

*Season's Greetings and best wishes*  
for a healthy, happy, and better 2021



HEARTS Regional Workshop, Dominican Republic, May 2019. Photo credit: Arantxa Cayon, PAHO

## HEARTS in the Americas: 2020 end of year review

# Vision

**By 2025, HEARTS will be the institutionalized model for the cardiovascular disease risk management, including hypertension, diabetes, and dyslipidemia in primary health care in the Americas**

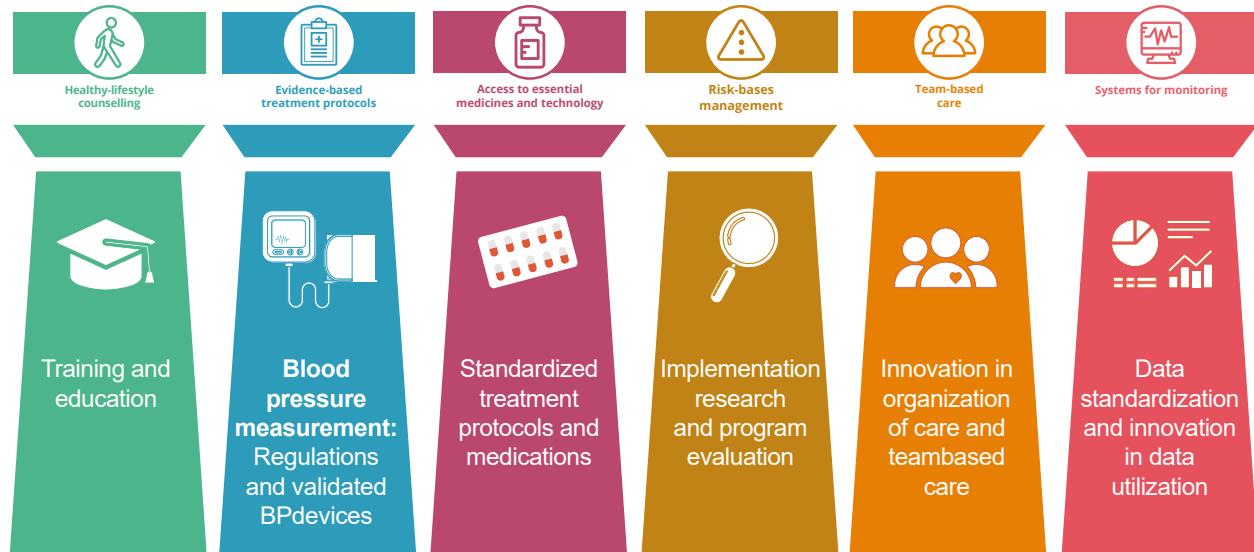
Main programmatic priorities of HEARTS in the Americas for 2021

- 1.** Moving towards the institutionalization of the HEARTS model by expanding the number of countries implementing the program and scaling up the number of Primary Health Centers (PHC) implementing the HEARTS technical package.
- 2.** Reinforcing the HEARTS technical pillars with special emphasis on:
  - a. Countrywide implementation of preferred standardized treatment protocols in all HEARTS countries and inclusion of high-quality and affordable fixed-doses combination medications in national lists.
  - b. Improvement in blood pressure (BP) measurement through a) training and certification of the PHC workforce and b) promotion of a regulatory framework for registration of BP devices that requires proof of validation, c) improvement of procurement mechanisms to ensure the exclusive use of validated BP devices in PHC facilities.
- 3.** Innovation in health care delivery to reach the full potential of the PHC teamwork approach by:
  - a. Consolidating the HEARTS 1.0 (full implementation of HEARTS technical package) with attention to standardized treatment protocols and registries.
  - b. Introducing the HEARTS 2.0 to catalyze the hypertension control improvements with attention to BP measurement with non-physician provider, BP follow-up visit with non-physician provider including medication titration and extending the medication refill frequency.
- 4.** Strengthening the capacity building activities at the first level of care by optimizing the uptake of the HEARTS training resources available at PAHO virtual campus of public health.
- 5.** Boosting the HEARTS System for Monitoring and Evaluation by promoting the innovation in data collection and reporting as a base for a hypertension quality improvement strategy.

## Technical Pillars of HEARTS in the Americas



Technical package for cardiovascular disease management in primary health care



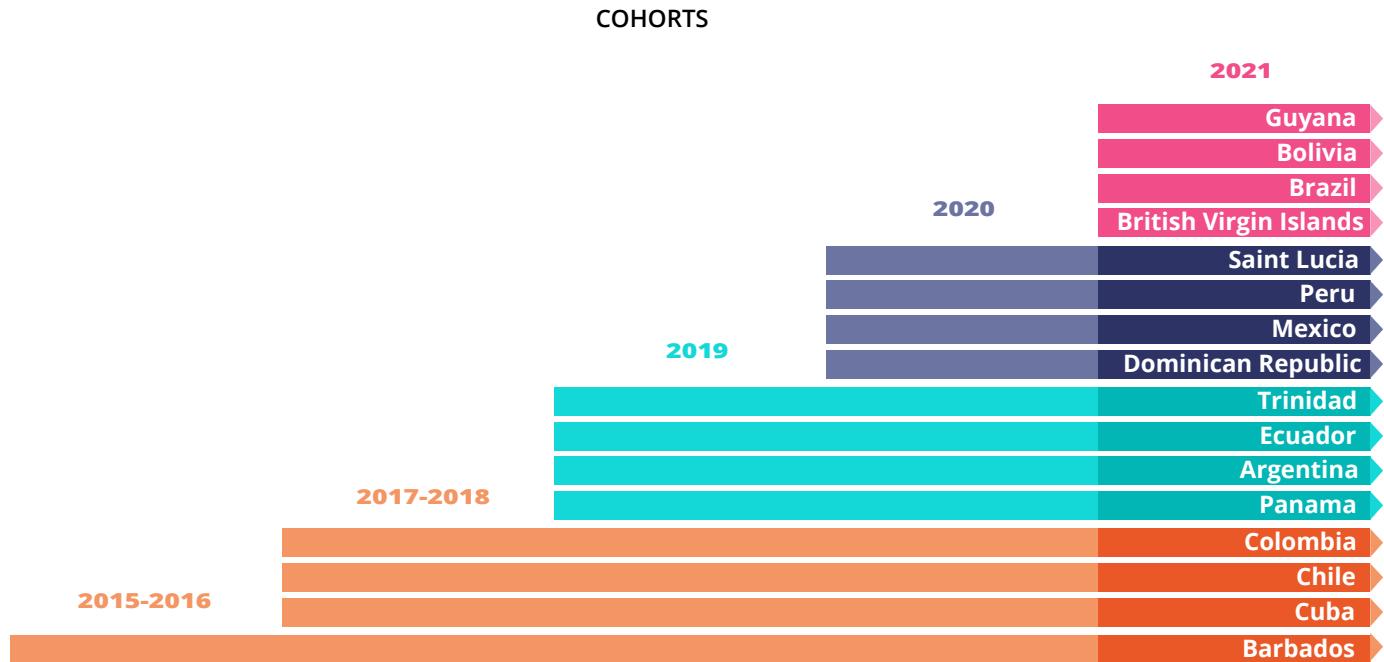
**VISION:** HEARTS will be the institutionalized model of care for cardiovascular risk management, with special emphasis on the control of hypertension and secondary prevention in primary health care in the Americas by 2025.

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## COUNTRIES SCALING THE PROGRAM



# 1. Growing number of countries implementing HEARTS Initiative in the Americas



## 2. Growing number of primary health centers implementing the full HEARTS technical package





**16** countries scaling  
the program

Welcome Cohort 4th:  
Bolivia, Brazil,  
British Virgin Islands  
and Guyana

**478** Primary care centers  
implementing the model

**288** Primary care centers  
reporting at mid-year 2020

**7.8** million people live in the reference  
area of implementing  
primary health care centers

**393,455** patients under new  
treatment protocol

\* Cuba was recognized by the World Hypertension League with the 2020 Organizational Excellence Award in Hypertension Prevention and Control.



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PRIMARY CARE  
HEALTH CENTERS  
IMPLEMENTING  
THE MODEL

La Rioja, Argentina. 2019  
Photo credit: Antonella Rivoire

### 3. Improved coverage and control rates based on country reports

Countries	Number of persons in treatment	Coverage (%) based on the estimate of prevalence		Control among treated (%)	
		Baseline	2020	Baseline	2020
Barbados	No reporting	No reporting	No reporting	No reporting	No reporting
Colombia	45,185	35	58	45	67
Chile	185,759	48	46	64	69
Cuba	65,832	52	69	55	67
Trinidad	12,527	31	33	27	38
Ecuador	7,719	5	9	79	79
Argentina	5,602	22	21	39	33
Panama	52,872	21	38	40	77
Saint Lucia	1,406	19	21	13	9
Peru	7,655	5	8	74	73
Dominican Rep	5,292	32	43	16	18
Mexico	3,606	10	8	46	43

Source: Ministry of Health Report by July 2020

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PRIMARY HEALTH  
CARE CENTERS  
REPORTING AT  
MID-YEAR 2020



Santa Barbara Municipal Health Department, Chile. 2019  
Photo credit: Marta Rivas Ramirez

## 4. A new thematic webpage. HEARTS in the Americas

<https://www.paho.org/en/hearts-americas>

### Web Metrics

From May 1st to December 11th, 2020

The website had **23,491 USERS**  
who engaged in **23,622 SESSIONS**,  
with a total of **49,482 PAGEVIEWS**

The screenshot shows the PAHO HEARTS in the Americas webpage. At the top, there's a navigation bar with links for TOPICS, COUNTRIES, RESOURCES, MEDIA, and ABOUT, along with a DONATE button. Below the navigation is a menu with links for ABOUT HEARTS, TECHNICAL PACKAGE, BLOOD PRESSURE MEASUREMENT, PROTOCOLS AND MEDICATIONS, MEETINGS, PUBLICATIONS & RESOURCES, and VIRTUAL COURSES. The main content area features a section titled "HEARTS in the Americas" with three tabs: CORONAVIRUS DISEASE (COVID-19) OUTBREAK, NCDS AND COVID-19, and COVID-19: COMMUNICATION MATERIALS. Below this is a large orange banner with text about the HEARTS model reaching 2025 and illustrations of medical icons like a heart rate monitor, brain, and pills. Key statistics are displayed: 12 countries in the Region have joined the HEARTS initiative, and 371 health centers are implementing HEARTS. At the bottom, there are two sections: "Global HEARTS Initiative" (describing the WHO-led initiative) and "HEARTS in the Americas" (describing the regional implementation). A map of the Americas highlights countries involved.

By 2025, the HEARTS model will be the model for the cardiovascular disease risk management, including hypertension, diabetes, and dyslipidemia in primary health care in the Americas

12 countries in the Region have now joined the HEARTS initiative

371 health centers implementing HEARTS

**Global HEARTS Initiative**

Global Hearts is an initiative spearheaded by the World Health Organization involving various global actors, including the Centers for Disease Control and prevention of the United States (CDC) and the International Society of Hypertension among global actors. The Department of Noncommunicable Diseases and Mental Health of the Pan American Health Organization (PAHO) leads the implementation of HEARTS in the Region of the Americas, ensuring that implementation actions are aligned with the strategic priorities of the region, particularly with the universal health coverage resolution, strengthening of health systems based on primary care and with the Sustainable Development Goals 2030, specifically those related to the prevention and control of noncommunicable diseases (NCD)

**HEARTS in the Americas**

HEARTS in the Americas is an initiative of the countries, led by the Ministries of Health with the participation of local stakeholders with the technical cooperation of PAHO. The initiative seeks to integrate seamlessly and progressively the delivery of health services and delivery services to promote the adoption of global best practices for the prevention and control of cardiovascular diseases (CVD) and improve the performance of the services through better control of high blood pressure and the promotion of secondary prevention with emphasis on the primary health care. HEARTS is being implemented and expanded in 12 countries of the Region to include 371 health centers across the Region. The HEARTS, which together cover approximately 6 million adults in their respective catchment areas. The HEARTS model will be the model for the cardiovascular disease risk management, including hypertension, diabetes, and dyslipidemia in primary health



<https://www.paho.org/en/hearts-americas>

## 5. Virtual courses for primary health care teams

New courses 2020	Languages	Number of modules	Number of faculty	Number of academic hours	Number of registered Health professionals
Update on hypertension management and cardiovascular risk in primary care level. <a href="https://bit.ly/CVOPS-HTA-RiesgoCardiovascular-APS">https://bit.ly/CVOPS-HTA-RiesgoCardiovascular-APS</a>	Spanish	8	16	20	8,530
Accurate automated blood pressure measurement <a href="https://bit.ly/PAHOVC-Blood-Pressure-Measurement">https://bit.ly/PAHOVC-Blood-Pressure-Measurement</a>	English Spanish Portuguese French	1	animated video	1	1,400
Acute renal injury management for primary Health care team <a href="https://bit.ly/CVOPSInjuriaRenalAguda">https://bit.ly/CVOPSInjuriaRenalAguda</a>	Spanish only	7	20	21	133
<b>Courses 2017 - 2020</b>					
Implementation of the HEARTS Technical Package in Primary Health Care <a href="https://bit.ly/CVOPS-HEARTS">https://bit.ly/CVOPS-HEARTS</a>	English Spanish	11	30	30	66,783
CVD Secondary Prevention <a href="https://bit.ly/CVOPSPrevSecundECV">https://bit.ly/CVOPSPrevSecundECV</a>	Spanish only	9	9	20	35,956
Diagnosis and management of chronic renal disease <a href="https://bit.ly/CVOPSPrevManejoEnfermedadRenalCronica">https://bit.ly/CVOPSPrevManejoEnfermedadRenalCronica</a>	Spanish Portuguese	9	12	22	30,376
Peritoneal dialysis management for multidisciplinary primary care team <a href="https://bit.ly/CVOPSDialisisPeritonealISLАНH">https://bit.ly/CVOPSDialisisPeritonealISLАНH</a>	Spanish	14	19	40	13,370
<b>Total number of participants in all courses 2017-2020</b>	All languages				<b>156,548</b>

## 6. Webinars

Themes	Participants	Zoom metrics only
Cardiovascular Disease training courses overview with partners		<b>320</b>
Acquisition of antihypertensive drugs. Update		<b>207</b>
Practical resources on how to check validated blood pressure devices		<b>840</b>
No data, no progress. HEARTS is a data-driven program		<b>460</b>
HEARTS in the Americas: New developments and resources		<b>402</b>
HEARTS in World Hypertension Day, new virtual course on accurate blood pressure measurement		<b>1318</b>
CVD and COVID-19: Inter-relationship and opportunities for change of two global crisis		<b>504</b>
Bilateral virtual meetings – Review of COVID-19 evolving impact and HEARTS as part of the response – Ten countries (ARG, CHI, COL, CUB, DOM, ECU, MEX, PAN, PER, TTO)		<b>150</b>
Bilateral virtual meetings – In depth review of Progress, Priorities and Planning for 2021 Currently implementing countries (ARG, CHI, COL, CUB, DOM, ECU, MEX, PAN, PER, TTO, SLC) New countries in pre-implementation (BRA, BOL). New countries in pre-engagement (GUY, BHS)		<b>120</b>



**7.8  
million**  
**PEOPLE UNDER  
MODEL OF CARE**

Nuevo Chorrillo, Panama, 2019  
Photo credit: Ana Alveo

## **7. Methodological, Technical Documents and Tools 2020**

Technical resources relevant to the accuracy of blood pressure measurement

(Eng) <https://www.paho.org/en/documents/technical-resources-relevant-accuracy-blood-pressure-measurement>

(Spa) <https://www.paho.org/es/documentos/recursos-tecnicos-relevantes-para-medicion-precisa-presion-arterial>

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Lists of validated automated blood pressure measuring devices

(Eng) <https://www.paho.org/en/documents/lists-validated-automated-blood-pressure-measuring-devices>

(Spa) <https://www.paho.org/es/documentos/lista-dispositivos-medir-presion-arterial-automaticos-validados>

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Recommendations from the HEARTS in the Americas Workshop on Regulatory Frameworks and Procurement of Blood Pressure Measuring Devices for Use in Primary Health

(Eng) <https://www.paho.org/en/documents/recommendations-hearts-americas-workshop-regulatory-frameworks-and-procurement-blood>

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Especificaciones técnicas de la OMS para dispositivos automáticos de medición de la presión arterial no invasivos y con brazalete

(Spa) <https://iris.paho.org/handle/10665.2/53145>

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HEARTS D: Diagnosis and management of type 2 diabetes

(Eng) <https://apps.who.int/iris/handle/10665/331710>

(Spa) <https://www.paho.org/es/documentos/diagnostico-manejo-diabetes-tipo-2-hearts-d>

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HEARTS technical package: Risk-based CVD management

(Eng) <https://www.paho.org/en/documents/hearts-technical-package-risk-based-cvd-management>

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Improving hypertension control in 3 million people: country experiences of programme development and implementation

(Eng) <https://www.paho.org/en/node/74785>

(Spa) <https://iris.paho.org/handle/10665.2/53146>

## 8. Scientific publications 2020

1. Martinez R, Lloyd-Sherlock P, Soliz P, Ebrahim S, Vega E, Ordunez P, McKee M. Trends in premature avertable mortality from non-communicable diseases for 195 countries and territories, 1990-2017: a population-based study. *Lancet Glob Health.* 2020 Apr;8(4):e511-e523. <https://pubmed.ncbi.nlm.nih.gov/32199120/>
2. Sharman JE, O'Brien E, Alpert B, Schutte AE, Delles C, Hecht Olsen M, Asmar R, Atkins N, Barbosa E, Calhoun D, Campbell NRC, Chalmers J, Benjamin I, Jennings G, Laurent S, Boutouyrie P, Lopez-Jaramillo P, McManus RJ, Mihailidou AS, Ordunez P, Padwal R, Palatini P, Parati G, Poultier N, Rakotz MK, Rosendorff C, Saladini F, Scuteri A, Sebba Barroso W, Cho MC, Sung KC, Townsend RR, Wang JG, Willum Hansen T, Wozniak G, Stergiou G. *Lancet Commission on Hypertension Group.* Lancet Commission on Hypertension group position statement on the global improvement of accuracy standards for devices that measure blood pressure. *J Hypertens.* 2020 Jan;38(1):21-29. <https://pubmed.ncbi.nlm.nih.gov/31790375/>
3. Picone DS, Padwal R, Campbell NRC, Boutouyrie P, Brady TM, Olsen MH, Delles C, Lombardi C, Mahmud A, Meng Y, Mokwatsi GG, Ordunez P, Phan HT, Pucci G, Schutte AE, Sung KC, Zhang XH, Sharman JE. Accuracy in Measurement of Blood Pressure (AIM-BP) Collaborative. How to check whether a blood pressure monitor has been properly validated for accuracy. *J Clin Hypertens (Greenwich).* 2020 Oct 5. <https://pubmed.ncbi.nlm.nih.gov/33017506/>
4. Skeete J, Connell K, Ordunez P, DiPette DJ. Approaches to the Management of Hypertension in Resource-Limited Settings: Strategies to Overcome the Hypertension Crisis in the Post-COVID Era. *Integr Blood Press Control.* 2020 Sep 28;13:125-133. <https://pubmed.ncbi.nlm.nih.gov/33061561/>
5. Ebrahim S, Ordunez P, Lloyd-Sherlock P, McKee M, Martinez R, Soliz P. Improving the indicator for premature deaths from noncommunicable diseases. *Bull World Health Organ.* 2020 Jun 1;98(6):438-440. <https://pubmed.ncbi.nlm.nih.gov/32514220/>
6. Valdés González Y, Campbell NRC, Pons Barrera E, Calderón Martínez M, Pérez Carrera A, Morales Rigau JM, Afonso de León JA, Pérez Jiménez V, Landrove Rodríguez O, DiPette DJ, Giraldo G, Orduñez P. Implementation of a community-based hypertension control program in Matanzas, Cuba. *J Clin Hypertens (Greenwich).* 2020 Feb;22(2):142-149. <https://pubmed.ncbi.nlm.nih.gov/31967722/>
7. Ordunez P, Campbell NR. Smoking tobacco, the major cause of death and disability in Cuba. *Lancet Glob Health.* 2020 Jun;8(6):e752-e753. <https://pubmed.ncbi.nlm.nih.gov/32446341/>
8. DiPette DJ, Goughnour K, Zuniga E, Skeete J, Ridley E, Angell S, Brettler J, Campbell NRC, Coca A, Connell K, Doon R, Jaffe M, Lopez-Jaramillo P, Moran A, Orias M, Pineiro DJ, Rosende A, González YV, Ordunez P. Standardized treatment to improve hypertension control in primary health care: The HEARTS in the Americas Initiative. *J Clin Hypertens (Greenwich).* 2020 Oct 12. <https://pubmed.ncbi.nlm.nih.gov/33045133/>
9. Lombardi C, Sharman JE, Padwal R, Picone D, Alcolea E, Ayala R, Gittens A, Lawrence-Williams P, Malcolm T, Neira C, Perez V, Rosende A, Tesser J, Villacres N, Campbell NRC, Ordunez P. Weak and fragmented regulatory frameworks on the accuracy of blood pressure-measuring devices pose a major impediment for the implementation of HEARTS in the Americas. *J Clin Hypertens (Greenwich).* 2020 Oct 6. <https://pubmed.ncbi.nlm.nih.gov/33022866/>
10. Martinez R, Soliz P, Mujica OJ, Reveiz L, Campbell NRC, Ordunez P. The slowdown in the reduction rate of premature mortality from cardiovascular diseases puts the Americas at risk of achieving SDG 3.4: A population trend analysis of 37 countries from 1990 to 2017. *J Clin Hypertens (Greenwich).* 2020 Aug;22(8):1296-1309. <https://pubmed.ncbi.nlm.nih.gov/33289261/>
11. Campbell NRC, Khalsa T, Ordunez P, Rodriguez Morales YA, Zhang XH, Parati G, Padwal R, Tsuyuki RT, Cloutier L, Sharman JE. Brief online certification course for measuring blood pressure with an automated blood pressure device. A free new resource to support World Hypertension Day Oct 17, 2020. *J Clin Hypertens (Greenwich).* 2020 Oct;22(10):1754-1756. <https://pubmed.ncbi.nlm.nih.gov/32882074/>

# 393,455

PATIENTS UNDER NEW  
TREATMENT PROTOCOL



Yucatan, Mexico. 2020  
Photo credit: Daniel Fernandez

# BUILDING BACK BETTER WITH **HEARTS IN THE AMERICAS**



Remember the 3 W's to reduce risk of COVID-19: Wear a mask. Wash your hands. Watch your distance. Isolate if ill

*Thanks to the Centers for Disease Prevention and Control (CDC) and the Resolve to Save Lives Initiative of Vital Strategies for their financial and technical support.  
Thanks to the World Hypertension League for continuous technical support.*

