

# Main facilitators and challenges to implementation

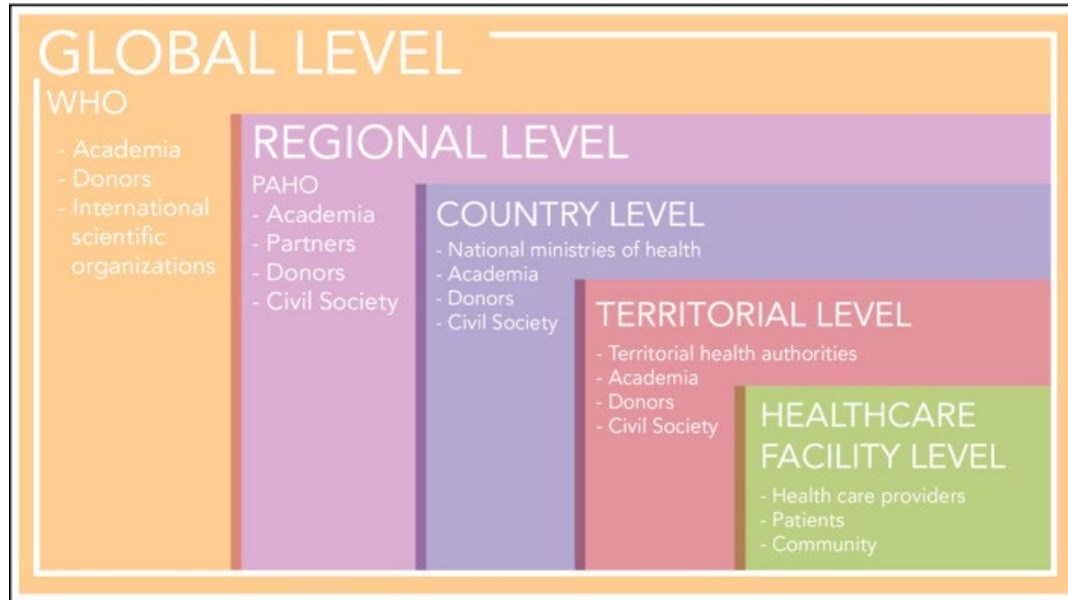
---

Gloria Giraldo, MPH, DrPH

SubRegional Programme for the Caribbean

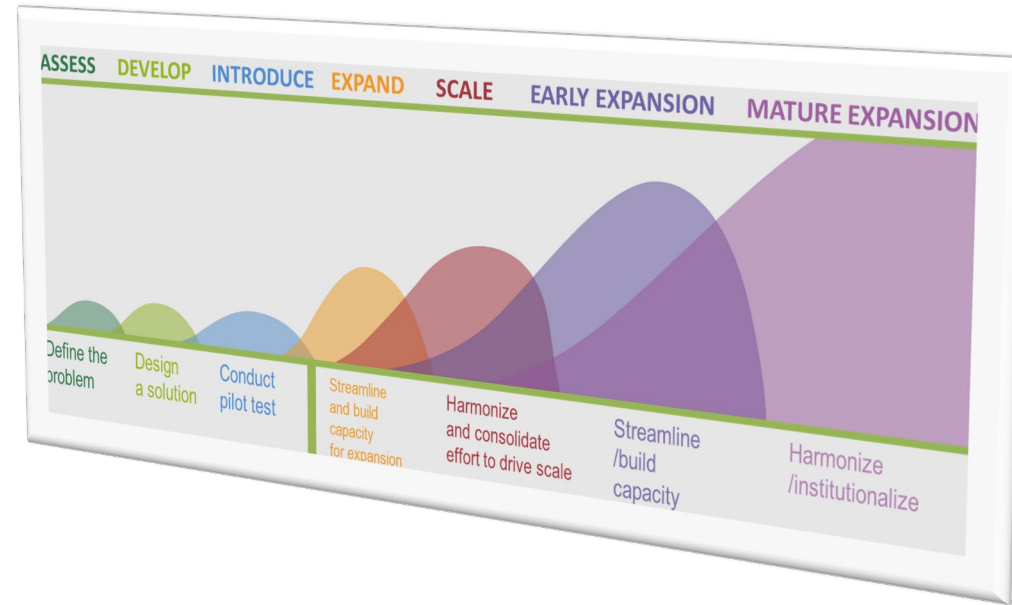
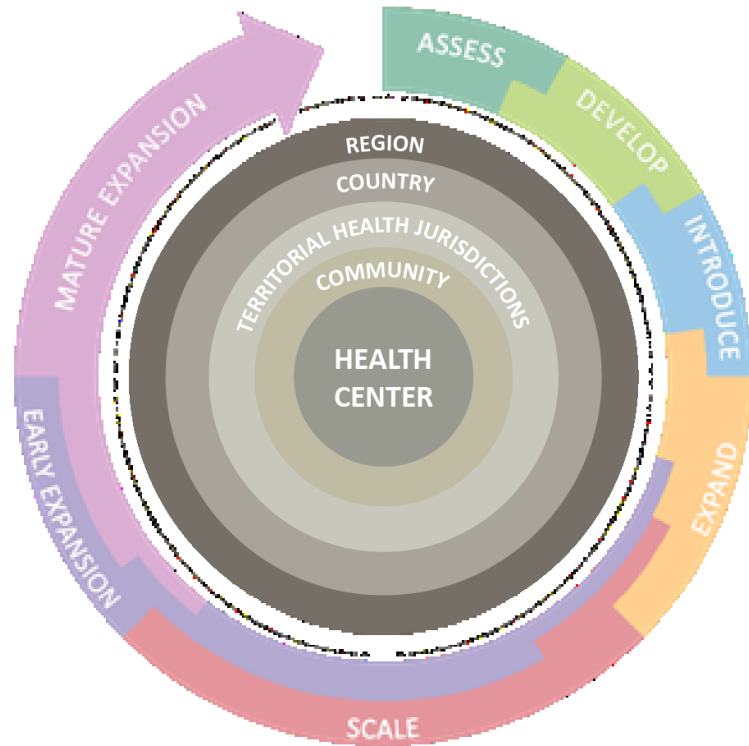


# HEARTS in the Americas = complex multi-level set of interventions



- set of complex, multi-level interventions containing several interacting components
- delivered and received by individuals and communities as well by health providers and health facilities with different level of organization and resources.

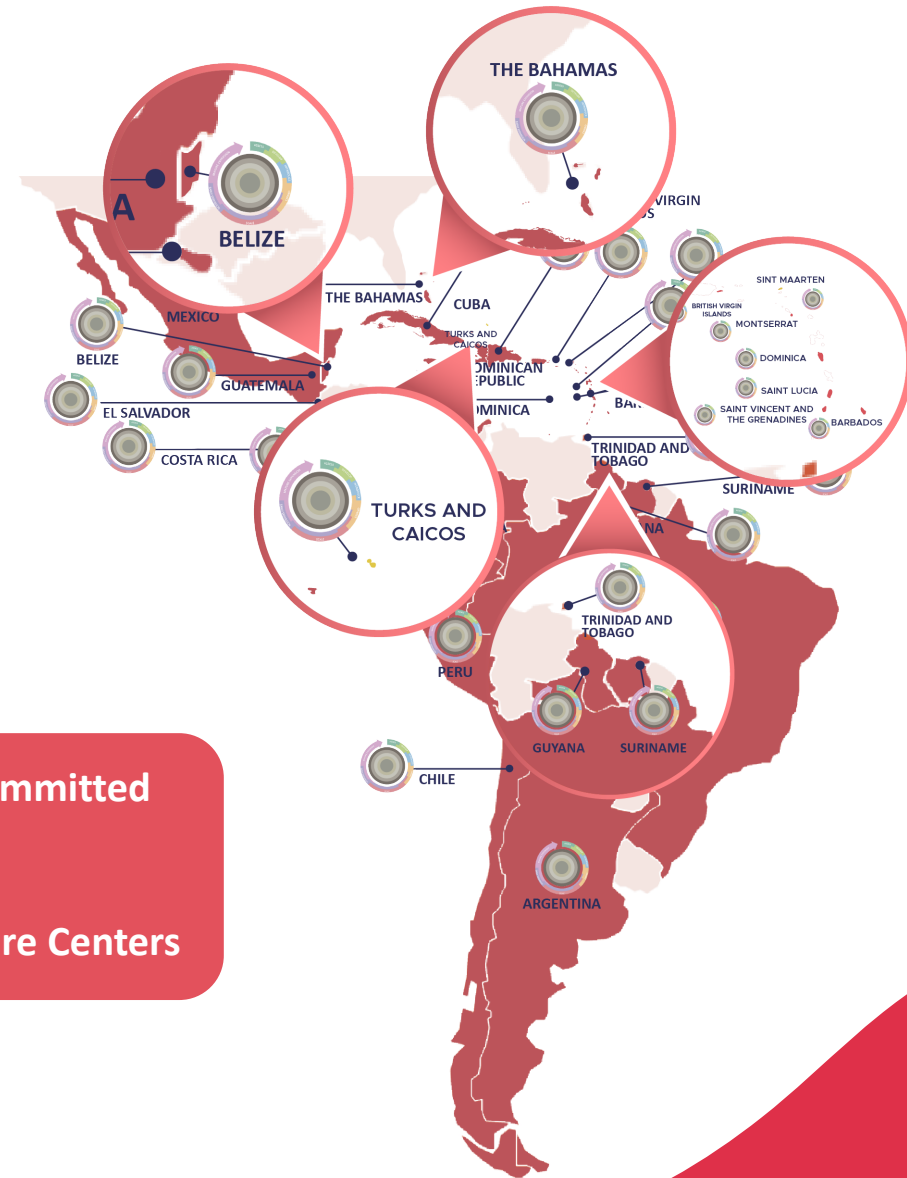
# Re-iterative staged model of implementation



# HEARTS in the Caribbean

COUNTRIES & TERRITORIES	
1	Antigua y Barbuda
2	Barbados
3	British Virgin Islands
4	Dominica
5	Grenada
6	Montserrat
7	Saint Lucia
8	St. Kitts & Nevis
9	St. Vincent and the Grenadines
10	Anguilla
11	Bahamas
12	Turks and Caicos
13	Belize
14	Guyana
15	Bermuda
16	Suriname
17	Trinidad & Tobago
18	Sint Maarten

- 32 countries & territories committed to implementing HEARTS
- 50% in the Caribbean
- More than 3,000 Primary Care Centers



# Compendium of HEARTS progress – Special Issue +

## Pan American Journal of Public Health – Special Issue HEARTS

Received: 21 October 2020 | Revised: 10 December 2020 | Accepted: 13 December 2020  
DOI: 10.1111/paj.14157

ORIGINAL PAPER

WILEY

### Mapping stages, barriers and facilitators to the implementation of HEARTS in the Americas initiative in 12 countries: A qualitative study

Gloria P. Giraldo DrPH<sup>1</sup> | Kristy T. Joseph MA<sup>2</sup> | Sonia Y. Angell MD<sup>3</sup> | Norm R. C. Campbell MD<sup>4</sup> | Kenneth Connell MD<sup>5</sup> | Donald J. DiPette MD<sup>6</sup> | Maria C. Escobar MD<sup>7</sup> | Yamile Valdés-González MD<sup>8</sup> | Marc G. Jaffe MD<sup>9</sup> | Taraleen Malcolm PhD<sup>10</sup> | Javier Maldonado MD<sup>11</sup> | Patricio Lopez-Jaramillo PhD<sup>12,13</sup> | Michaels Hecht Olsen MD, PhD, DMS<sup>12,14,15</sup> | Pedro Ordunez PhD<sup>1</sup>

<sup>1</sup>Department of Non-Communicable Diseases and Mental Health, Pan American Health Organization, Washington, DC, USA

<sup>2</sup>Center for Global Health, Centers for Disease Control and Prevention, Atlanta, GA, USA

<sup>3</sup>College of Physicians and Surgeons of Columbia University, New York, NY, USA

<sup>4</sup>Department of Medicine, Physiology and Pharmacology and Community Health Sciences, O'Brien Institute for Public Health and Libin Cardiovascular Institute of Alberta, University of Calgary, Calgary, AL, Canada

<sup>5</sup>University of West Indies, Bridgetown, Barbados

<sup>6</sup>University of South Carolina, Columbia, SC, USA

<sup>7</sup>Pan American Health Organization, Santiago, Chile

<sup>8</sup>University Hospital "General Calisto García", Havana, Cuba

<sup>9</sup>Kaiser Permanente, San Francisco, CA, USA

<sup>10</sup>Pan American Health Organization, Port of Spain, Trinidad and Tobago

<sup>11</sup>Secretariat of Health of Bogotá, Bogotá, Colombia

<sup>12</sup>Lancet Commission on Hypertension Group, London, UK

<sup>13</sup>University of Santander, Bucaramanga, Colombia

<sup>14</sup>Holbaek Hospital, Holbaek, Denmark

<sup>15</sup>University of Southern Denmark, Odense, Denmark

**Correspondence**  
Pedro Ordunez, MD PhD, Department of Non-Communicable Diseases and Mental Health, Pan American Health Organization, Washington, DC, USA.  
Email: ordunez@paho.org

#### Abstract

The World Health Organization (WHO) Global Hearts Initiative offers technical packages to reduce the burden of cardiovascular diseases through population-wide and targeted health services interventions. The Pan American Health Organization (PAHO) has led implementation of the HEARTS in the Americas Initiative since 2016. The authors mapped the developmental stages, barriers, and facilitators to implementation among the 371 primary health care centers in the participating 12 countries. The authors used the qualitative method of document review to examine cumulative country reports, technical meeting notes, and reports to regional stakeholders. Common implementation barriers include segmentation of health systems, overcoming health care professionals' scope of practice legal restrictions, and lack of health

**PAHO** Pan American Health Organization World Health Organization

**PAN AMERICAN JOURNAL OF PUBLIC HEALTH** 100 YEARS

**SPECIAL ISSUE HEARTS IN THE AMERICAS**

**Editorials**  
Scaling up cardiovascular disease management in primary care through HEARTS in the Americas [Simon C]  
HEARTS in the Americas: saving lives from the world's deadliest disease [Frieden T et al]

**Special Reports**  
HEARTS in the Americas: innovations for improving hypertension and cardiovascular disease risk management in primary care [Ordunez P et al]  
Integrating hypertension and diabetes management in primary health care settings: HEARTS as a tool [Flood O et al]  
Building the health-economic case for scaling up the WHO HEARTS hypertension control package in low- and middle-income countries [Moran A et al]

**Original Research Articles**  
Efficacy of a standardized and simplified strategy for the treatment of high blood pressure in Chile: the HEARTS initiative in the Americas [Molina L et al]  
Preliminary results of the HEARTS initiative in Mexico: facilitators and barriers in information systems [Casales-Ramírez M et al]  
Monitoring and evaluation platform for HEARTS in the Americas: improving population-based hypertension control programs in primary health care [Pardo P et al]  
Implementation of the HEARTS initiative in Argentina: initial results [Rodríguez G et al]  
HEARTS in Cuba: Experiences after 5 years of implementation [Ibáñez González P et al]  
Implementation design: HEARTS healthy habits and lifestyles in the first level of care in Mexico [Sánchez N et al]  
Political will and governance, key to HEARTS implementation in Peru [Pinedo V et al]  
Improving cardiovascular health with the patient-centered, integrated primary care HEARTS model in Trinidad and Tobago [Schoon R et al]  
Addressing population dietary sodium reduction in the Americas: updated Regional Sodium Reduction Targets 2021-2025 [Almond L et al]

Association between population hypertension control and ischemic heart disease and stroke mortality in 30 countries of the Americas, 1999-2019: an ecological study [Martínez R et al]

Assessing costs of a hypertension program in primary care: evidence from the HEARTS program in Mexico [Chávez C et al]

Impact of the HEARTS initiative in a second-level health institution in Colombia [Ríos-Rivera S et al]

**Brief communications**  
Profile of blood pressure measurement devices purchased in Chile 2018-2020 [Soto P et al]

Evaluating progress and addressing actions to eliminate industrially produced trans-fatty acids in the Americas [Becerra-Galindo Pacilio S et al]

Chile's public healthcare sector hypertension control rates before and during the pandemic and HEARTS implementation [Baralot F et al]

Improving cardiovascular health in primary care in Saint Lucia through the HEARTS initiative [Oy Phibert S et al]

The HEARTS app: a clinical tool for cardiovascular risk and hypertension management in primary health care [Ordunez P et al]

Moving toward improved access to medicines and health technologies for cardiovascular disease [Giron V et al]

**Opinion and Analysis**  
Ups and downs of hypertension control in Canada: critical factors and lessons learned [Campbell N et al]

Control of arterial hypertension: a pending issue [Sosa López A et al]

Developing population-based hypertension control programs [Joffe M et al]

Civil society's role in improving hypertension control in Latin America [Chamorro R et al]

**Current topics**  
HEARTS in the Americas appraisal checklist and clinical pathway for comprehensive hypertension management in primary care [Rosende A et al]

Integrated approach for noncommunicable disease management in the Americas [Lacort S et al]

**Letters to the editor**  
Concerning "The HEARTS app: a clinical tool for cardiovascular risk and hypertension management in primary health care" [Muller Laguna J et al]

Authors' response to the letter "Concerning The HEARTS app: a clinical tool for cardiovascular risk and hypertension management in primary health care" [Ordunez P et al]

Peer-reviewed articles available and over 5,000 visits to the journal's website.

A century supporting public health in the Americas 100 YEARS



**TABLE 1. Key components of successful population-based hypertension control programs**

Component	Description
Leadership	Prioritize hypertension control Facilitate adequate resource allocation
Screening, outreach and patient follow up	Undertake opportunistic screening in clinics and systematic outreach Address the entire population at risk Develop mechanisms to ensure appropriate follow up
Treatment protocols	Ensure a simple and standardized clinical pathway for diagnosis and treatment Use as opportunity for consensus building Facilitate medication procurement and task-sharing
Medications	Prefer small number of high-quality and effective medications and doses Prefer affordability with low-cost or no-cost medications Use single-pill combination medications to reduce burden and increase control
Task-sharing	Allow larger workforce to address hypertension Ensure personnel work at their maximum scope Is more efficient and allows for greater opportunities to deliver care
Monitoring and reporting	Ensure that metrics are easy to measure, shared widely and distributed regularly Standardize to allow for comparison with other centers and programs Allow for identification of opportunities for improvement and successes

Jaffe MG et al. Rev Panam Salud Publica. 2022 Sep 15;46:e153. <https://pubmed.ncbi.nlm.nih.gov/36128474/>

# Detailed Guidance & Tools



Table 10: Checklist

TASK	Status of completion
Official request to join HEARTS	X
Formal acceptance	X
Coordinating team	X
Situational analysis	X
Strategic plan	X
Training of coordinating team	X
Treatment protocol and clinical pathway	X
Monitoring & Evaluation	X
Inclusion of academic partner	X
Selected localities for initial implementation	X
HEARTS virtual courses enrollment and completion	X
Training of primary care teams – National workshop – Train-the-trainers modality	X
Launch implementation	X

# Governance & scale up plan

---

1. A well-defined governance structure
2. Relevant stakeholders representing the main work areas
3. Having a functioning governance structure
4. Development of updated strategic plan and an operational plan



# Set scale up targets from inception

---

1. Develop a solid projection of scale up to 2025
2. Develop and submit a scale up plan
3. **Monitor** consistently number of primary care centers implementing HEARTS

# Foundational step: Developing a clinical pathway

---

- Follow the steps of the development of the HEARTS clinical pathway
- Set the stage for mandatory use in all primary health care settings
- Train primary care teams in the use of the clinical pathway
- Monitor and work towards improvement of the clinical pathway

# Medications

---

- National Medication Formulary Updated according 2021 WHO EML
- Inclusion of FDC
- Availability of High-intensity Statins in PHC

# Monitoring and evaluation

---

1. Technical Team/ Technical person
2. Implementation Plan for M & E
3. Training for M & E
4. Implementing SM&E
5. PHC that report data based on the number of PHC implementing HEARTS

# Team-based care

---

- Increased HTN Treatment management by Nurses.
- BP measurement by Community Health Workers.
- Treatment follow-up by Pharmacists (adherence and persistence).



# Exclusive use of validated BPMDs in PHC

---

1. Regulation of marketing authorization
2. Regulation of purchases of BPMDs w public funds
3. Purchases of BPMDs in2022
4. Other measures (database, campaign, capacity building)

# Training and education

---

- Establish policy/mechanism to ensure that PHC providers in HEARTS implementing centers are utilizing the PAHO virtual campus and receiving certifications
  - Entire set of HEARTS-related courses
- Early on, establish the course on Accurate BP measurement as mandatory for PHC providers from HEARTS implementing centers

# Thank you

---

Gloria Giraldo, MPH, DrPH

SubRegional Programme for the Caribbean

