



# **APPLYING LESSONS FROM COSTA RICA TO EQUITY ORIENTED PRIMARY CARE**

**TUESDAY MARCH 8, 2022 | 1:00PM ET | 10:00AM PT**

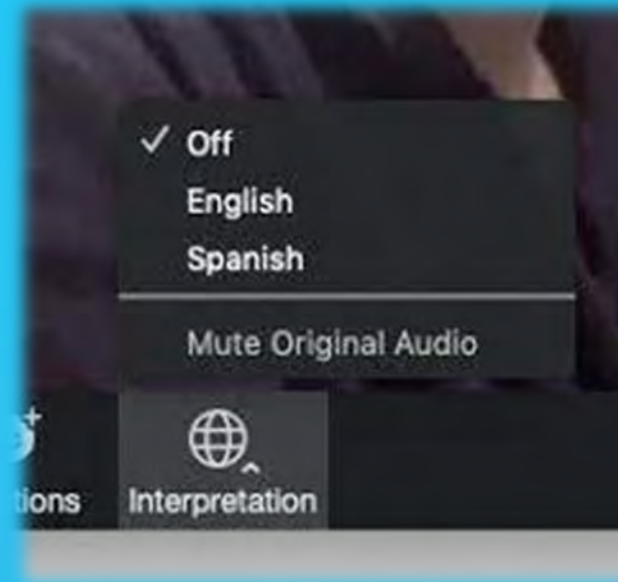
 **Health Leads**



# LANGUAGE INTERPRETATION

## Interpretación del idioma

To listen to this presentation in Spanish, click the globe interpretation icon and select your language.



Para escuchar esta presentación en español, hacer clic en el ícono del mundo de interpretación y seleccionar su idioma.

# CLOSED CAPTIONS

To enable closed captioning, please click on the "Live Transcript" icon and select "Show Subtitles"



# HOUSEKEEPING



Use Zoom chat feature for comments/reactions/links



Click the "Live Transcript" button to enable closed captioning



Use Zoom Q&A to ask a question



Poll and survey will be shown at the end of the webinar



Recording & slides will be shared after the webinar



# AGENDA

## Welcome & Introductions

Jacquelyn S. Dalton, MPH

## EOPC Overview

Jacquelyn S. Dalton, MPH

## Coordinated Health Systems

Madeline Pesec, MD, ScM

Hannah Ratcliffe, MSc

## Facilitated Discussion

All Panelists

## Moderated Q&A

All Panelists

## Key Takeaways and Closing

Jacquelyn S. Dalton, MPH



**MADELINE PESEC,  
MD, SCM**

**BRIGHAM & WOMEN'S HOSPITAL  
& ARIADNE LABS**



**HANNAH  
RATCLIFFE, MSc**

**ARIADNE LABS  
& WAYMARK**



**JACQUELYN S.  
DALTON, MPH**

**HEALTH LEADS**



## **JACQUELYN S. DALTON, MPH**

DIRECTOR OF COMMUNITY ENGAGEMENT  
**HEALTH LEADS**



# Health Equity & Innovative Codesign in Primary Health Care

The Equity-Oriented Primary Care  
Innovation Collaborative



# Defining Care Coordination

## Care coordination

- The deliberate organization of patient care activities and sharing of information among all the participants concerned with a patient's care to facilitate the appropriate delivery of health care services.
- Patient needs and preferences are communicated to the right people at the right time
- IOM deemed care coordination as a ***key strategy to improve the American health care system and outcomes for patients, providers and payors.***

1. Chapter 2. What is Care Coordination?. Content last reviewed June 2014. Agency for Healthcare Research and Quality, Rockville, MD.

<https://www.ahrq.gov/ncepcr/care/coordination/atlas/chapter2.html>

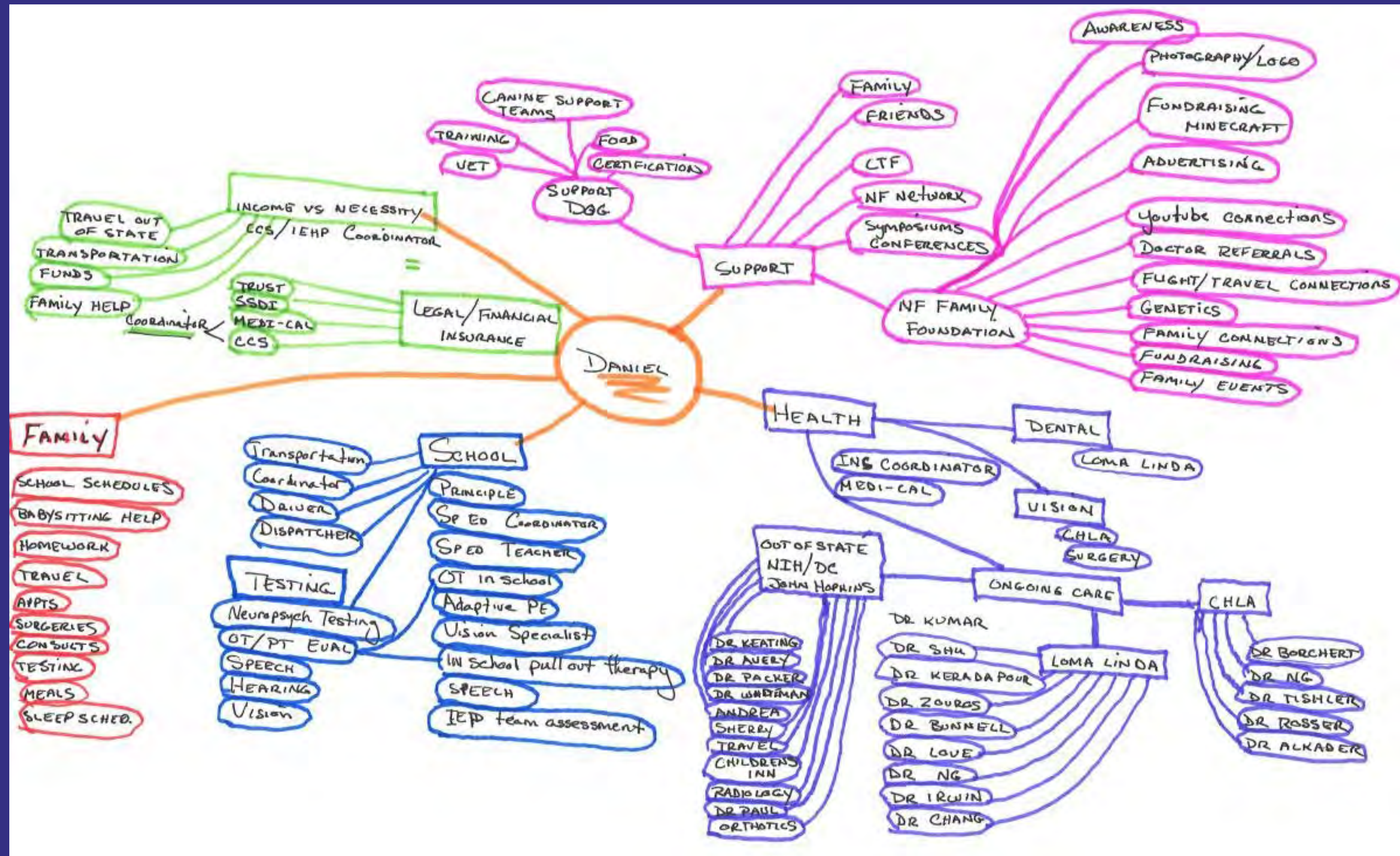
2. Care Coordination. Content last reviewed August 2018. Agency for Healthcare Research and Quality, Rockville, MD. <https://www.ahrq.gov/ncepcr/care/coordination.html>

# Describing the US Healthcare System's Care Coordination

- Disjointed, unclear, inconsistent, less than efficient
- Confusing, a web of confusion, exhausting to navigate
- Prior to the pandemic, only 3% of U.S. healthcare spending was invested in primary care
- Patients present with unmet social needs
- Expensive, repetitive, convoluted journey of care



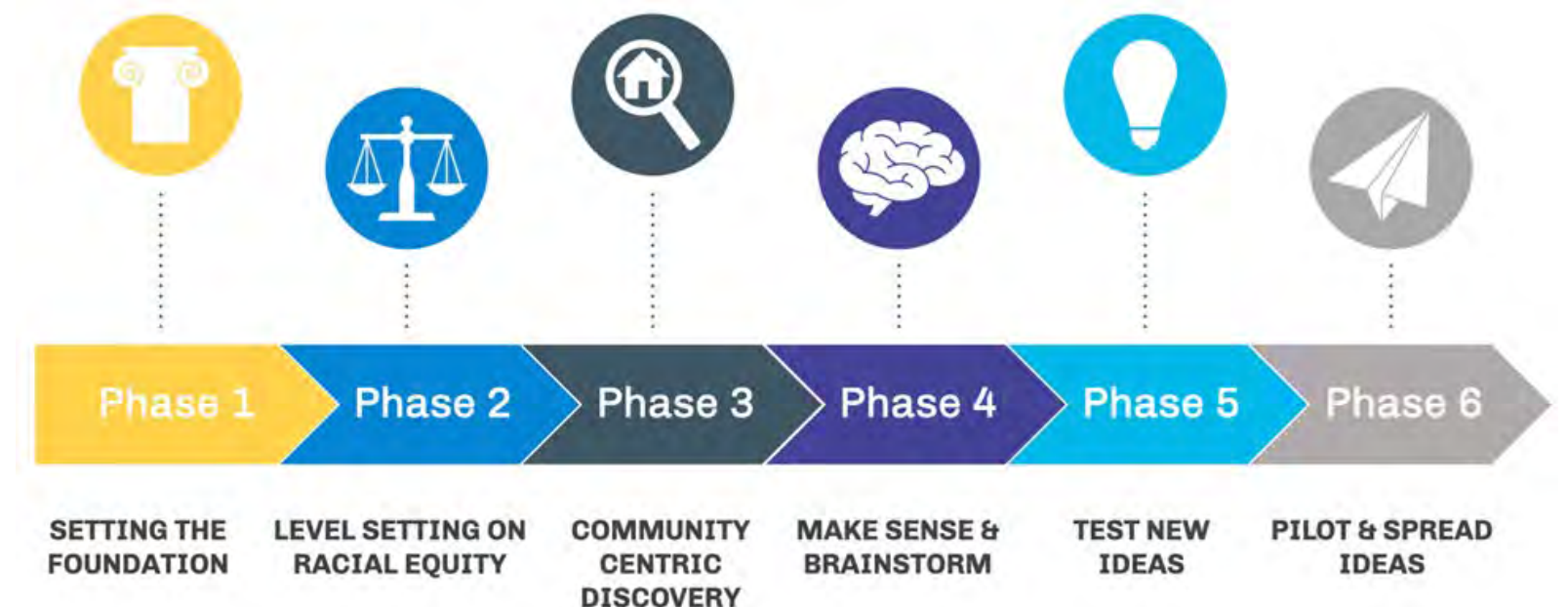
# Snapshot of Care Coordination in the US





# Equity-Oriented Primary Care Innovation Collaborative

- Building an equitable system of care requires investment in innovation, collaboration and engagement
- We heard from healthcare providers and CBO leaders who championed health equity:
  - Sustainable transformation of care happens at the systems' level
  - Clear intention for health equity
  - Prioritization of community/patient voice
  - Sustainable for success.
- Areas of Innovation:
  1. Unearth Existing Racial and Institutional Bias
  2. Coordination with Community Partners
  3. Applying Sustainability





# Designing Community Integrated Health Systems

## Community Integrated Health System

Integrated healthcare networks partnering with public health and community organizations to reduce community health risk factors and provide coordinated care.



**Family Medicine Practice  
of Karen L. Smith MD, PA.**



**MATTHEW WALKER**  
Comprehensive Health Center, Inc.

## **MADELINE PESEC, MD, SCM**

INTERNAL MEDICINE & PEDIATRICS RESIDENT  
**BRIGHAM & WOMEN'S HOSPITAL**  
PRIMARY HEALTH CARE RESEARCH ASSISTANT  
**ARIADNE LABS**



## **HANNAH RATCLIFFE, MSC**

AFFILIATE FACULTY  
**ARIADNE LABS**







# PRIMARY HEALTH CARE IN COSTA RICA

JOURNEY TO COMMUNITY-BASED, COMPREHENSIVE, ACCESSIBLE PRIMARY HEALTH CARE

Hannah Ratcliffe, MSc

*Affiliate Faculty, Ariadne Labs*

*Process & Quality Lead, Waymark*

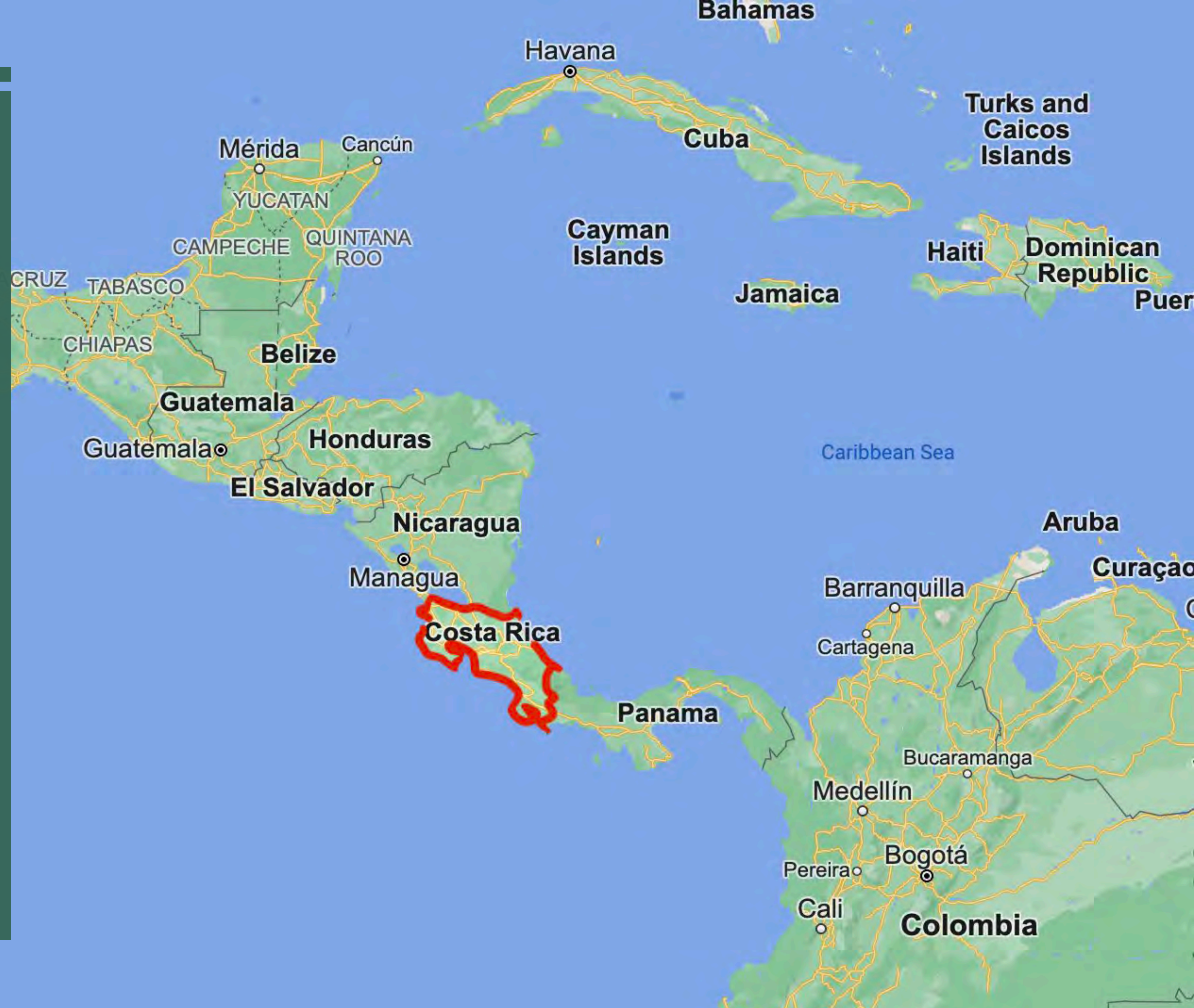
Madeline Pesec, MD, MSc

*Internal Medicine and Pediatrics Resident, Brigham and Women's Hospital*

*Research Assistant, Ariadne Labs*

# INTRODUCTION TO COSTA RICA

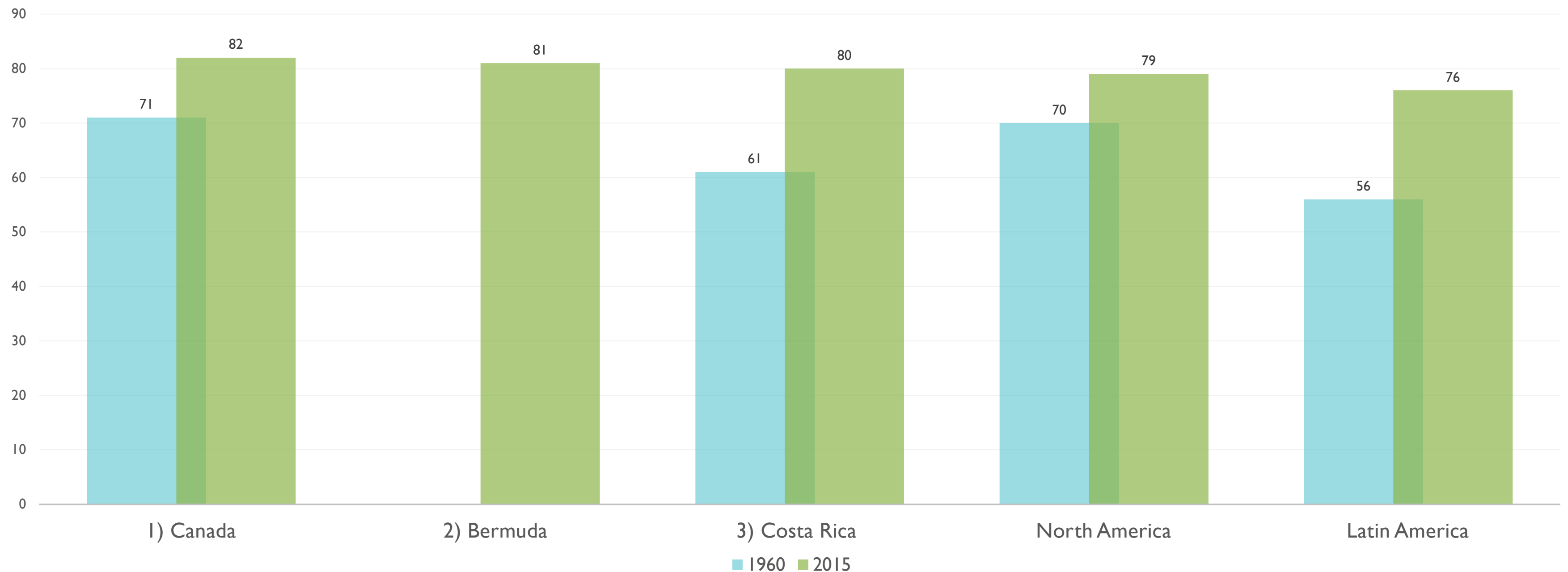
- Central American country with population of approx. 5 million
- Unique political history: stable socialist democracy since 1949, with no national army
- Middle income country with GDP per capita ~ \$12,000 USD
- Majority of health care delivered through public hospitals/clinics since 1973.





# COSTA RICA IS A PHC EXEMPLAR:

3<sup>RD</sup> HIGHEST LIFE EXPECTANCY IN THE WESTERN HEMISPHERE



# SOME OF THE BEST COVERAGE RATES OF ANY LOW- AND MIDDLE- INCOME COUNTRY

★ TOP RESULT IN LMIC

Children with diarrhea receiving appropriate treatment

70.0%

no trend data available



COMPARE TO OTHER COUNTRIES →

Antenatal care coverage (4+ visits)

90.0%



COMPARE TO OTHER COUNTRIES →

Continuity of care: DTP3 dropout rate

1.0%



COMPARE TO OTHER COUNTRIES →

Continuity of care: Antenatal care dropout rate

8.0%



COMPARE TO OTHER COUNTRIES →



# A TOP PERFORMER ACROSS LOW- AND MIDDLE- INCOME COUNTRIES FOR OUTCOMES

Under-five mortality rate (per 1,000 live births)

10



COMPARE  
TO OTHER  
COUNTRIES →

★ TOP RESULT IN LMIC

Adult mortality from non-communicable diseases

12%



COMPARE  
TO OTHER  
COUNTRIES →

Maternal mortality ratio (per 100,000 live births)

25

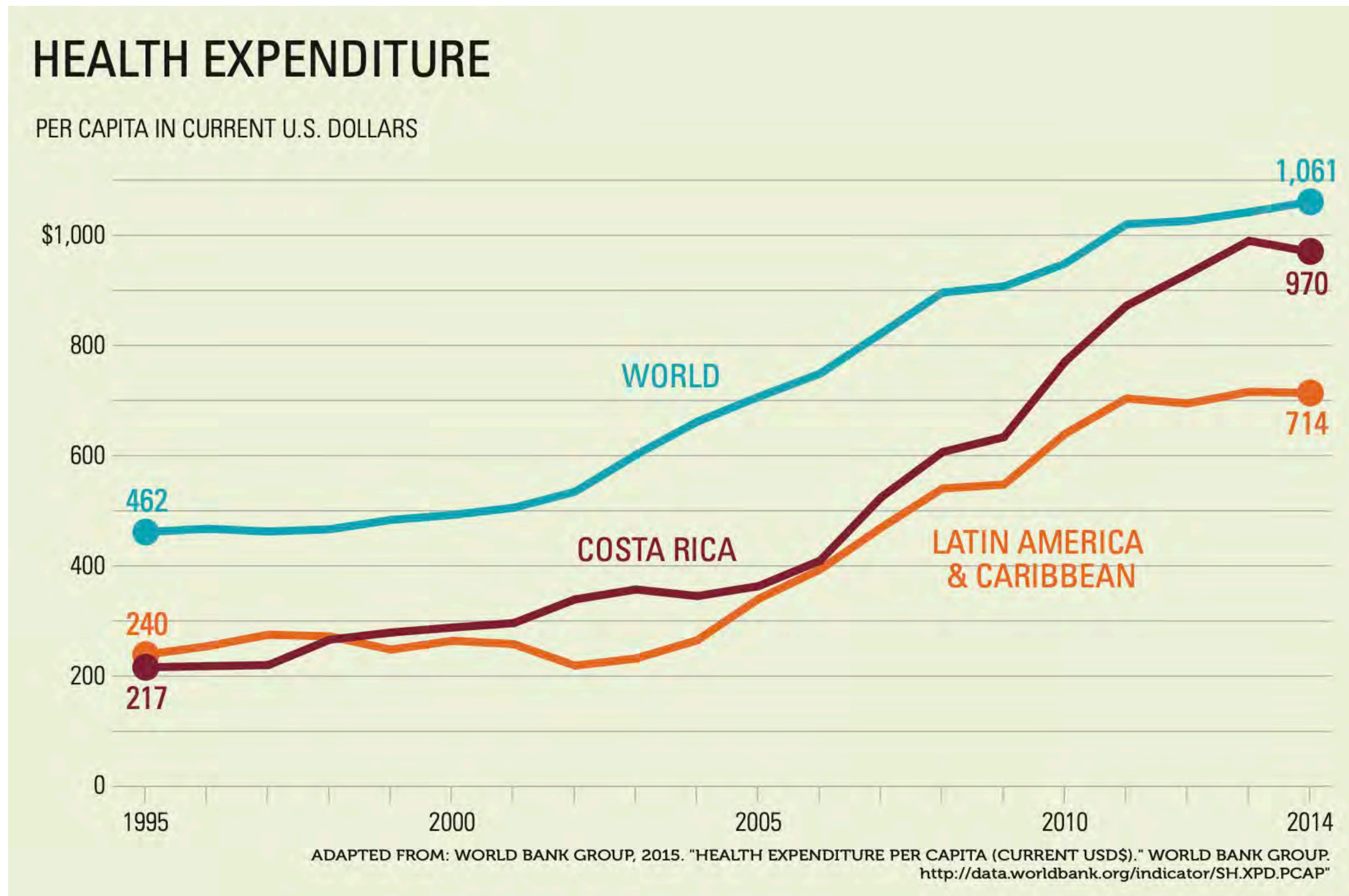


COMPARE  
TO OTHER  
COUNTRIES →





# ALL ACHIEVED THROUGH RELATIVELY LOW EXPENDITURE





# HOW DID THEY DO IT?

- A strong Primary Health Care system is at the heart of Costa Rica's success
- Costa Rica's Primary Health Care system delivers care that is continuous, comprehensive, coordinated, and person-centered



Continuous



Comprehensive



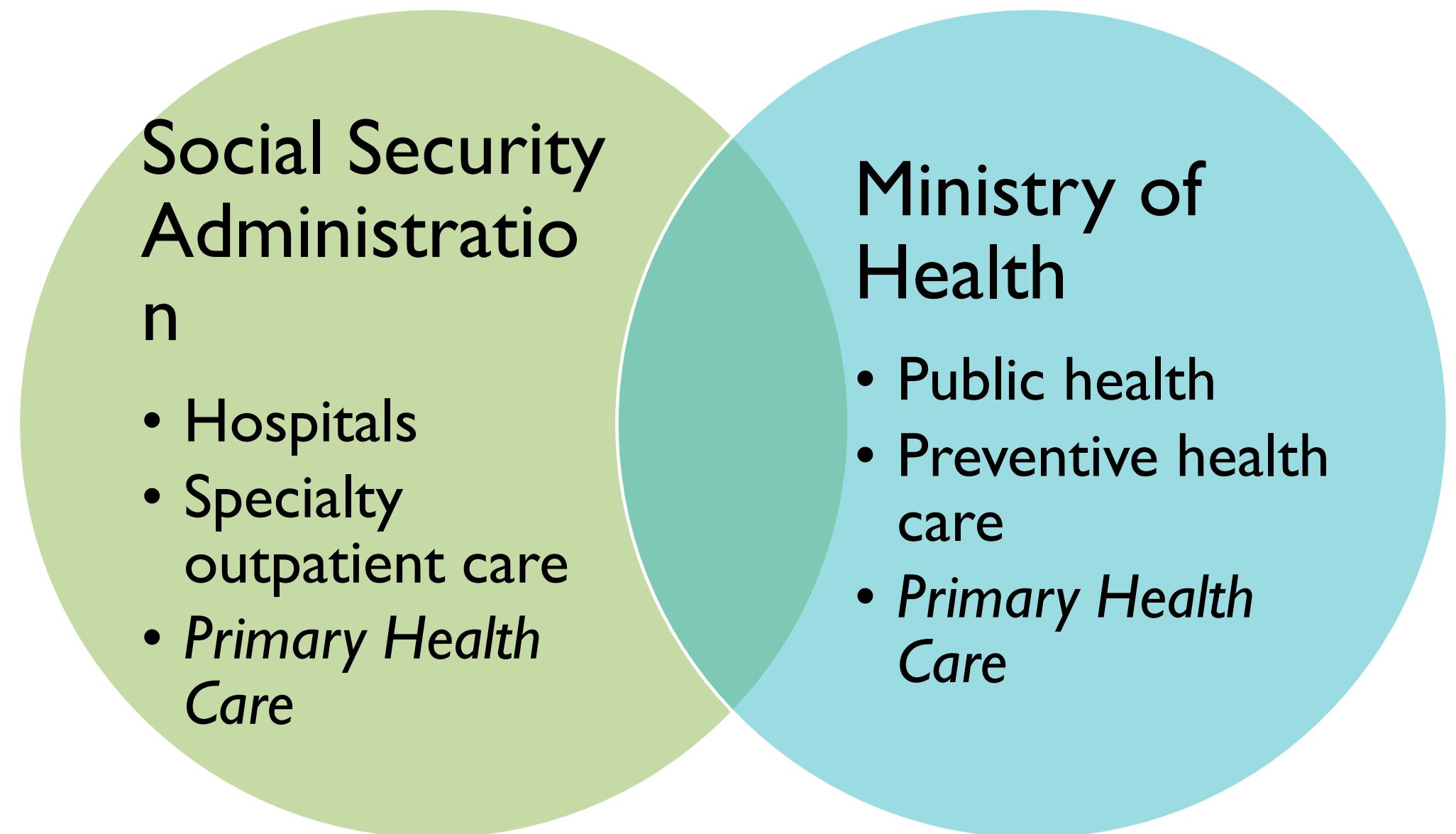
Coordinated



Person-Centered

# IMPETUS FOR REFORM IN THE EARLY 1990s

- Strong history of community-centric innovative public health efforts and primary health care models in 1950-1970s
- 1980s saw decreased public funding for public health and primary care efforts
- Duplicative coverage between the Social Security Administration and Ministry of Health





# THE SOLUTION: PRIMARY HEALTH CARE REFORM

- The Primary Health Care reform was developed by physicians and public health experts, and drew heavily on Costa Rica's history of strong public health and primary care programs
- Worked to develop buy in from a wide range of stakeholders prior to passing the law for reform
- The re-organization of primary care was nestled in a larger health care system reform, parts of which were funded by international development organizations

Integration of public health and primary health care

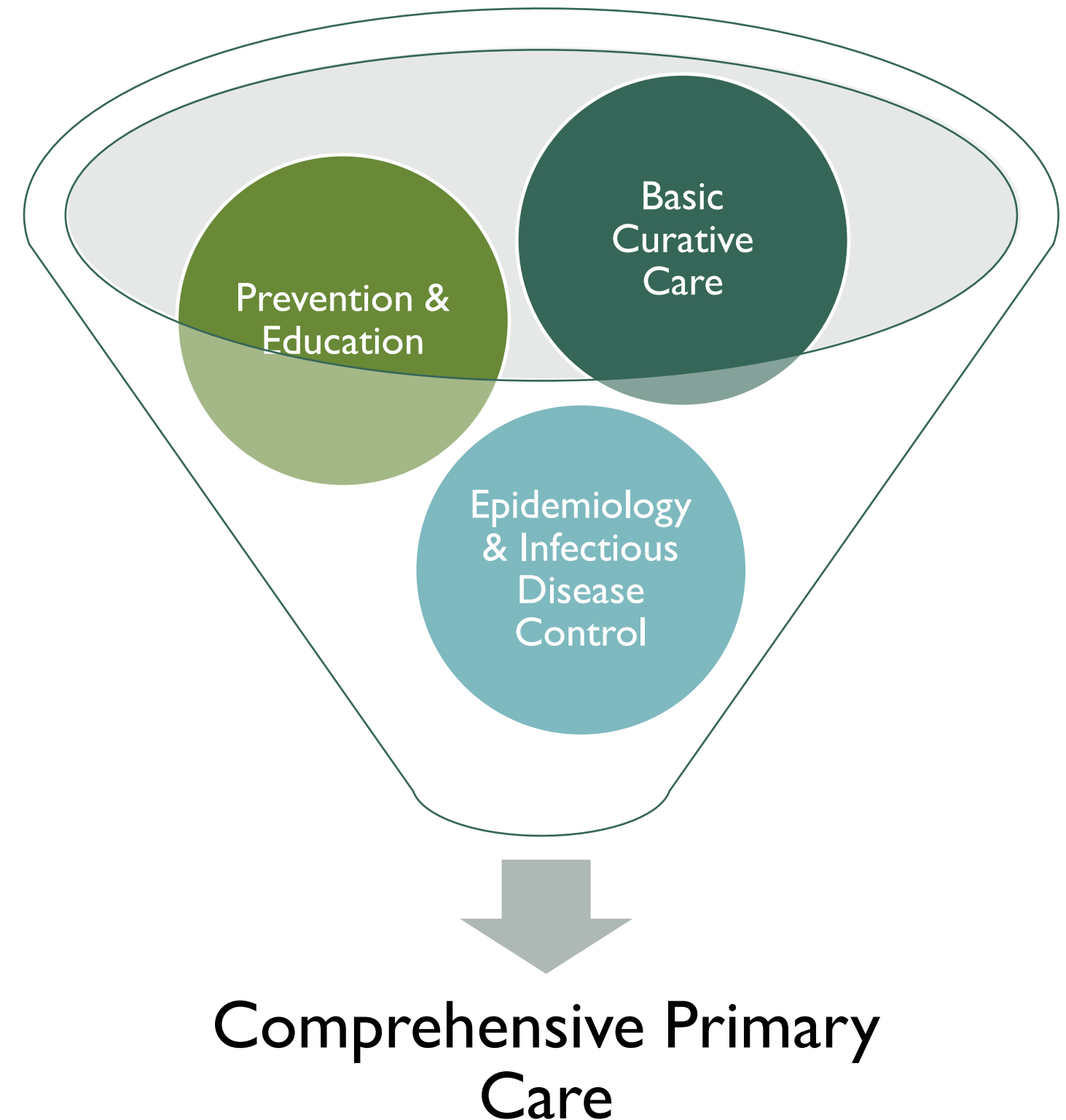
Multidisciplinary Team (EBAIS)

Geographic Empanelment

Measurement and reliable feedback loops

# INTEGRATION OF PUBLIC HEALTH AND CURATIVE CARE

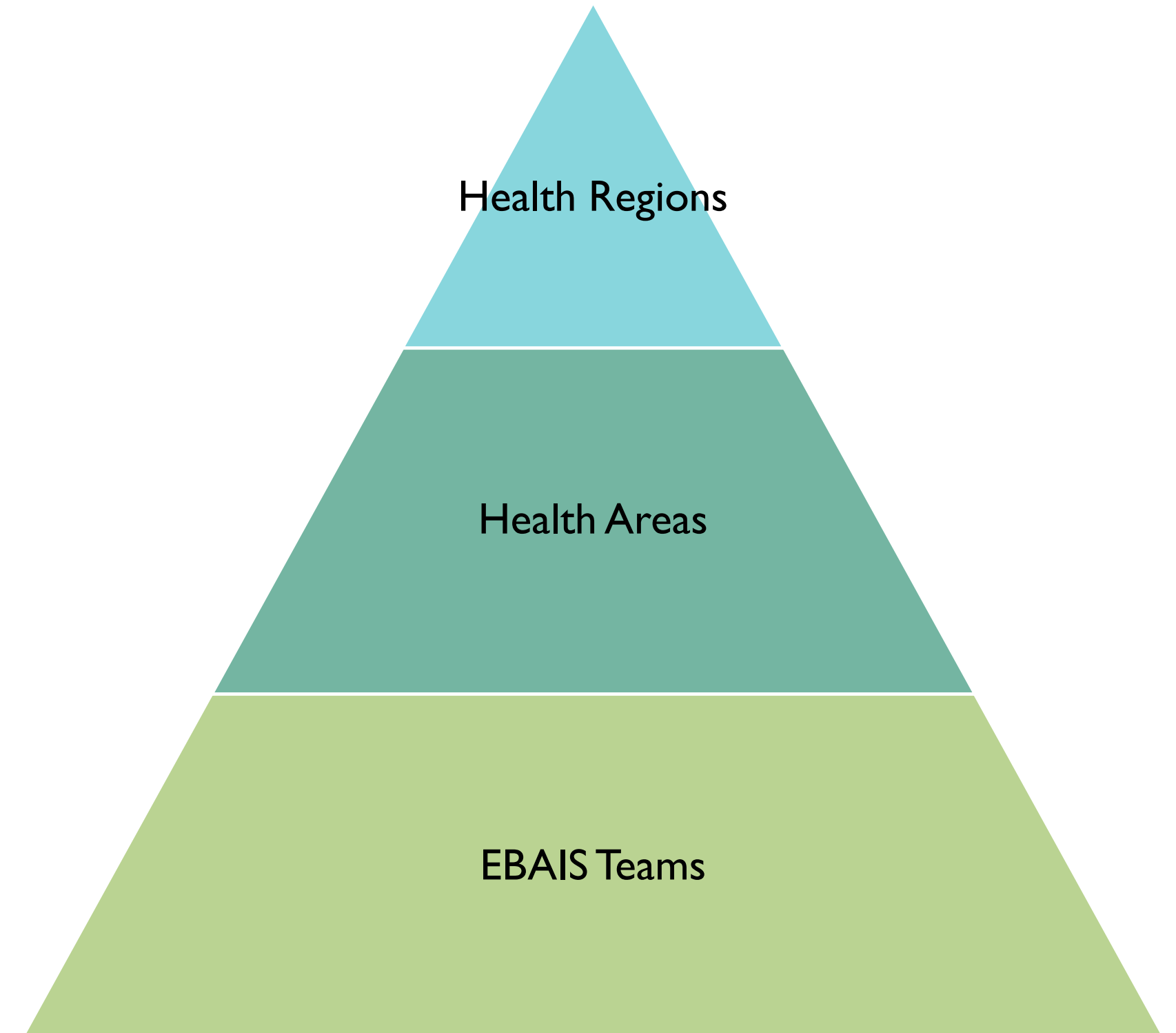
- The bureaucratic integration of the Ministry of Health and the Social Security Administration also led to a philosophical merger of curative and preventive care at the primary health care level
- In this model, primary care is responsible for a wide range of activities including:
  - Epidemiological surveillance and infectious disease control
  - Immunization
  - Health education and health promotion in the community
  - Contraceptive and dental education in schools
  - Childhood growth monitoring
  - Pregnancy monitoring
  - Treatment of diabetes, hypertension, among other chronic diseases
  - Treatment of diseases like pneumonia, diarrheal diseases, minor trauma
  - Elderly population monitoring and treatment





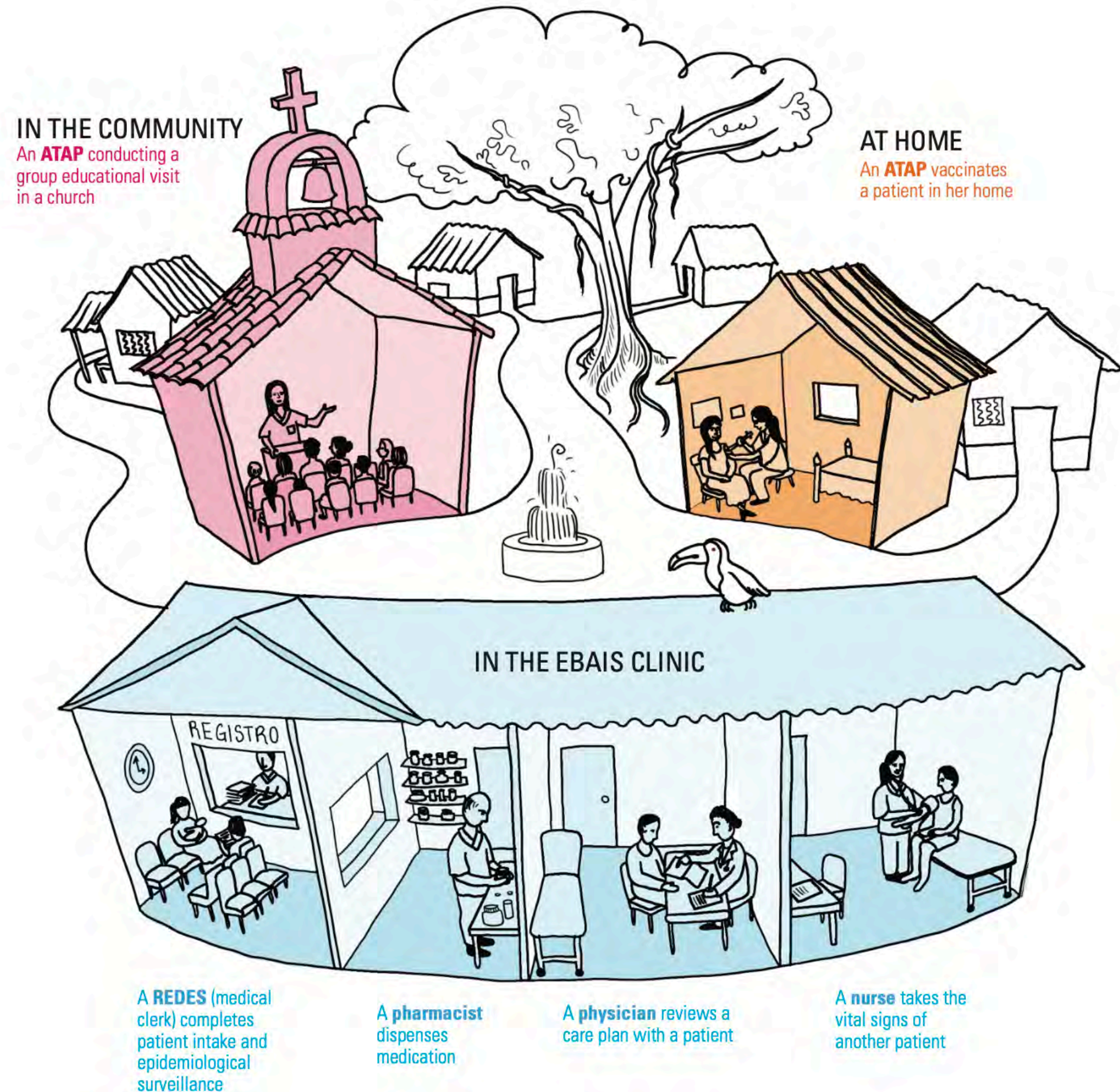
# PHC SYSTEM HAS THREE TIERS

- **7 Health Regions** coordinate and oversee ~15 Health Areas each
- **106 Health Areas** are the main organizational unit of primary care. Oversee ~ 10 EBAIS teams each and provide basic emergency services, family medicine, pediatrics, and obstetric care, depending on the needs of their population
- **EBAIS Teams** are the building block of the primary care system and provide multidisciplinary primary care to approx. 4,000 people each. There are a total of over 1,000 EBAIS Teams in Costa Rica.



# EBAIS TEAM STRUCTURE

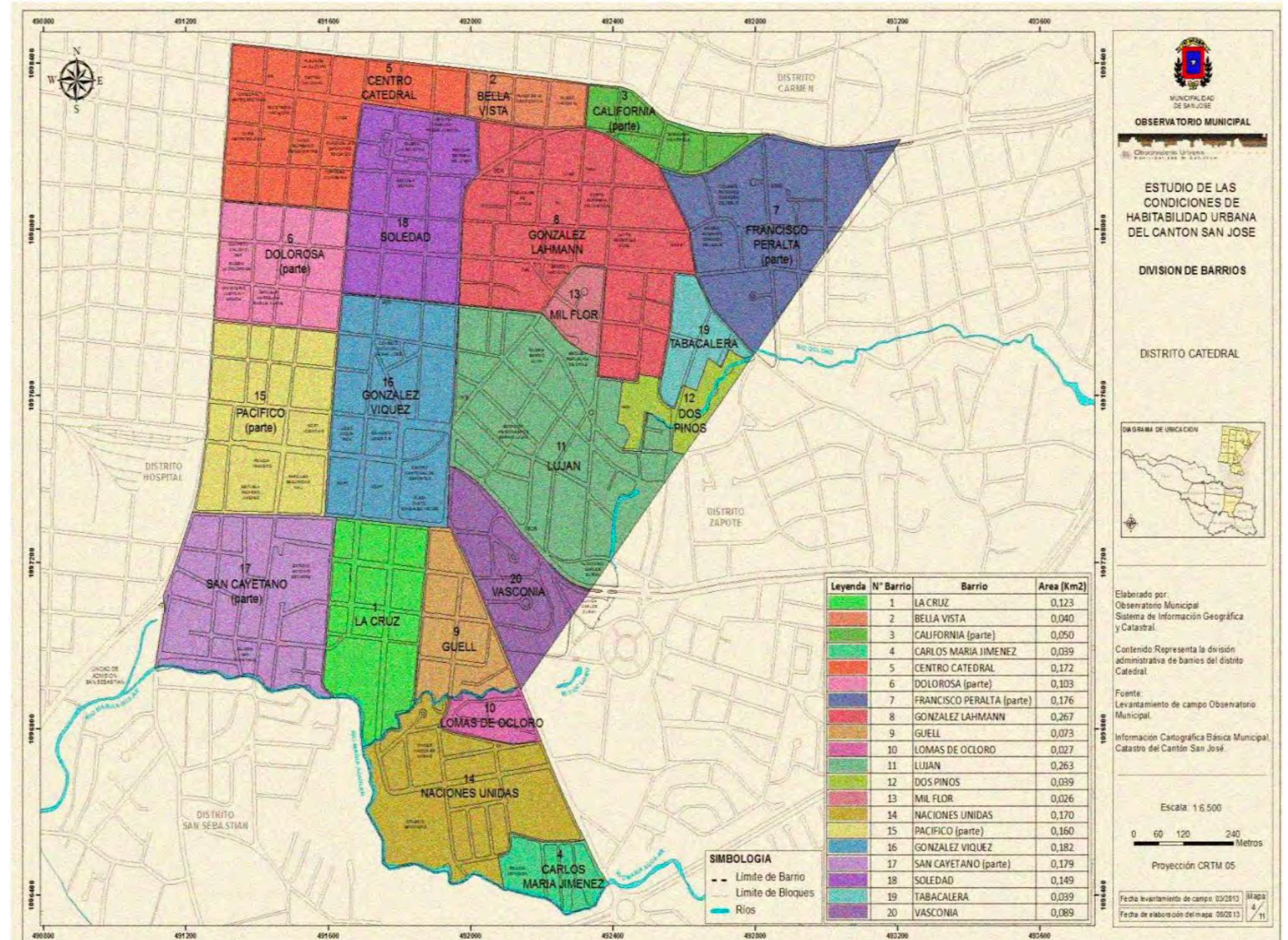
- Doctor
- Nurse assistant
- ATAP (Community health worker)
- REDES (medical data clerk)
- Pharmacist





# GEOGRAPHIC EMPANELMENT

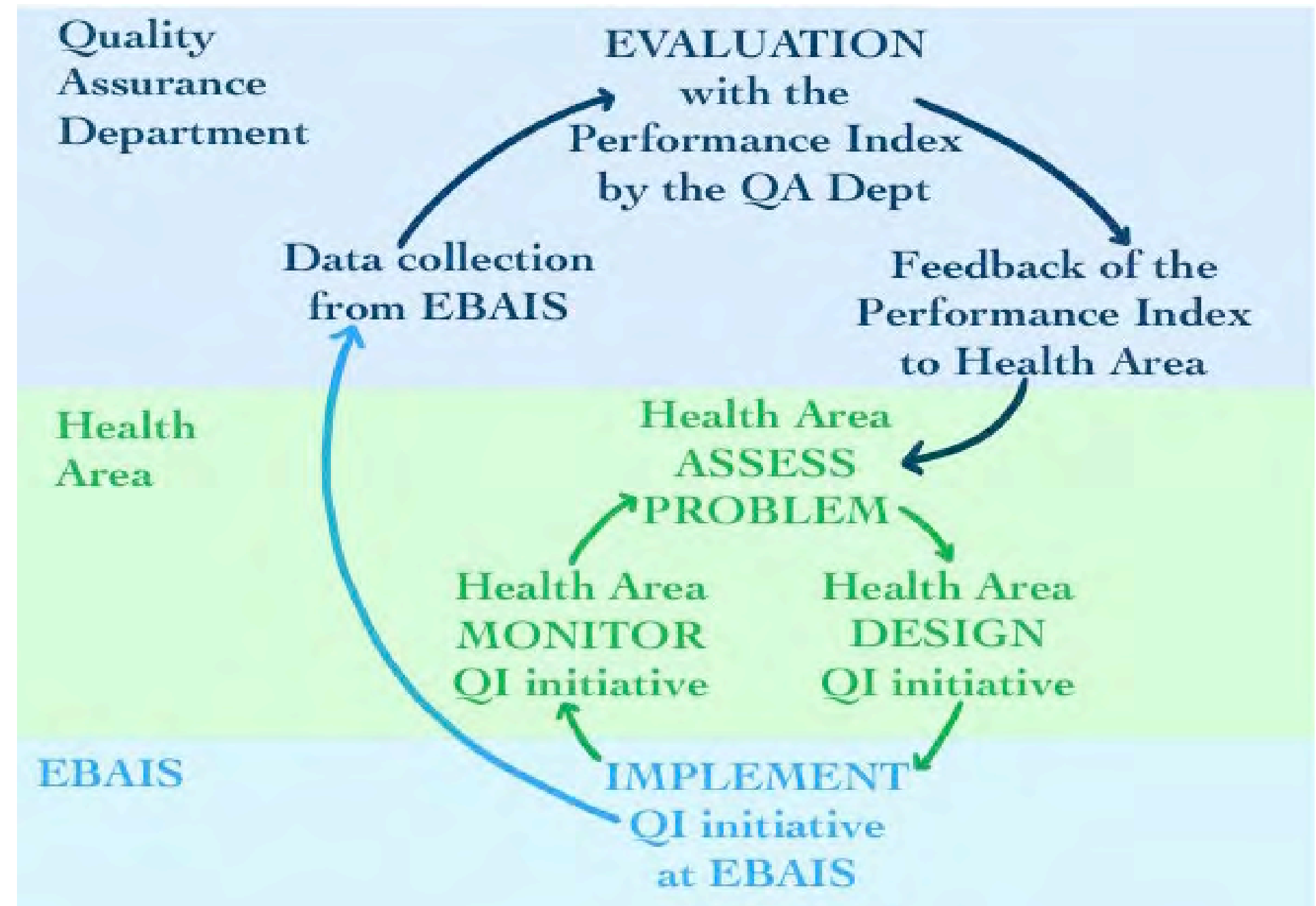
- Each Costa Rican was assigned to an EBAIS team, based on the location of their homes.
- Before GIS and satellite mapping in 1993-1995, this was done by hand with cartographers from the University
- Empanelment defines the exact population each EBAIS team is responsible for and enables care to be much more proactive.





# MEASUREMENT AND FEEDBACK LOOPS

- Multitude of data streams which flow from the local level to the regional and national level but, critically also flow from the national level back down to the local level
- Intentionally created a culture of valuing data to assess performance non-punitively
- Created Quality Improvement Index which ranks Health Areas from best to work quality, and stimulates significant quality improvement activities at the local level without financial incentives attached





# IMPLEMENTATION PRINCIPLES

## EQUITY LENS

- Started with areas with lowest socio-economic development first
- Started in the rural areas of the country, working inward toward the capital city

## VOLUNTARY

- The first communities to implement the primary care model were those which had volunteered, drawing on enthusiasm from community to ensure success

## COMMUNITY ENGAGEMENT

- Newly trained community health workers came from the communities where they worked
- All new Health Areas and their subsidiary EBAlS teams had community advisory boards



# COMMUNITY HEALTH NEEDS ASSESSMENT

- Every two years, each Health Area conducts a rigorous, standardized **health needs assessment**.
- Each assessment analyzes geographic, demographic, and socioeconomic characteristics and population risk factors.
- Identified health problems are prioritized based on mortality/burden of disease and community priorities.
- A **root cause analysis** is completed by the community and academics for each prioritized issued.
- **Action plans** are developed and then validated by the community.





# LESSONS LEARNED

Community-based care improves patient's health



Integrating public health, preventive, and curative care is possible

Multidisciplinary teams provide effective care



Clearly defined populations enable active population management



Reliable data feed-back loops promote quality improvement



# ADDITIONAL EQUITY ORIENTED PRIMARY CARE RESOURCES

- Learn more about Health Leads' [Equity-Oriented Primary Care Innovation Collaborative](#), an 18-month project that implements racial equity to drive measurable improvements for communities experiencing the most adverse health outcomes.
- Check out the [Rebuilding For Equity In Primary Care: Designing The Equity-Oriented Primary Care Innovation Collaborative](#) blog post which discusses innovative strategies that other primary care practices can adapt, spread, and scale to minimize the effects of systemic inequities and racial bias.
- Learn more about the [high-quality primary health care](#) in Costa Rica that is continuous, comprehensive, coordinated, and person-centered
- Health Affairs gives an overview of how [Costa Rica has been a leader in innovative service delivery](#), revolutionizing primary care by utilizing integrated health care teams.
- Research paper from NIH shares on how [implementing strategies from Costa Rica](#) can improve community health and health equity
- The Commonwealth Fund answers [“what does community-oriented primary health care look like?”](#) by highlighting lessons learned from Costa Rica



# THANK YOU



**Jacquelyn S. Dalton, MPH**  
*Director of Community Engagement*  
**Health Leads**

- Today's slides and a recording of this webinar will be posted online; a link will be provided
- Please take the brief evaluation poll that will appear on your screen shortly
- Let us know your feedback and thoughts for future webinar topics in the post-webinar survey
- Thank you for your time and participation!