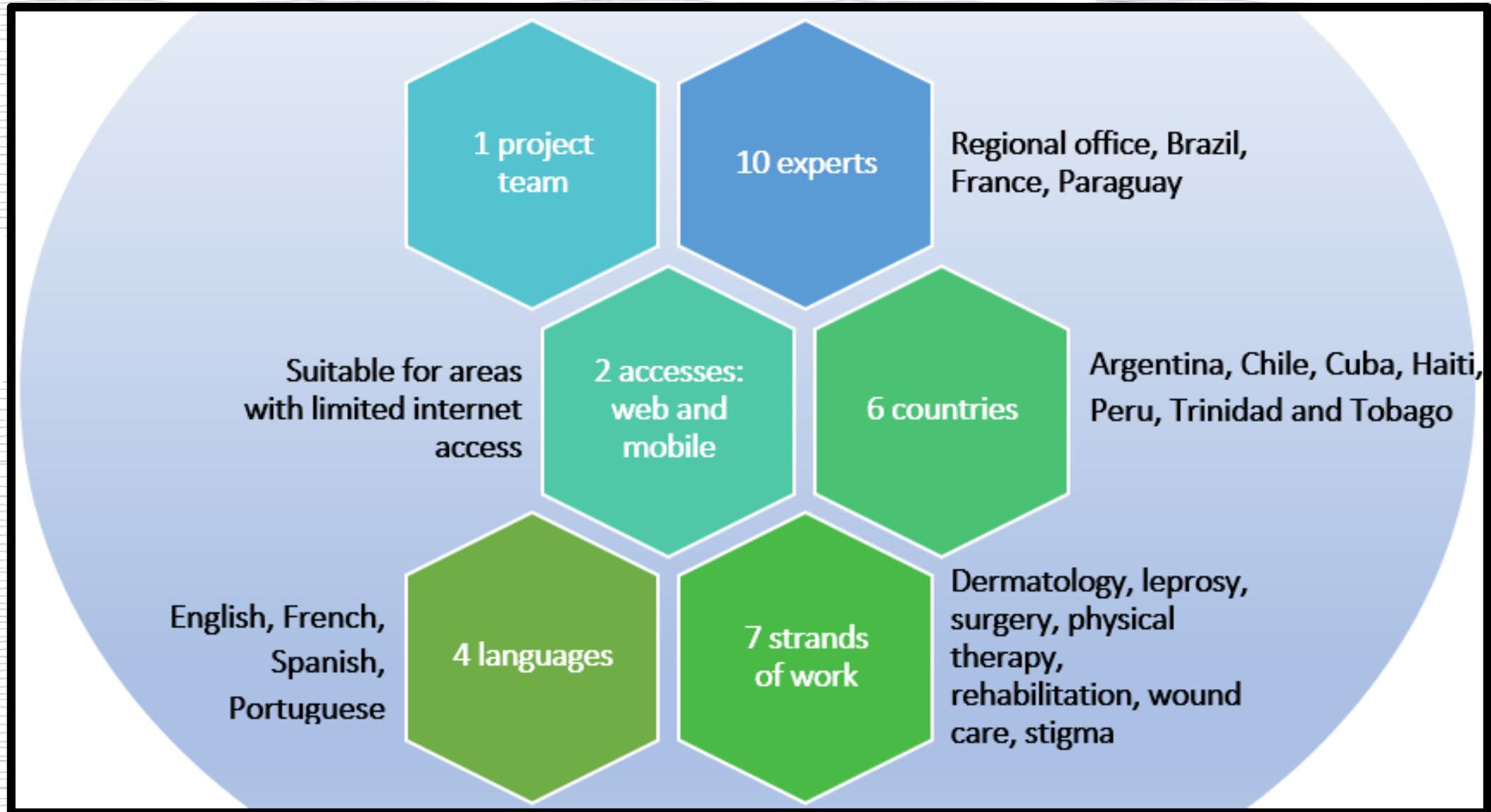


# Background

- Integrated Leprosy management at first care level or centralized services in reference centre
- Loss of expertise, quality care to be preserved
- Telemedicine to ensure equity access to specialized care

- International **networks** of experts
- Improves **care quality for the patient**, prevents  
Provides **access to numerous resources and trainings**  
to the users
- Adapts to the **different contexts and needs** of the  
countries

# Telemedicine : participants



# Telemedicine : material

## Presentation and instructions for participants

La télémedecine pour la lépre

Demande d'avis

**Le plateforme PAHO est accessible par le service régional pour la lépre et accessible pour tout unguent de la région Amériques.**

**Se connecter à la plateforme de télémedecine**

1) Dans un navigateur (par exemple google), taper l'adresse: [www.cohort/telemedecine.org](http://www.cohort/telemedecine.org)

La page d'accueil de la plateforme de télémedecine s'affiche.



2) Cliquez sur le lien bleu "Ouvrez votre compte" en haut à droite pour choisir la langue du portail.

3) Si c'est votre première visite, vous devez créer un compte utilisateur (voir paragraphe "Ouvrez votre compte").

4) Entrez votre identifiant et votre mot de passe.

5) Cliquez sur le bouton "Ouvrez votre compte".

6) Si vous avez perdu votre mot de passe, utilisez l'option "Impossible de se connecter ?" à côté de l'identifiant et saisissez les coordonnées.

**Envoyer une demande**

1) Envoyez une demande par email à l'adresse suivante: [telemedecine@cohort.org](mailto:telemedecine@cohort.org), ou par whatsapp au numéro indiqué ci-dessous.

Indiquez votre nom, prénom, email, profession et votre spécialité et votre lieu médical ainsi que l'établissement de votre avis.

2) Vous recevrez un email contenant votre identifiant et un mot de passe temporaire. Votre mot de passe temporaire doit être changé dans les 24 heures.

3) Si vous n'avez plus accès dans les 24h, vérifiez vos données.

1) Cliquez sur le lien bleu "Ouvrez votre compte" en haut à droite pour choisir la langue du portail.

2) Entrez votre identifiant et votre mot de passe et cliquez sur "Ouvrez votre compte".

3) Cliquez sur le bouton "Ouvrez votre compte".

4) Si vous avez perdu votre mot de passe, utilisez l'option "Impossible de se connecter ?" à côté de l'identifiant et saisissez les coordonnées.

**Envoyez vos demandes d'avis**

1) Dans le menu principal de l'application mobile, cliquez sur "Ouvrez votre demande d'avis".

2) Dans le menu principal de l'application mobile, cliquez sur "Ouvrez votre demande d'avis".

## Divuligation: video



**Dermatologist**



**Surgeon**

**I have quickly access to many specialists**



**Wound care**



**Rehabilitation**



**Infectious diseases**

## Telemedicine for leprosy

First phase / 1ère phase: regional experiment in the Americas

# Monthly report

Under the drive of PAHO/WHO, a regional experiment on telemedicine for leprosy is taking place from November 2022 to April 2023. Its goal is to test a multi-lingual platform allowing national programs to seek expert medical advice.

Using new technologies to facilitate the access to specialized care for leprosy patients

The success of global leprosy elimination is relying on work of the primary care and other levels. The case management in the "regular" health center which involves the attention and management of the more severe, the reports of cases, treatment, the use of preventive therapy from the diagnosis must be supervised to guarantee that treatment is working with an adequate level that includes and prevents loss.

The third phase strategy in leprosy elimination requires expertise in telemedicine to ensure the quality of care and reduce the mortality associated to leprosy.

A series of PAHO's centers, technical and technical capabilities based in the American region. Telemedicine allows us to overcome distance and extend the strategy to the specific and needs of the countries while ensuring that the patients have access to suitable expertise.

The first experiment contributes to ensure results in the access to specialized care for the patients in the region. It will be implemented in two phases:


- Phase 1: National expertise / 1ère phase: expertise locale (2022)
- Phase 2: Use for health centers / 2ème phase: expertise locale (2023)



Management of simple cases for support needed for difficult cases, e.g. use of the platform for the self-confirmation of a leprosy diagnosis.

Remote expertise is maintained through supporting the centers that face serious and emerging difficult cases, supported by ongoing of international experts when needed.

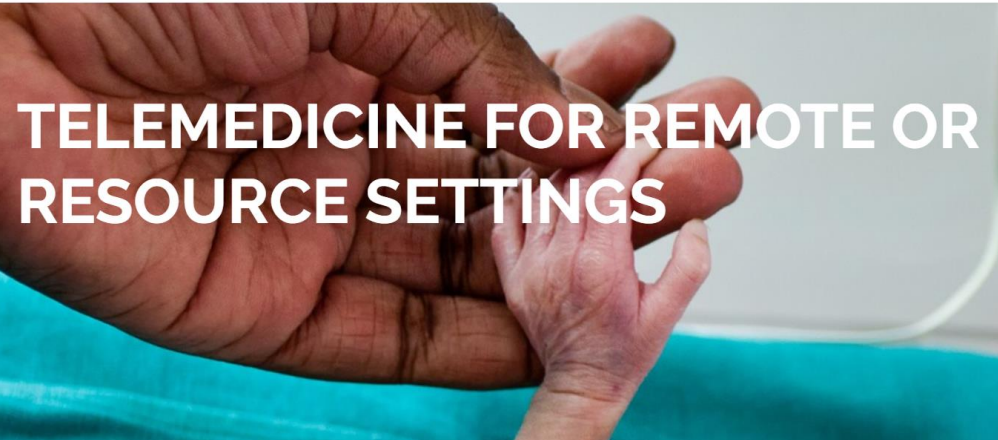
# Telemedicine : the platform



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Username Password LOG IN

Unable to log in?



## TELEMEDICINE FOR REMOTE OR LOW RESOURCE SETTINGS

<https://www.collegiumtelemedicus.org>



Menu principal Aide Deconnexion

Bienvenue Dr Sophie Delaigue (Coordinator, RESOLEP)

### Message pour le cas no 3 - Avis clinique requis pour un cas spécifique (concerne un patient en particulier)

Le texte du message est affiché dans la fenêtre bleue. Quelques éléments relatifs au cas sont indiqués dans la fenêtre au-dessus du message • Cliquez sur **Afficher les détails du cas** à la gauche du texte du message pour obtenir plus d'informations sur le cas -- celles-ci apparaîtront dans une fenêtre séparée.

#Cacher ce texte

Numéro de dossier:	3	Âge:	25 a
Nature de la demande:	Avis clinique requis pour un cas spécifique (concerne un patient en particulier)	Poids:	65.0 kg
Nom du patient:	Victor W	Date de l'avis:	07-Jun-2018
Sexe:	Mâle	Ville, pays :	Léogane, Haïti
Médecin demandeur:	Dr Sophie Delaigue (demandeur)	Hôpital:	Institut de dermatologie et de Maladies Infectieuses

07-Jun-2018 19:36 Message no 9

**Sujet:** [New referral] Nouvelle référence - Avis clinique requis pour un cas spécifique (concerne un patient en particulier) **Dermatology Avis**

**Message de:** Dr Sophie Delaigue (demandeur) **Motif principal:** Est-ce que la prise en charge actuelle vous semble correcte?

**Visibilité:** CRS

[voir les détails du cas 3](#)

1. MOTIF DE CONSULTATION  
Patient de 25 ans, suivi pour une lèpre MB depuis 2016 hospitalisé depuis 15 jours pour des douleurs, oedèmes des membres, fatigue, fièvre et récidive des nodules sur le corps dans le cadre de la diminution de sa corticothérapie.

2a. DUREE D'EVOLUTION  
aiguë (<1 month)

# Telemedicine : case examples

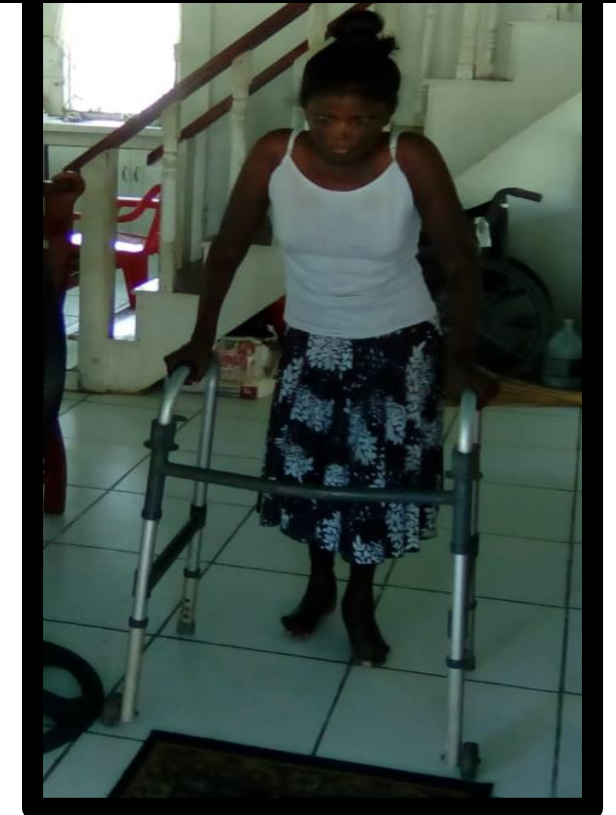
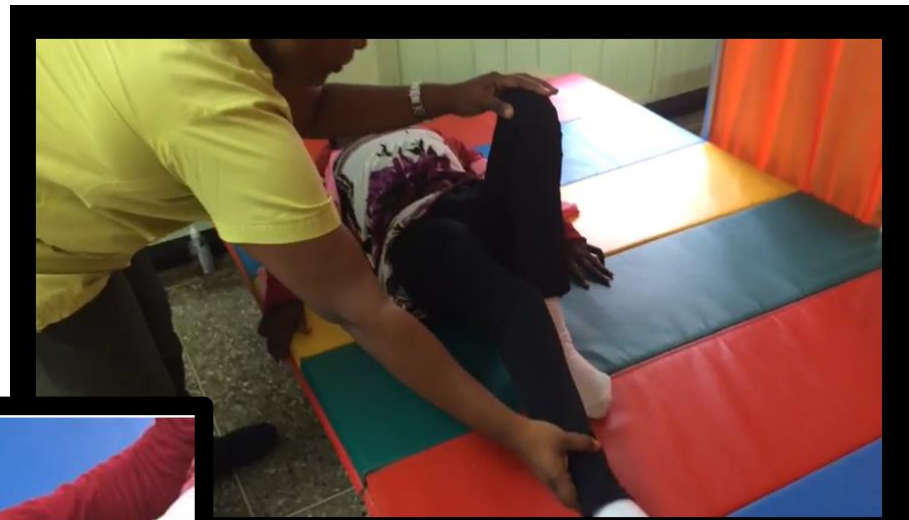
Guyana,

Patient 22 years old, Lucio phenomena left patient blind and bedridden for the last 2 years

Follow-up for 5 months (messages + teleconference + video of patient progress)

Initial question : “**Recommendations as to where best this care could be provided with consideration as to where care can be provided, e.g. Brazil, United States etc**”

Finally : Follow-up locally + support with telemedicine.



# Telemedicine : case examples

## Guyana

Bullous lesion with vomiting, diarrhea, shortness of breath

Lab results: HB 9.2, Platelets 302 000; White blood cells 32 000; PMN cells 83.4, Lymph 4.1, Eosin 1.3; Basop 0.4; Mono 10.8;

Electrolytes: Na 132.3; Cl 97.9; Ca 9.8;

Urine: Leuk 2+; Bact 2+; Epit cells 2+, RBC 3 in 12 fields; cloudy

Kidney function: Creatinine 0.9; BUN 19;

Liver function: GGT 180; ALT 55; Phosp 2.0; Total Bilirubin 5.0,

ECG sinus rhythm, CXR no abnormalities seen

## Case resolution

Shortness of breath, tachycardia and palpitations may be caused by anemia during a sulphone syndrome. Sulfone hypersensitivity.

Stop dapsons

Secondary bacterial infection on skin lesions: IV antibiotics

Severe ENL. Prednisolone doses to at least 1.5 mg per kg until clinical improvement and clofazimine up to 300 mg a day (after improvement of GI symptom).

Question from the reference leprosy center for the platform:

“Severe Leprosy Reaction type 2 suspected: Requested support for diferencial diagnosis and management”

After 3 days patient felt better “ is feeling much better, Thanks to all the specialists that showed interest”



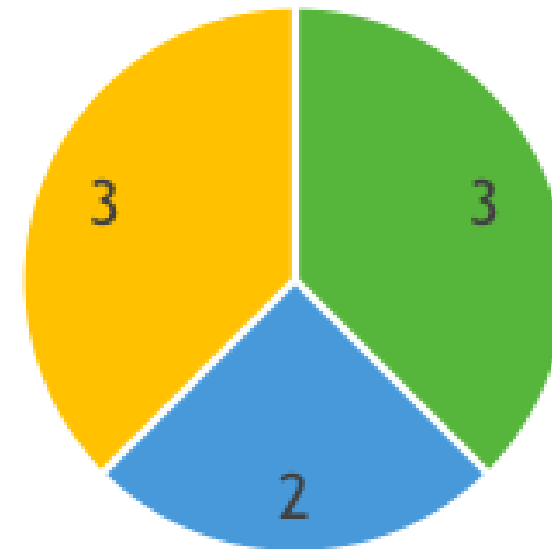


# Telemedicine : consults summary



Main reason (leprosy cases only)

- Reactions, adverse events
- Disabilities (G2D)
- New patient
- Failure of treatment
- Second line treatment



# Telemedicine : progress

Indicators	Achieved	Target
Number of monthly reports	6	6
Number of countries using the platform	2	7
Number of country's file started	4	7
Number of country's file finalized	0	7
Budget (Platform + Human Ressources)	9,144 USD	10 000 USD
Platform in 4 languages	Mobile app + Web in french/english/spanish/portugues	

# Telemedicine : lessons learned

## **Clinical achievements**

Feasibility of an international program to support NLP by providing ready access to specialist opinions for leprosy and dermatology care

14 cases have been submitted from Haïti and Guyana over 6 months with 10 specialists registered and 7 referrers. All answered received within 48 hours

No relevant alert has been reported, no major / technical incident reported

2) Quality care : the telemedicine system aims to provide patients with the best health care possible: referrers noted a positive impact in improving their knowledge during the teleconferences, we noted treatment modifications / reduce of transfer (to the US)

## **Preserving knowledge**

PAHO has the capacity to mobilize a network internationally, thus increasing relation between actors and countries, reinforcing the communication with countries focal points and helping with collecting and analyzing data from programs

# Telemedicine : limitations

- Implementation takes time and use of the platform is still quite low.
- More facts would be required to invest more in such projects : research as user survey, medico economic analysis, define country needs etc...
- Interface to be made more user friendly (touch screen to enter patient data)
- Lack of time and dedicated human resources to the platform led the following countries request for assistance to be resolved by phone call, video chat and regular email: Panama (2 cases), Trinidad and Tobago (neurolysis), Nicaragua (differential diagnosis), Saint Vincent and Grenadines (drug treatment)

# Thank you

