Bridges to Development

Multi-level integration: The PINE project experience in PNG and Vanuatu

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Context of Integration

Consistent with growing focus on **PHC and UHC in countries**, and

- An increased drive for **integration is encouraged** to achieve the ambitious goals set out **in the NTD Roadmap 2021-2030**
- Integration is not just called for in NTDs, for example it is aligned with **Global Technical Strategy for Malaria 2016-2030**
- **Sustainability of NTD impacts will rely on health system and success of UHC**

In the context system disruptions (COVID, outbreaks, climate, and conflict):

- **The need to integrate is amplified** with significant programmatic setbacks to all health services
- **There is an opportunity for programs to work together** to mitigate challenges and to efficiently progress both programs with benefits to the communities and health system.

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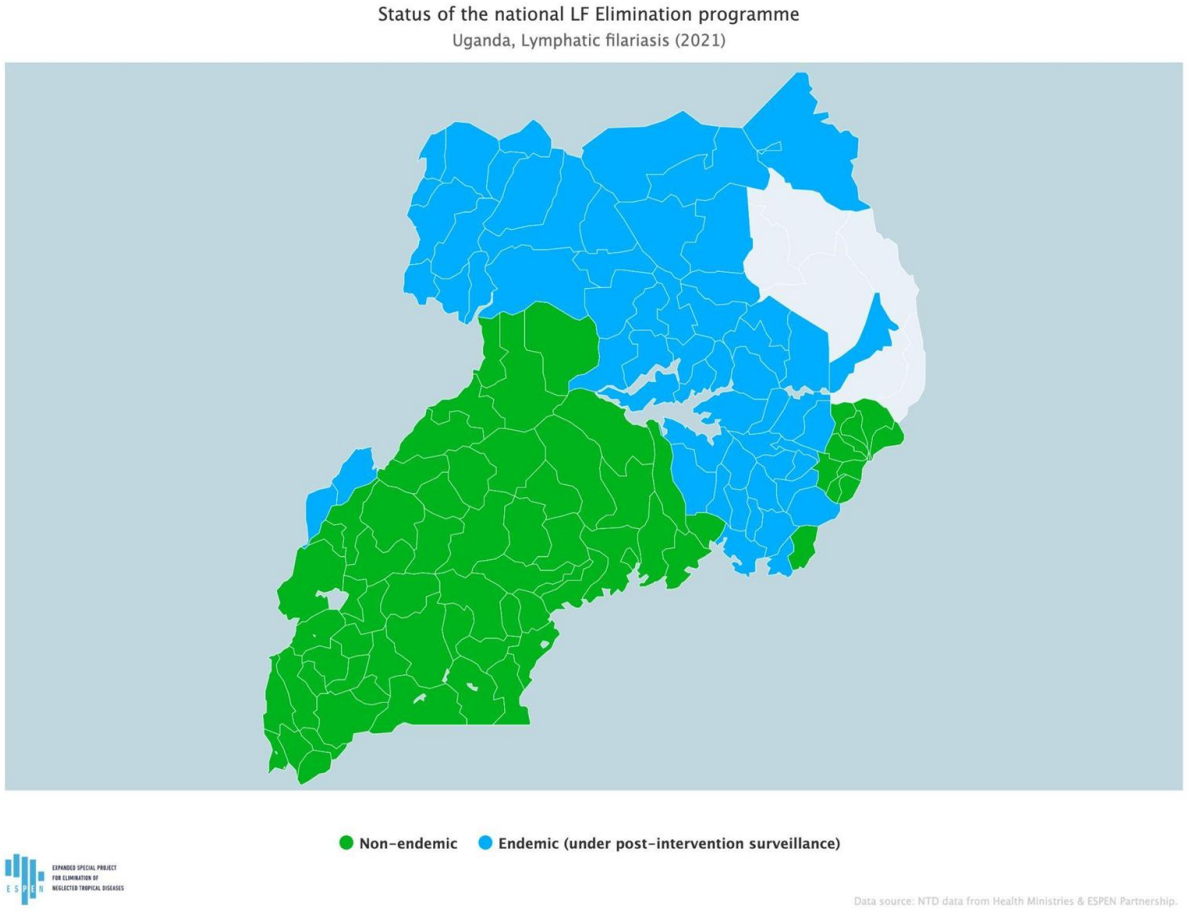
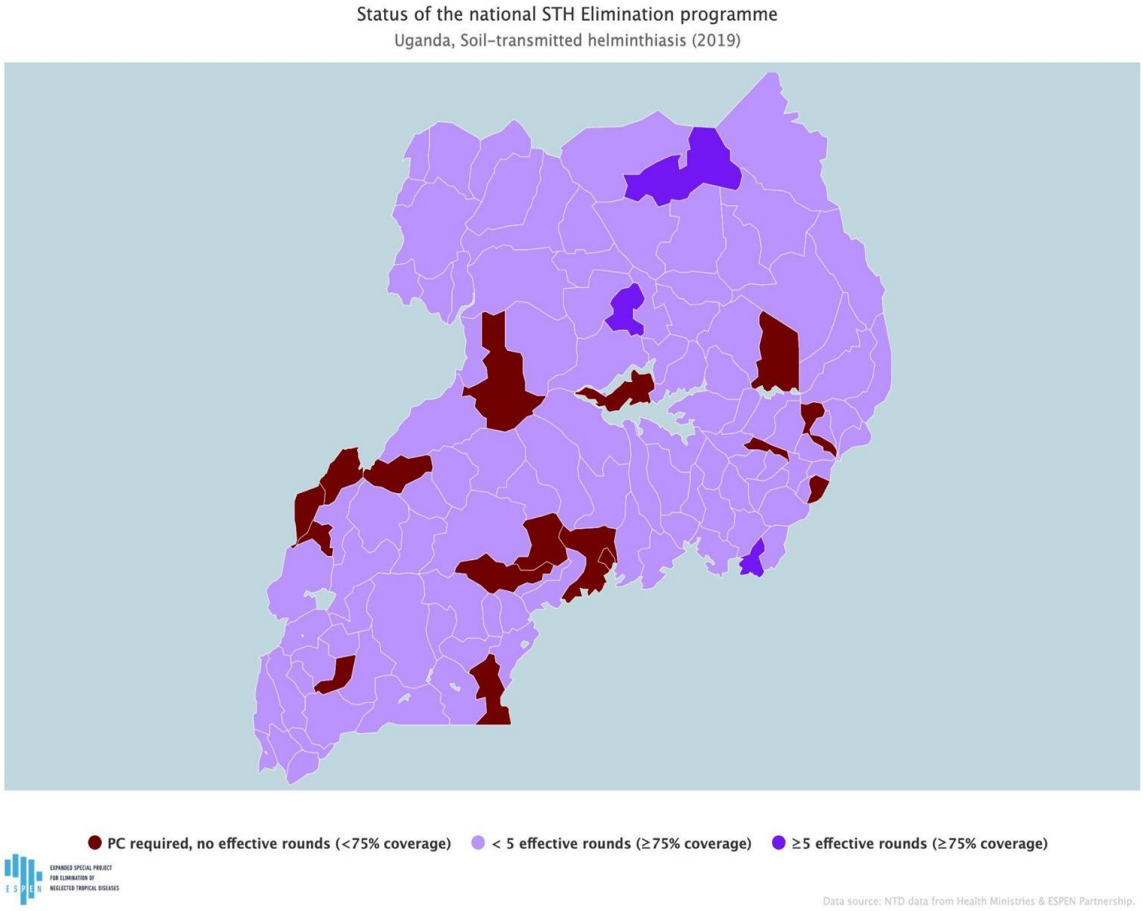
By not thinking of integration, we risk dis-integration

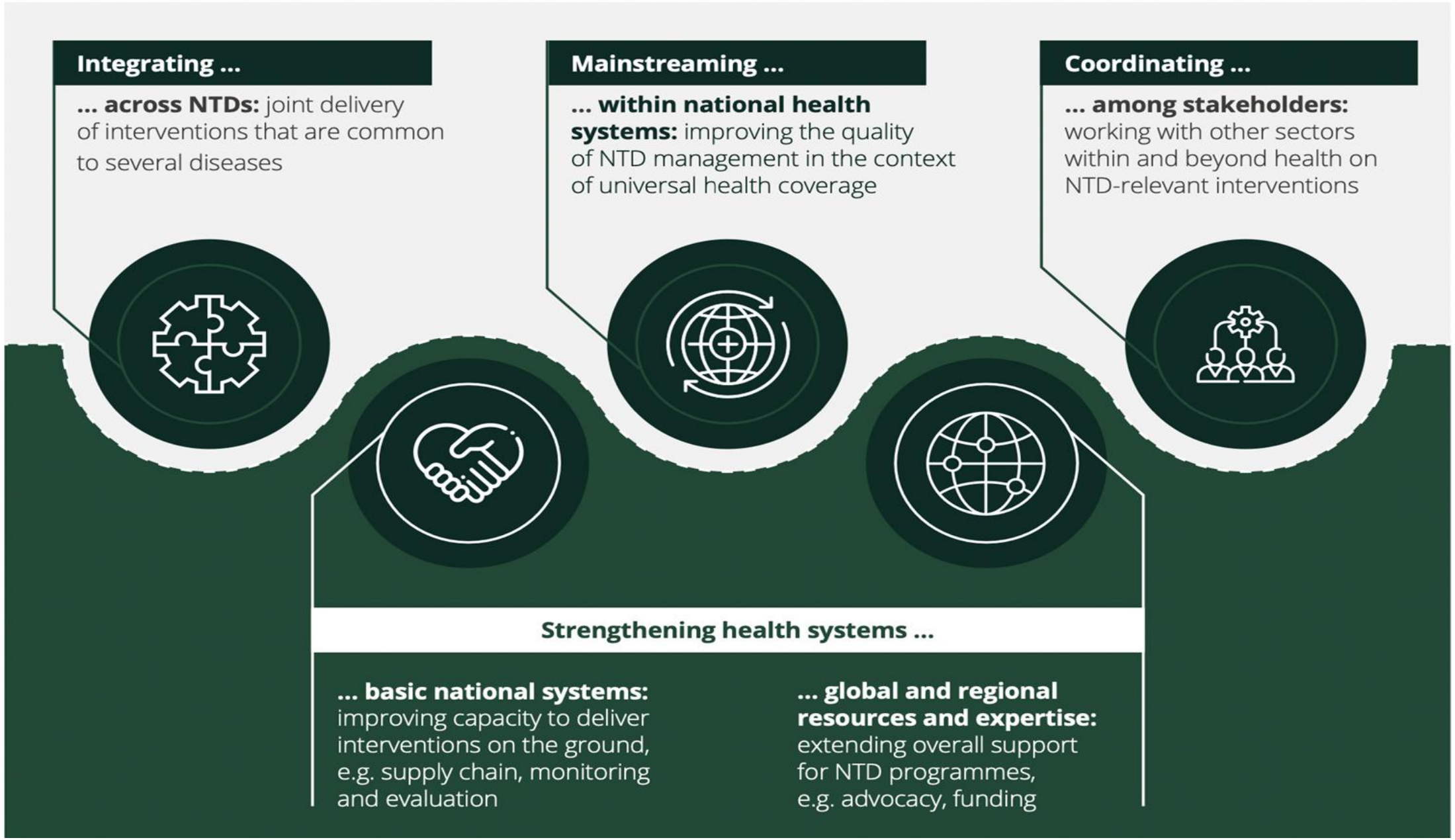
Example: Uganda MDA for LF stopped, STH needs continue

Source: https://espen.afro.who.int/dashboards



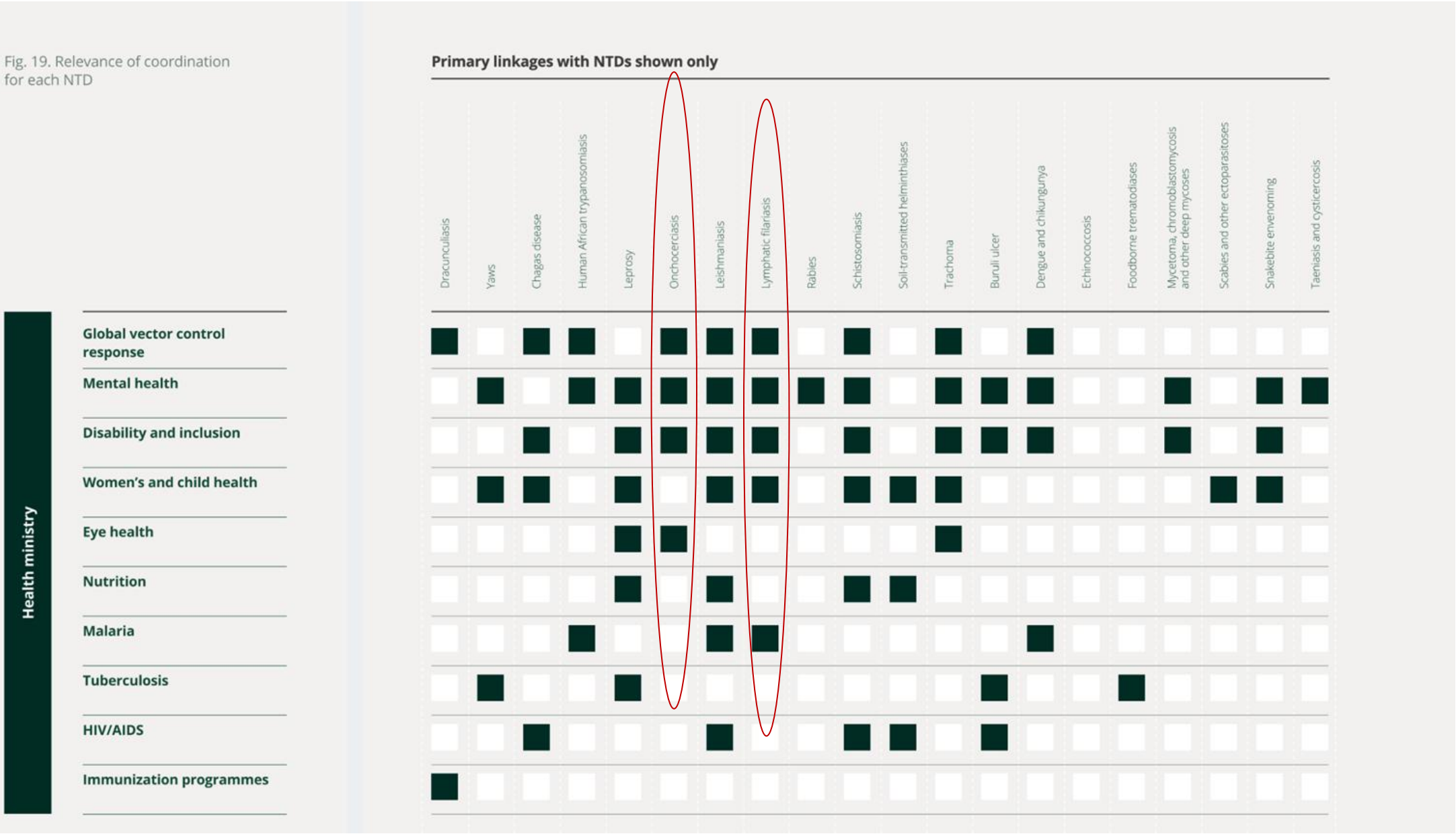


NTD Integration levels in WHO Roadmap



WHO NTD Roadmap highlights opportunities

Fig. 19. Relevance of coordination for each NTD



Opportunities for integration through Health Systems Building Blocks

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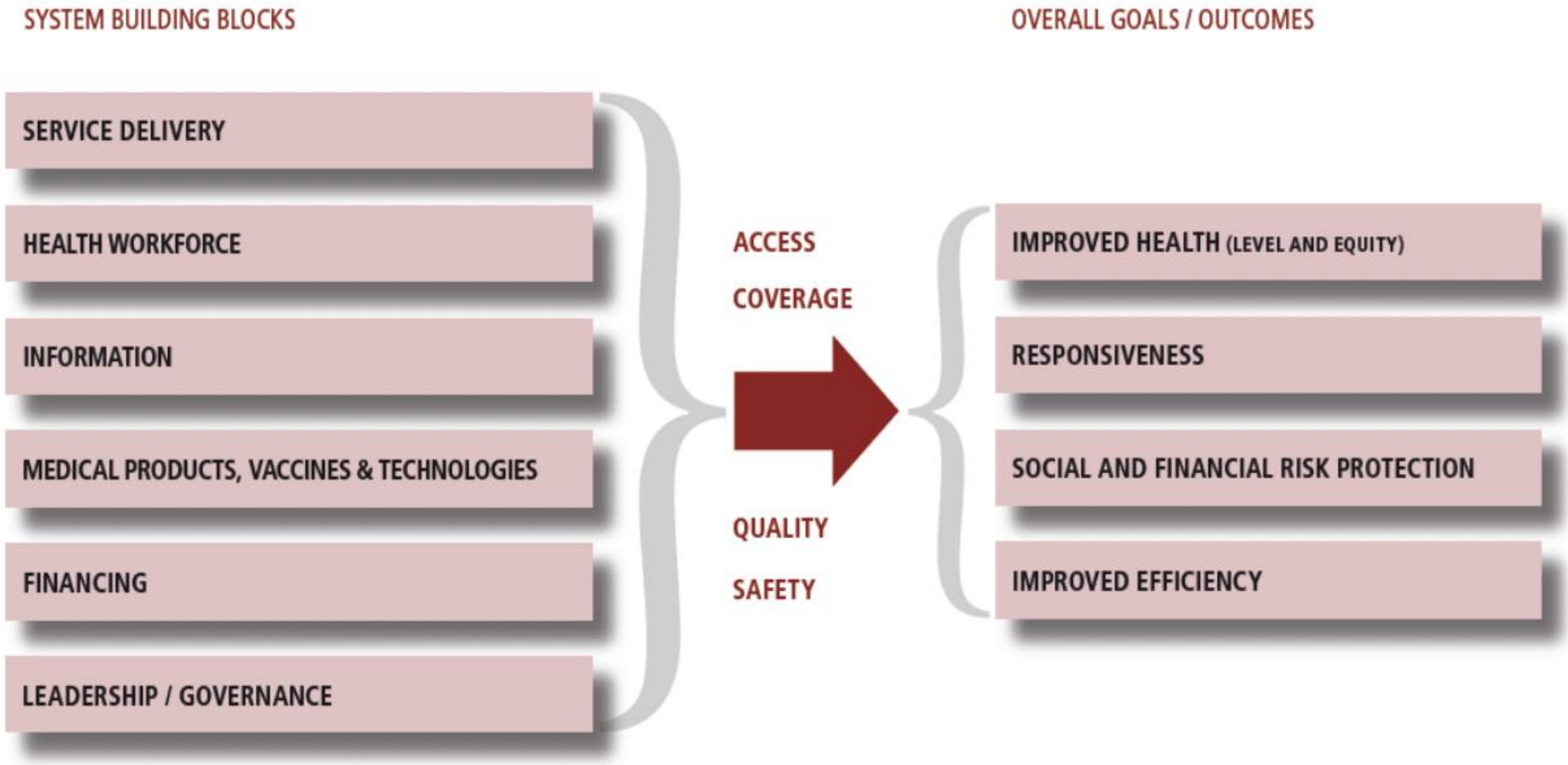

Figure 2: The WHO's Health System Framework (Source: World Health Organization. Everybody's Business: Strengthening health systems to improve health outcomes—WHO's Framework for Action. Geneva: WHO, 2007, page 3.)

Case Studies from Landscaping

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Funded by GLIDE conducted by Bridges to Development Project conducted by PAHO

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Key Learning Points from Landscaping

1. Successful collaborations are based on a **win/win opportunity** where both partners extract an equal value from the collaboration

2. The **value of the collaboration needs to outweigh the additional administrative burden** associated with the effort for all involved

3. Programs should take into account the **perspective of the communities** to define opportunities that reflect how they view their own health

4. The **benefits, both operational and impact**, need to be captured to sustain the effort and/or to advocate for further or sustained collaboration

5**. Funding** that is specifically for integrated activities or **flexible** enough to be used to support cross-program or cross-sector collaborations is needed

6. In some cases, the development of an **investment case** which described the benefits, potential impact, and resources required can be an effective tool to secure buy-in from leadership, sustain, and scale collaborations

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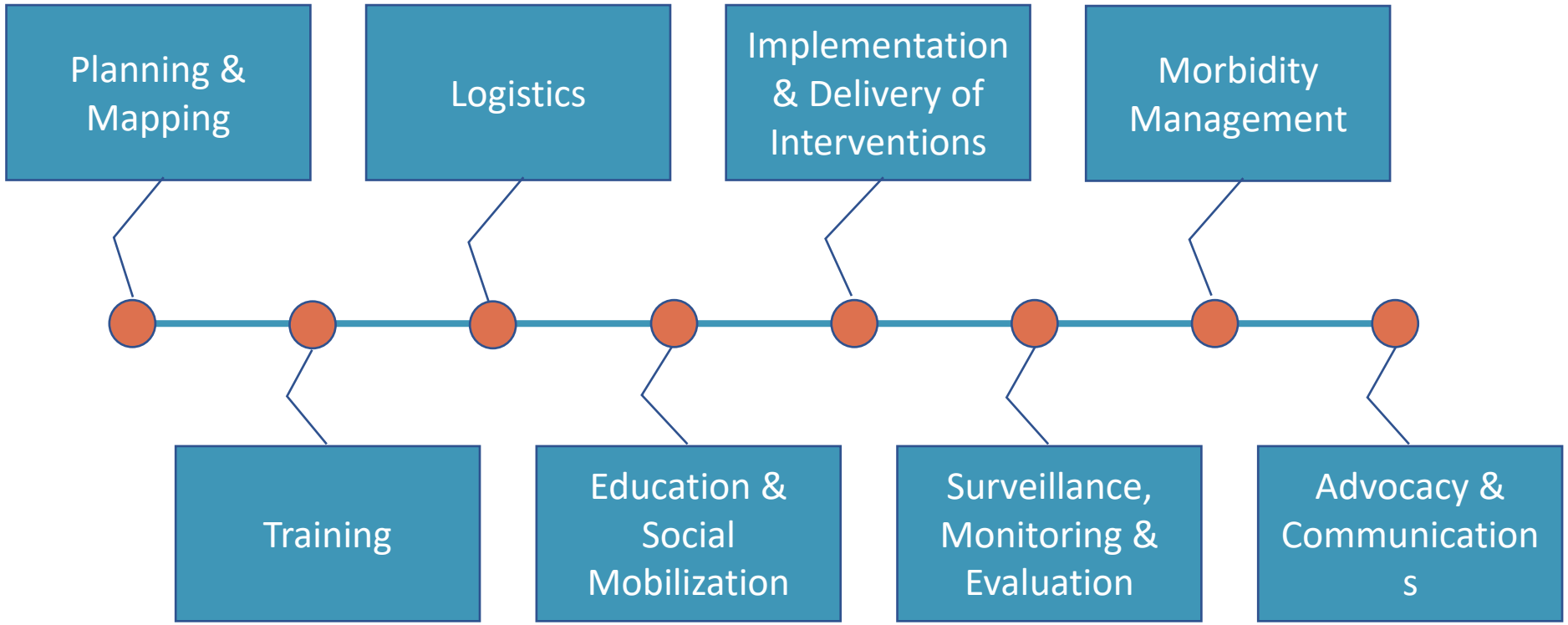
Integrate What

Opportunities for programs to work together along the spectrum of program activities



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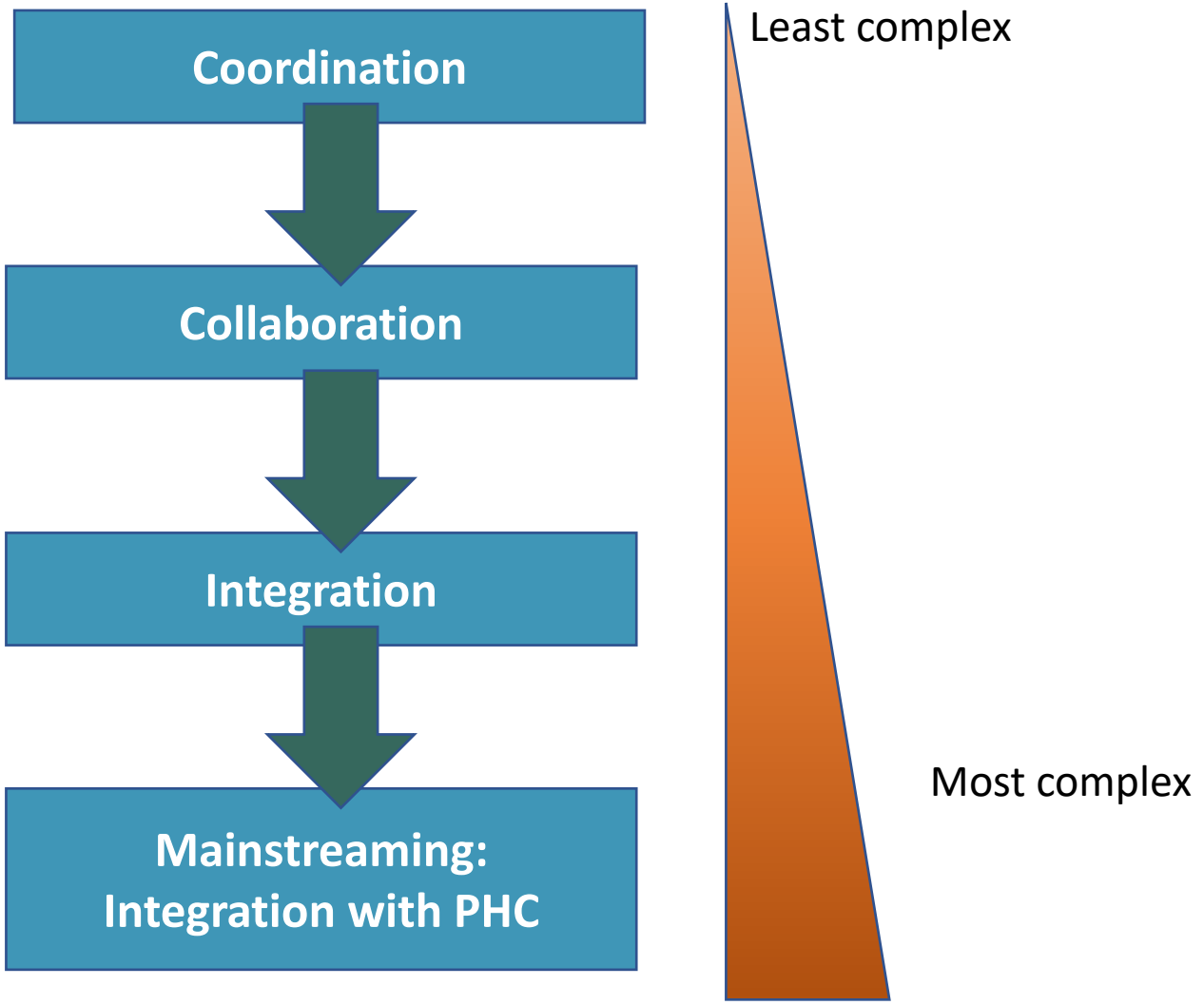
Integrate How: Spectrum of Opportunities



Integration moving ahead

Coordination or collaboration across programs can add complexity. Therefore, the benefit… together must outweigh the perceived additional burden. Coordination must have…

- **Win/win opportunities** with shared incentives for both programs (i.e. both… return')
- A low barrier for entry and low management complexity (i.e. does n… ucturing programs)

There needs to be shared incentives for programs to wo…

- When coordinating between programs can add… ogrammatic challenge
- When it allows programs to make the b… resources; more impact per dollar
- When you can leverage costly vi… ttings to have impact on multiple diseases

Working together ca… enefits:

- Values com… time
- Valu… ealth worker time
- … t-effectiveness in certain settings
- S… successes

To Be Successful in NTDs we have to figure this out!

Integrating into the health system and other sectors

Example Deworming Women of Reproductive Age

WHO 2030 STH Target #4: Establish an efficient STH control programme for adolescent, pregnant and lactating WRA

Groups at risk	**WRA**
Intention	To eliminate morbidity in a previously neglected high-risk group
Activities to achieve the target	Include routine deworming in human papillomavirus (HPV) vaccination programmes and in maternal and child health (MCH) programmes (including post-partum deworming)
Indicator	Deworming coverage in adolescent, pregnant, lactating and other WRA in endemic areas (defined as areas where SAC are in need of treatment); (data should be disaggregated by WRA sub-group) **Threshold by 2030: 75% coverage** (estimate for 2020- between 15-20%)
How the indicator is collected	Survey Population to be surveyed: all WRA subgroups (adolescent girls, pregnant women, lactating women, or other adult women) in the different areas in the country in need of treatment. Calculation of the indicator in each endemic country (data should be disaggregated by WRA subgroup): # of adolescent, pregnant and lactating WRA receiving deworming/ Total # of adolescent, pregnant and lactating WRA Technique & frequency for collection: JAP report, DHS (at least every 3 years)

WHO STH Targets include Women of Reproductive Age

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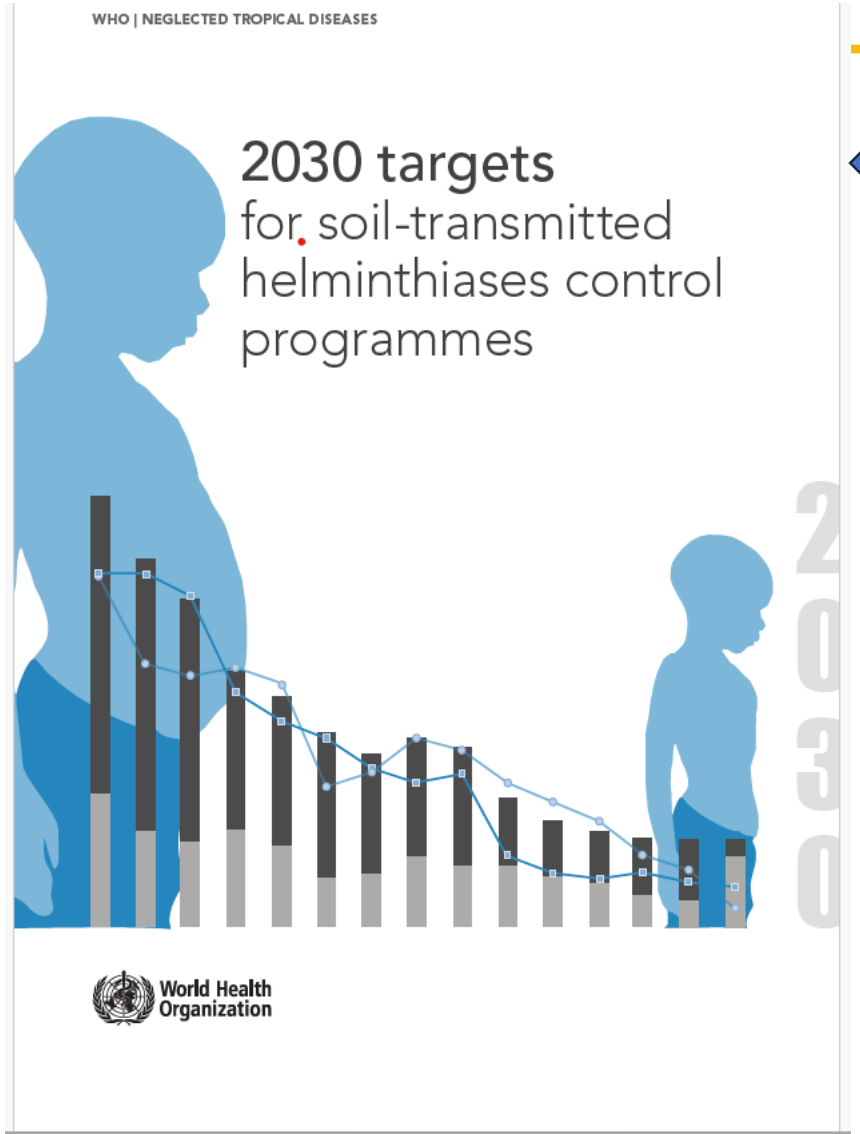
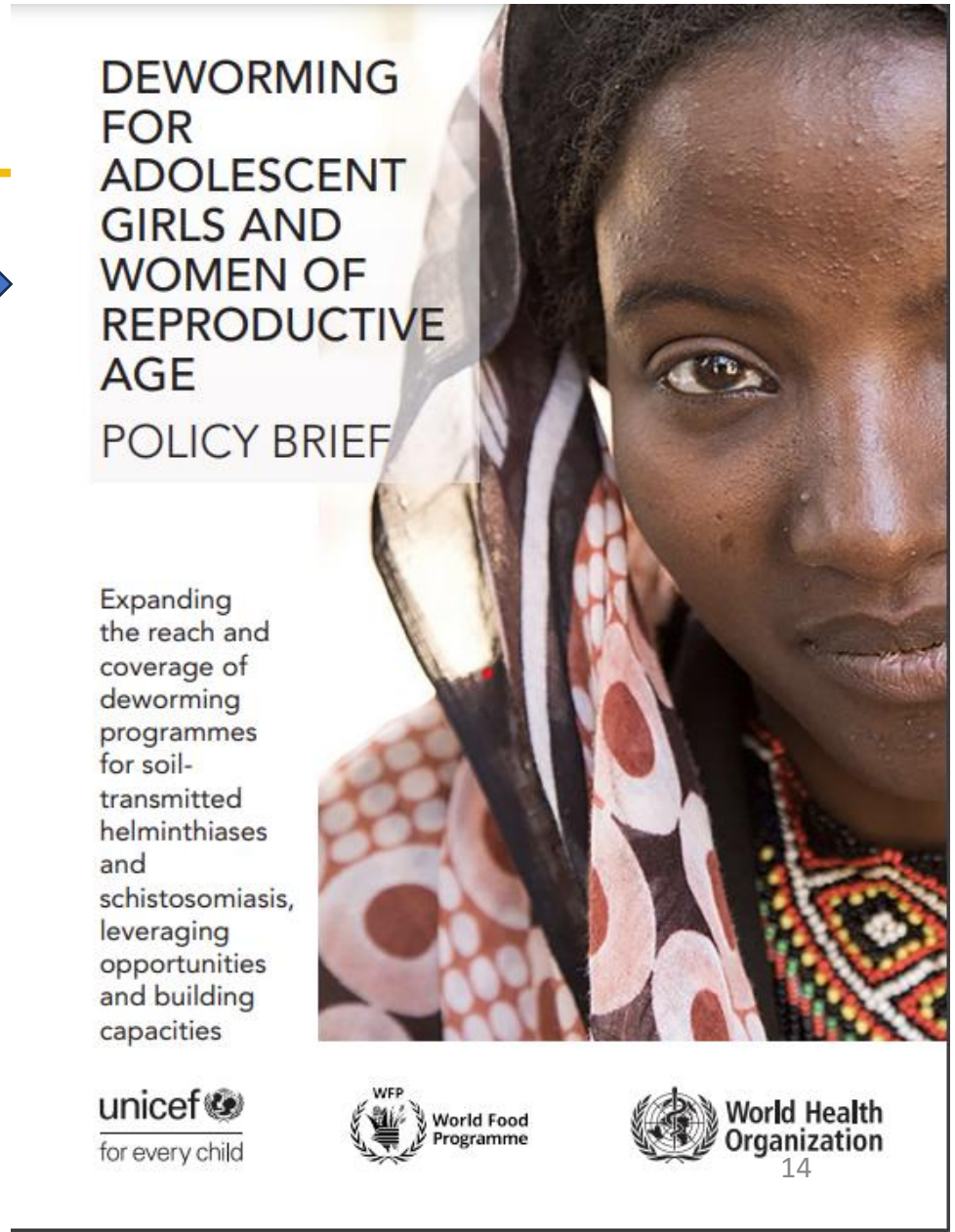


The only way to achieve this goal is to work with and through sexual and reproductive health programmes
We must integrate to succeed and reach those we are trying to serve



FGS Integration Group

from shared ideas, concern and passion to building integration for women and girls

CHALLENGE

Female Genital Schistosomiasis (FGS) affects the health and wellbeing of an estimated

56 MILLION WOMEN AND GIRLS

in Africa; it is a co-factor in HIV infection and complicates the diagnosis and treatment of sexually transmitted infections and cervical cancer.

Women and girls with FGS are

3X MORE LIKELY

to get HIV and two times more likely to get human papilloma virus (HPV), a cause of cervical cancer, than other women.

COALITION

FRONTLINE AIDS · Bridges to Development · SCI Foundation · Sightsavers · Avert HIV · lvct health · GSA Global Schistosomiasis Alliance

APPROACH

RAISE AWARENESS AND SENSITISE communities, health providers and sexual and reproductive health stakeholders on FGS and its links to HIV, cervical cancer, infertility and other sexual and reproductive ill-health.

BUILD AND STRENGTHEN THE EVIDENCE BASE on FGS by supporting and facilitating research and translating evidence into programming.

INTEGRATE FGS FGS into the essential packages of sexual and reproductive health services (SRHR) and NTD programming by building awareness and strengthening cross-sectoral linkages (eg WASH, Education).

DECREASE STIGMA AND VIOLENCE experienced by women and girls by including FGS in comprehensive sexuality education, anti-stigma, and violence prevention.

ENGAGE diverse stakeholders to collaborate, learn and take action together to expand and diversify funding for FGS, embedding FGS in global, regional and national policy and guidelines.

OUTCOMES

AWARENESS
Health providers, communities and SRHR stakeholders actively include FGS in their practice, policymaking, and budget allocations increasing community support to women and girls who experience FGS.

EVIDENCE
Improved the body of evidence on FGS and what works in SRHR integration to improve patient outcomes and commitment from stakeholders.

ENGAGEMENT
FGS recognised as a significant SRHR issue for women and girls with political will and commitment to implement and scale up sustainable FGS integrated interventions.

INTEGRATION
Comprehensive FGS prevention, diagnosis and management within national health systems and regional and global policy and funding mechanisms.

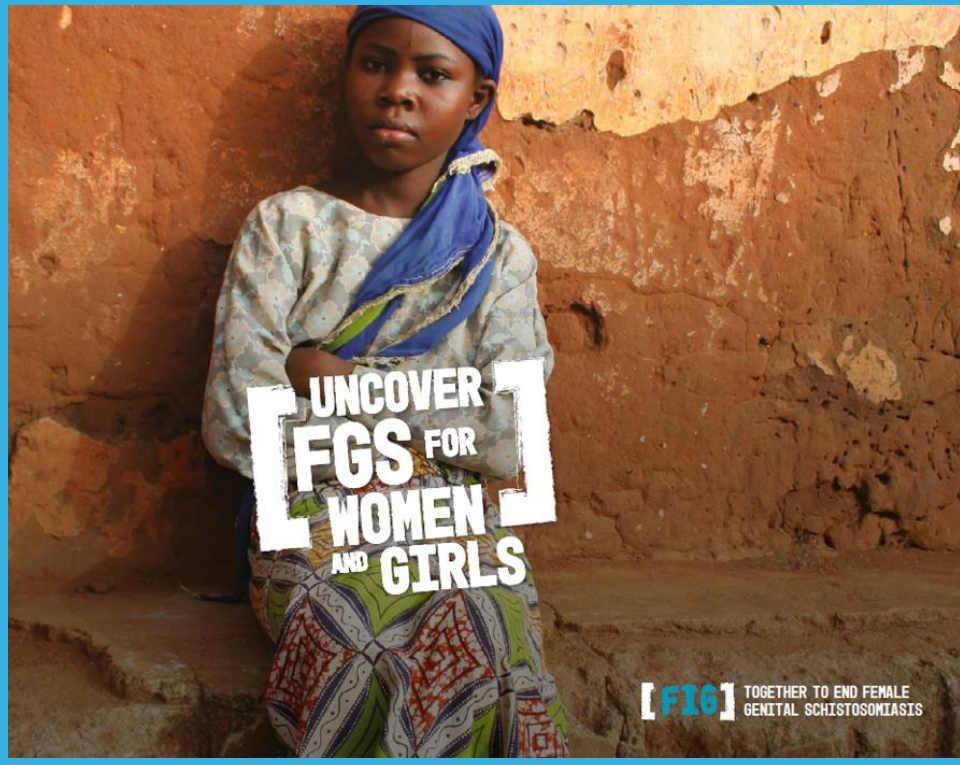
STIGMA
Women and girls affected by FGS/HIV/cervical cancer experience less stigma, discrimination and gender-based violence.

LONG-TERM GOAL

Improved awareness, diagnosis, treatment, and prevention for women and girls in Africa through sustainable integration of FGS into SRHR- including HIV, cervical cancer and STIs – and NTD programming.

IMPACT

FGS Integration Group will contribute to achievement of Sustainable Development Goals 3, 5, 6 and 10, by improving the health and wellbeing of millions of women and girls through better access to integrated sexual, reproductive health and NTD programmes and services.



Result:
New WHO Cross Department Task Team forming linking SRHR programs, immunization, and others with a mandate to integrate and reach across UN agencies

Example: The PINE Project

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Funded by Takeda Pharmaceuticals, CSR Program

Why:

- In the Pacific, skin diseases are amongst the top reasons people show up to health centers

What:

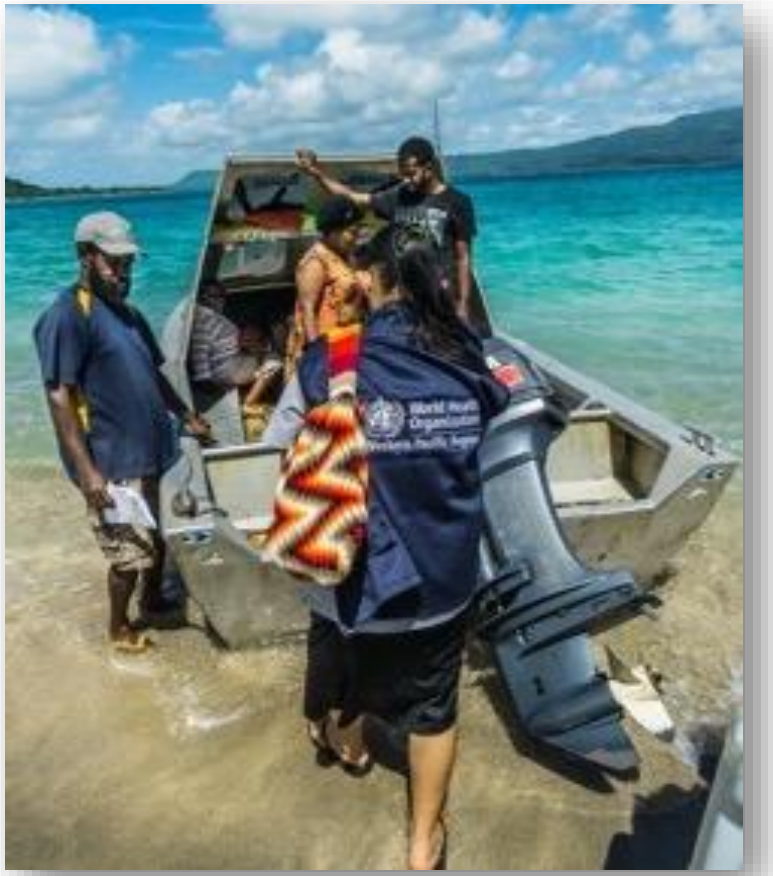
- **Eliminate / control:**
  - Yaws
  - Scabies
  - Leprosy
  - Lymphatic filariasis
  - Soil Transmitted Helminthiasis

Where:

- Papua New Guinea: West New Britain Province
- Vanuatu: Shefa, Tafea, and Sanma
- Both ‘hard to reach’ island populations

Papua New Guinea

National Department of Health



Kirby Institute

World Health Organization

CASE WESTERN RESERVE UNIVERSITY

Introduction

Pacific

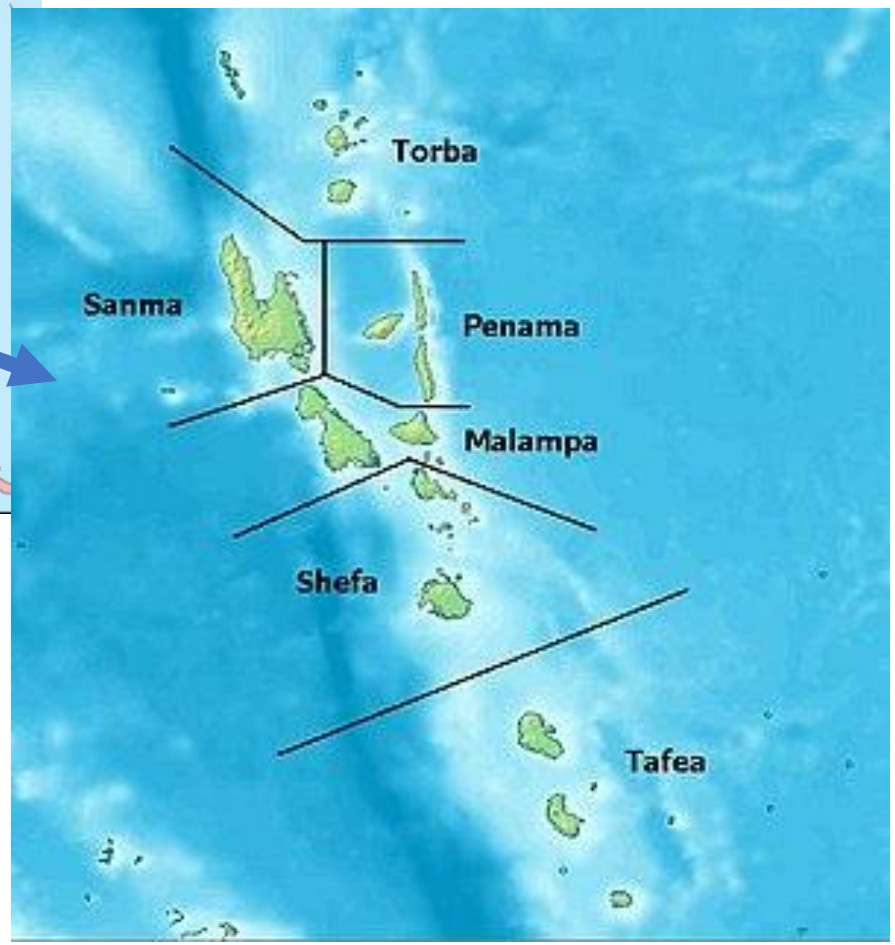
Integrated

NTD

Elimination

(PINE) Project

Papua New Guinea:
West New Britain Province



Vanuatu

Bridges to Development

Introduction

Pacific

Integrated

NTD

Elimination

(PINE) Project

Through community-based mass drug administration (MDA) and health systems strengthening addressing 5 different diseases at the same time

Introduction

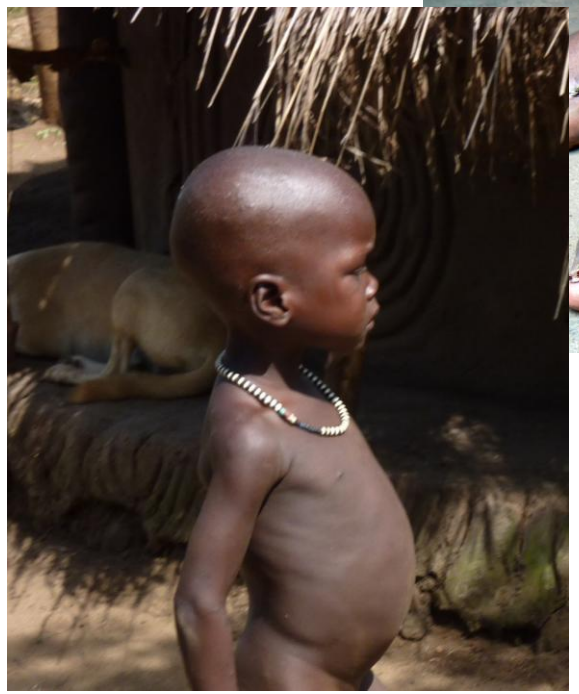
Pacific

Integrated

NTD

Elimination

(PINE) Project



Introduction

Pacific

Integrated

NTD

Elimination

(PINE) Project

PINE: Project Aims

- **Innovate** by tailoring more comprehensive strategies for island-based populations through **integration** of multiple interventions and services targeting **disease elimination**

- **Introduce innovations** like ivermectin-DEC-albendazole (IDA) triple therapy for lymphatic filariasis (LF), 4 drug therapy in PNG adding azithromycin, and new scabies **mass drug administration** (MDA) strategies

- Document **innovations** and their validation to provide proof of concept, to refined WHO guidelines and allow roll out and **scaling** to other **hard to reach populations**

- Utilize a "**whole of society approach**"

Implementation and Monitoring and Evaluation (M&E)

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Two pillars for programmatic implementation

Pillar 1: Community outreach for active intervention (MDA)

- Vanuatu (Shefa, Tafea, Sanma): yaws, scabies, STH
- PNG (WNBP): LF, yaws, scabies, STH

Pillar 2: Primary health care capacity strengthening for passive surveillance (health systems strengthening)

- Vanuatu (Shefa, Tafea, Sanma): yaws, scabies, leprosy, LF morbidity
- PNG (WNBP): yaws, scabies, LF morbidity

Three components to M&E

- Active surveillance
- Passive surveillance
- Sero-surveillance

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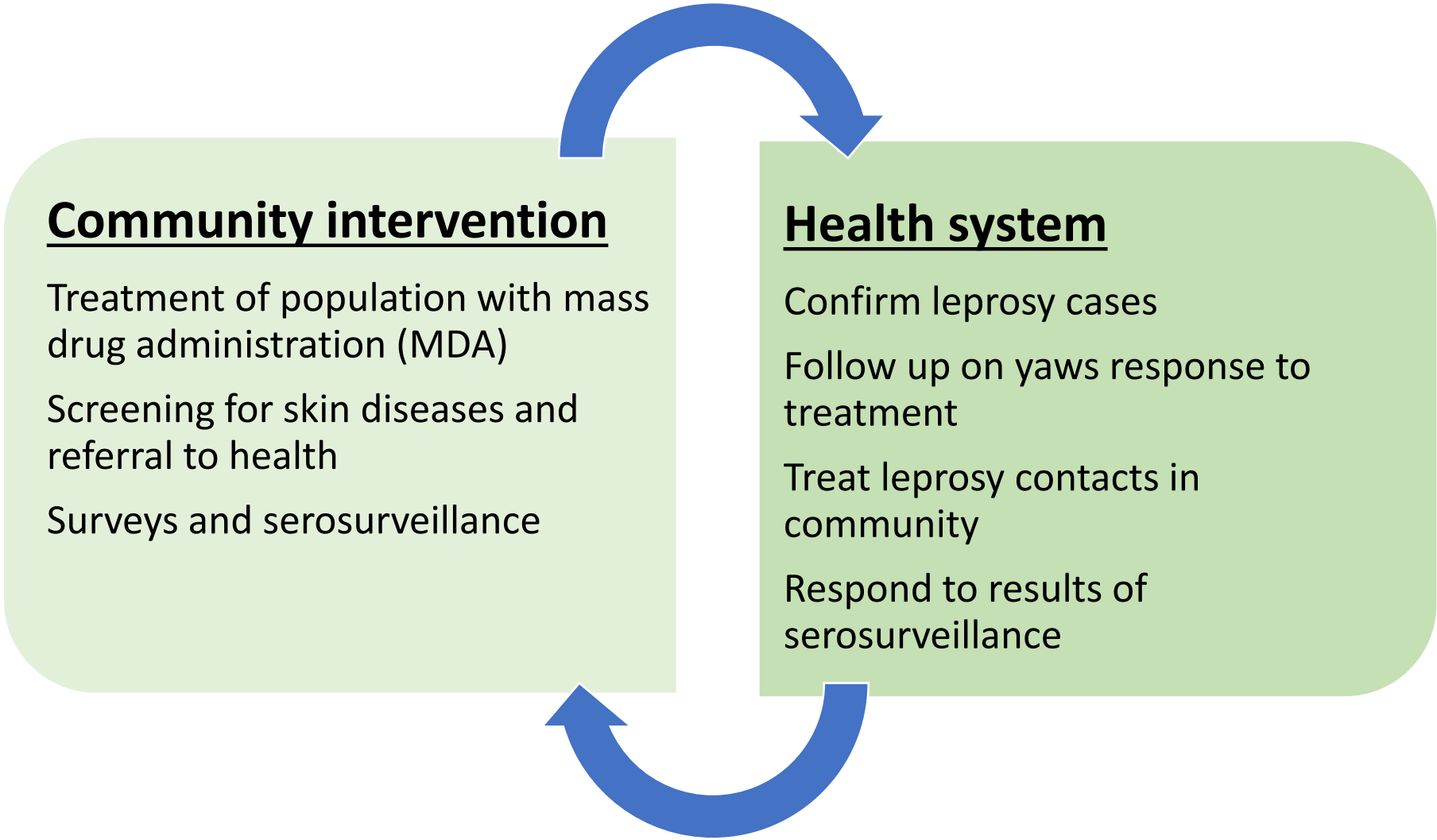
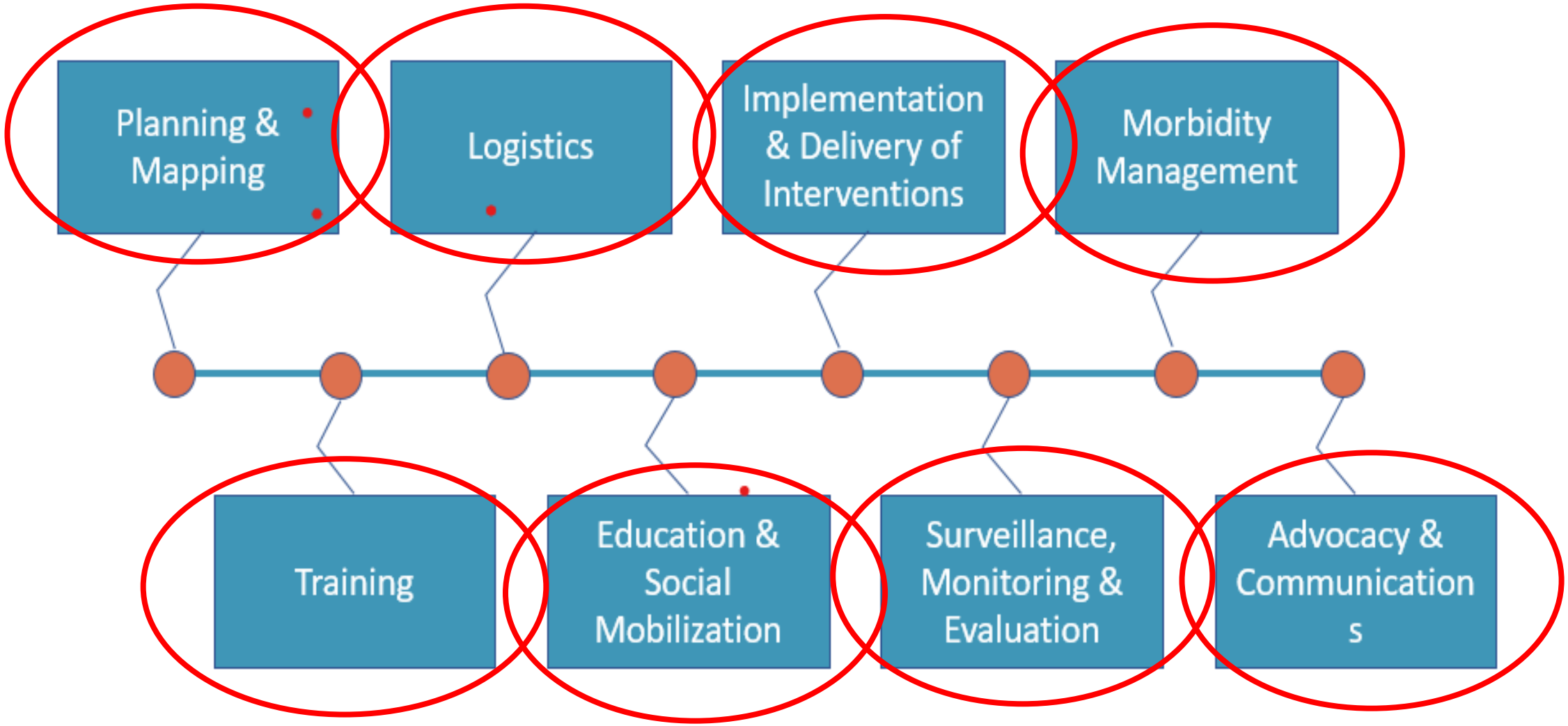
PINE linking community and health system



PINE has many layers of integration



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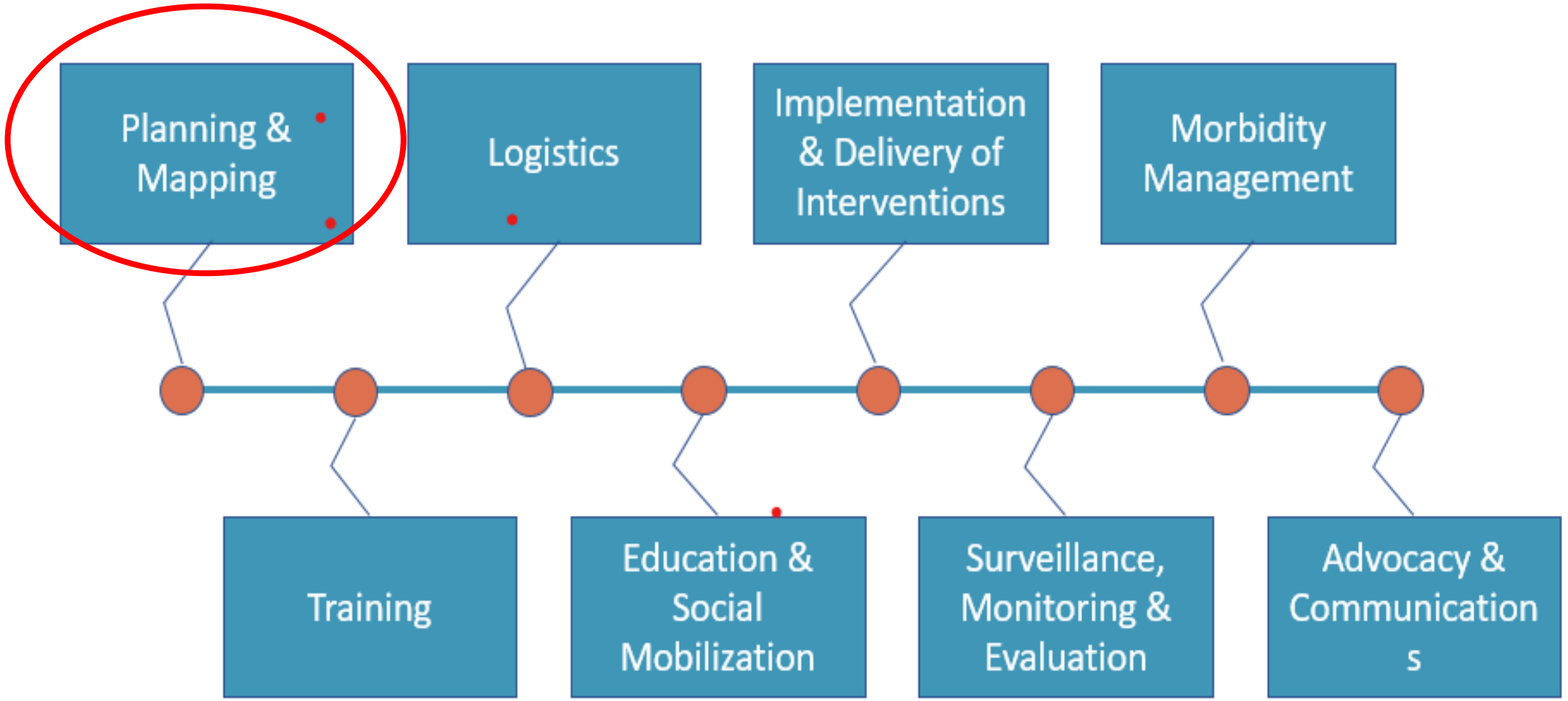
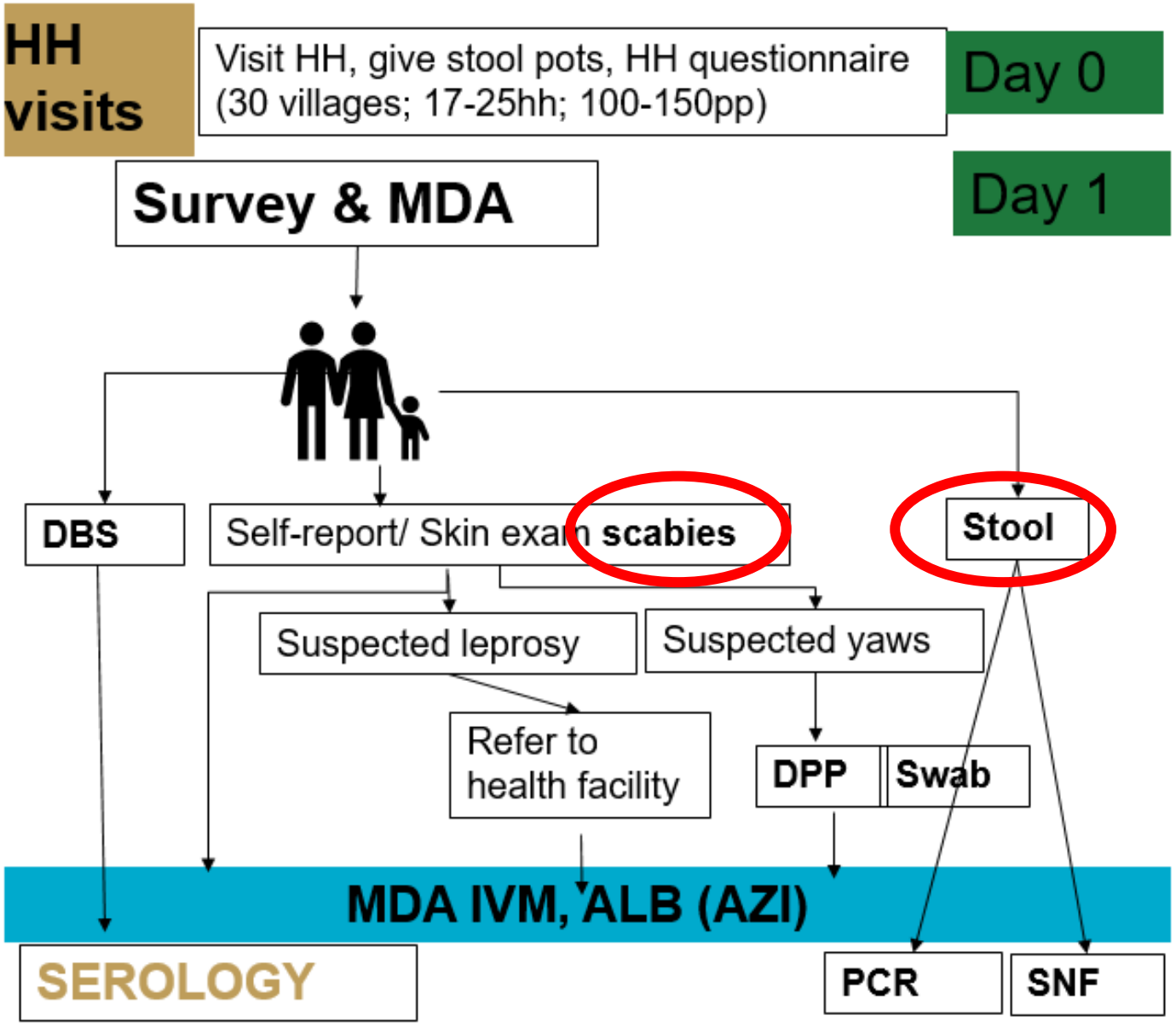
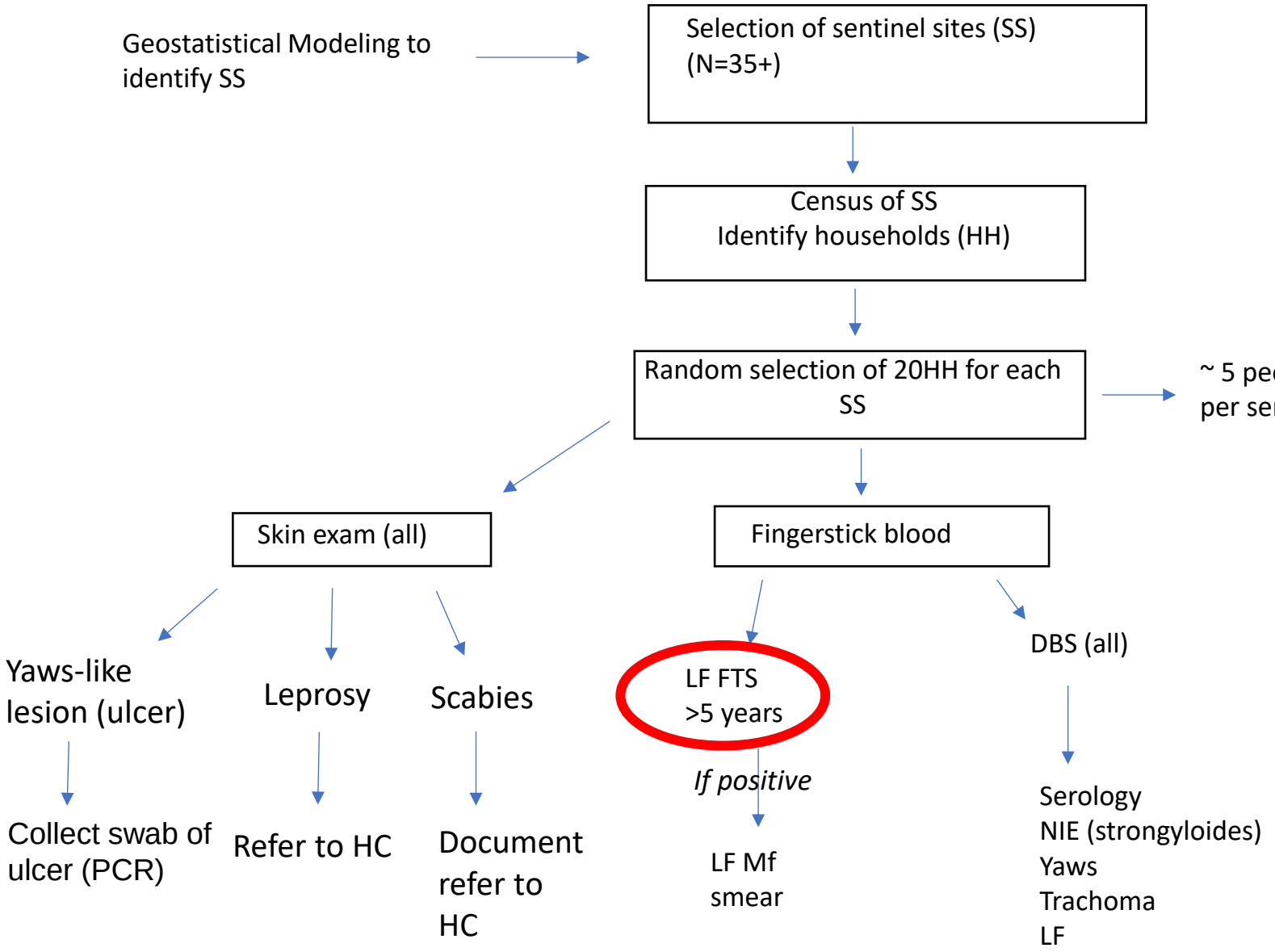


Planning and Mapping

- **In Vanuatu integrated baseline surveys were across diseases** (sample size based on scabies and STH)
- **AND integrated with MDA**
- **AND integrated serosurveillance**
  - Vaccine preventable diseases
  - Enteric disease
  - NTDs
  - Malaria
  - Arboviruses



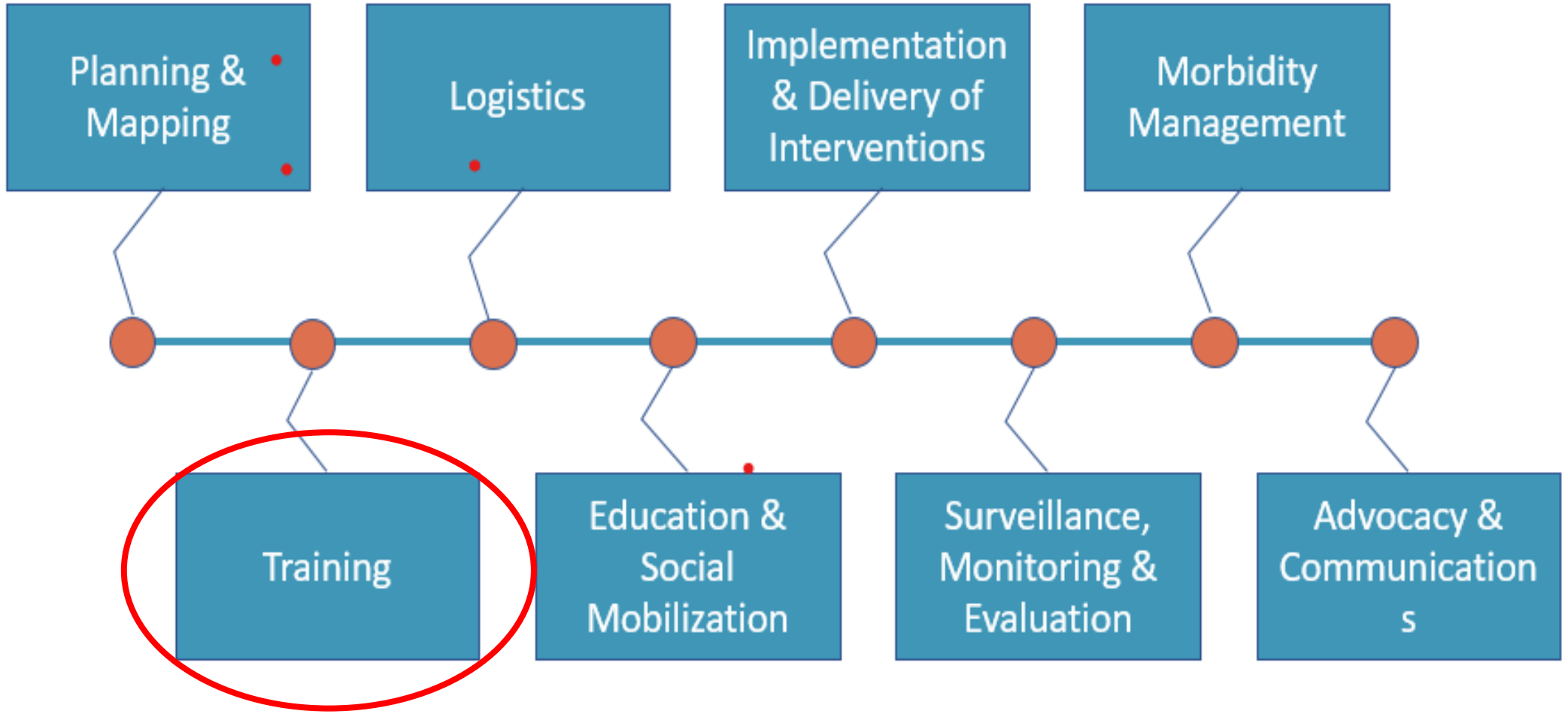
PNG - Active Surveillance in Sentinel Sites (SS)



- **Sampling based on LF**
- **43 sites**
- **Median people/site =90/site (range 36-111)**
- **3,511 total participants**

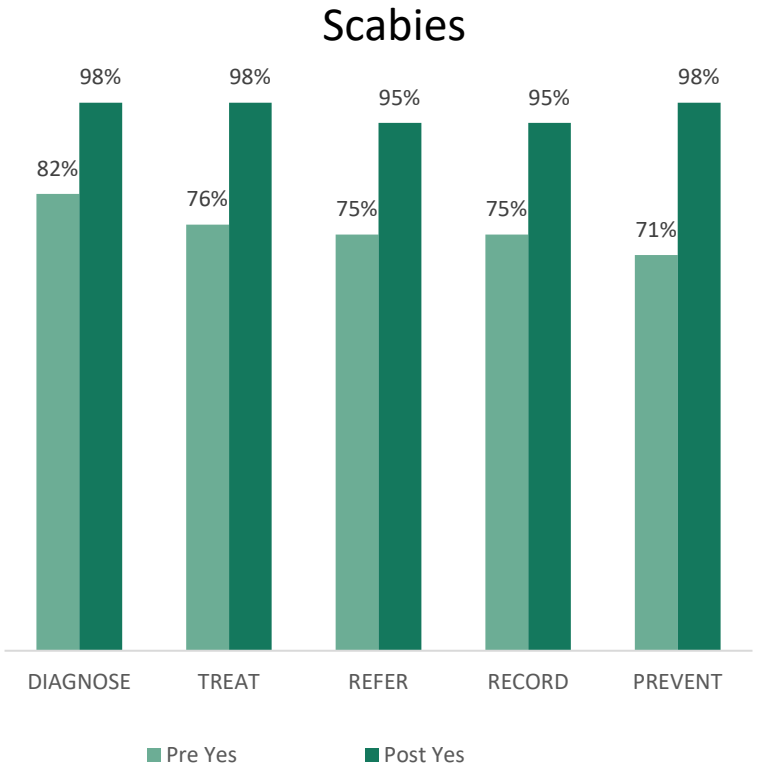
- **In PNG Skin exams were done on all survey participants**
- **And LF testing was done as well as dried blood spots for serosurveillance**

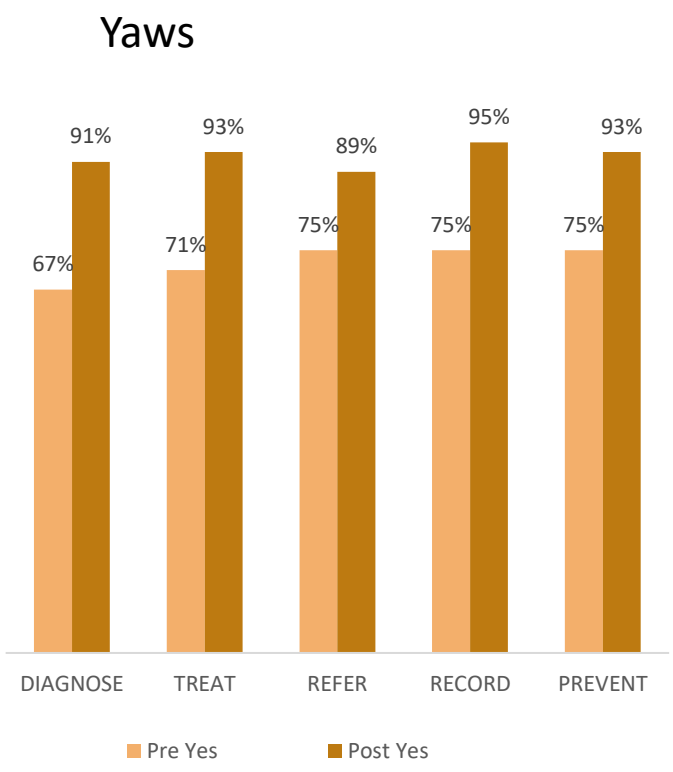
PINE has many layers of integration

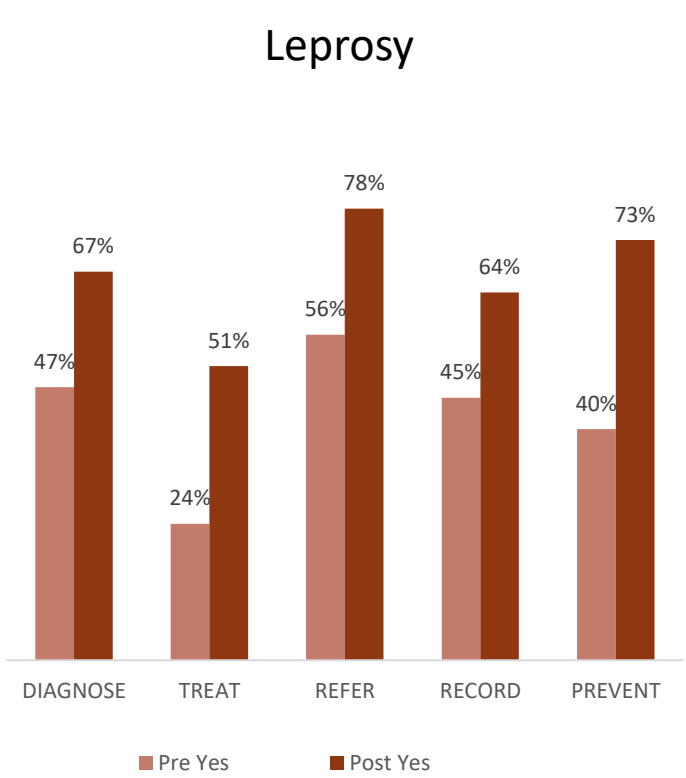


Integrated Skin Disease Training Results Vanuatu

Do you feel you have the knowledge to [diagnose, treat, refer, record, prevent] scabies, yaws, and leprosy? (n=55)







Wilcoxon signed rank test, a non-parametric test, was used to compare pre and post survey outcomes. Differences in the percentages shown are statistically significant with p-values <=0.05.

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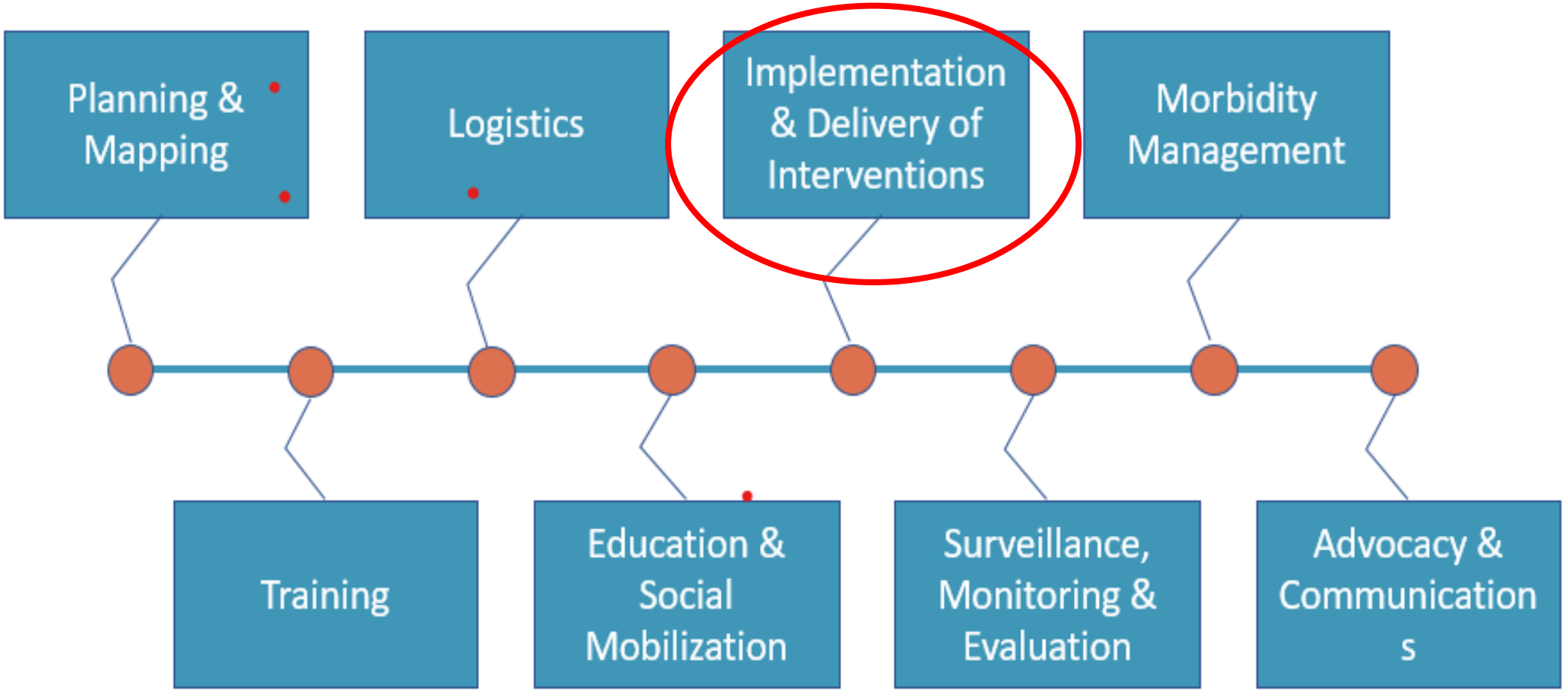
PNG MDA training of Health Workers/Supervisors integrated with Integrated Skin Disease training

PINE has many layers of integration



Skin screening was integrated during MDA

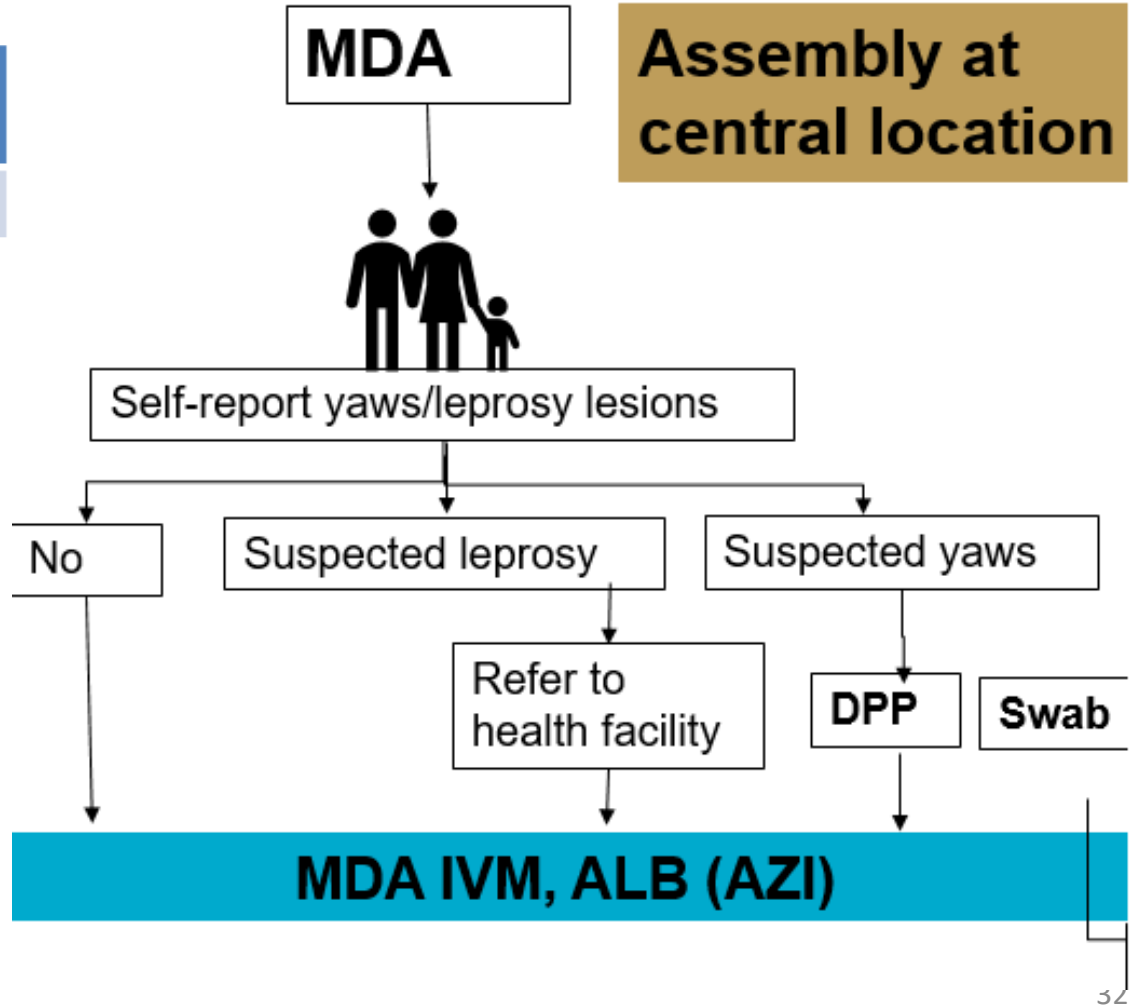
Skin disease found in PNG during MDA

Yaws	Scabies	LF- Lymphedema and Hydrocele	Leprosy
1923	3860	175	5

Commodities delivered during MDA in Vanuatu

Commodities Distributed	Quantity
Azithromycin distributed	376,235
Albendazole	195,851
Ivermectin	664,367
PM Cream	23,543
Benzyl benzoate lotion	1,305
Soaps	43,246
Wound kit	11,225

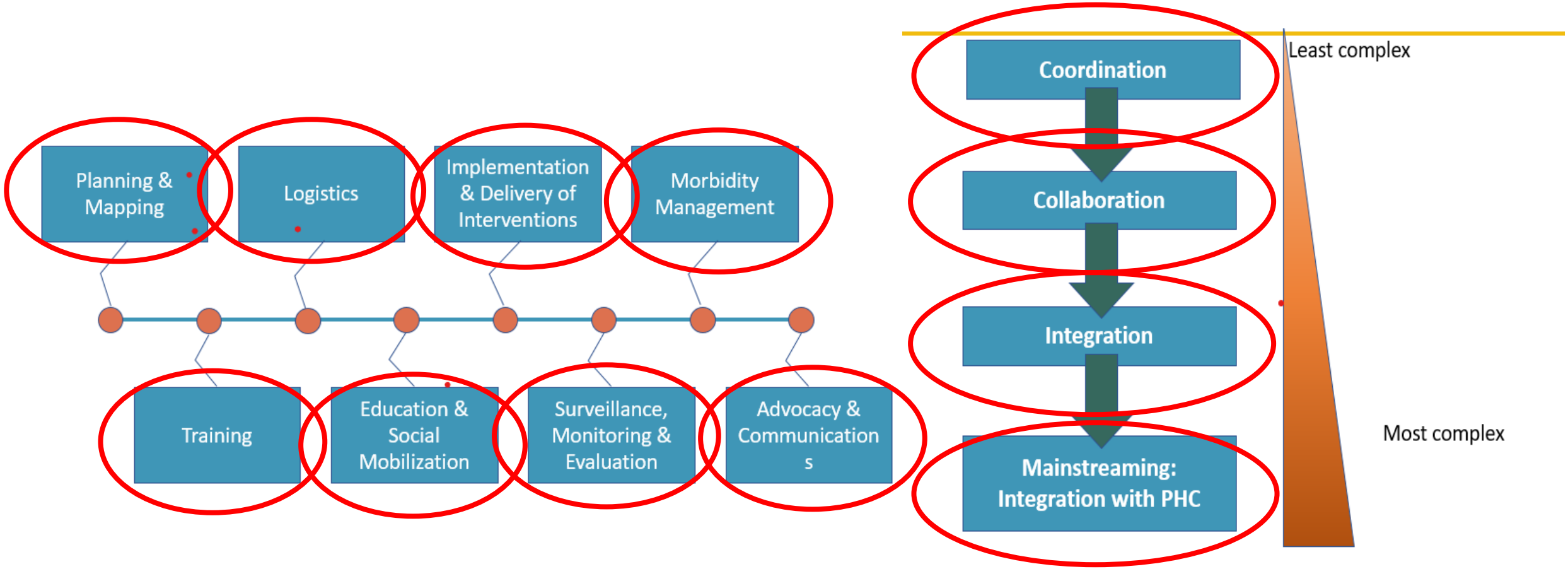
MDA integration in Vanuatu



Integration of treatment in PNG (4-drug MDA)

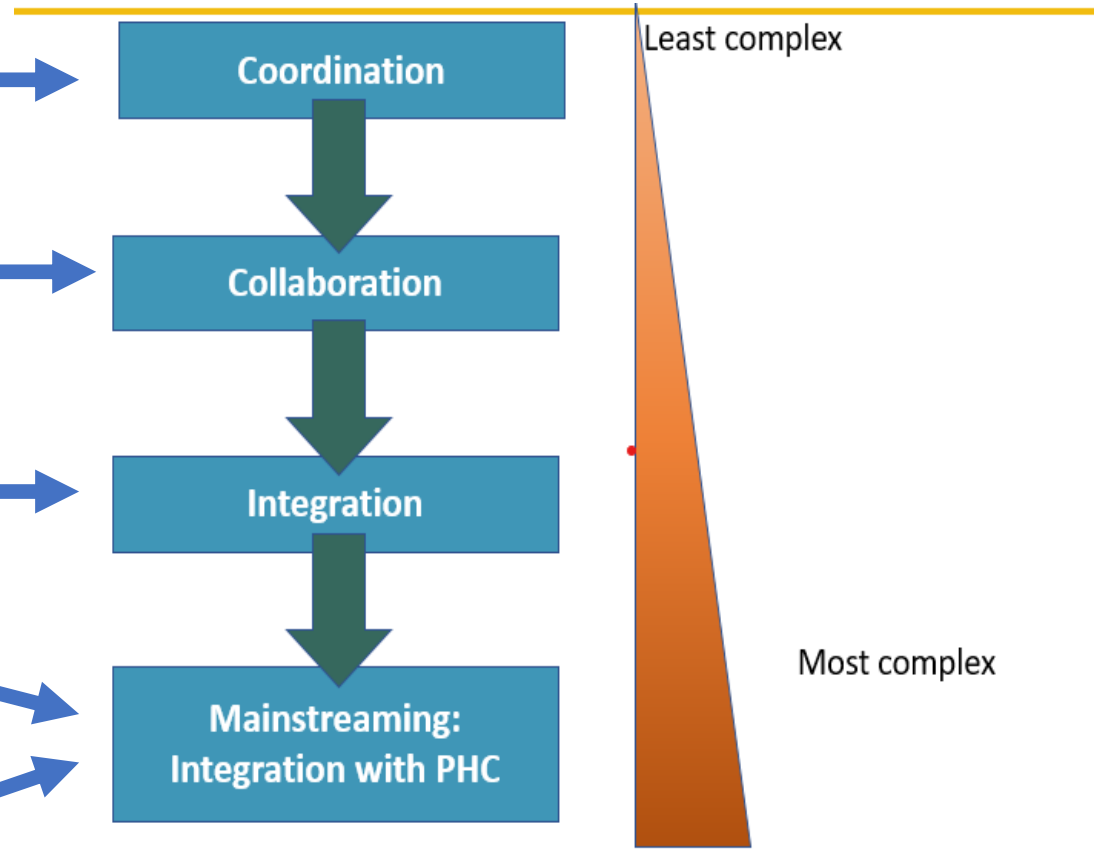
- Integrated treatment of ivermectin, DEC, albendazole, and azithromycin moving from triple drug to 4-drug treatment
- Research done on safety for 4-drug treatment done in PNG (Dr Lucy John)
- No policy at WHO, which meant that the donated drugs could not be co-administered
- Western Pacific Regional Office expert review of data issued position that supported use of 4 drug treatment in PNG (not in time for 2023 MDA)
- In the MDA, IDA was given with azithromycin given with 5 day gap
- 3,000 person co-administration safety study conducted to complete 10,000 cohort event monitoring to support WHO guidelines
- WHO HQ now working on global guidelines for co-administration

PINE has many layers of integration



Different ways of integrating

- Drug supply coordinated for arrival for integrated MDA (this was not smooth)
- Public health collaborating with curative services in detection and referral of skin disease cases
- Integrating NTD reporting into HIS in Vanuatu and PNG
- Mainstreaming NTDs into the National Health Plan in PNG
- Mainstreaming skin NTD drugs into essential medicines lists in PNG and Vanuatu

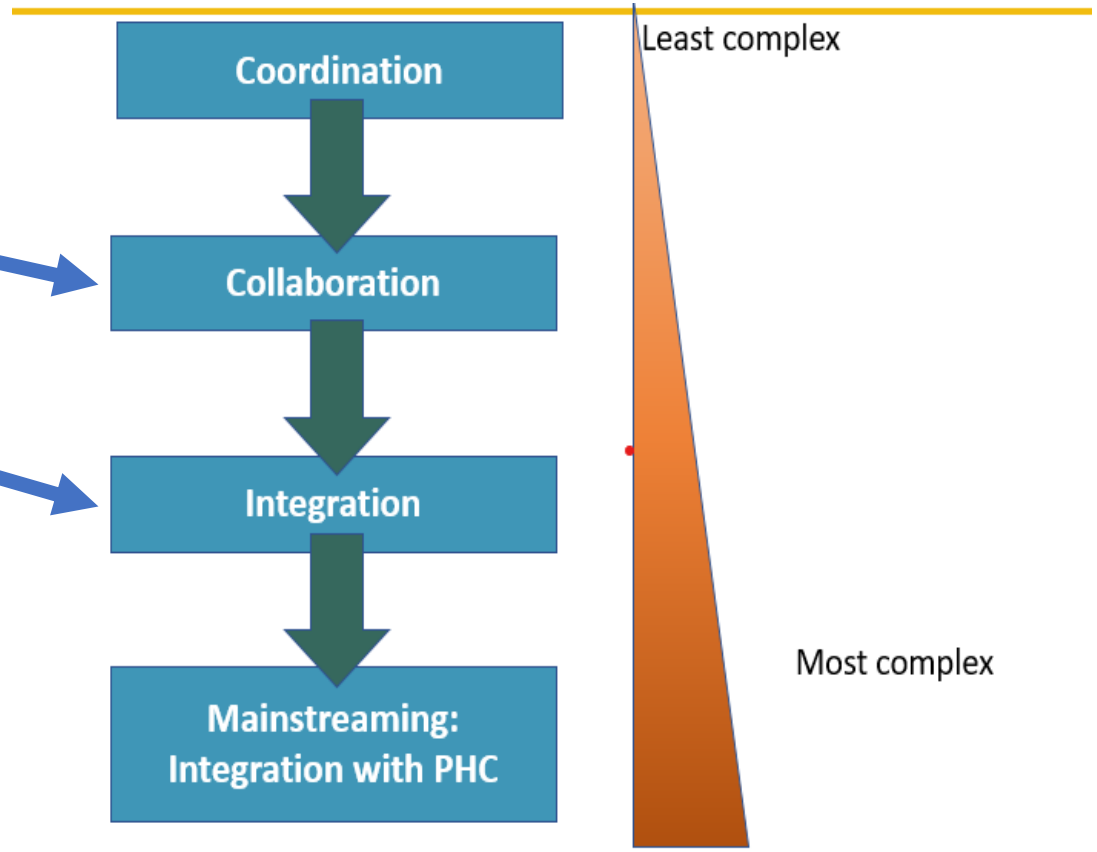


Different ways of integrating

MDA treatment good example of different approaches to integration

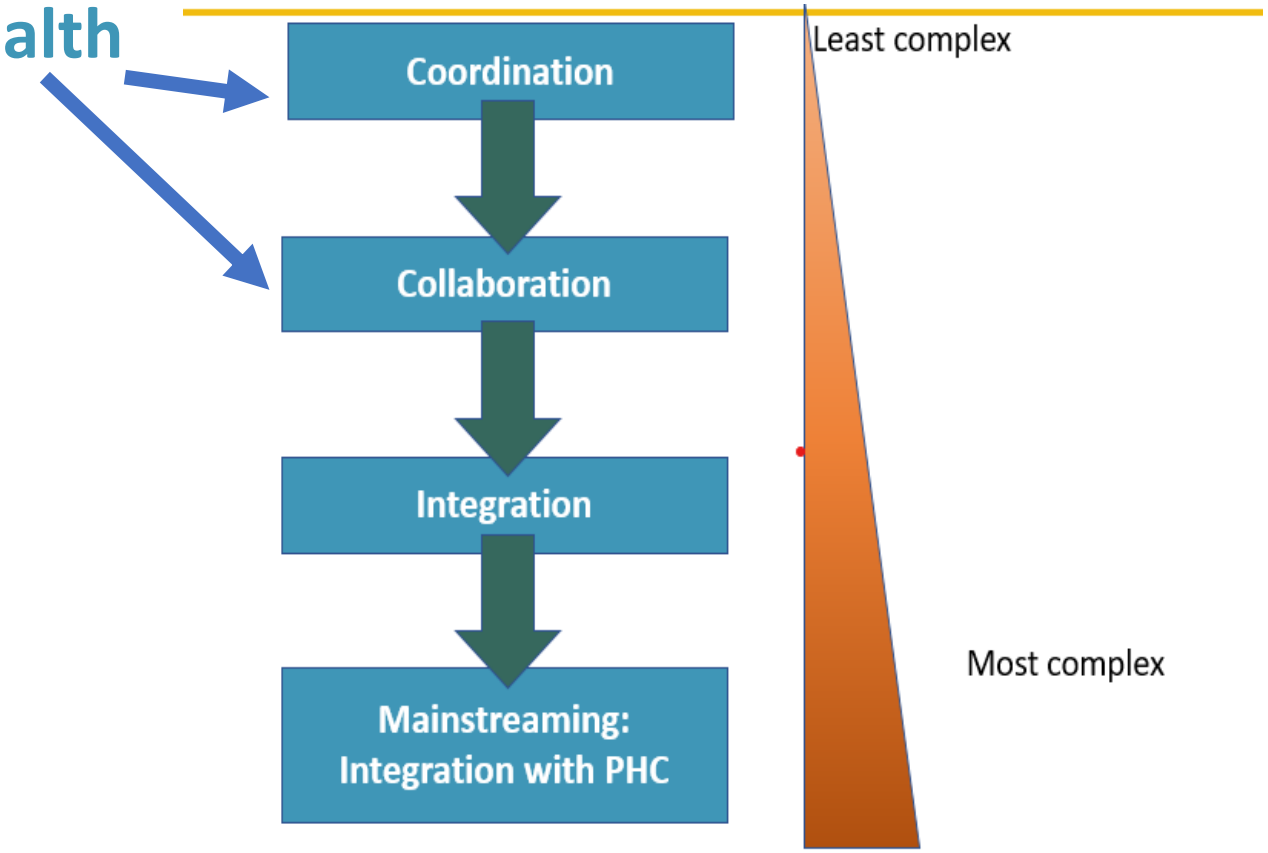
- **MDA with IDA followed by MDA with azithromycin**
- **MDA with 4-drug treatment IDA plus azithromycin**

Moving between these levels requires more research and supportive policy and guidance. Payoff is decreased costs and increased coverage



Different ways of integrating

- Integration of MDA with Primary Health Care outreach



Sanma Province, MDA round 2, Part One

- **Limited funds → integrate into PHC outreach activities**
- **PHC outreach pilot: non-communicable disease screening, malaria testing, childhood vaccinations, and health education**
- **Strategy:**
  - Went to 3/12 area councils
  - 1 station was set up in one village in each area council
  - MDA team set up at the station to deliver IVM+ALB+AZI

Outcome:

- **Treatment coverage 9.3% - 443 people treated**

Sanma Province, Round 2, Part Two

- **Modified the approach to expand to other areas. Went to 9/12 area councils**

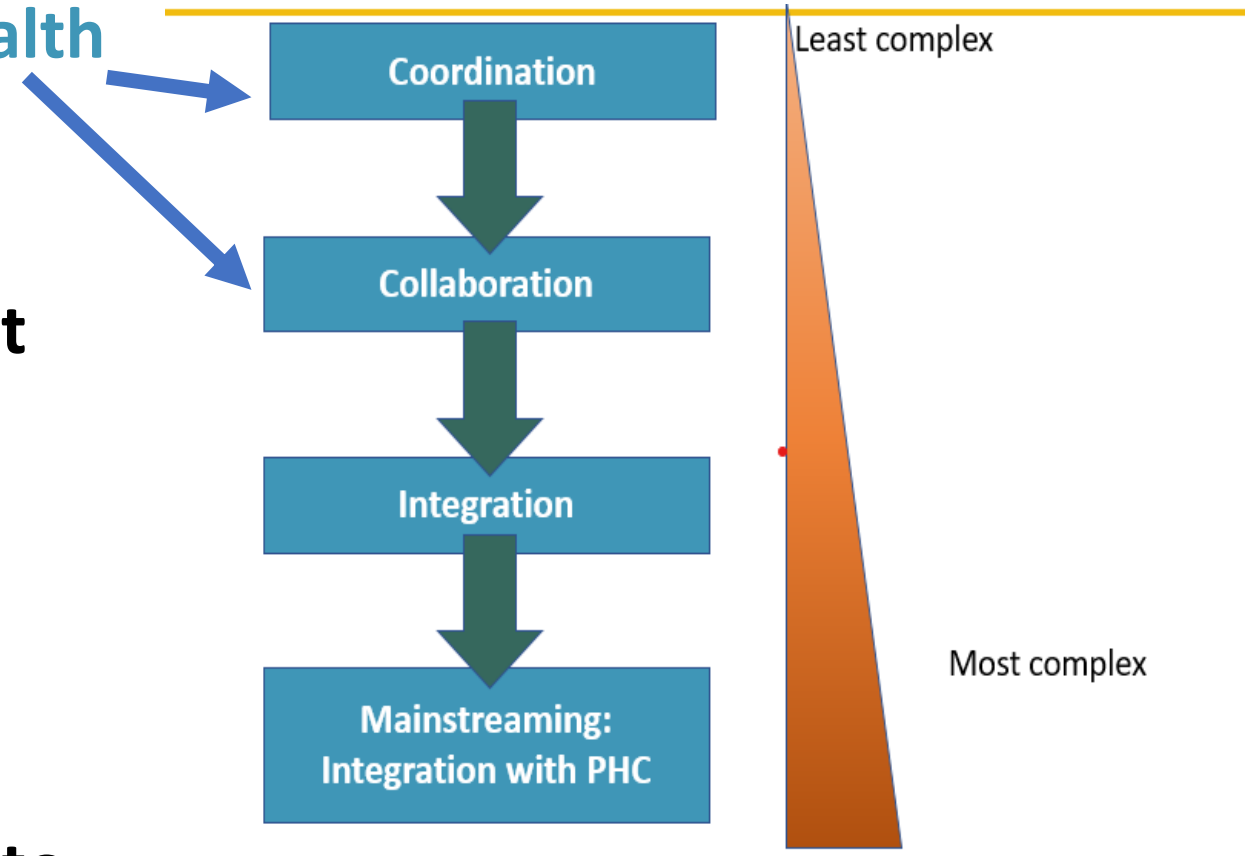
- **Strategy:**
  - PHC - 1 station in each area council (same as before)
  - MDA team set up at the station to deliver treatment AND 2 mobile teams visited every village

Outcome:

- **Treatment coverage: 74% - 45,205 people treated**

Different ways of integrating

- Integration of MDA with Primary Health Care outreach



Increased investment and planning but outcome worthy of investment

OR questions- document this case and include impact on PHC screening, did community outreach increase PHC effectiveness?? Was there a win- win to inspire investment from both sides?

Did it work: Impact of integrated MDA and skin screening in PNG and Vanuatu

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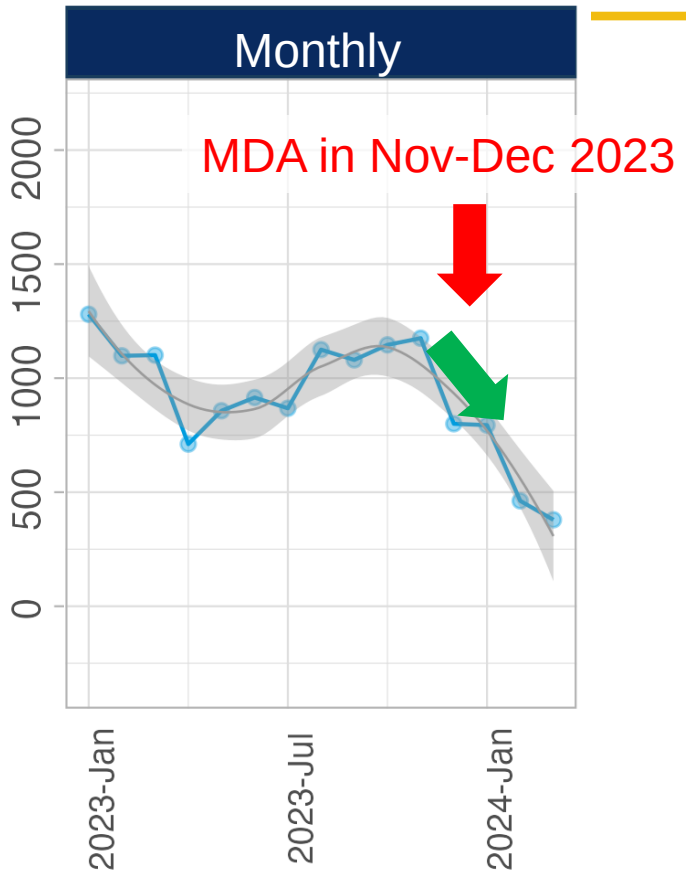
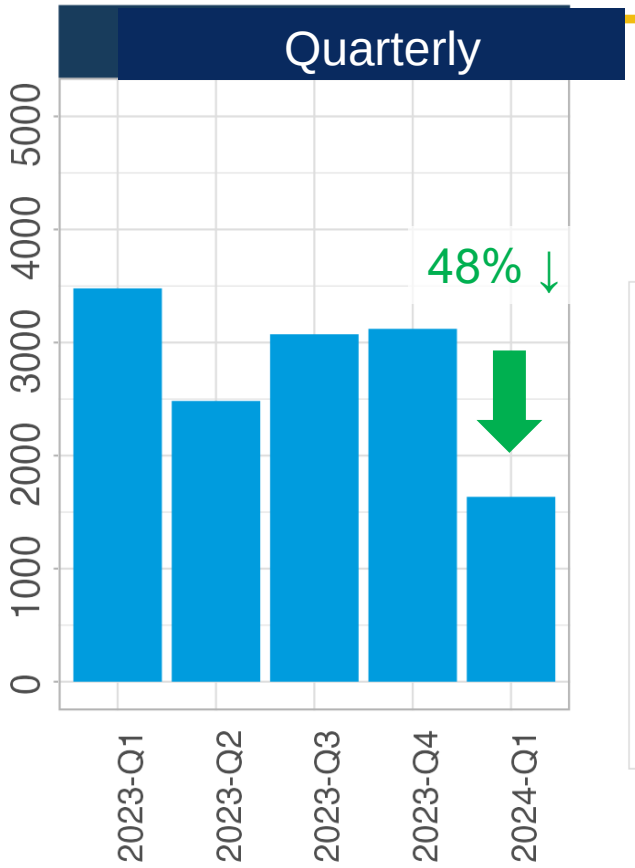
Decreased number of OPD visits for yaws after MDA implementation in Dec 2023 PNG

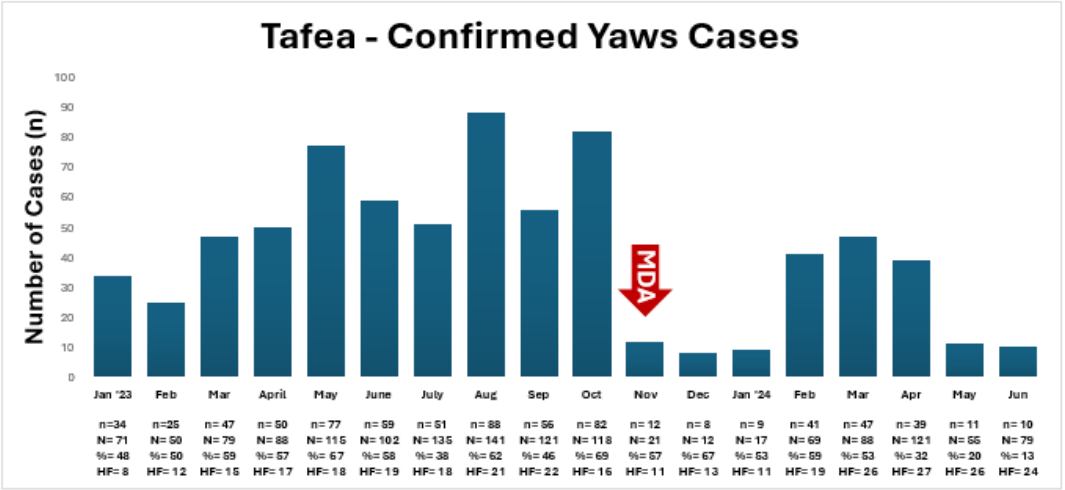




- 1175 visits in Nov 2023
- 379 visits in Jan 2024

- 3121 visits in Q4 2023
- 1635 visits in Q1 2024

Decreased number of confirmed yaws cases in Tafea Province, Vanuatu after MDA



Data collection underway but early data indicate PINE integration worked

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Operational benefit

- Yaws, leprosy, scabies case detection in MDA successful
- Increased coverage of MDA for skin diseases
- Increased reporting and data mainstreaming

Impact benefit

- Decrease in skin diseases seen at health posts after MDA

Global Impact

- Data to support new WHO guidelines on co-administration of 4 drug therapy
- Data on impact of MDA with IVM for scabies
- Data on integration of NTD Skin Disease programs

Summary

- Integration has many definitions- coordination, collaboration, integration, mainstreaming- Define and measure the win-win scenario for integration
- Important to understand the what, where, and how if integrating
- Document impact and investments-, Approaches to measure the different elements and outcomes of integration need further development
- Holistic view of the system is essential including end users and communities
- Many examples of success and new examples underway- learn and expand what works and increases reach and sustainability

Papua New Guinea
National Department of Health

Bridges to Development

Thank you

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