Engaging Communities for Better Vector Control Outcomes

Presented by

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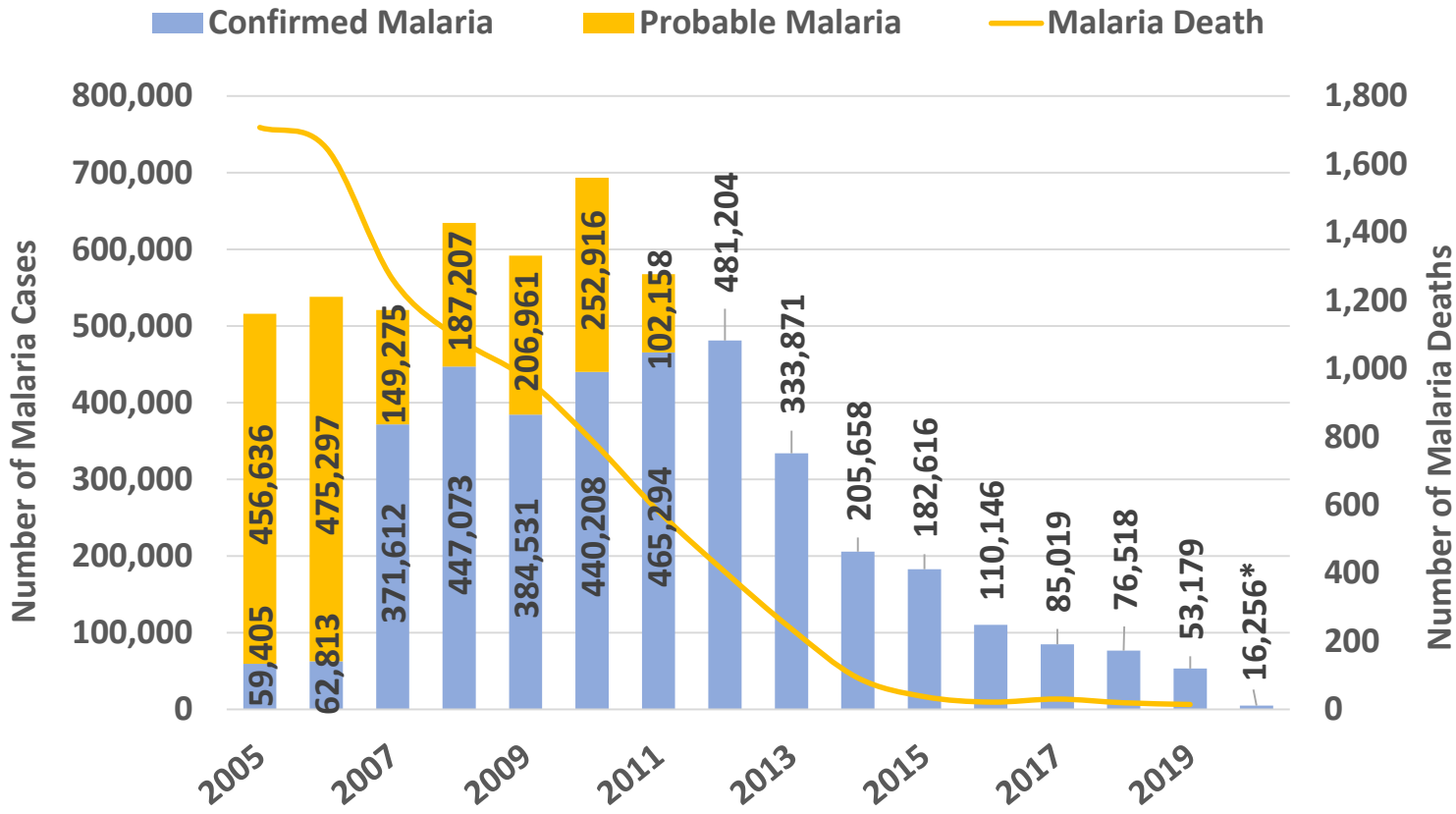
Presentation outline

- Malaria situation in Myanmar
- The program timeline and focus
- Key interventions and supporting elements
- Integrated community malaria volunteers
- Engaging communities in vector control

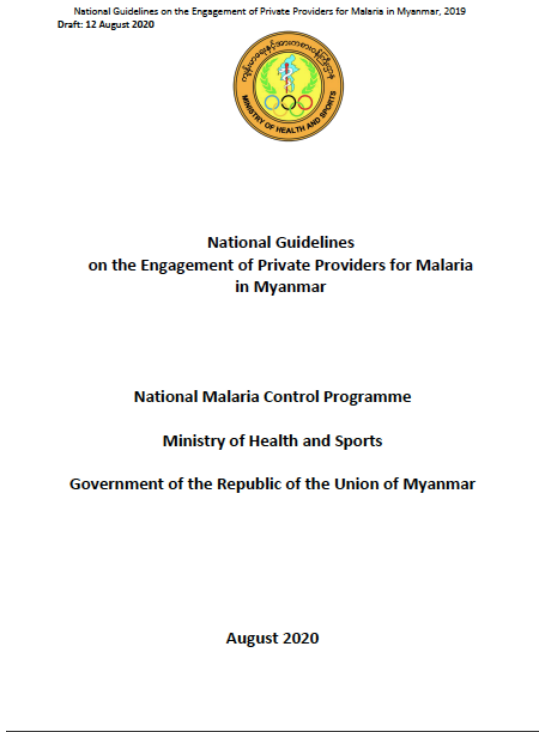
Malaria Situation in Myanmar

- 52 million population
- 22.3 million population are at risk of malaria
- 53,179 malaria cases and 14 malaria death in 2019
- 60% of all malaria cases was *Plasmodium Vivax* in 2019
- Primary vectors (*An. dirus and An. minimus*)



Programme Timelines and Focus

- Myanmar is signatory to Global Technical Strategy 2016-2030, 'GMS Ministerial Call for Action to end Malaria by 2030', APLMA commitment etc.
- **Target for *P. falciparum* elimination is by 2025 and all human malaria is by 2030.**
- National Malaria Strategic Plan (2021-2025) & M&E Plan (2021-2025) have been developed
- **Community and Private sector engagement remains key focus in elimination**


National Guidelines on the Engagement of Private Providers for Malaria in Myanmar, 2019
Draft: 12 August 2020

National Guidelines
on the Engagement of Private Providers for Malaria
in Myanmar

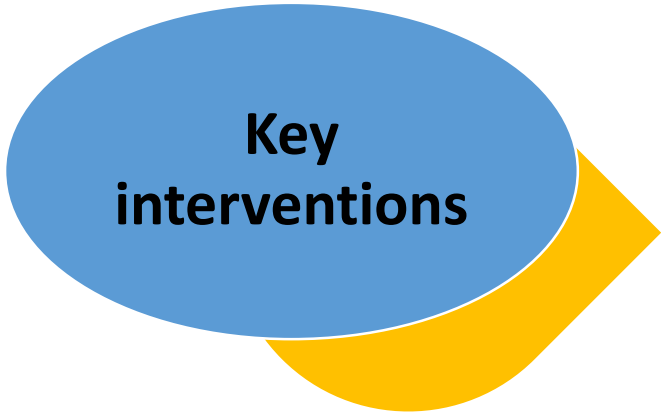
National Malaria Control Programme

Ministry of Health and Sports

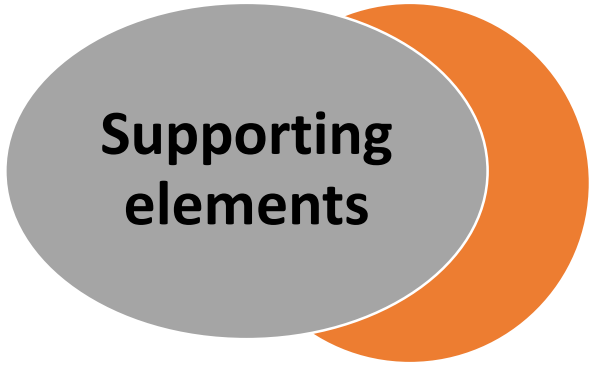
Government of the Republic of the Union of Myanmar

August 2020

Key interventions and supporting elements

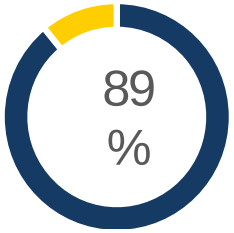


- Early and effective malaria **case management.**
- Universal coverage of high-risk populations with appropriate malaria **prevention** measures.
- **Case-based surveillance** for elimination and prevention of re-establishment.

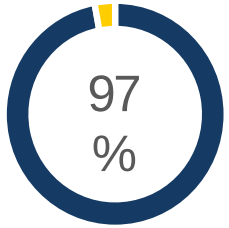


- Expanding **research** for innovation to accelerate malaria elimination and improve delivery of services.
- Strengthening the **enabling environment**.

Success to this decline….

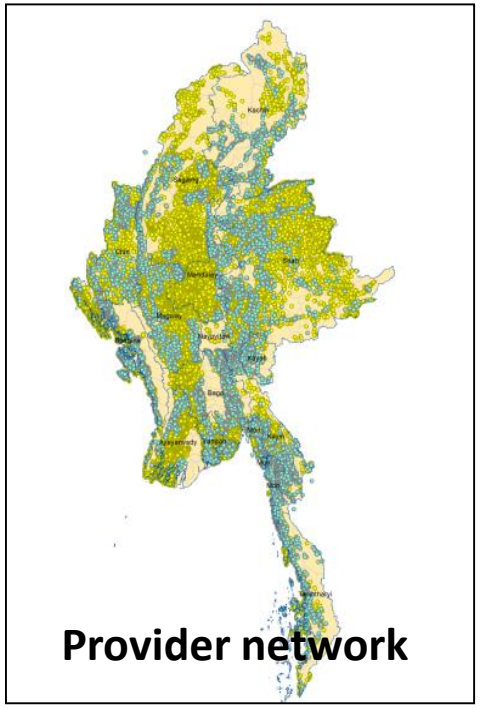


Morbidity reduction 2012 to 2019

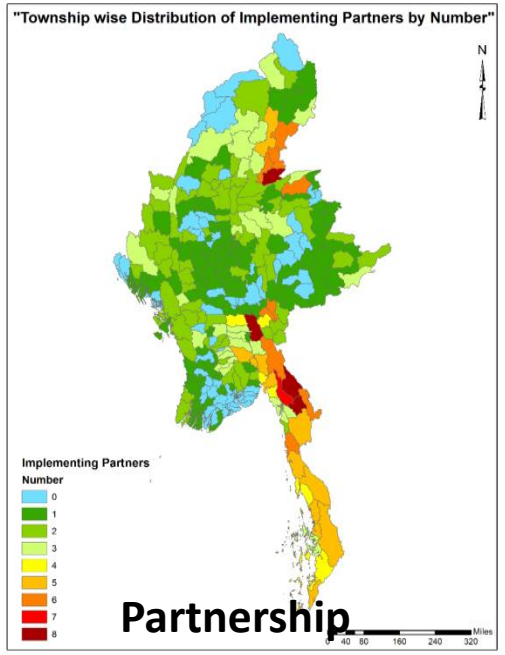


Mortality reduction 2012 to 2019

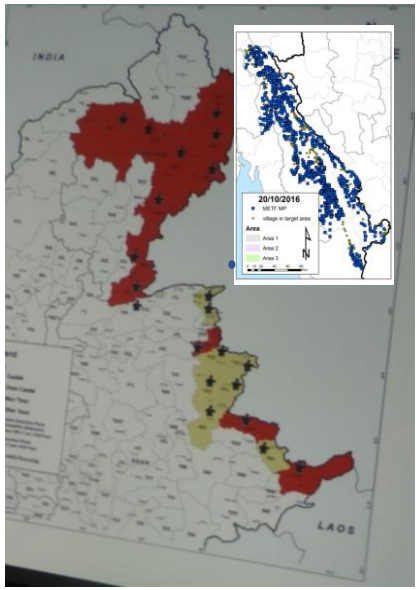
- **Front line community workers and private outlets (21,000 ICMVs)**
- LLIN, RDT, QAACT
- Equitable malaria services -Conflict areas, focus at risk groups (MMPs)
- Partnership (31 partners- I/NGO/EHOs includes private sectors)
- Availability of funds



Provider network



Partnership



Services in Conflict areas

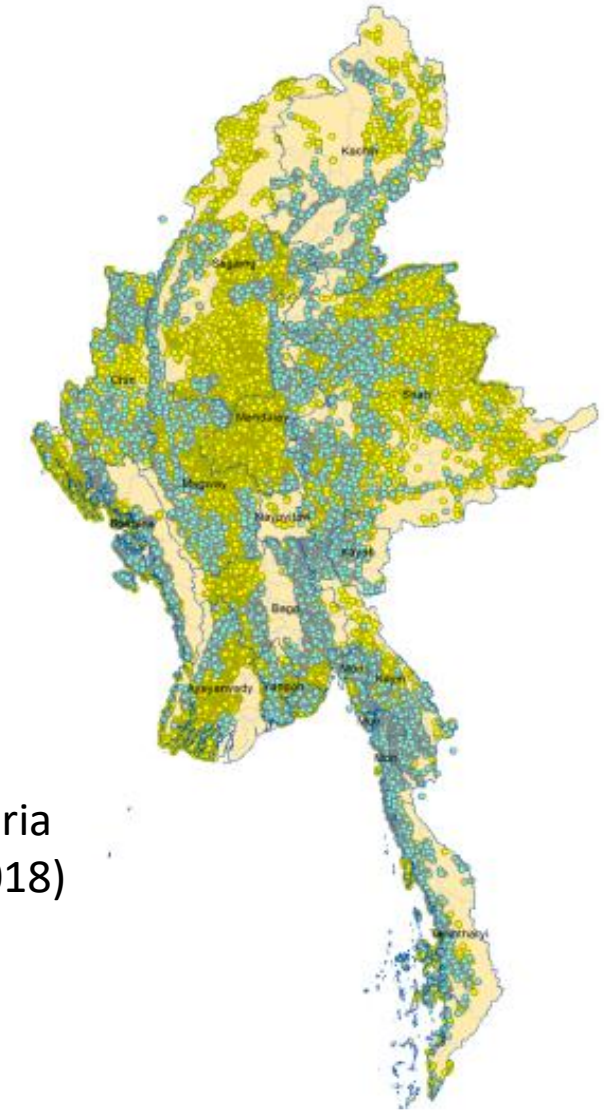
Integrated Community Malaria Volunteers

I believe that **if you show people** the **problems** and **you show** them the **solutions they will** be moved to act.

Bill Gates

- **Policy:** Malaria volunteers transformed as Integrated Community Malaria volunteers (ICMV)
- Total no.: NMCP: 15,000
- Partners: 6,000
- Diseases covered including roles: Primary role is malaria diagnosis, treatment, referral and IEC/BCC activities.
- Other diseases: TB, HIV, Leprosy, Dengue and Filariasis: For suspicion, referral and follow up

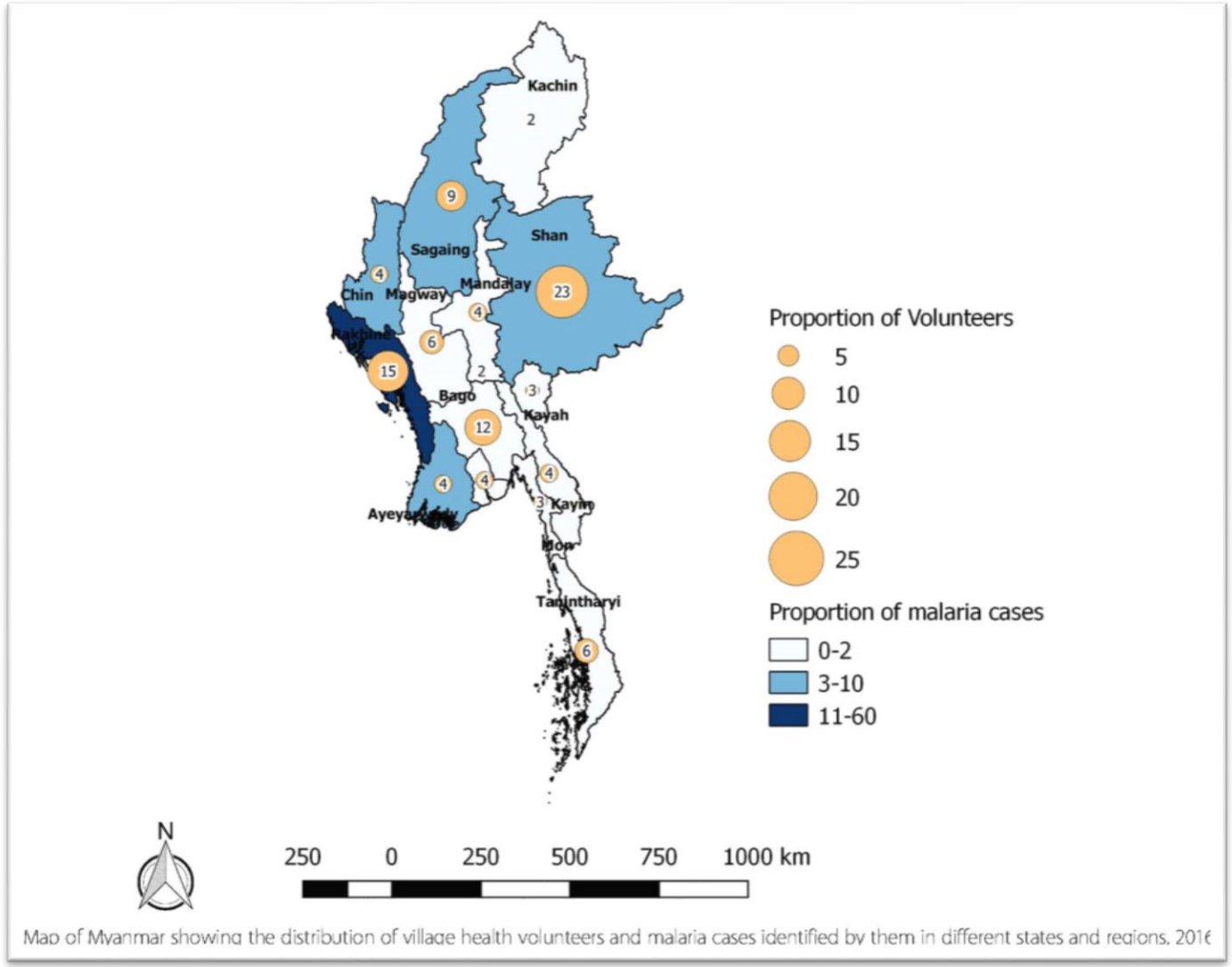
Integrated Community Malaria Volunteers



Mapping Malaria Volunteers (2018)

Manual for ICMVs (2017)

Integrated Community Malaria Volunteers



Proportion of Distribution of Malaria Volunteers in Myanmar 2016

Integrated Community Malaria Volunteers

RAI2E EMPOWERING COMMUNITIES THROUGH ICMVS

By mobilizing and empowering malaria-affected communities with skills, knowledge and equipment to fight malaria, RAI2E is bringing quality malaria services to the most vulnerable communities in Myanmar's remote rural areas, where access to quality malaria care is most limited and the need is greatest.

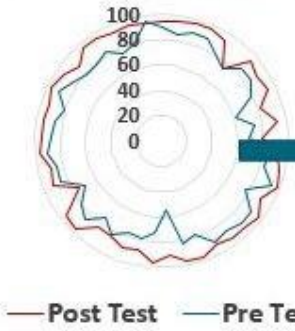
Integrated Community Malaria Volunteers

Mrs. Bu Sein thinks fondly of the training saying, "The ICMV training was a good opportunity for us as we have gained more knowledge about additional diseases and feel more confident in dealing with the community's health issues. Additionally, people in the village have gained more trust in the volunteers and come more often to discuss suspected signs and symptoms."

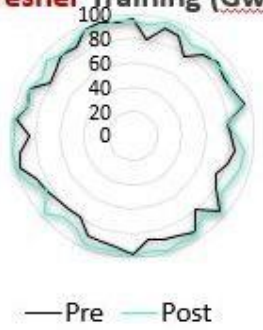
Integrated Community Malaria Volunteers

Improved malaria knowledge among trained ICMVs in two regions (Gwa and Hlaningbwe): Reduced gap between pre and post test scores at initial vs. refresher training

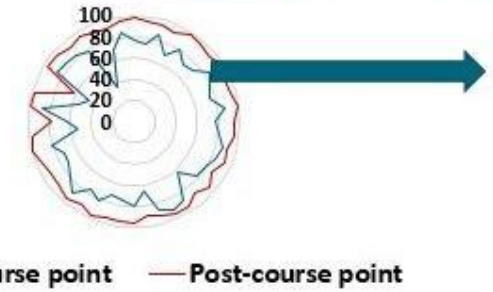
ICMVs' Pre and Post Test scores (%) at Initial Training (Gwa Region)



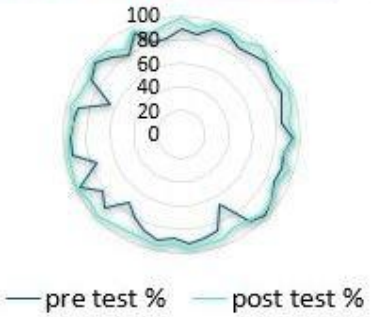
ICMVs' Pre and Post Test scores (%) at Refresher Training (Gwa Region)



ICMVs' Pre and Post Test scores (%) at Initial Training (Hlaingbwe Region)



ICMVs' Pre and Post Test scores (%) at Refresher Training (Hlaingbwe Region)



Integrated Community Malaria Volunteers

Harnessing The Power Of Community To Tackle Malaria: Volunteer Health Worker Daw Thla Sui

- ✓ Of her work, she says, “I feel proud and happy to improve the health status of my villagers. I have their trust.”
- ✓ “Now, all the villagers are in the habit of sleeping with mosquito nets. They even use them when they go to the mountainous areas for seasonal cultivation.”

More recently, Daw Thla received integrated community case management training in other diseases and health issues, such as HIV, tuberculosis, filariasis (a parasitic infection), dengue and leprosy. This expansion of her skills is part of a broader initiative to increase the knowledge and range of health volunteers to make the most of their commitment and talents to meet more community health needs. This is particularly important as malaria prevalence drops, and with it, motivation to continue testing.

Integrated Community Malaria Volunteers

- The role of Integrated Community Malaria Volunteers (ICMVs) to deal with other diseases including malaria at all age groups under the integrated Community Care Management (iCCM) will be promoted and expanded, particularly for hard-to-reach areas, to cover all endemic settlements more than 2 km from a functioning health facility.
- At the grassroots level, VHVs/ICMVs can be considered as the connecting point between community and public health services in provision of adequate case management and disease prevention.
- To improve access to case management, especially in remote communities, the number of villages and working sites with migrant and mobile populations, where VHVs/ICMVs are present should be increased.
- The target should be to place at least one VHV/ICMV or work site volunteer or backpacked mobile volunteer in every village and major working sites that are considered with on-going local transmission or at risk of malaria.
    - providing diagnosis of malaria,
    - supporting the referral of severe/complicated cases,
    - engaging in LLINs distribution and other preventive and vector control measures, and, along with health staff,
    - raising awareness of public campaigns
    - health education activities on malaria.

Integrated Community Malaria Volunteers

- In addition, he/she should also support the Dengue Control, National Tuberculosis, leprosy, AIDS, Reproductive, Maternal and Child Health, Nutrition Programs to identify/screen, treat, refer (as appropriate) and generate awareness.

- In low-transmission areas eligible for elimination, VHVs/ICMVs along with health staff should be actively involved in case detection and reporting, and may support case and foci investigation and response.

- All VHVs/ICMVs should receive annual training on case management, malaria prevention and health education, and case reporting as well. VHVs/ICMVs should participate in regular meetings with township- and lower-level health staff.

- Malaria and general health staff with support of VHVs/ICMVs should develop materials and organize campaigns to sensitize communities about the availability of free malaria diagnosis/treatment/vector control at public health facilities to increase their demand.

Integrated Community Malaria Volunteers

Township Health Committee
(Township Medical Officer +
Township General Admin Dept.)

Village Tract Health Committee
(Health Staff+ Village Tract Administrator+ Village Administrator)

Village Health Committee
(Health Staff+ Village Administrator)

Village Health Committee
(Health Staff+ Village Administrator)

ICMV

ICMV

ICMV

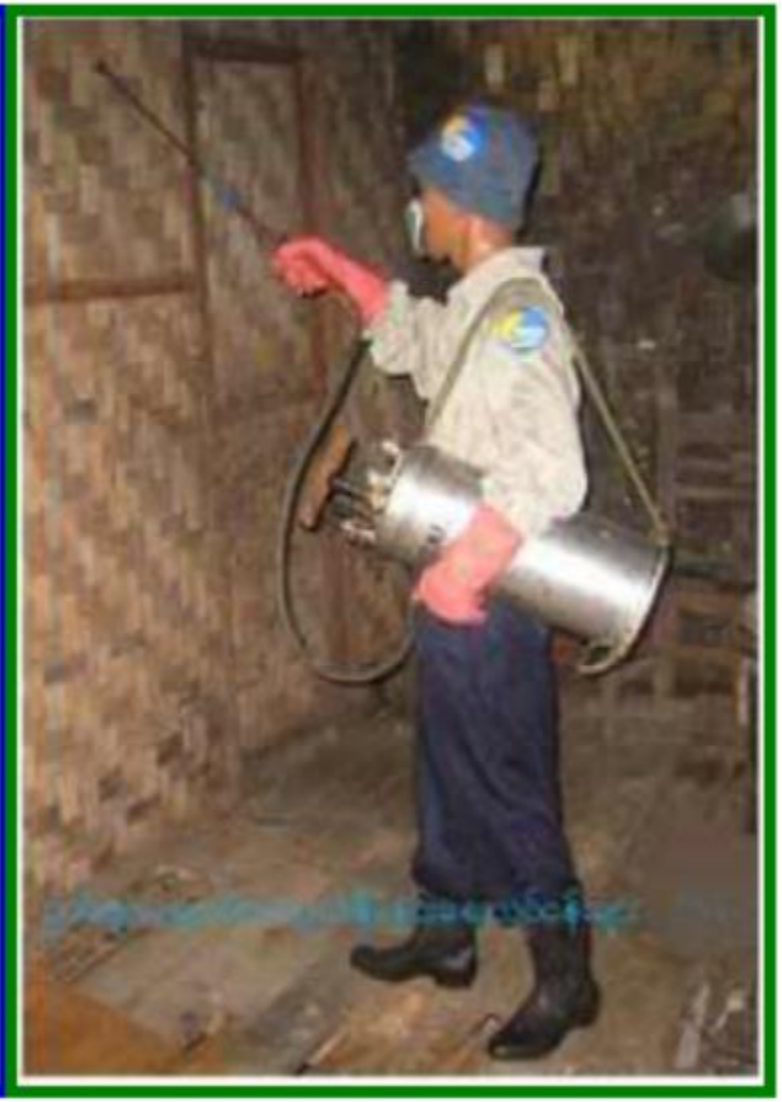
ICMV

Integrated Community Malaria Volunteers

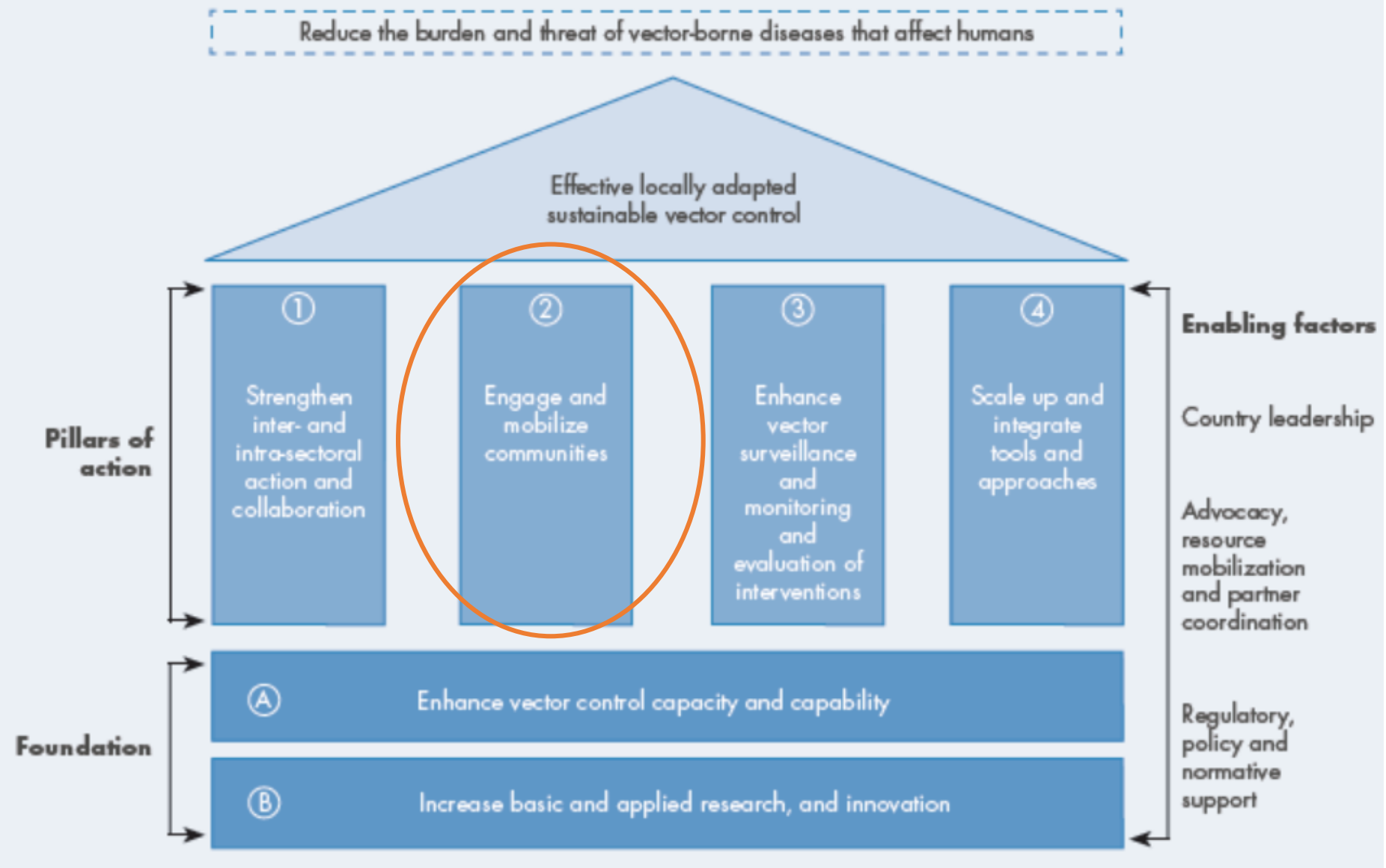
Madauk village integrated community malaria volunteer U Nyi Nyi Aung is ready to distribute LLINs free of charge to villagers. Photo: UNOPS

Beneficiaries from Kyauk Maw village of Shwe Kyin Township, Bago region prepare for distribution of LLIN to villagers (credit- Burnet Institute, 2014)

Integrated Community Malaria Volunteers



ENGAGING COMMUNITIES IN VECTOR CONTROL



Diseases such as malaria, dengue, leishmaniasis and lymphatic filariasis thrive in conditions of poverty and often exact their heaviest toll on the poorest. The economic and social burdens of these diseases on individuals, households and economies are tremendous.
(Dr Tedros Adhanom Ghebreyesus)

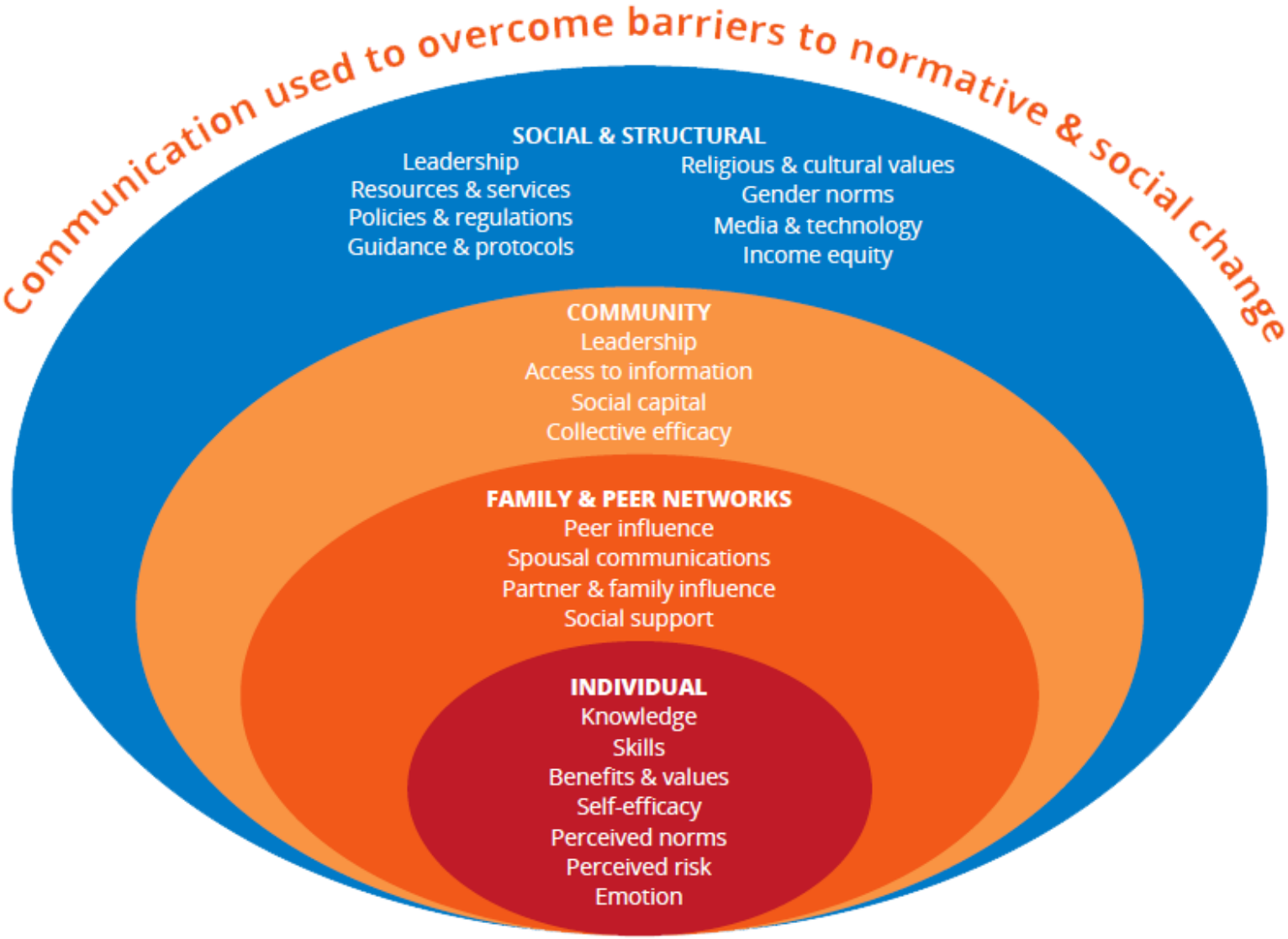
ENGAGING COMMUNITIES IN VECTOR CONTROL

The Social Ecological Model

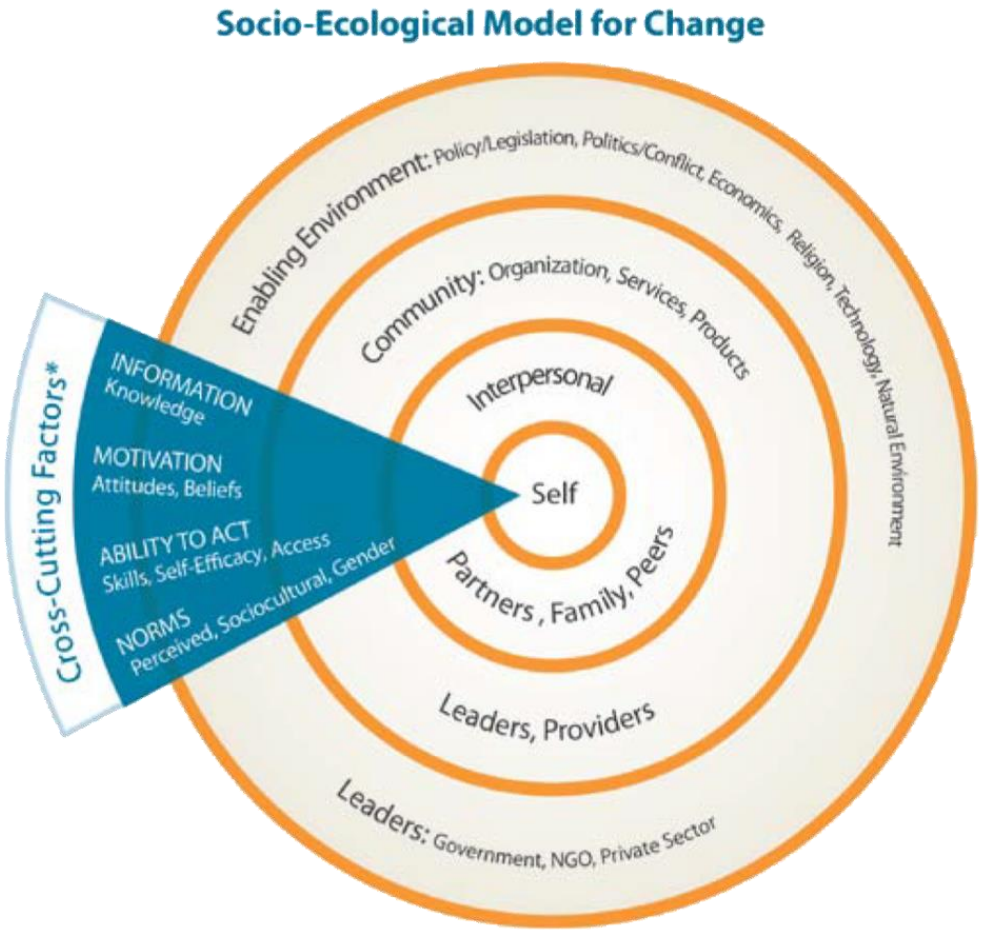
Bronfenbrenner's 1979 seminal work, recognizes **four levels of influence that interact to affect behavior:**

1.Individual
2.Family and peer networks
3.Community and
4.Social/structural

(Glanz & Rimer, 2005; Glanz & Bishop, 2010; HC3, 2014)



ENGAGING COMMUNITIES IN VECTOR CONTROL



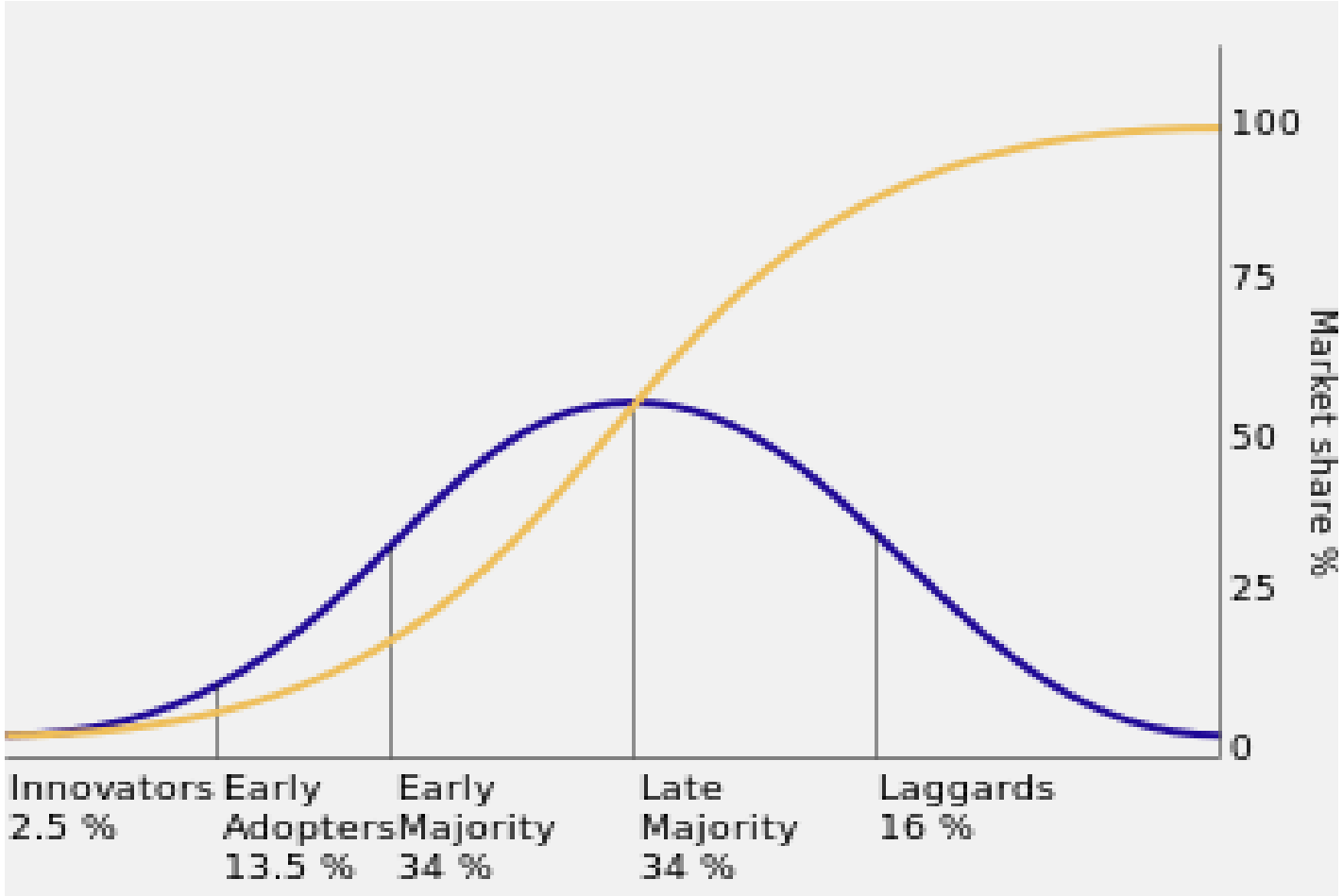
*These concepts apply to all levels (people, organizations, and institutions). They were originally developed for the individual level.

SOURCE: Adapted from McKee, Manoncourt, Chin and Carnegie (2000)

ENGAGING COMMUNITIES IN VECTOR CONTROL

DIFFUSION OF INNOVATIONS

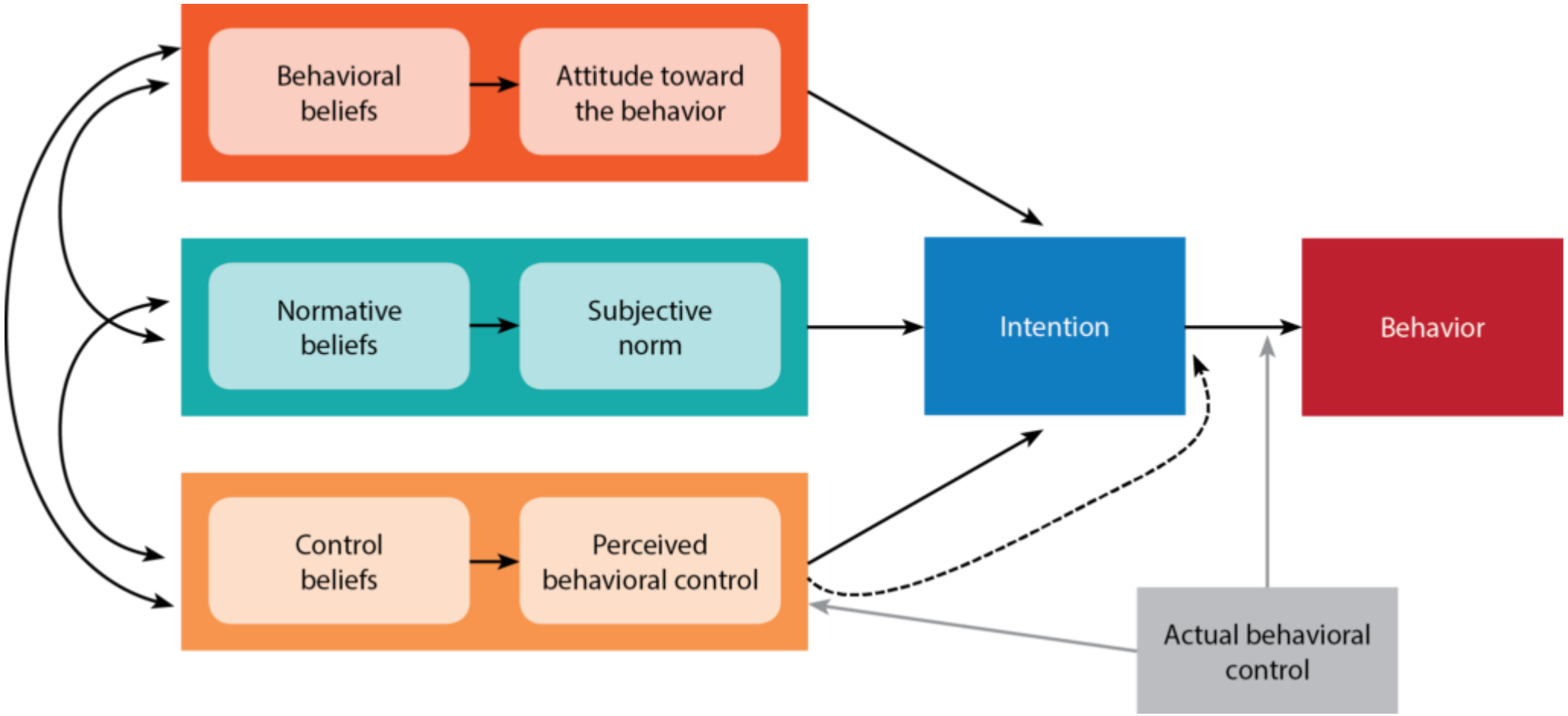
This theory describes the process by which new ideas (innovations) are spread through a community or social structure (Glanz & Rimer, 2005).



ENGAGING COMMUNITIES IN VECTOR CONTROL

THE THEORY OF PLANNED BEHAVIOR

The theory of planned behavior acknowledges the individual's role in changing a behavior (attitude and perceived ability), as well as the influence of significant others (subjective norms) (Ajzen, 1991; Glanz & Rimer, 2005).



ENGAGING COMMUNITIES IN VECTOR CONTROL

IVM framework and distinguishing characteristics.

Beier, J.C., Keating, J., Githure, J.I. et al. Integrated vector management for malaria control. Malar J 7, S4 (2008). https://doi.org/10.1186/1475-2875-7-S1-S4

ENGAGING COMMUNITIES IN VECTOR CONTROL

IVM checklist for a vector control programme (modified from Hatch 1973 and Challet 1991).

Vector control elements	General description	Specific activities
Programme administration	• How to manage of vector control?	1. Goal setting
		2. Policy development
		3. Developing staff duties
		4. Risk management
		5. Legislation development and enforcement
Financial and economic assessment	• What is the economic burden of disease and how do you finance vector control?	1. Conduct cost-effectiveness analysis
		2. Financial planning: identifying source of revenue (i.e. taxes, lottery, income generation activities, etc.)
Facilities and equipment	• What elements are needed to do vector control?	1. Selecting and assigning facilities
		2. Determining available and needed equipment
Vector surveillance	• How to measure program effectiveness?	1. Vector population surveillance
Disease detection	• How to determine the quality and quantity of control efforts?	1. Disease detection programme to monitor vector-borne disease parameters
Control activities	• How to establish a guide to control operations that will use the most effective, yet environmentally sensitive method of vector control?	1. Determine appropriate control methods: i) environmental management, ii) biological control, iii) chemical control, iv) legislation
		2. Integrate efforts where possible to achieve synergy
Public education and relations	• How to communicate and interact with community regarding vector control?	1. Personal public education
		2. Printed public education
		3. Customer service
		4. Multimedia education (i.e. TV and internet)
		5. Community outreach

ENGAGING COMMUNITIES IN VECTOR CONTROL

Record/reporting/evaluation	• How to evaluate the programme and achievement of goals?	1. Keeping, compiling and reporting activities
		2. Summarizing annual reports and linking to goals and objectives
		3. Analyze data to evaluate effectiveness
		4. Model data for ecological, human, vector, disease and control trends
Intergovernmental coordination/environmental planning	• How to coordinate activities between stakeholders, which have mutual concerns for vector control, through interagency partnerships?	1. Contact between local and national governments
		2. Planning between vector control staff and environmental development staff
		3. Assessment of environmental impact related to vectors and pest
		4. Develop relationship with conservationist and wildlife enthusiast
Research	• How to build research to determine how local conditions are changing in response to vector control and develop new approaches for control?	1. Incorporate applied basic research in the programme
		2. Review research design and statistical methods
Emergency preparedness	• How to plan on how to dealing with disease situations and natural disasters?	1. Identify responsible agency that coordinates and communicates with the public
		2. Develop vector and disease surveillance that provide early alert to potential emergency conditions
		3. Key control actions to specific situation
		4. Reserve funding for emergency situations
Training and continuing Education	• How to mandate elements for certified personnel?	1. Mandatory training to certify technicians each year
		2. Establish training programmes with sufficient budget
		3. Attend professional and society meetings

THANK YOU

Welcome questions comments and suggestions