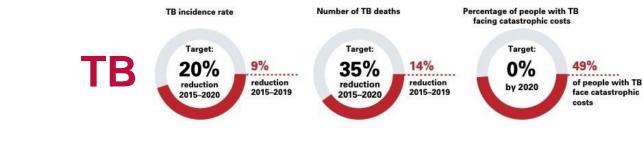
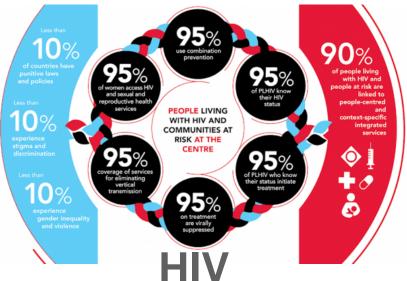


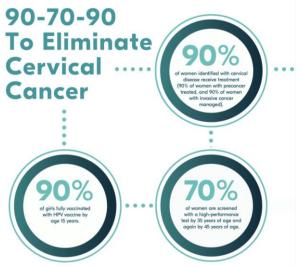
# Health system approach for integration of cervical cancer screening into HIV/TB control programs

Patti E. Gravitt, PhD, MS
enior Advisor, Population and Systems Science
US NCI Center for Global Health

# Policy objectives – calls to action from WHO









# Nice!

How do we do this?

# Move beyond vertical programming

- Global health programs in many countries is disease focused
- Usually funds from outside donors who are passionate about their cause and don't want to deviate funds to other problems
- Sustainability becomes a problem

How do we move from vertical to horizontal?

# VERTICAL VS. HORIZONTAL PROGRAMS IN GLOBAL HEALTH

#### "VERTICAL"

- OFTEN DISEASESPECIFIC
- · CURE-FOCUSED
- GENERALLY DRIVEN BY DONORS/OUTSIDERS
- NOT SUSTAINABLE
   WITHOUT CONTINUED
   FUNDING

#### "HORIZONTAL"

**M** TEPHINET

- FOCUS ON A RANGE OF ISSUES, NOT A SINGLE DISEASE
- PREVENTION-FOCUSED
- DRIVEN BY THE
   AFFECTED COMMUNITY
- INTEGRATED INTO THE HEALTH SYSTEM, WHICH HELPS WITH SUSTAINABILITY

https://twitter.com/tephinet/status/1182808980441255937

# A path forward

Creating global learning health systems through embedded implementation research





https://www.ahrq.gov/learning-health-systems/about.html





# Let's look at each system

Implementation science Systems science

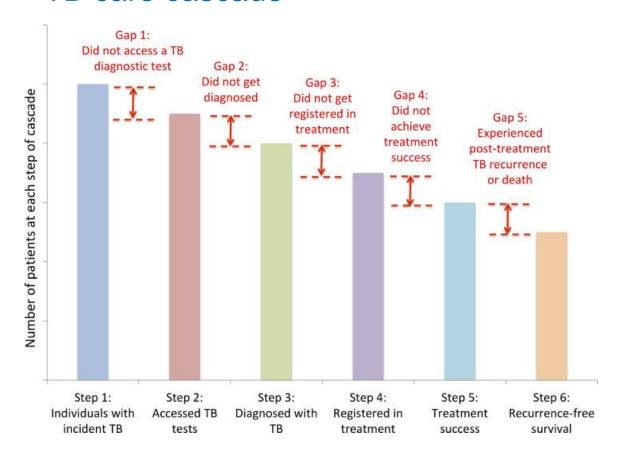
#### HIV care cascade



Successfully meeting WHO HIV goals requires that PLWHIV:

- Know their status (i.e., get tested)
- Are retained in care (i.e., are monitored)
- Get treatment
- Become virally suppressed.

#### TB care cascade

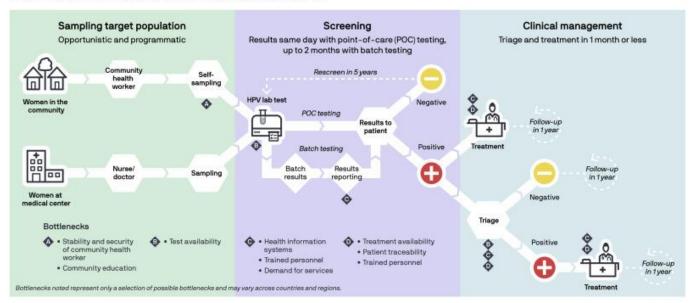


Similar sequence of steps here...

# Cervical cancer screening care cascade

#### HPV-based cervical cancer screening program

Main interventions, ideal timelines, and bottlenecks





And here...

# Systems thinking and integrated health service delivery

 Systems thinking is a methodological approach that can facilitate design of integrated models of HIV, TB, and cervical cancer screening (just to start).

- The methodology starts by bringing the relevant stakeholders together in the same room
  - So no more TB meetings, HIV meetings, CxCa screening meetings but screening and management meetings

# Building an implementation team

#### **Relational Pathway**





Level 1 Level 1

Level 3

Health care

providers



Midwives

Doctors

Admissions staff Administrative staff

Head of establishment

Information

management staff

Laboratory technicians





Regional Hospital of Loreto





Intermediary Coordinator Director

Oncologist Onco-obstetra

Gynecologist

Pathologist

Pathology technician

Administrator

Director



SIS

MINSA

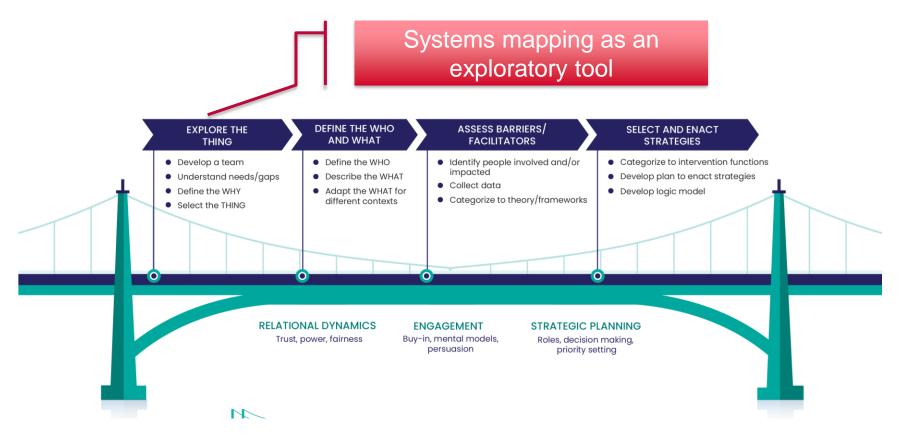
Finance staff Regulatory manager



South Iquitos health network



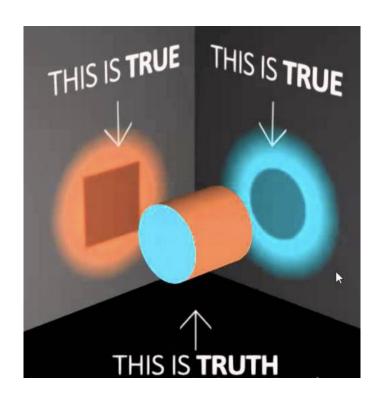
# How to implement "the thing"







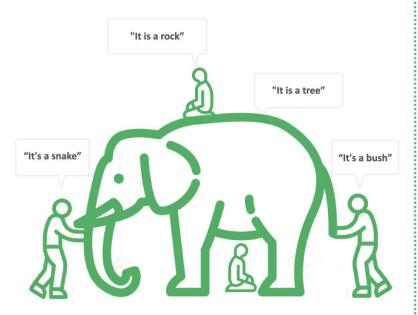
# Multiple perspectives respected



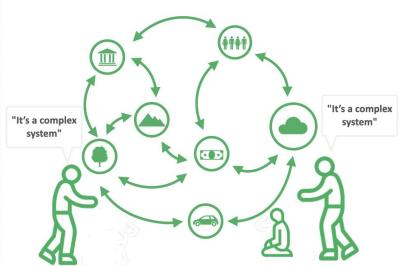
# Systems thinking and integrated health service delivery

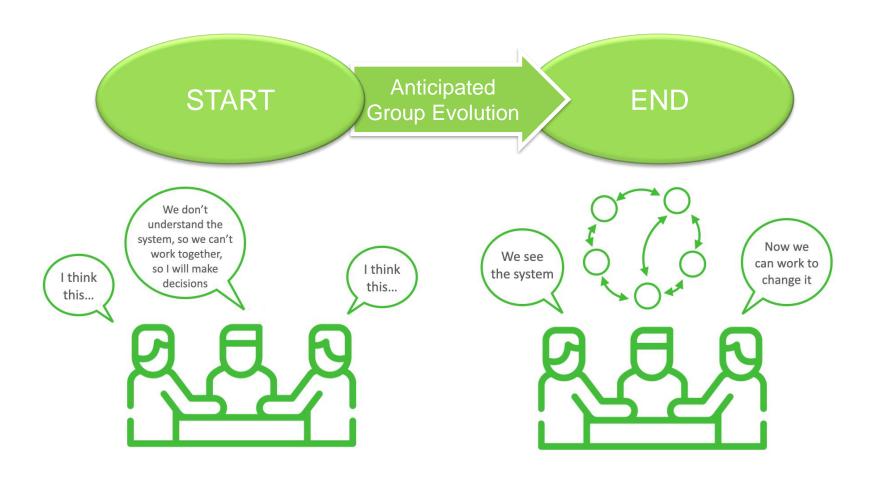
- Then...
  - Clarify the goals of each system
  - Create a shared visual understanding of how each system should work, how it currently works, and the resources needed vs. available
  - Overlay the systems to identify leverage points for sharing human resources, task shifting work, sharing instrumentation, creating new infrastructure that wasn't feasible for just one program but would be if shared by 3 programs...
  - Make an integration plan and test it
  - Repeat learn from that experience and continue to redesign until reach an equilibrium (which will be temporary...so plan for that)

#### Without a system map

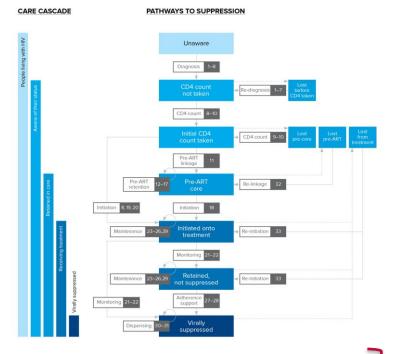


#### With a system map



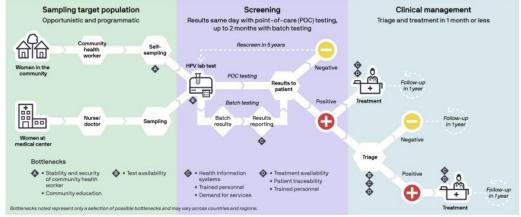


#### Learn from prior programs! They are more similar than we might think



#### HPV-based cervical cancer screening program

Main interventions, ideal timelines, and bottlenecks





Link successful strategies developed for retaining individuals in HIV/TB care to bottlenecks in cervical cancer screening

Client-initiated clinic-based testing
 Provider-initiated testing

Mobile testing

Door-to-door testing
 Workplace testing

Workplace testing
 Youth-friendly services
 Self-testing

8. PMTCT 9. Laboratory CD4 testing

D. POC or immediate CD4 testing
 Community support: link to care
 Pre-ART wellness program

Additional education – lay
 Additional education – prof.
 Community support: pre-ART

16. Text messaging: pre-ART 17. WhatsApp: pre-ART 18. Classic ART initiation

Fast-track ART initiation
 Same day ART initiation
 Laboratory viral load testing
 POC or immediate viral load

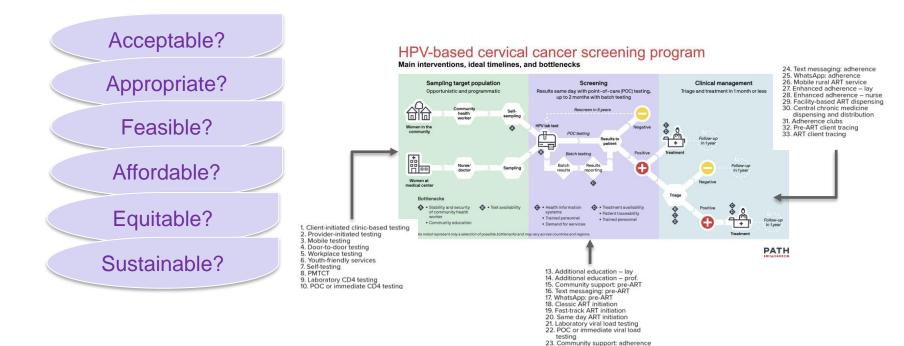
testing
23. Community support: adherence

24. Text messaging: adherence 25. WhatsApp: adherence 26. Mobile rural ART service 27. Enhanced adherence – lay 28. Enhanced adherence – nurse

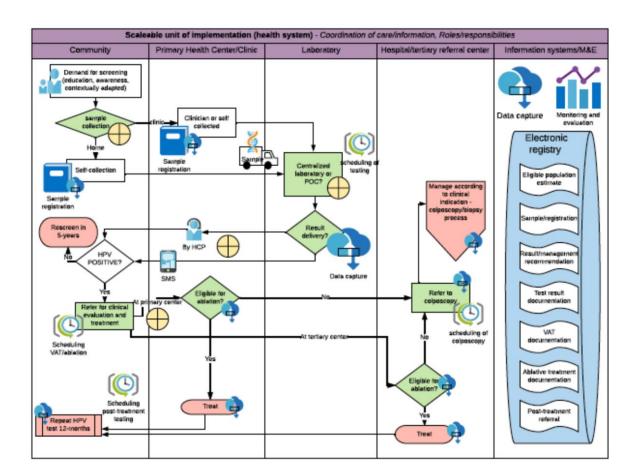
Facility-based ART dispensing
 Central chronic medicine
 dispensing and distribution
 Adherence clubs

32. Pre-ART client tracing 33. ART client tracing

# How to draw from other implementation science results



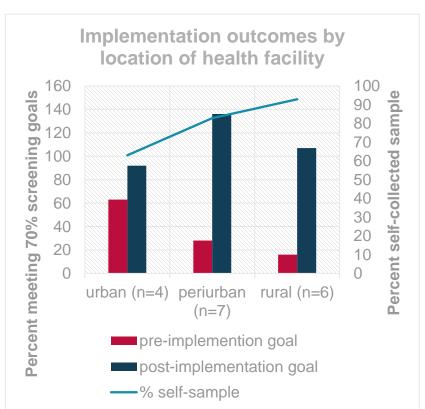
#### Shared visualization



- Use to check initial planning decisions
- Probe what is working, what isn't, who is involved, and where to find highest leverage for change
- Essentially start the cycle over again!

# And it can increase EQUITY in screening





#### Our team

#### **Proyecto Precancer Team**

- Patti Gravitt, PI
- Valerie Paz-Soldan, Pl
- Margaret Kosek
- Anne Rositch
- Joanna Brown
- Jhonny Cordova
- Magdalena Jurczuk
- Anna Kohler Smith
- Gabriela Ladrón de Guevara
- Jessica Mori
- Rachel Morse
- Helen Noble
- Jennifer Rios
- Karina Roman
- Gessy Salva
- Sandra Soto
- Batel Blechter
- Sarah Gilman

#### San Juan Laboratory

- Nolberto Tangoa Rengifo
- Esther Yolanda García

#### **Systems Engineers**

- Erica Gralla
- Nadia Lahrichi
- Kai Friesecke

#### **Stakeholder Group**

- Graciela Meza Sanchez
- Carlos Santos
- Jose Jerónimo Guibovich
- Manuel Alvarez
- Victor Palacios
- Lita Carrillo
- Henrry Daza
- Dalia Marin Macedo

#### Stakeholder Group (contd)

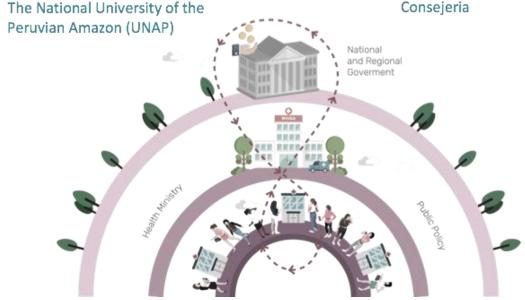
- Hermann Silva Delgado
- Javier Vasquez Vasquez
- Reyles Ríos
- Jaime Marín
- Renso Lopez Linam
- Janeth Pinto
- Andrea Matos
- Karina Gonzales Díaz
- Magali Figueredo E.
- Obstetricians of the Micro Red Iquitos Sur
- Onco-obstetricians of the Hospital Regional de Loreto and Hospital Apoyo de Iquitos





- Micro Red Iquitos Sur
- Ministry of Health (MINSA)
- Regional Ministry of Health (DIRESA)- Loreto
- The National Institute of Neoplastic Diseases (INEN)

- The National Association of Psycho-Oncology of Peru (ANPPe)
- The Pontifical Catholic University of Peru (PUCP)
- Escuela de Excelencia en Consejeria



**OUR PARTNERS** 

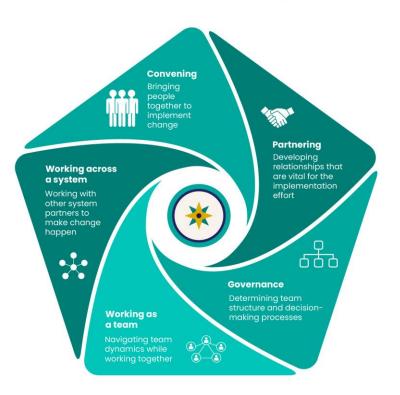




cancer.gov

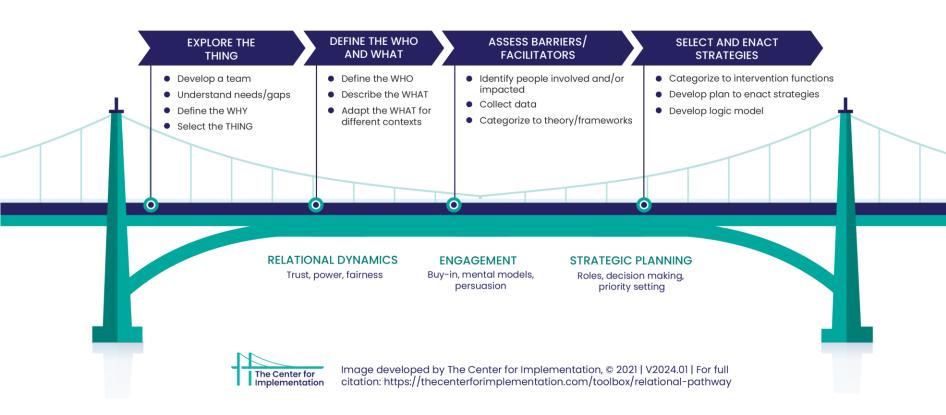
cancer.gov/espanol

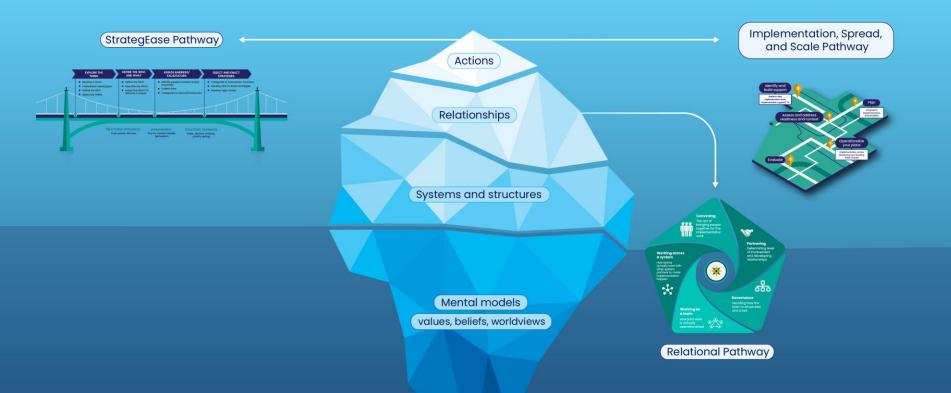
#### **Relational Pathway**





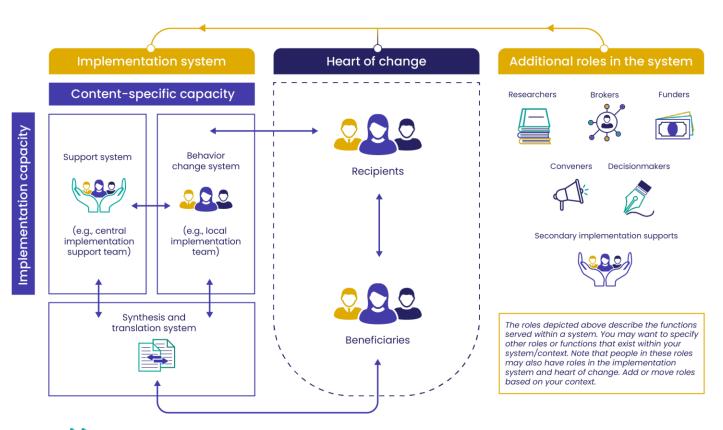
#### StrategEase Pathway







#### Interactive Systems Framework (ISF)





Based on Wandersman et al. (2008). Image adapted by The Center for Implementation, © 2023 | V2024.01 | For full citation: https://thecenterforimplementation.com/toolbox/interactive-systems-framework

#### Implementation, Spread, and Scale Pathway



