There is no state of conflict of interest requiring disclosure

Build, Collaborate and Disseminate Health Knowledge Networks, based on Regional and National R&E Networks

Author: Luiz Ary Messina

GÉANT & EaP Baselining Meeting "eHealth"

COI Disclosure

The author has no financial conflicts of interest to disclose concerning the presentation.

Digital Health is Building new Capacity, improves collaborative Research and remote Assistance to achieve Universal Health Coverage

Digital Health is Building new Capacity, improves collaborative Research and remote Assistance to achieve Universal Health Coverage

T@lemed

www.alis-telemed.net

Telemedicine for rural and remote zones Optimizing healthcare resources using platforms of e-health Experiences with bad infrastructures in Latin-America

Subproject I

Telemedicine for the diagnosis and treatment of **malaria** in underserved regions

Target country: Colombia

Subproject II

Tele-imaging services for rural hospitals for **ultrasound examinations**

Target country: Brazil

@LIS

EUROPEAID CO-OPERATION OFFICE

ALICE

America Latina Interconectada Con Europa

RED CLARA

@LIS

EUROPEAID

CO-OPERATION OFFICE

Clara

Cooperação Latino-Americana de Redes Avançadas

Cooperación Latino-Americana de Redes Avanzadas

DANTE

GÉANT

RNP

REDE NACIONAL DE ENSINO E PESQUISA

T@lemed

SUSTAINABLE DEVELOPMENT GOALS

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

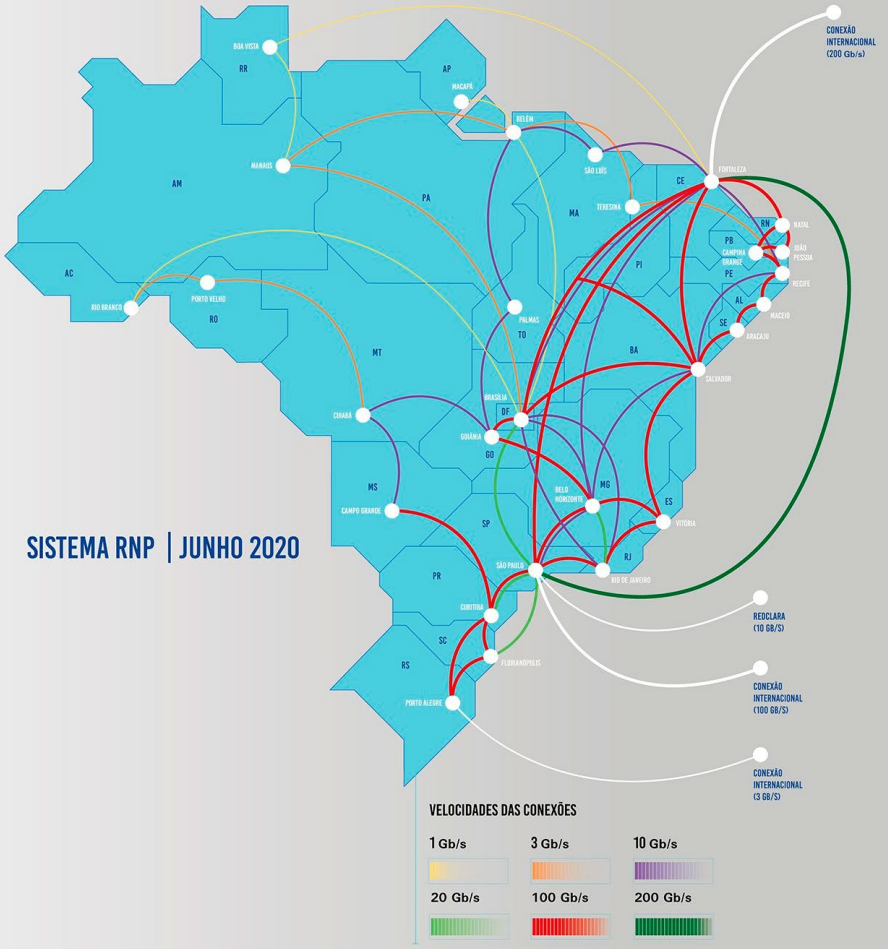
11 SUSTAINABLE CITIES AND COMMUNITIES

17 PARTNERSHIPS FOR THE GOALS

RNP 30 anos

ORGANIZAÇÃO SOCIAL DO MCTI

1. National R&E Backbone
2. Metropolitan Comunity Networks
3. User Organizations
4. Collaborative Networks
5. Network Advanced Services



782 Gb/s
capacidade agregada

213 Gb/s
Capacidade internacional

Via Ipê
Verifique a qualidade de conexão com as instituições.

800
organizações conectadas

+ de 4 milhões
de usuários

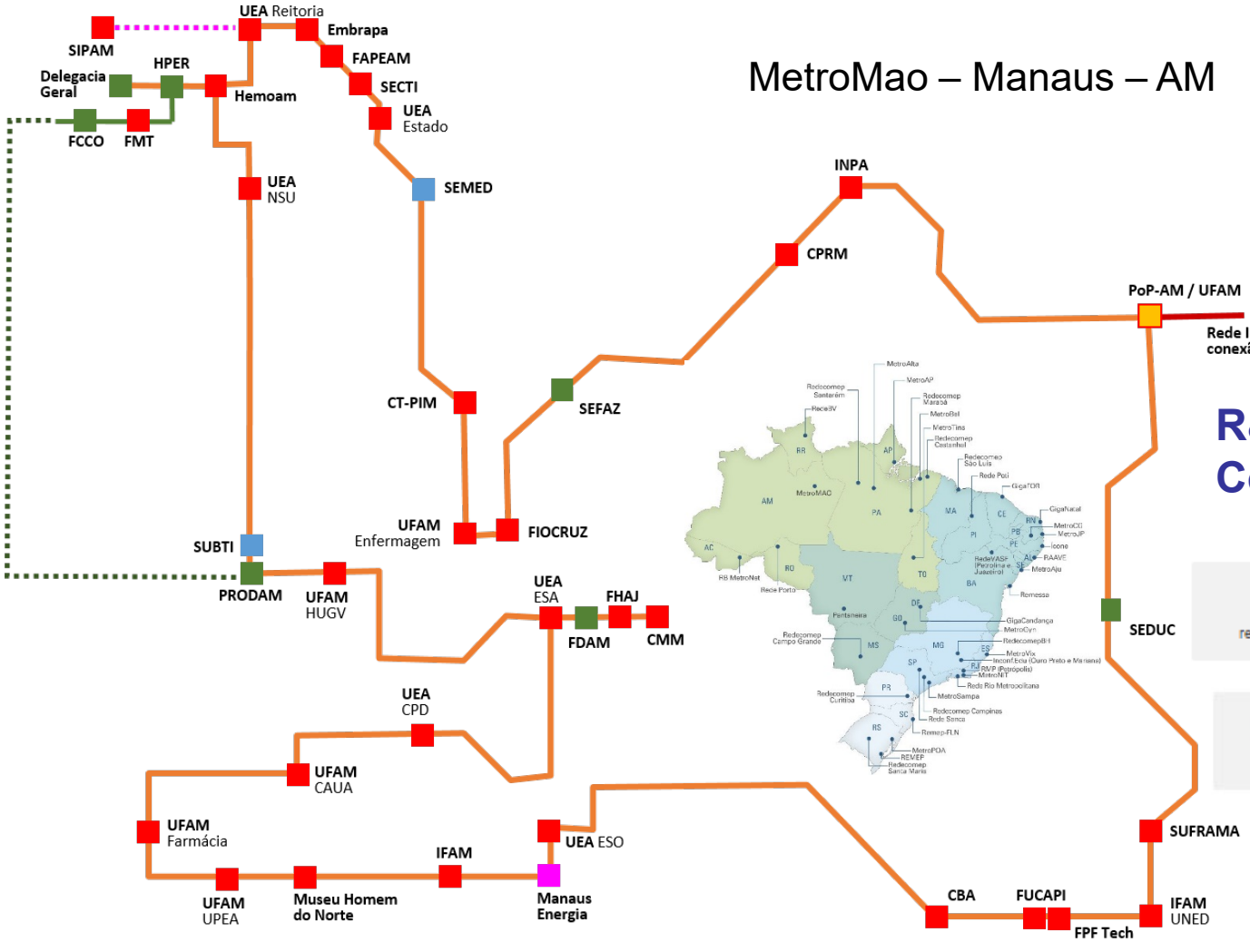
50 redes
comunitárias

+100 GB/s
de velocidade de conexão

MetroMao – Manaus – AM

RNP

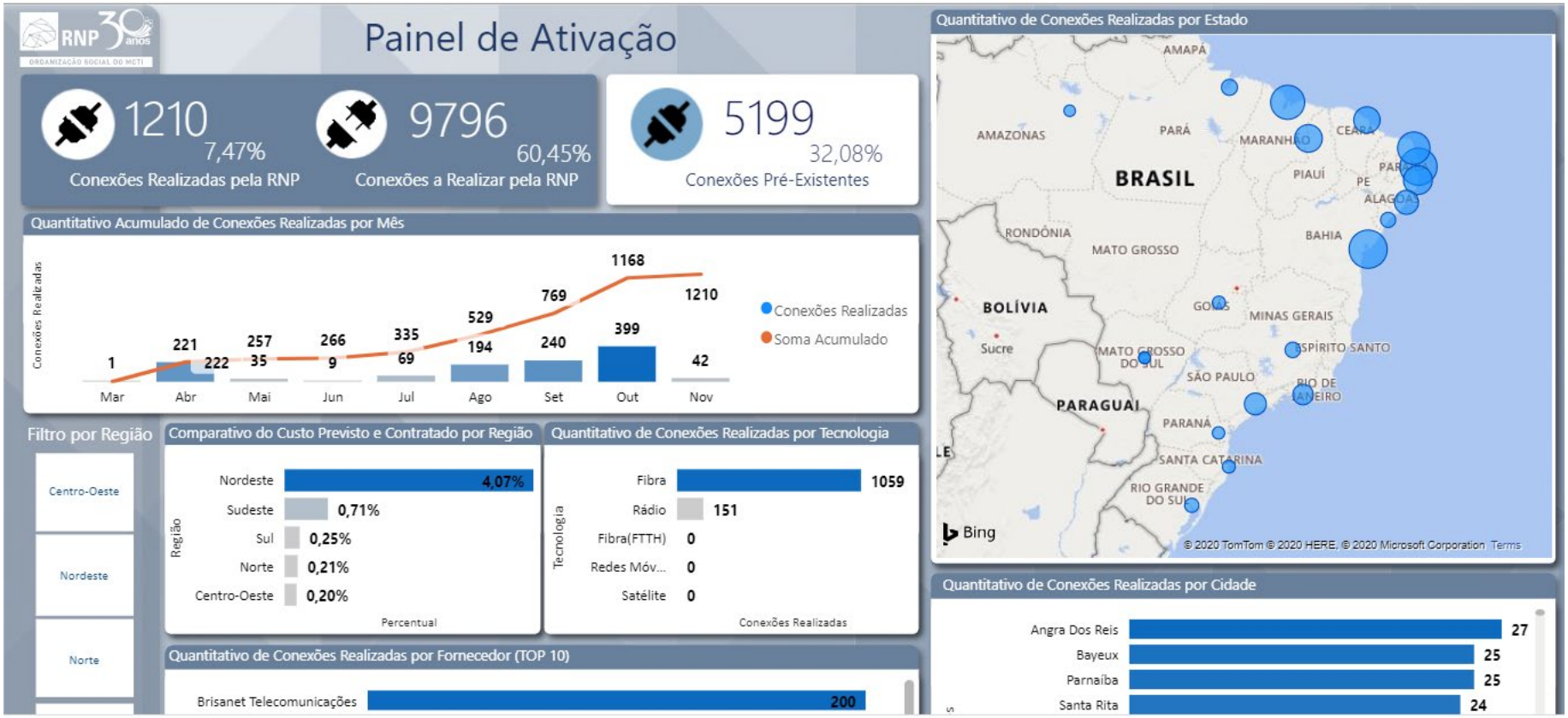
REDE COMEP



R&E Metropolitan Comunity Networks

39 redes de operação	24 redes em construção
3.064 km extensão total	546 instituições participantes

RNP initiated in 2020 the coordination of a Connectivity Project (Ministry of Health and Ministry Science, Technology and Innovation) in implementation by telecommunication enterprises for 15T Health Family Units



The Brazilian National Telehealth Program

Remote Assistance

Program Telehealth Brazil Networks, 24 implanted Nuclei in 27 states, 2.367 out of 5.570 municipalities, Ministry of Health
www.telessaudebrasil.org.br

Continuous Education

The Open Health University UNASUS, over 2 million health professionals registered in courses, Ministry of Health http://www.unasus.gov.br/

Collaborative R & E

The Telemedicine University Network RUTE, connects 139 University and Teaching Hospitals in all states and 60 SIGs Special Interest Groups, Ministry of Science, Technology & Innovation

www.rute.rnp.br

10 R&E Telemedicine Units /year
15 years network operation

				Mental e Psiquiatria		
6 16:00h - 17:00h SIG Rede de Governança da Informação CONASEMS	7 08:15h - 09:45h SIG Obstetrícia Patológica 10:00h - 11:00h SIG Acidente Vascular Cerebral (AVC) 11:00h - 12:00h SIG Hanseníase 12:00h - 13:00h SIG Simulação em Saúde 15:00h - 16:00h SIG Anestesiologia	8 09:30h - 11:30h SIG Saúde Indígena 16:00h - 17:00h SIG Fonoaudiologia	9 08:00h - 12:00h Capacitação da DGAIS - SES-PE 09:00h - 10:00h SIG Reumatologia Pediátrica 11:00h - 12:00h SIG Cardiologia 12:00h - 13:00h SIG Ressuscitação Cardiopulmonar (RCP) 14:00h - 15:00h SIG Colaborativo em Educação Médica 14:00h - 16:00h SIG TeleEnfermagem 15:00h - 16:00h SIG Economia da Saúde	10 08:30h - 10:00h SIG Medicina do Sono 10:30h - 12:00h SIG Educação Permanente em Saúde Mental e Psiquiatria 11:30h - 13:00h SIG Terapia Ocupacional em Contextos Hospitalares e Cuidados Paliativos	11	
13 12:00h - 13:00h SIG Endocrinologia Pediátrica	14 13:00h - 14:00h SIG Oncopediatria 17:00h - 18:00h SIG Doenças Neuromusculares	15 09:00h - 10:30h SIG Farmacologia e Terapêutica 12:00h - 13:00h SIG Oftalmo 12:00h - 13:00h SIG Queimaduras	16 08:00h - 12:00h Capacitação da DGAIS - SES-PE 11:00h - 12:00h SIG Perinatologia 13:00h - 14:00h SIG Medicina Tropical	17 09:00h - 10:00h SIG Telecoloproctologia 10:30h - 12:00h SIG Educação Permanente em Saúde Mental e Psiquiatria	18	
20 12:00h - 13:00h SIG TeleRedeBLH - Tele Rede de Bancos de Leite Humano	21 12:30h - 14:00h SIG Pneumologia	22 15:00h - 16:00h SIG Teleodontologia	23 11:00h - 12:00h SIG Cardiologia	24 10:00h - 12:00h SIG Técnico Operacional RUTE	25	26

http://rute.rnp.br/eventos

SIG - TeleRedeBLH
Human Milk Bank
22 países ALC
CPLP/Palops ePortuguese
BRICS

http://rute.rnp.br/eventos

27	28	29	30
11:00h - 11:45h SIG TeleDermato	11:00h - 12:00h SIG Sentinela	12:00h - 13:00h SIG Covid-19 Brasil http://conferenciawe	09:00h - 10:30h SIG Educação em Saúde Digital
11:00h - 12:00h SIG Colaborativo em Educação Médica	12:00h - 13:30h Reunião Científica das Ligas de Cirurgia Pediátrica	12:00h - 13:30h SIG Enfermagem Intensiva e de Alta Complexidade	10:00h - 11:00h SIG Queimaduras
12:00h - 13:00h SIG Covid-19 Brasil http://conferenciawe	15:00h - 16:00h SIG Soberania e Segurança Alimentar e Nutricional de Populações Campesinas,... http://https://nutri	14:00h - 15:00h SIG Obesidad	11:00h - 12:00h SIG Cardiologia
	15:00h - 17:00h SIG Paisagens, Autonomia, Segurança e Soberania Alimentar e Nutricional http://https://nutri		11:00h - 12: SIG Saúde Crianças e Adolescente
			12:00h - 13: SIG Covid-1
			14:00h - 15: SIG Articula Soberania e Segurança Alimentar e Nutricional do Nordeste http://nutrissan.rnp
			14:00h - 15:30h SIG Ciência de Dados e Inteligência Artificial em Saúde
			15:00h - 17:00h SIG Guias Alimentares na América Latina http://nutrissan.rnp
			15:00h - 17:30h SIG Cirurgia Pediátrica (Cirped)

SIG Child and Adolescent Health

De:	30/04/20
Duração:	11:00 – 12:00 (Fuso horário sensitivo)
Título:	SIG Saúde de Crianças e Adolescentes
Apresentador:	Andrey Moreira Cardoso, M.D., PhD
Tema:	SAÚDE DA CRIANÇA INDÍGENA
Descrição:	
URL:	
Tipo:	Webconferência

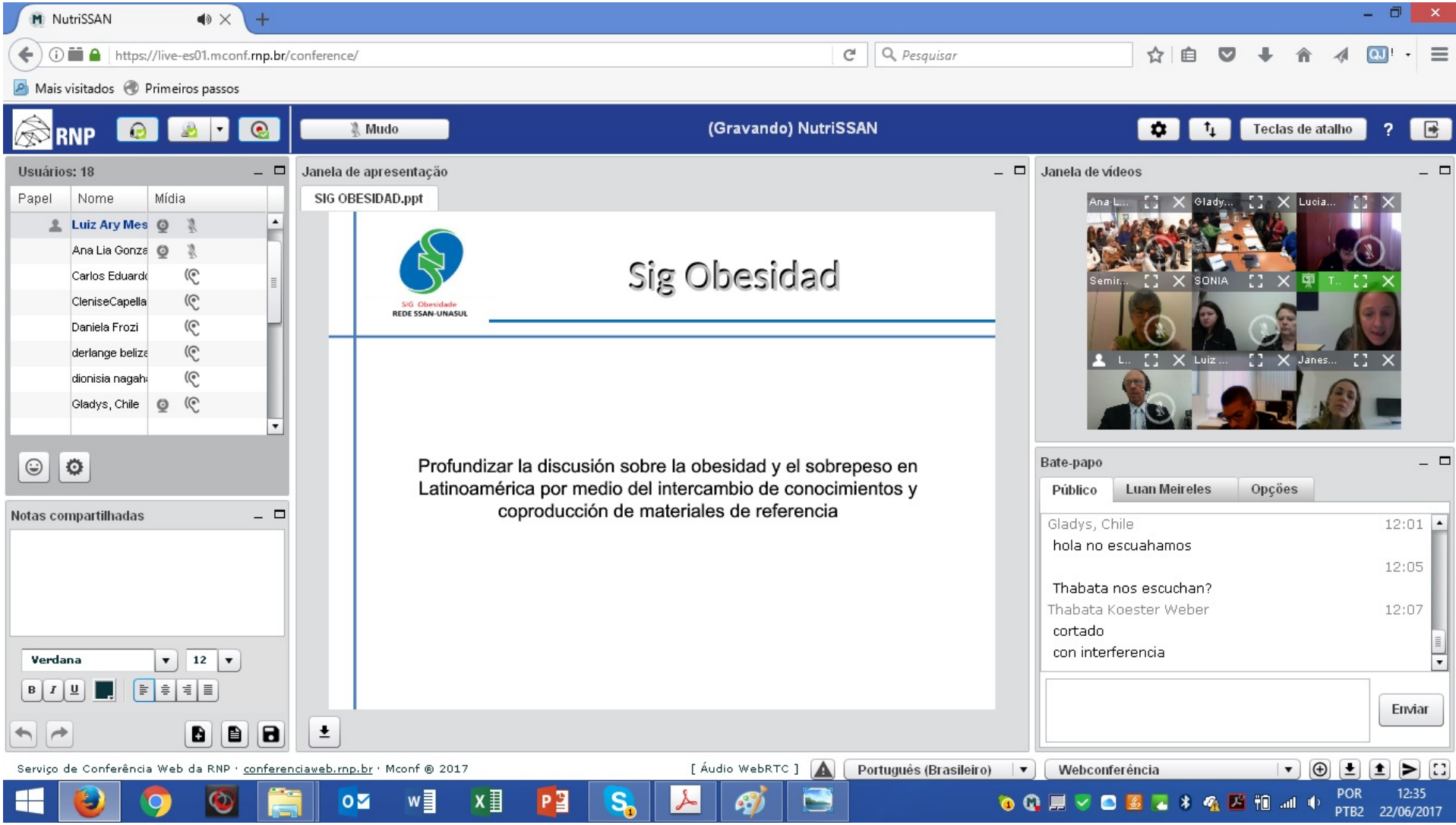
2 ZERO HUNGER

17 PARTNERSHIPS FOR THE GOALS

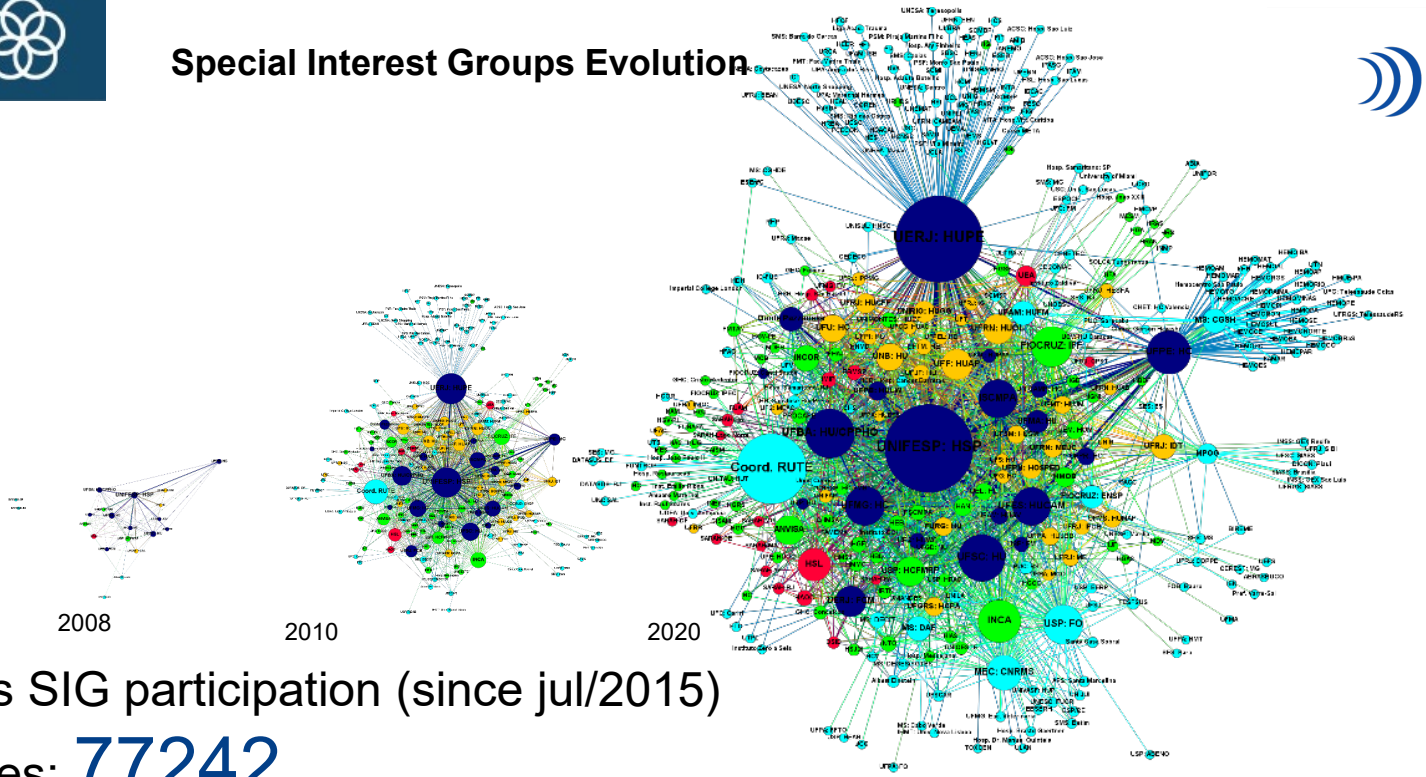
10 REDUCED INEQUALITIES

Nutri SSAN
REDE GLOBAL DE ENSINO, PESQUISA E EXTENSÃO EM NUTRIÇÃO, SOBERANIA E SEGURANÇA ALIMENTAR

Sovereignty, Security, Food and Nutrition



Special Interest Groups Evolution



Numbers SIG participation (since jul/2015)

Presences: 77242

Evaluations: 25738

Participants: 20453

Sessions: 6721

Imagem referente à pesquisa: BRITO, T. D. L. V.; BAPTISTA. R. S.; LOPES, P. R. L.; HADDAD, A. E.; MESSINA, L. A.; PISA, I. T.. The Collaborative Coordination of Special Interest Groups on The Telemedicine University Network (RUTE) in Brazil. In: MEDINFO 2015: 15th World Congress on Health and Bio

Over 3000 health professional participants
Speakers from 14 states and 14 countries

20/07/2020	Outpatient Covid-19 diagnostics in Moscow: how to flatten the curve with CT, unified RIS and AI ?	Prof. Sergey Morozov, MD, MPH, PhD, Center for Diagnostics and Telemedicine, Moscow, Russia, Past-President of the European Society of Medical Imaging Informatics - Moderação: Dr.Valdair Muglia, Scientific Director of the Brazilian Radiology Council CBR	Link
27/07/2020	1. Ancient wisdom into the modern world 2. Experience of treatment with COVID-19 in Wuhan city, China	Dr. Wei Cao is an Associate Professor and the Deputy Director in Department of Infectious Diseases (ID) in Peking Union Medical College, experience in Wuhan city, Hubei province, China. Dr. Jiang, Rongmeng (Chief Physician, Beijing Ditan Hospital for Infectious Diseases) Moderator: Dr. Zeng, Zheng (Peking University First Hospital)	Link
03/08/2020	Telesalud Indígena y la COVID19	Dr. Jose Alejandro Almaguer González (Director de Medicina tradicional y desarrollo Intercultural de la SSA - Ministério de Salud, México) e Dra. Zaira Zambelli Taveira (SESAI - Secretaria Especial de Saúde Indígena - Ministério da Saúde, Brasil) Moderação: Coordenação SIG Saúde Indígena - RUTE	Link

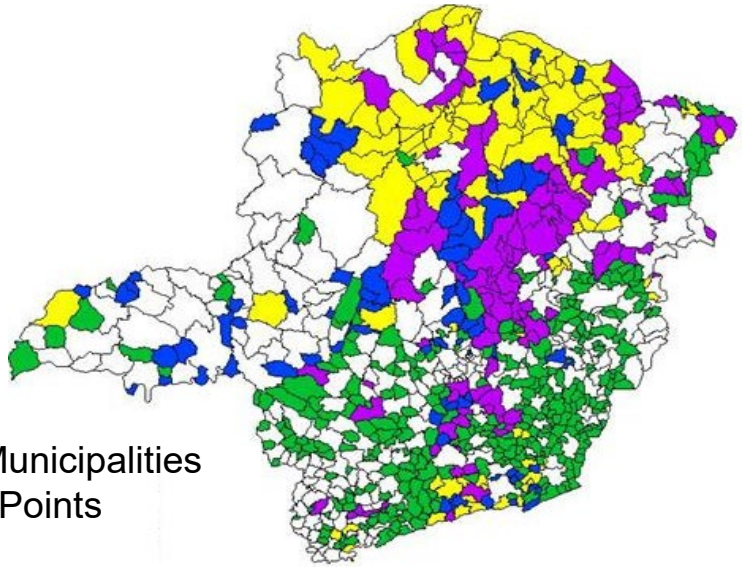
Telehealth in the State of Minas Gerais

Clinical Hospital - Federal University of Minas Gerais - UFMG

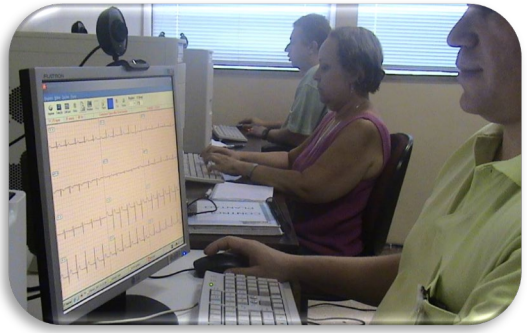
Minas Gerais Health State Department

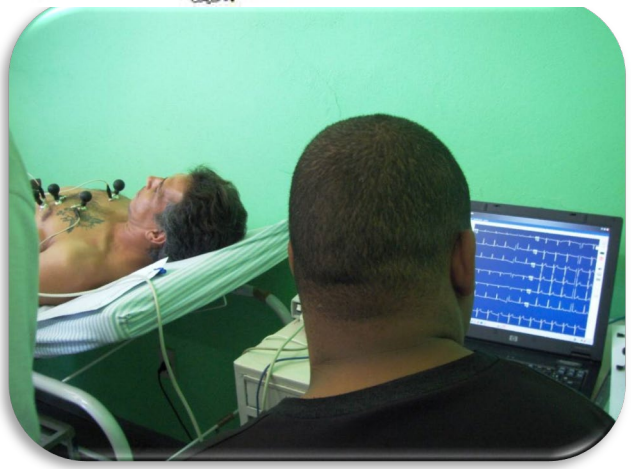
24hours/day
3200 ecg/day
1700 Teleconsult/month
(UFMG, UFU, UFTM, UFJF, Montes Claros, UFSJ)

Since 2005



800 Municipalities
1000 Points





More than 5 million TeleECG

80% of the telepatients need no transfer to Reference Centers

10% municipal health budget savings

UFAM Federal University of Amazonas: During the Pandemia Teleassistance and Remote Education

Cardiology, Pneumology, Reumatology, Neuropediatrics, Neurosurgery, Estomaterapy, Nefrology

Municipalities: Benjamin Constant, Coari, Itacoatiara, e Paritins e Humaitá

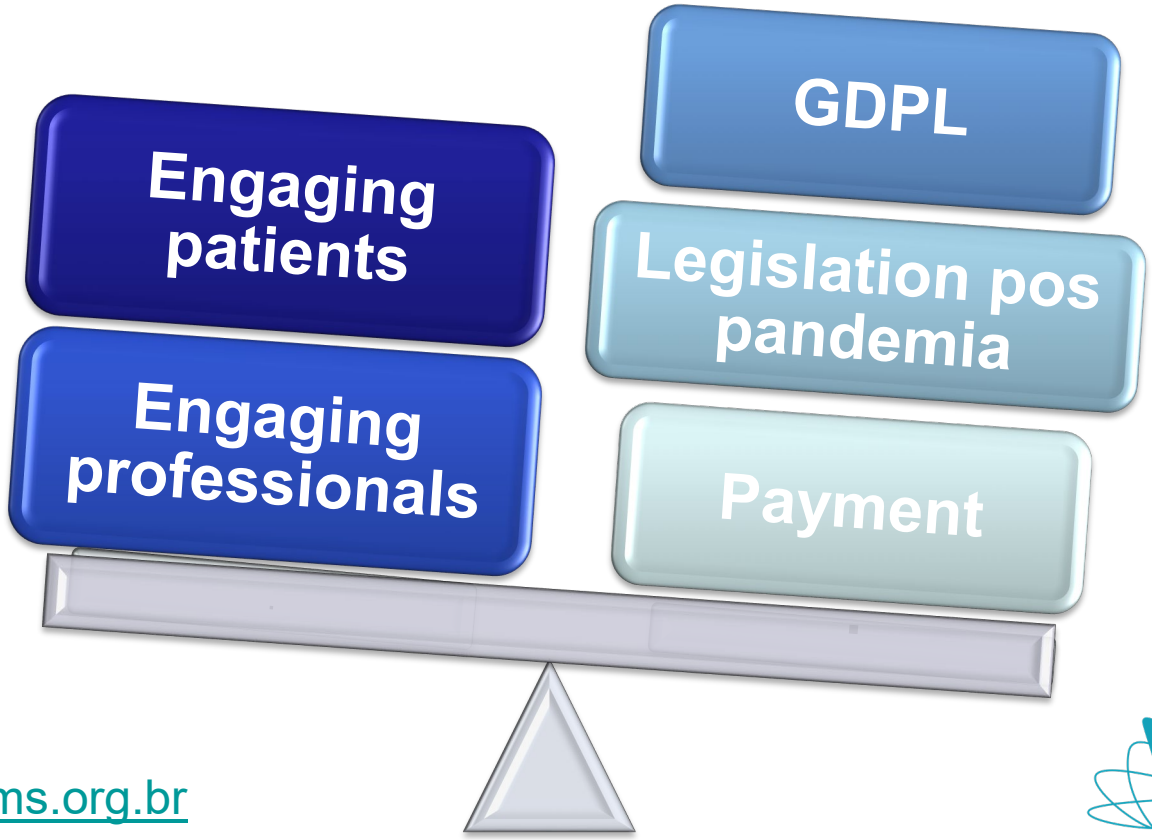
ABTms and the Federal Councils of Health Professions 2020

Profession	Webinars
Physician	APM, ACM, SBC
Social Assistent	
Nursing	COFEN, ABEN, UERJ
Nutrition	
Pharmacy	CFF, USP, UFCSPA, ABNT (26/11)
Fisiotherapy	COFFITO, CREFITO, INCA, SARAH
Fonoaudiology	CFFa, SBFa, UERJ, UFES
Odontology	CFO, IADR (27/11)
Psicology	
Ocupational Therapy	COFFITO, CREFITO, INCA, SARAH

To include: Biologists, Biomedicals, Physical Educators, Veterinarians
In 2021

ABTms
Associação Brasileira de Telemedicina e Telessaúde

Today and the Future of Telemedicine and Telehealth in Brasil



www.abtms.org.br

ABTms
Associação Brasileira de Telemedicina e Telessaúde

CONGRESSO NACIONAL

FRENTE PARLAMENTAR DA TELESSAÚDE

Ao Senhor Luiz Ary Messina, presidente da ABTms.

Caro Senhor Luiz,

Tenho a honra de convidá-lo para o lançamento da Frente Parlamentar Mista da Telessaúde, que tem como objetivo ampliar o debate sobre a telessaúde no Brasil.

O evento acontecerá na quinta-feira, 26 de novembro de 2020, às 9 horas. Sua participação, em caráter de convidado especial de associação/entidade parceira da Frente, poderá tanto ser presencial, na Câmara dos Deputados, quanto via aplicativo Zoom por meio do *link* https://zoom.us/j/6375524555.

A história e atuação da ABTms certamente terá muito a acrescentar nos debates e trocas de experiências que, certamente, levarão à consolidação definitiva da telessaúde no Brasil.

Agradeço desde já pela valiosa contribuição em defesa da saúde.

Adriana Ventura - Deputada Federal
Presidente da Frente Parlamentar da Telessaúde

Data: 26 de novembro de 2020, quinta-feira
Horário: 09h
Endereço: Plenário 6, Câmara dos Deputados, Anexo II - Brasília, DF
Link para participação *on-line*: https://zoom.us/j/6375524555

https://www.youtube.com/watch?v=rREJKse6arQ&t=3927s

Messina (min43): Alert to the need for a National Public Policy on Telehealth, a regulatory framework that includes the following pillars: cyberinfrastructure, interoperability, human resources and governance, guaranteeing investments in telehealth in the Brazilian Public Health System SUS and permanent training of human resources, consolidatingthe SUS Universalization, Integrality and Equity !

World Health Organization

DIGITAL HEALTH ROUND TABLE

YOUR THOUGHTS AND INPUTS MATTER!

Please join us for an interesting round table

When: Wednesday, 9 December 2020
Time: 2:00 - 4:30pm CET
Where: Virtual
Zoom link: please click on the Zoom link below to join us

Link: https://who.zoom.us/j/99799950316
Meeting ID: 997 9995 0316
Passcode: MEEt#2020

To discuss 3 important topics:

- **Digital Transformation**
- **Early warning disease surveillance**
- **Digital Health Network of Networks**

https://www.who.int/health-topics/digital-health
Contact: DigitalHealth@who.int

The Latin American Endoscopy Japan and Latin America

Key to the success

- **Medical Needs**
- **Training Hospital Engineers**

Shuji Shimizu, MD, PhD
Telemedicine Development Center of Asia (TEMDEC)
Kyushu University Hospital

Digital Health Building Capacity to achieve UHC Universal Health Coverage 12/04/18

M.Natenzon, L.A.Messina, vice-Ministro da Saúde da Rússia, Oleg Salagay, Victor Klassen, Saroj Mihsra

6th Meeting of the BRICS Health Ministers, New Delhi. (2016)

Telemedicine is inserted in the BRICS Agenda of the Ministers of Health

UNIVERSITY OF TORONTO

BRICS Information Centre

Home | Documents

8th BRICS Summit: Goa Declaration

Goa, India, October 16, 2016

- http://pib.nic.in/newsite/PrintRelease.aspx?relid=155596

3 GOOD HEALTH AND WELL-BEING

10 REDUCED INEQUALITIES

17 PARTNERSHIPS FOR THE GOALS

FIOCRUZ

INSTITUTO DE HIGIENE E MEDICINA TROPICAL

Reunião Técnica PECS-CPLP 2009 – 2016

Secretariado Executivo da CPLP

Lisboa, 29 de fevereiro a 4 de março de 2016

CPLP

Telehealth Strategy to the Portuguese speaking countries

Approved

(Portugal, Brazil, Mozambique, Angola, Cape Verde, Guiné Bissau, Guiné Equatorial, East Timor, São Tomé and Príncipe)

Signed

Resolution by the **9 Ministers of Health** on Oct 26th 2017

Created the **Permanent Working Group Telemedicine of the portuguese speaking countries**

RNP

MINISTÉRIO DA DEFESA

MINISTÉRIO DA CIDADANIA

MINISTÉRIO DA SAÚDE

MINISTÉRIO DA EDUCAÇÃO

MINISTÉRIO DA CIÊNCIA, TECNOLOGIA, INOVAÇÕES E COMUNICAÇÕES

PÁTRIA AMADA BRASIL GOVERNO FEDERAL

3 GOOD HEALTH AND WELL-BEING

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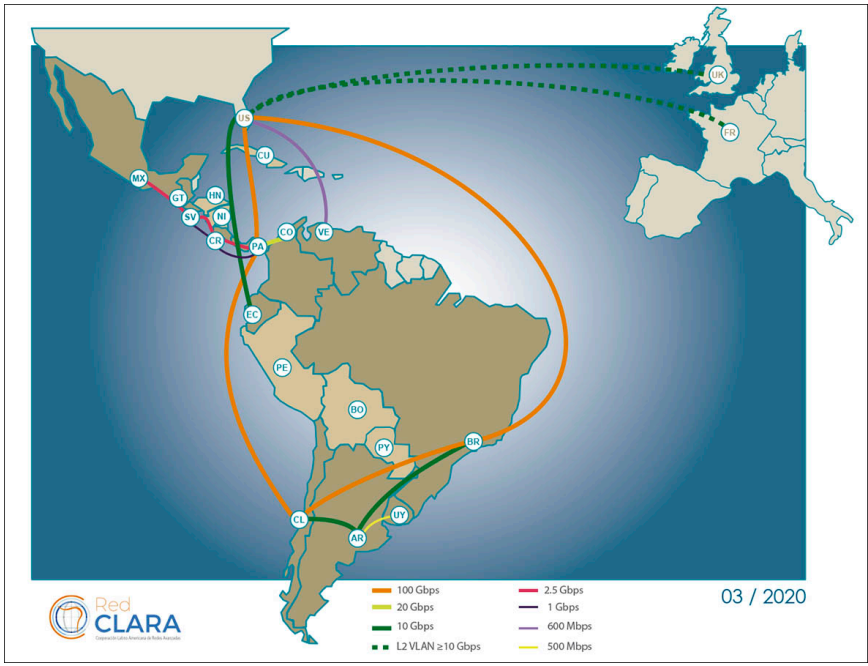
Red CLARA

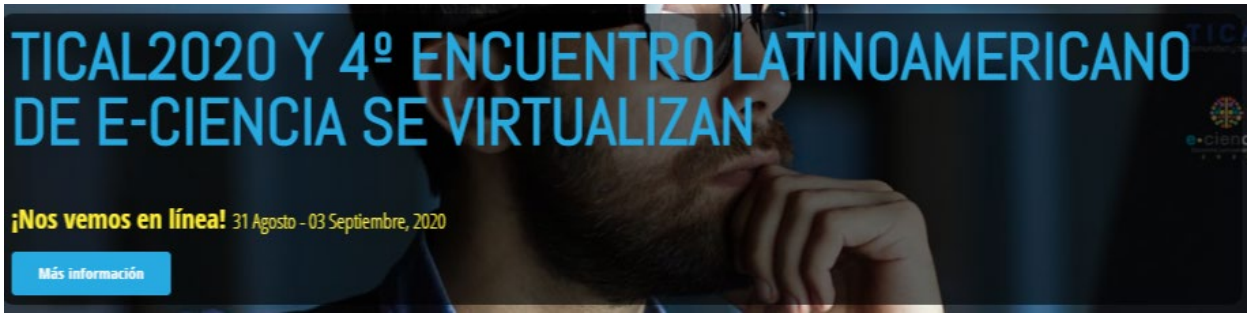
RUTE - LA Latin America

REDE UNIVERSITÁRIA DE TELEMEDICINA

RedCLARA is proud and prides itself on providing National Research and Education Networks (NREs) of Latin America what commercial operators can't: a high-speed network that pushes the limits of commercial network technology by offering a profitable Latin American infrastructure. The big projects of research trust RedCLARA for excellent Availability and quality of service.
A high speed Internet different from the commercial one, exclusively for research and education.

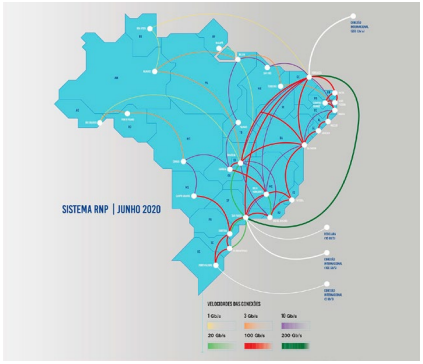


InnovaRed · RNP · RENATA COLOMBIA · ICONARE · REUNA · CEDIA · RAICES · ragie · cudi · RUNBA · RAU2 · REDNESAH



MoU signed expanding RUTE-LA Sept 1st 2020
RedClara Latin American Cooperation of Advanced Networks
RNP Brasil
CUDI Mexico
RENATA Colombia
REUNA Chile
CEDIA Ecuador

National Research and Education Networks contribution to the social economical impact of the Digital Transformation and the agenda 2030



RUTE REDE UNIVERSITÁRIA DE TELEMEDICINA

Nutri SSAN
REDE GLOBAL DE ENSINO, PESQUISA E EXTENSÃO EM NUTRIÇÃO, SOBERANIA E SEGURANÇA ALIMENTAR

CPLP

Telemedicine & Telehealth Permanent Workgroup

RUTE-AL, ReClara
RNP Brasil
CUDI México
RENATA Colômbia
REUNA Chile
CEDIA Equador

Build, Collaborate and Disseminate Health Knowledge Networks

How to construct, sustain and pave the evolution of Health Collaborative Networks supported by Regional and National Research and Education Networks