

# REACH

Ending Child Hunger and Undernutrition

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## **Acting at Scale: Intervention Guide**

Malaria Interventions:

Insecticide Treated Bednets (ITNs) and Intermittent Preventive Treatment during Pregnancy (IPTp)

February 2009

# Context

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## **The following document is part of the REACH *Acting at Scale* set of materials**

- The documents' aim is to provide highly condensed information and lessons learned for scaling up REACH-promoted interventions to support field practitioners and other interested parties
- They are intended to become a living set of materials, updated periodically by the REACH Global Interagency Team
- These materials are a first step towards a larger REACH Knowledge Sharing service, which will be developed over time

## **The full set of *Acting at Scale* materials includes**

- *An Intervention Summary*
  - An overview document containing key facts for all of the 11 promoted interventions
- *Intervention Guides* for each of the interventions<sup>1</sup>
  - Containing rationale, lessons learned, costs and further resource lists
- *Implementation Case Studies* for each of the interventions<sup>1</sup>
  - Initial set of details and lessons learned from programs implemented at scale
- *Resource Lists*
  - Lists of key documents, organizations and programs at scale
  - Included at the back of each *Intervention Guide* and in Excel spreadsheets available from the REACH Global Interagency Team

## **These materials represent a preliminary version, to be validated and refined via additional consultations**

- Prepared in Summer 2008 by the REACH Global Interagency Team, based on inputs from 56 practitioners and experts, as well as extensive desk research
- A revised Version 2 of these documents will be released in late 2008 or early 2009, incorporating feedback from initial recipients

## **If you have questions or feedback on these materials, please**

- Contact your local REACH facilitator in Lao or Mauritania, or
- Contact the REACH Interagency Team Coordinator, Denise Costa-Coitinho, at [Denise.CostaCoitinho@wfp.org](mailto:Denise.CostaCoitinho@wfp.org)

1. Breastfeeding and complementary feeding have been combined into a single document due to strong linkage in delivery

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## Key messages

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### **Malaria poses a serious global health and nutrition challenge**

- Malaria causes around 350-500M illnesses and accounts for 20% of all childhood deaths <5 years
- Up to 975,000 children <5 years and up to 10,000 pregnant women are estimated to die each year from severe malarial anemia
- Malaria during pregnancy causes maternal anemia, leading to low birth weight and child mortality
- Childhood malaria associated with lower weight gain, decreased linear growth and wasting
- Deficiencies in vitamin A, zinc, iron, folate and other micronutrients are attributed to a large share of malaria morbidity and malaria, as undernourished children suffer malaria more deeply
- Annual economic loss in Africa due to malaria is estimated \$12 billion, representing 1.3% annual loss in GDP growth in endemic countries

### **Insecticide-treated nets<sup>1</sup> (ITNs) and intermittent preventive treatment for pregnant women (IPTp) are proven interventions that reduce the risk poor nutritional outcomes arising from malaria**

- ITNs lead to reduced risk of low birthweight and 12% reduction of risk of maternal anemia
- IPTp can reduce risk of low birthweight by 43%

### **Many national programs rely on a two-step approach to scaling up ITNs**

- Achieve rapid "one-time catch-up" through mass campaign and/or public health system
- Maintain coverage through blend of free/subsidized and commercial distribution by the private sector
  - Market segmentation requires good targeting of free/subsidized distribution not to impair market development
  - Subsidized nets can be effectively targeted through voucher systems and delivery through health facilities registering beneficiaries
  - PPPs enable government and donors to facilitate market development e.g. through creating a supporting policy environment (ITN-friendly tax regulations, etc.)

### **IPTp is typically scaled-up nationally via the public health service**

- Community-based approaches can supplement low public healthcare coverage and reach women who do not attend antenatal care

### **Strong monitoring and evaluation are required for continuous program improvement**

- IPTp monitoring can leverage regular data collection with training activities and health facilities

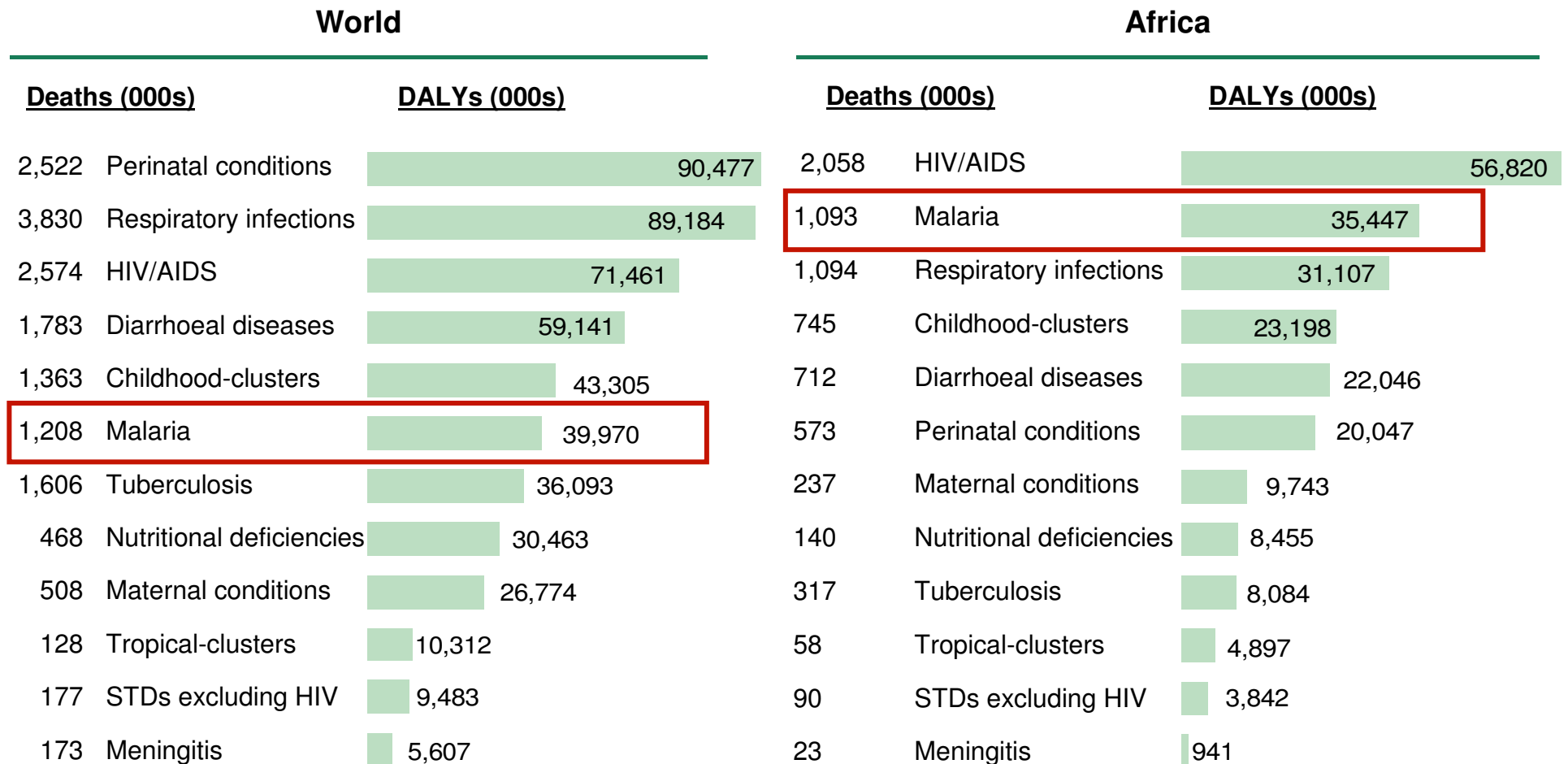
1. Long-lasting insecticide nets (LLINs) are another form of ITN with longer-lasting insecticide. For the purpose of this document, ITN is the term that will be used.

Source: Expert interviews; WHO website; Roll Back Malaria; Malaria No More website; Caulfield, Richard and Black, "Undernutrition as an Underlying Cause of Malaria Morbidity and Mortality." DCPD Working Paper No. 16; Bhutta ZA et al. "What works? Interventions for maternal and child undernutrition and survival." Maternal and Child Nutrition 3. The Lancet, 2008.; literature review; REACH analysis

## Why implement

Preliminary

# Malaria is 2nd largest contributor to disease burden in Africa and 6th largest worldwide



Note: Does not reflect the impact of undernutrition and its associated risk factors on each individual disease. Childhood clusters include: pertussis, poliomyelitis, diphtheria, measles, tetanus. Perinatal conditions include: low birth weight, birth asphyxia, and birth trauma. Tropical clusters include: trypanosomiasis, chagas disease, schistosomiasis, leishmaniasis, lymphatic filariasis, and onchocerciasis. Graphs exclude injuries and non-communicable conditions, such as cardiovascular diseases, malignant neoplasms, and respiratory diseases. Source: WHO Global Burden of Disease Project (2001 statistics). Colin D. Mathers, Alan D. Lopez, and Christopher J. L. Murray, "The Burden of Disease and Mortality by Condition: Data, Methods, and Results for 2001." 2006. Global Burden of Disease and Risk Factors, ed. , 45-93. New York: Oxford University Press. (Copyright 2006, The World Bank Group)

# The global community is highly invested in fighting malaria

Good deal of global support and potential partners available

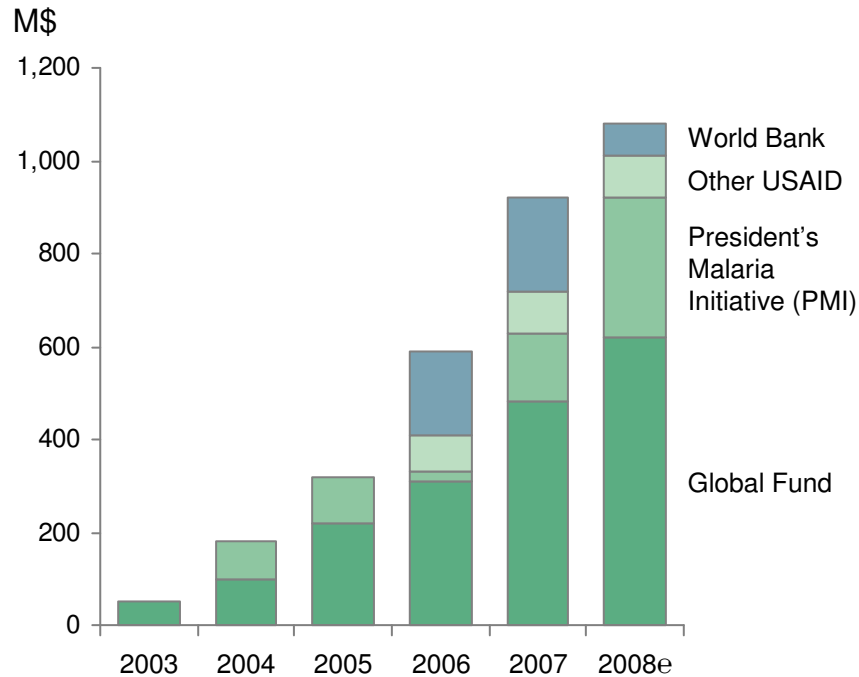
Key players	Key activities	Relevance for country-level action
<b>Global Fund to fight AIDS, Tuberculosis and Malaria</b>	<ul style="list-style-type: none"><li>• Funds nationally-owned AIDS, tuberculosis and malaria programs</li><li>• Approved funding as of November 2007 amounts to US\$471M</li></ul>	<ul style="list-style-type: none"><li>• Largest potential global funding source for national malaria control programs</li></ul>
<b>Roll Back Malaria Partnership</b>	<ul style="list-style-type: none"><li>• Strengthens country action with strong partnerships</li><li>• Helps to develop national strategy</li><li>• Advocates fight against malaria globally</li></ul>	<ul style="list-style-type: none"><li>• Potential partner to mobilize country action</li><li>• Partnership with RBM signals commitment to and increases attention from other partners</li></ul>
<b>President's Malaria Initiative</b>	<ul style="list-style-type: none"><li>• Funds programs in focus countries</li><li>• Focuses activities on IRS, LLINs, IPTp, and antimalarials</li><li>• Invested US\$135M in 2007</li></ul>	<ul style="list-style-type: none"><li>• Potential funding source</li><li>• Countries selected based on burden, implementation capacity, willingness to partner with U.S., and involvement of other international donors</li></ul>
<b>World Bank Global Strategy &amp; Booster Program</b>	<ul style="list-style-type: none"><li>• Funds existing country programs</li><li>• Provides technical assistance to countries</li><li>• Funded US\$230M in 2007</li></ul>	<ul style="list-style-type: none"><li>• Potential funder and technical assistant</li><li>• Focus on Africa with Booster Program for Malaria Control in Africa</li></ul>

**2000 Africa Summit led to Abuja Declaration stating African leaders renewed commitment to fight malaria**  
**2007 announcement by Gates Foundation focused efforts on ultimate eradication of malaria**

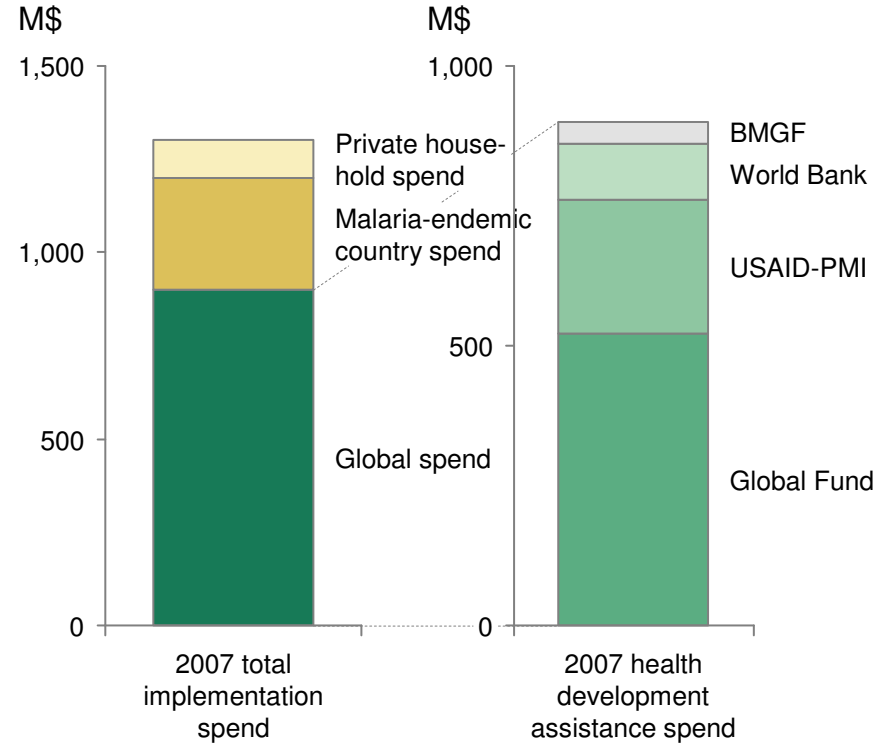
1. Angola, Benin, Ethiopia, Ghana, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Rwanda, Senegal, Tanzania, Uganda, Zambia  
Source: GFATM website; RBM website; PMI website; World Bank website, accessed on June 24, 2008.

# Increasing funding flows emerging

### Health development assistance funding for malaria



### Sources of current implementation funding





# ITNs and IPTp are effective tools when used as recommended

## ITNs

### Nightly use of ITNs provides effective vector control

#### Nets must be treated and cared-for to be effective

- Non-treated nets are still available and in use in malaria-prevalent areas, but not as effective and no longer recommended by WHO
- ITNs are effective from 6-12 months before retreatment is required
  - WHOPES<sup>1</sup> tests and recommends insecticides
- Long-lasting insecticide treated nets (LLINs) can last up to 5 years prior to retreatment
- Misuse or rough handling that tears nets require earlier replacement

- ITN use by pregnant women reduces risk of delivering a low birthweight infant by 23%, equivalent to a reduction in odds of term low birthweight of 43%<sup>2</sup>
- ITNs can reduce deaths in children by 20% and episodes of malaria by 50%<sup>2</sup>

## IPTp

### Consists of 2 to 3 doses of sulfadoxine-pyrimethamine (SP)

#### WHO recommends IPT for pregnant women only

- Pregnant women, infants and young children are most vulnerable group
- Some programs (e.g. Gates) are actively supporting research to identify impact of IPT on infants

- *The Lancet* calculates that 99% coverage of IPTp could save 4.8m (1.9%) DALYs at 36 months<sup>2</sup>
- Reduces maternal anemia during third trimester or at delivery by 12%<sup>2</sup>
- 2-dose IPT dosage for women in their first or second pregnancy reduces low birthweight births and leads to higher mean birthweight than in control groups<sup>2</sup>

1. WHOPES = WHO Pesticides Evaluation Scheme

2. Bhutta Z A et al: "What works? Interventions for maternal and child undernutrition and survival." Series on Maternal and Child Undernutrition 3, The Lancet, 2008.

3. Lengeler C: "Cochrane Review: Insecticide-treated ITNs and curtains for preventing malaria." Cochrane Database of Systematic Reviews, 2004. Issue 2.

# Three pillars to prevent and control malaria during pregnancy

WHO recommendations

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## IPTp

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- **Delivery of at least 2 doses during ANC**
- **At least 2 doses given within a 1-month period**
- **EXCEPT for women in low transmission zones**
  - Less likely to contract malaria
  - But require ongoing vigilance in case malaria is contracted

## ITNs/LLINs

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- **Use of net early in pregnancy and post-partum**
  - Include young children under net

## Case management of malaria and anemia

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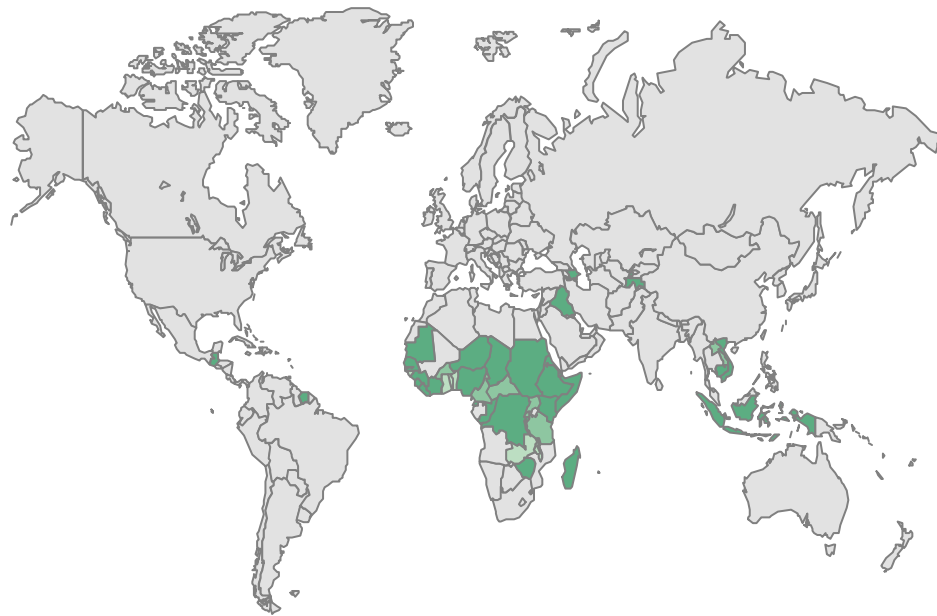
- **Screen and treat anemia antimalarial drug and iron supplement**
  - Promptly identify and treat all potential malaria cases

Preliminary

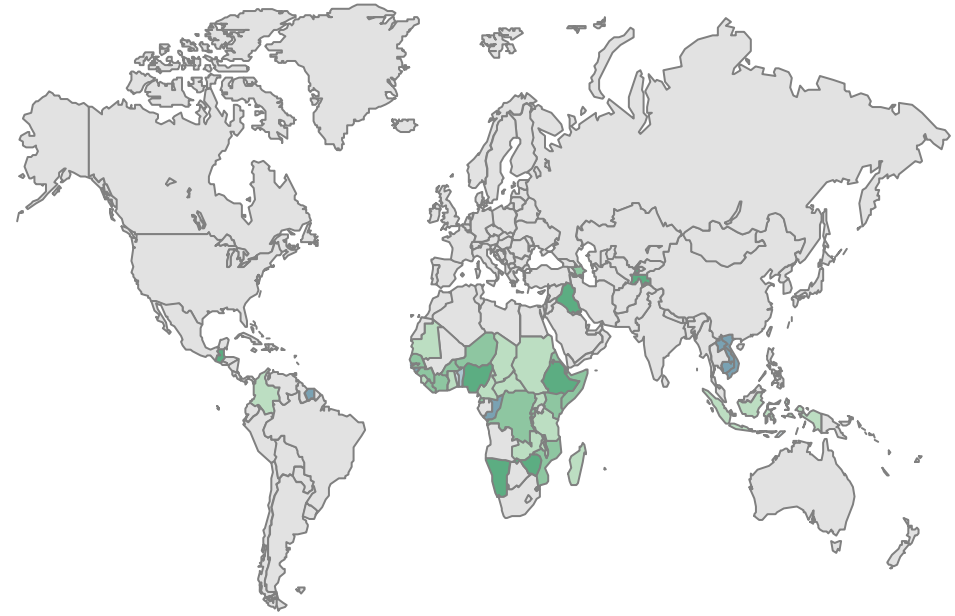
# Only 8% of <5 children in Africa sleep under an ITN

Falls short of 2000 Abuja Declaration global target of 60%<sup>1</sup>

% under fives sleeping under an ITN



% under fives sleeping under any net



■ 0%–9% ■ 10%–19% ■ 20%–39% ■ 40%–59% ■ > 60%

**In some countries, conventional net coverage exceeds ITN coverage, thus treatment campaigns can increase ITN coverage easily**

1. Global target is defined in the Abuja declaration of the African Summit in 2000  
Source: UNICEF statistics: [www.childinfo.org](http://www.childinfo.org), accessed June 23, 2008.

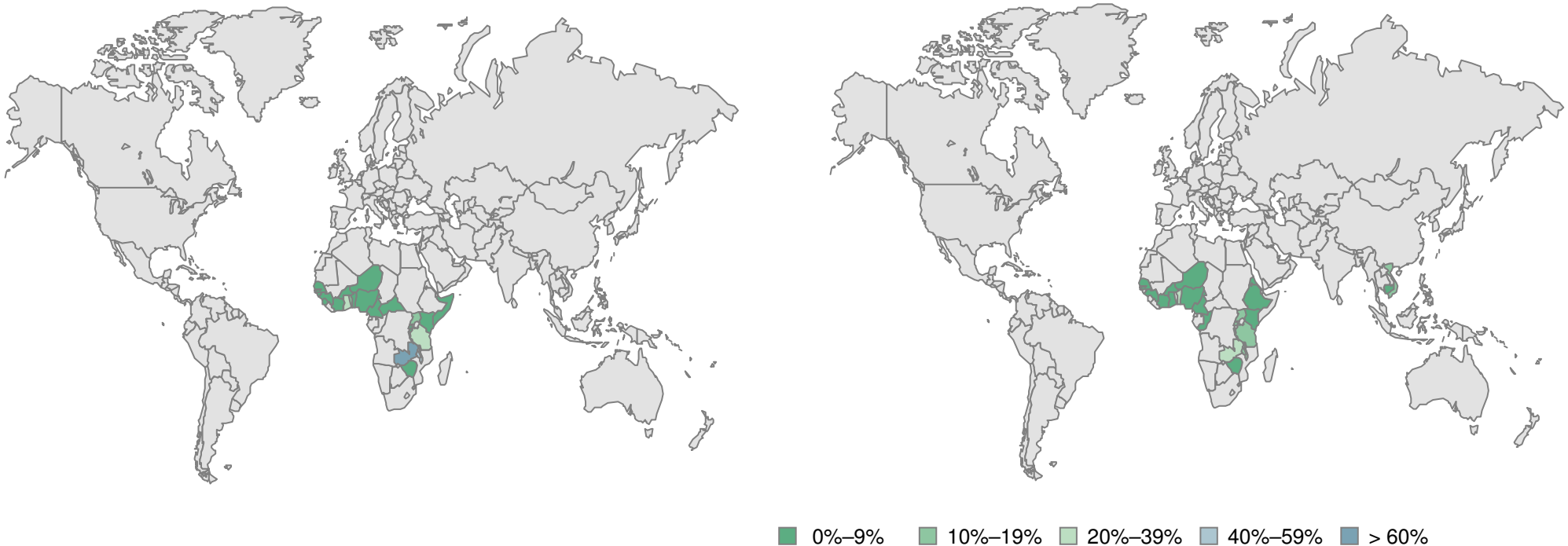
Preliminary

# Pregnant women are poorly protected

Only 10% of pregnant women in Africa receive IPTp; ITN usage falls short of Abuja target of 60%<sup>1</sup>

% of pregnant women receiving at least two doses of IPTp

% of pregnant women sleeping under an ITN

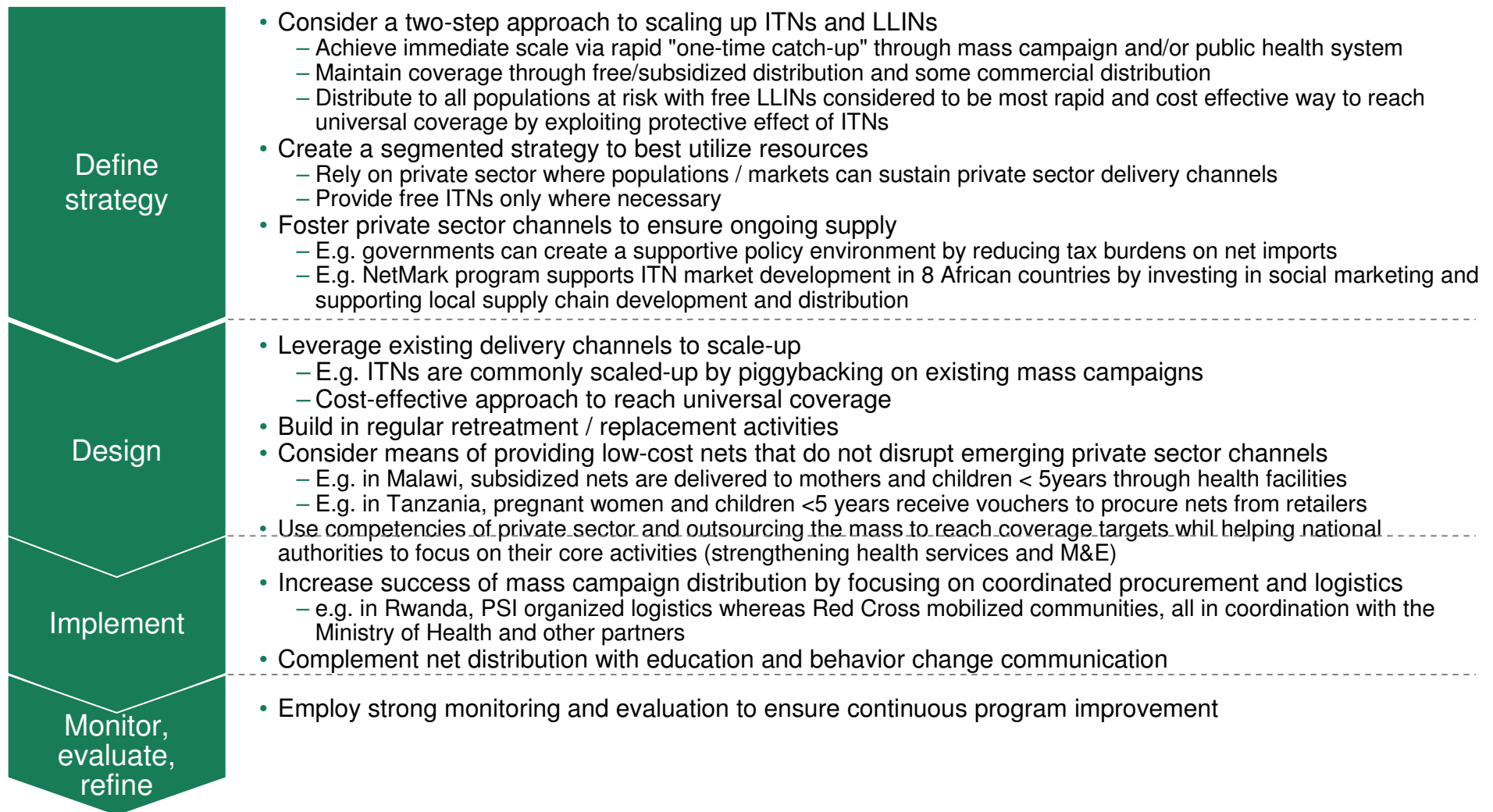


**Only Zambia has currently reached the IPTp Abuja target**

1. Global target is defined in the Abuja Declaration of the African Summit in 2000  
Source: UNICEF statistics: [www.childinfo.org](http://www.childinfo.org), accessed June 23, 2008.

## How to implement at scale

# Key lessons learned from implementing ITN programs at scale



Source: Expert interviews; literature review; REACH analysis

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# A two-step approach has led to successful scale-up of ITNs

## Two-step process enables rapid, sustainable ITN scale-up<sup>1</sup>

1

**Achieve rapid, mass scale-up**

### Blanket target population by

- Piggybacking on existing mass campaign OR
- Providing free nets through public health facilities/ community workers
  - Where healthcare coverage is high

2

**Maintain coverage via blended distribution**

### Develop ongoing supply of nets and insecticide

- Via public and private channels, depending on income levels
- Enabling replacement every 2-5 years, based on wear and tear
- Formative research helps identify sustainable approaches for ongoing treatment / redistribution

## Examples

### Malawi national ITN program

- Plans one-off free distribution via Expanded Program on Immunization (EPI) to reach scale and balance existing inequities between rural and urban population
- Maintains coverage by
  - Distributing subsidized nets to pregnant women and children <5 via health facilities
  - Subsidizing rural sales via village health committees or NGOs
  - Supporting commercial distribution at suggested retail price in urban areas

### Tanzanian national net program (NATNETS)

- Provides a voucher to every pregnant woman and infant attending antenatal care (ANC) / measles vaccination
  - ANC attendance is above 90% in Tanzania
- Vouchers can be redeemed for ITNs at participating retailers
- Supports a social marketing program to promote commercial market development for maintenance

1. For use when ITN coverage is <10%

Source: Yukich et al: "Operation, costs and cost-effectiveness of five ITN programs and two IRS programs." Swiss Tropical Institute, 2007.

# Free and subsidized ITN distribution via mass campaigns reaches scale quickly

**Vitamin A, vaccinations or other mass campaigns**

**ITN distribution**

- Same target audience (children < 5 years)
- Require minimal training (in case of oral polio vaccine campaign)
- Shares costs

## Challenges

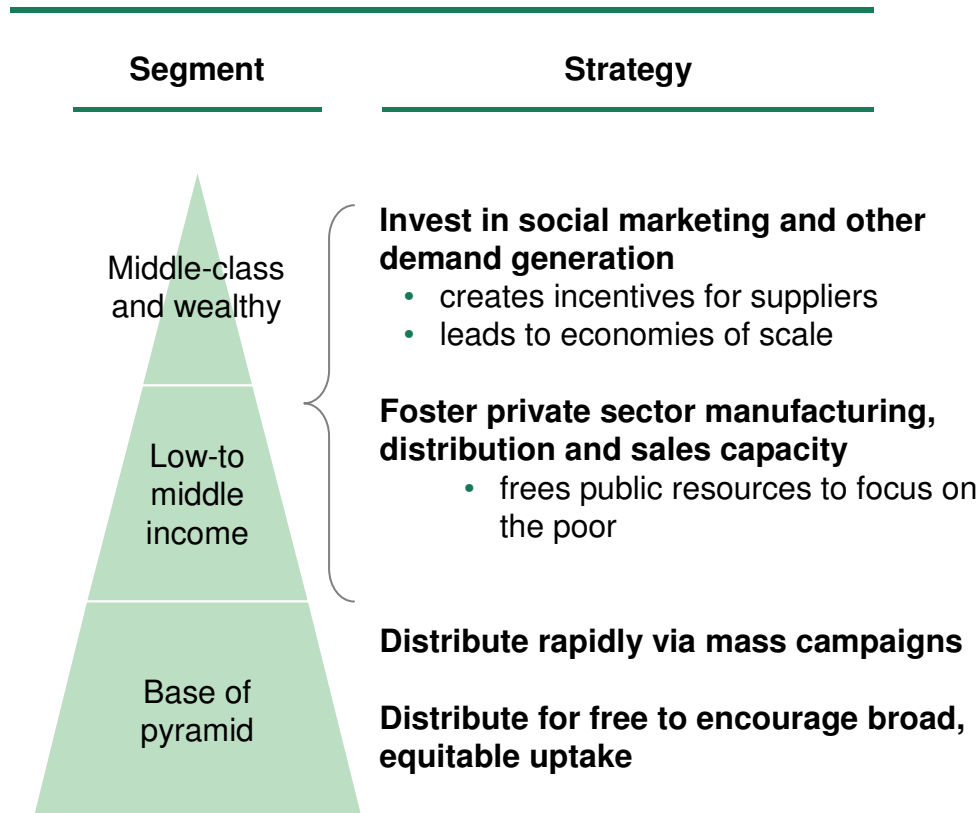
- **Mass campaigns are still highly dependent on external funding/partnership**
  - Possibly follow vaccination campaign example: publicly financed and free for all
- **Services during vaccination campaigns must be free of charge to avoid preventing poor from coming back to next campaign to receive vaccines**
  - Provide high value vouchers instead of nets
- **Nets are bulky and pose logistics challenge**
  - Provide high value vouchers instead of nets



# Segmentation by ability to pay enables resource optimization

**Distribution to all populations at risk is the most rapid and cost effective way to reach universal coverage**

## Dual approach to distribution



### Free nets can flood the market

- Free nets find their way to the marketplace
- Reduces viability of commercial distribution

### Free nets deters private sector investment

- Prevents market from developing

### Programs are testing approaches to address this tension

- E.g. NetMark promotes proper targeting when free/subsidized distribution is planned and reconciles private and public point of view as honest broker
- E.g. in Malawi, subsidized sales at health facilities are stopped if storage and sales numbers do not add up
- E.g. in Tanzania, retailers can only redeem received vouchers against credit for more nets

**Distribution systems should not be viewed as competitive but as complementary approaches to achieving a single goal: a comprehensive LLIN distribution Strategy**

**Clear strategy and open communications with partners while developing a strategy are essential**

# Develop strategies based on common challenges to scaling up ITNs

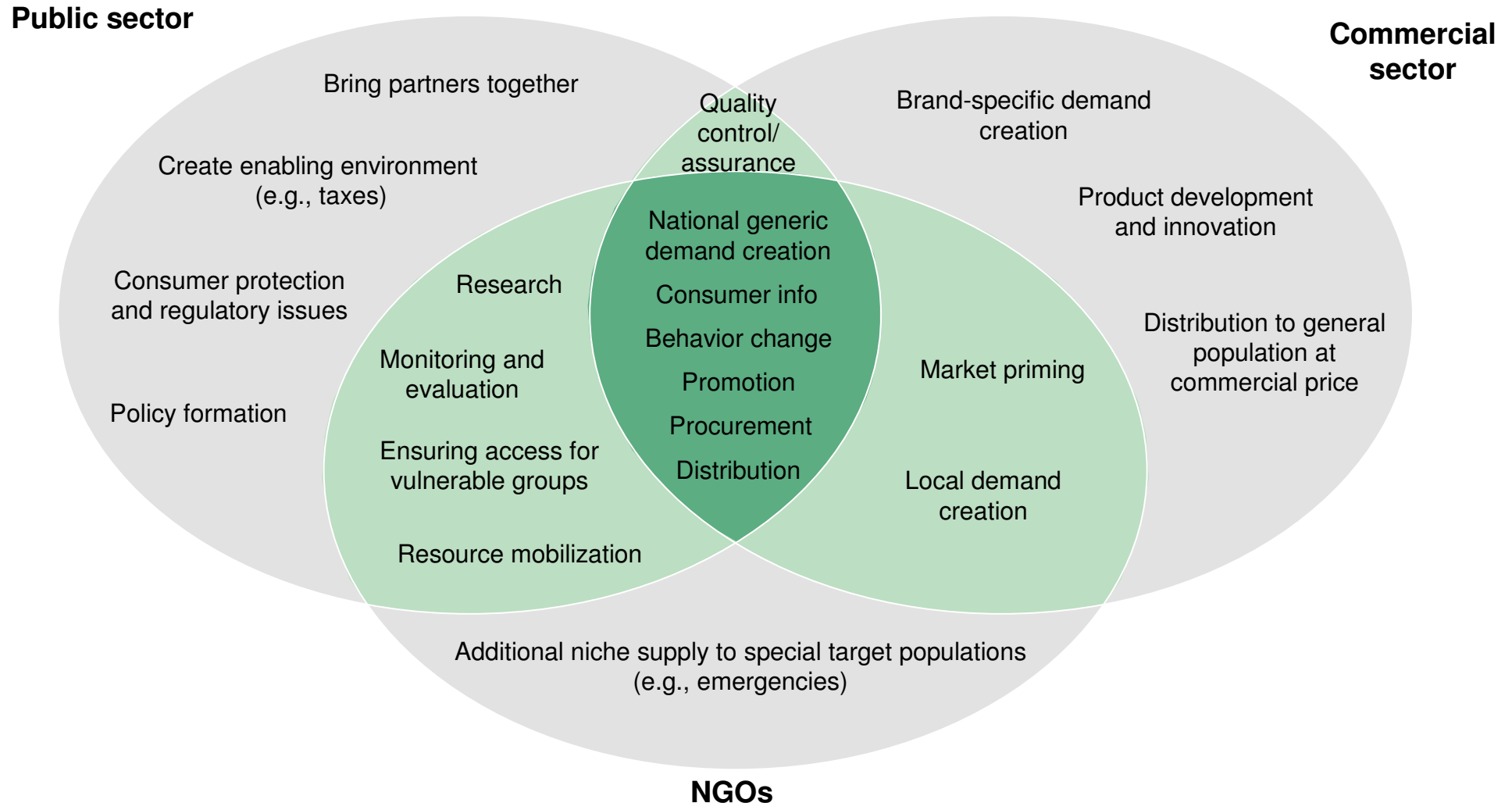
Common challenge	Potential solutions
<p><b>Unfavorable policy guidelines</b></p> <ul style="list-style-type: none"> <li>• Taxes and tariffs imposed on insecticides and/or nets</li> <li>• Few policy guidelines exist and must be adapted to local culture and language</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to WHO or RBM policy guidelines</li> <li>• Promote reduction or abolition of taxes and tariffs</li> </ul>
<p><b>Financing of nets still widely dependant on donor money</b></p> <ul style="list-style-type: none"> <li>• Multilaterals, bilaterals, foundations, and corporations accounted for 50% of ITN sales by volume in 2005</li> </ul>	<ul style="list-style-type: none"> <li>• Foster local market development and employ cost-sharing where populations have means to pay</li> <li>• Provide public financing for free distribution to most vulnerable</li> </ul>
<p><b>Supply constraints</b></p> <ul style="list-style-type: none"> <li>• Only five brands of LLIN currently approved by WHO Pesticides Evaluation Scheme (WHOPES)</li> </ul>	<ul style="list-style-type: none"> <li>• Accelerate WHOPES approval process at global level</li> <li>• Foster local production and international technology transfer</li> </ul>
<p><b>Limited market demand for ITNs in most countries</b></p>	<ul style="list-style-type: none"> <li>• Foster market development through PPP, social marketing, and risk sharing (e.g. projects who fund social marketing)</li> </ul>

Preliminary

Define strategy

# Public-Private Partnerships (PPP) are commonly employed for ITN distribution

## Roles of various sectors in ITN scale-up



Source: "Scaling up Insecticide-treated Netting Programmes in Africa. A Strategic Framework for Coordinated National Action." RBM, 2005.

REACH\_Acting at Scale\_Guide\_Malaria\_v2.ppt

# Market segmentation is critical to PPP success (I)

Example: Malawi allows commercial market to thrive by using subsidies for low-income households

## Malawi employs a blended approach, supported by PSI and UNICEF

## Resulted in solid coverage and economies of scale

**Pregnant women and children**

### Targeted ITN distribution through antenatal care

- PSI procures nets in collaboration with UNICEF and delivers them on credit to health facilities
- Clinics sell nets at highly subsidized price to pregnant women and children under five
- Beneficiaries receive stamp in their "health passport" to ensure proper targeting
- Sales are stopped if sales and storage numbers do not add up

**Rural population**

### Targeted ITN distribution to rural populations

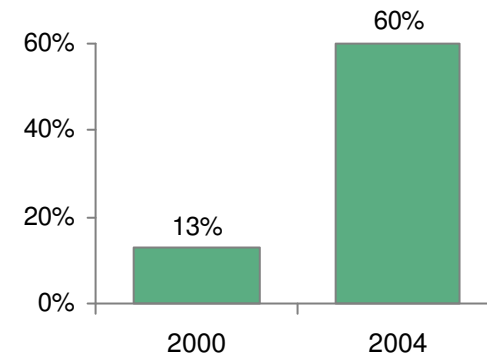
- Same approach as with delivery through antenatal care
- Distribution through village health committees or existing NGO channels

**Urban population**

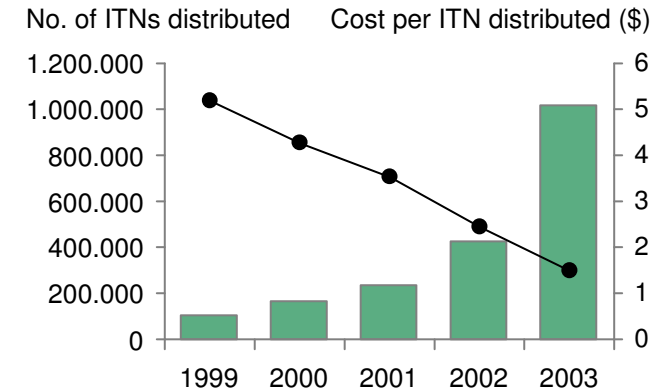
### PSI and UNICEF nets are commercially distributed in urban areas

- Nets are centrally packaged and branded
- PSI sales teams distribute nets to retailers
- Retailers are expected to sell nets at fixed price
- Cost-effectiveness increased with increasing program scale

### Increased household net coverage



### Increased cost-effectiveness



Source: Yukich et al: "Operations, costs and cost-effectiveness of five ITN programs and two IRS programs." Swiss Tropical Institute, 2007.; "The Malawi ITN Delivery Model." PSI, 2005.

# Market segmentation is critical to PPP success (II)

Example: Tanzania allows commercial market to thrive by using subsidies for low-income households

## Tanzania scaled-up via PPP...

### SMARTNET PPP

- Includes government, NGO, private sector, bilaterals
- Funded by DFID and Royal Netherlands embassy
- Encouraged changes in net taxation and insecticide regulations
- Strengthened supply side through transport subsidies and marketing support
- Enabled technology transfer for local production of LLIN
- Fostered nationwide inclusion of insecticide treatment kit into locally made nets
- Initiated nationwide communication campaign with support of the President of Tanzania to change perception of malaria as "part of life" towards "malaria is not acceptable"

### Tanzanian National Voucher Scheme (TNVS)

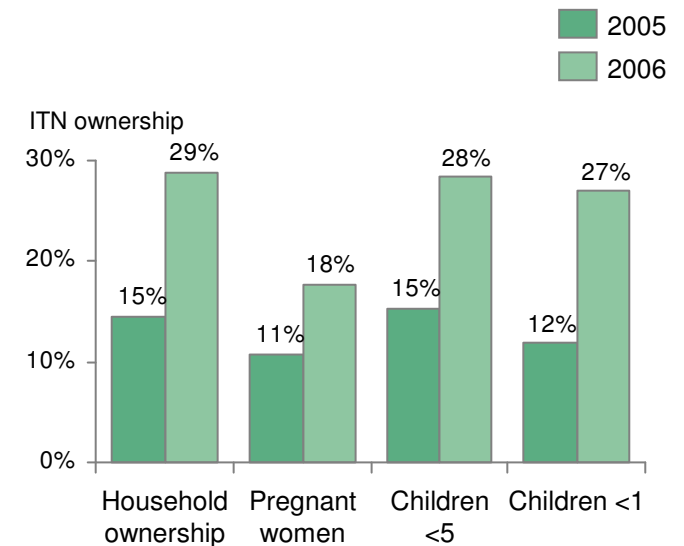
- Pregnant women and children <5 receive vouchers at antenatal care and measles vaccination health visits
- Vouchers can be exchanged to cover a portion of the cost of an ITN at participating retailers
- Vouchers cannot be monetized, preventing fraud

Developed market to build demand for ITNs

Targeted subsidies aimed at high risk groups

## ...and increased ITN coverage

- ITN coverage increased from 2005 to 2006



- Overall net coverage increased from 37% in 2001 to over 50% in 2004
- Sales figures at retailer and wholesale level have increased by 50-80% in 2005

Source: Yukich et al: "Operations, costs and cost-effectiveness of five ITN programs and two IRS programs." Swiss Tropical Institute, 2007.; "Partnerships for malaria control: engaging the formal and informal private sectors." WHO, 2006. "SMARTNET. A Tanzanian Public/Private Partnership to Prevent Malaria." PSI, 2007.

# Step 1: integrating into existing mass campaigns is most effective delivery channel for initial scale-up

Typical delivery channels	How-to	Strengths	Lessons learned
<b>Existing mass campaigns</b>	<ul style="list-style-type: none"> <li>Identify existing mass campaigns that cover target population</li> <li>Work with manufacturers and gov't to ensure timely procurement of nets</li> <li>Identify approach to including education component               <ul style="list-style-type: none"> <li>Either alongside or separate to mass campaign</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Low incremental delivery cost</li> <li>Enables rapid, high coverage</li> <li>Typically reaches remote areas and target populations, i.e. &lt;5s and P&amp;L women</li> </ul>	<ul style="list-style-type: none"> <li>ITNs must be provided free of charge (or vouchers), so that other free services are not affected by adding sales image to campaign</li> <li>Need to include behavior change communication to ensure actual usage of nets</li> <li>Need to develop approach to deliver nets between campaigns</li> </ul>
<b>Public health system</b> <ul style="list-style-type: none"> <li>E.g. during antenatal care or child vaccination visits</li> </ul>	<ul style="list-style-type: none"> <li>Encourage MoH to include distribution of free or subsidized nets in public health services</li> <li>Ensure supply of nets according to demand</li> <li>Improve services quality to keep up demand for</li> <li>Include education on net usage</li> </ul>	<ul style="list-style-type: none"> <li>Low incremental cost</li> <li>Creates sustainable channel</li> <li>Builds local capacity</li> </ul>	<ul style="list-style-type: none"> <li>If capacity is weak, provide management or technical training/support</li> <li>If coverage/attendance to care is low, supplement with other channels</li> </ul>
<b>Mass media</b>	<ul style="list-style-type: none"> <li>Identify partners to deliver mass media</li> <li>Perform research to understand ability to reach target audience</li> <li>Create and disseminate customized message to influence behavior change</li> </ul>	<ul style="list-style-type: none"> <li>Creates demand for intervention</li> </ul>	<ul style="list-style-type: none"> <li>Maintains demand for nets and increases awareness of proper usage</li> <li>May not reach most vulnerable populations               <ul style="list-style-type: none"> <li>Requires impact assessment</li> <li>Requires creative approaches to reach media dark areas</li> </ul> </li> </ul>

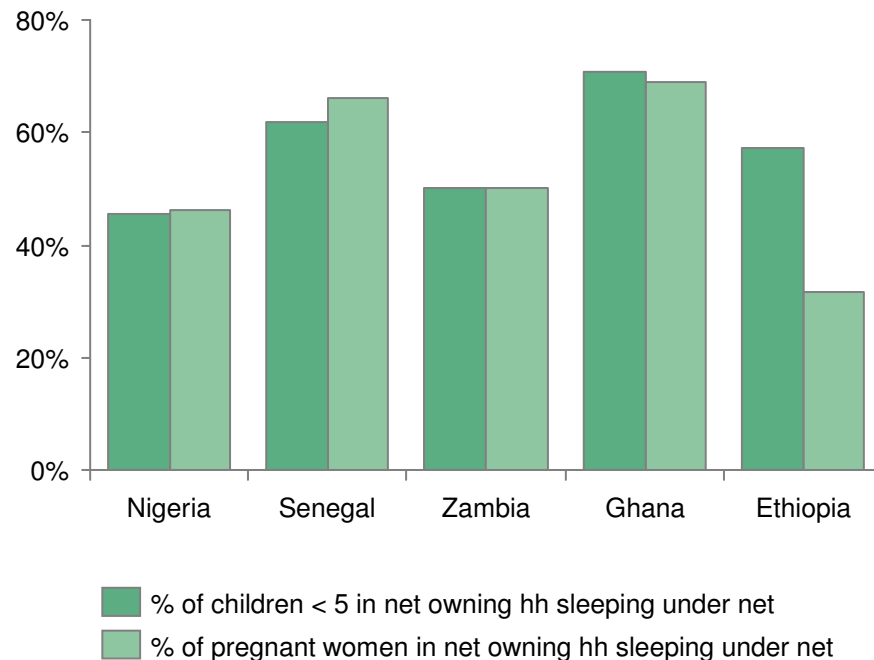
# Step 2: select delivery channel with best access to target segments to maintain coverage

Typical delivery channels	How-to	Strengths	Lessons learned
<b>Public health system</b> <ul style="list-style-type: none"> <li>Routine distribution of targeted free and subsidized nets</li> <li>Distribution of vouchers</li> </ul>	<ul style="list-style-type: none"> <li>Work with MoH to integrate net distribution into antenatal care/child immunization/other</li> <li>Leverage community health worker network to reach remote areas</li> <li>Include education on nets</li> <li>Target free/subsidized nets well not to impair commercial distribution</li> </ul>	<ul style="list-style-type: none"> <li>Low incremental delivery cost</li> <li>Targets P&amp;L women and children &lt;5 years</li> <li>Possibly reaches remote areas and vulnerable target (children) via community health workers</li> </ul>	<ul style="list-style-type: none"> <li>If capacity is weak, provide management or technical training/support</li> <li>If coverage/attendance to antenatal care is low, supplement with other channels</li> </ul>
<b>Private health facilities</b>	<ul style="list-style-type: none"> <li>Work with private provider associations to reach providers</li> <li>Develop education campaign to foster greater delivery</li> </ul>	<ul style="list-style-type: none"> <li>Supplements public health system where coverage is low</li> </ul>	<ul style="list-style-type: none"> <li>Ensure incentives are in place to encourage prescription / delivery of nets</li> </ul>
<b>NGO facilities/community activities</b>	<ul style="list-style-type: none"> <li>Identify NGOs with access to target communities</li> <li>Provide training and/or linkage to net manufacturers</li> </ul>	<ul style="list-style-type: none"> <li>Reaches remote areas and vulnerable target (children) via community activities</li> </ul>	<ul style="list-style-type: none"> <li>Especially important for follow-up on behavior change communication</li> </ul>
<b>Private sector</b> <ul style="list-style-type: none"> <li>Commercial distribution</li> <li>Distribution of subsidized nets for vouchers distributed with public health system</li> </ul>	<ul style="list-style-type: none"> <li>Support market development through favorable policy and tax regulations</li> <li>Promote local production</li> </ul>	<ul style="list-style-type: none"> <li>Provides sustainable channel to distribute nets to all who can afford market rates</li> <li>Allows scarce public funds to focus on the lower-income populations</li> </ul>	<ul style="list-style-type: none"> <li>Net prices decrease with economies of scale and enhanced competition</li> <li>Needs to be supplemented with other channels to reach poorest</li> </ul>
<b>Mass media</b>	<ul style="list-style-type: none"> <li>Identify partners to deliver mass media</li> <li>Perform research to understand ability to reach target audience</li> <li>Create and disseminate customized message to influence behavior change</li> </ul>	<ul style="list-style-type: none"> <li>Low-cost approach to create broad demand for and information on usage of nets</li> </ul>	<ul style="list-style-type: none"> <li>Reinforces importance of net usage via repetition and creating public awareness</li> <li>May not reach most vulnerable populations <ul style="list-style-type: none"> <li>Requires impact assessment</li> <li>Requires creative approaches to reach media dark areas</li> </ul> </li> </ul>

Source: Expert interviews; literature review; REACH analysis

# Tendency towards low or incorrect usage creates need for compliance education

## Poor compliance reduces impact



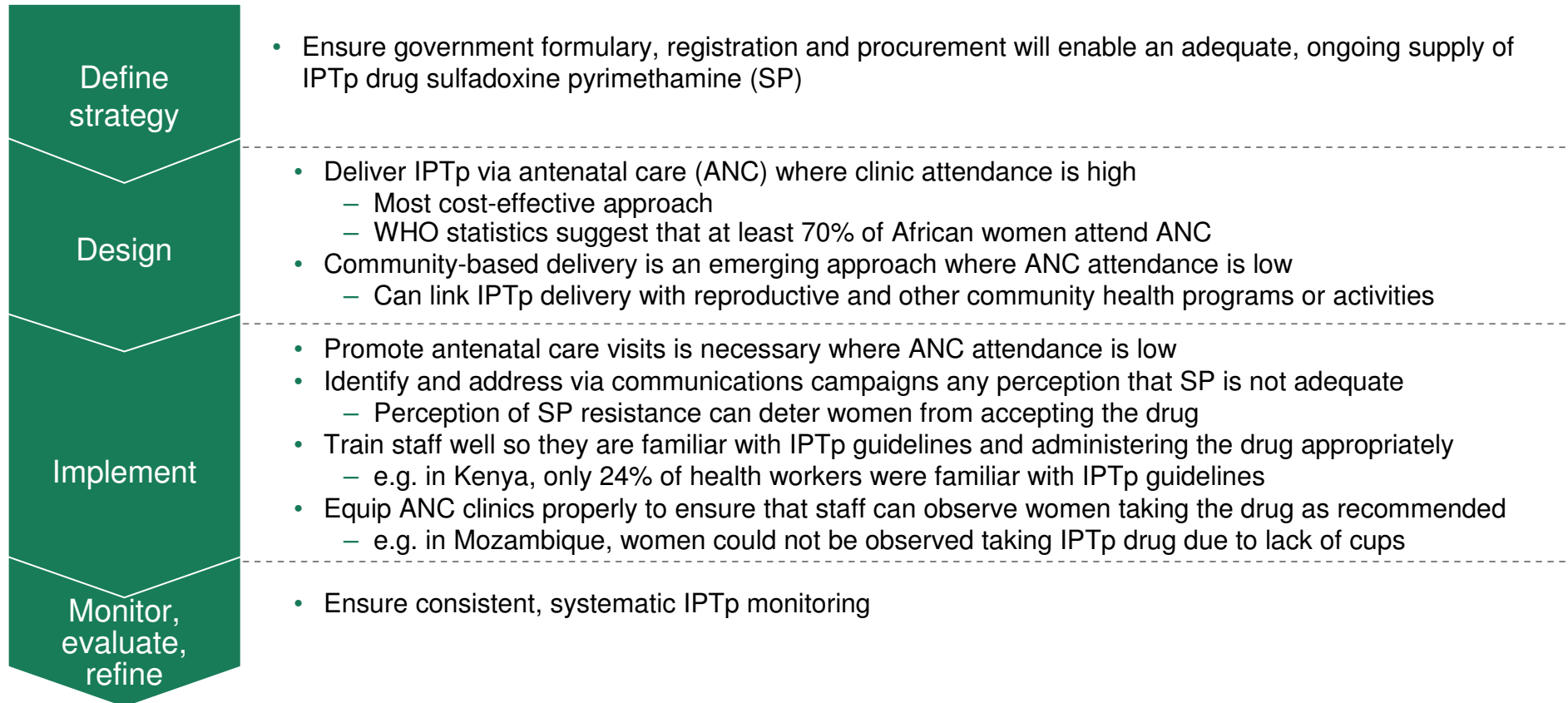
## Example: Red Cross/Red Crescent deploys education programs to improve ITN usage

- Red Cross/Red Crescent runs a 2-step program in several countries
  - Ghana, Indonesia, Kenya, Mozambique, Niger, Sierra Leone, Togo, and Uganda
- **Hang-up program:** short-term campaign of volunteers moving from house to house ensuring that nets are put up properly prior to rainy season
- **Keep-up program:** longer phase of periodic household visits to reinforce net use and other malaria prevention messages
  - Implemented by community volunteers in collaboration with Ministries of Health and other partners
  - Education on proper hanging/care of nets focuses on pregnant women and children under age five
  - Volunteers also promote healthy behaviors, including eliminating mosquitoes, promptly treating fevers, and getting additional nets for new community members

Source: "Awareness, Ownership, and Use of Mosquito Nets in Nigeria, Senegal, Zambia, Ghana, and Ethiopia. Cross-country results from the 2004 NetMark surveys." NetMark, 2004. American Red Cross website, accessed on June 23, 2008.



# Key lessons learned from implementing IPTp programs at scale



# Develop strategies based on common challenges to scaling up IPTp

Challenge	Possible solution
<p><b>Weak antenatal care (ANC) access</b></p> <ul style="list-style-type: none"> <li>• Inequitable access               <ul style="list-style-type: none"> <li>– e.g. the number of pregnant women making two or more ANC visits in Mali was 84% in urban areas compared to 42% in rural areas</li> </ul> </li> <li>• Lack of demand or insufficient attendance</li> <li>• Staff shortages</li> </ul>	<ul style="list-style-type: none"> <li>• Invest in ANC               <ul style="list-style-type: none"> <li>– Expand coverage of ANC clinics</li> <li>– Recruit and train staff</li> <li>– Employ social marketing and promote ANC at other health visits</li> </ul> </li> <li>• Supplement public health ANC with other channels               <ul style="list-style-type: none"> <li>– e.g. NGO / private facilities, community based delivery</li> <li>– Especially for rural poor</li> </ul> </li> </ul>
<p><b>Lack of consistent access to IPTp drugs</b></p> <ul style="list-style-type: none"> <li>• E.g. first-level health units in Mozambique were not authorized to stock SP because it is second-line antimalarial; and national formulary declared SP to be contraindicated in pregnancy</li> </ul>	<ul style="list-style-type: none"> <li>• Include SP/SP regimen for IPTp in national health policy</li> <li>• Ensure drug availability and supply</li> </ul>
<p><b>Perceived drug safety issues</b></p> <ul style="list-style-type: none"> <li>• Women can be reluctant to take medicines during pregnancy</li> </ul>	<ul style="list-style-type: none"> <li>• Promote IPTp</li> <li>• Inform pregnant women about risks of IPTp and malaria in pregnancy</li> </ul>
<p><b>Weak health care worker knowledge</b></p> <ul style="list-style-type: none"> <li>• E.g. in Malawi, health workers were not properly trained on the correct timing and spacing of IPT and did not properly record given treatments</li> </ul>	<ul style="list-style-type: none"> <li>• Train health workers appropriately</li> <li>• Inform health workers about current guidelines</li> <li>• Ensure consistency of training and national guidelines</li> </ul>

# IPTp is typically delivered via public health services

Coverage can be supplemented via NGO and other community healthcare services

Typical delivery channels	How-to	Strengths	Lessons learned
<b>Public health system</b> <ul style="list-style-type: none"> <li>• Antenatal care</li> <li>• Community health workers</li> <li>• Community health programs</li> </ul>	<ul style="list-style-type: none"> <li>• Include IPTp in National Health Policy and National Malaria Control Plan</li> <li>• Train health staff</li> <li>• Ensure drug availability and proper advocacy of SP<sup>1</sup> as a drug for IPT</li> <li>• Supplement facility-based delivery with community-based to reach most vulnerable</li> </ul>	<ul style="list-style-type: none"> <li>• Builds on existing structures</li> <li>• Low incremental cost</li> <li>• Often offers most direct reach to pregnant women</li> <li>• Most sustainable for long-term</li> </ul>	<ul style="list-style-type: none"> <li>• If capacity is weak, provide management or technical training/support</li> <li>• If coverage is low, supplement with other community-based channels</li> <li>• Possibly raise awareness for timely and frequent antenatal care visits</li> <li>• Only few experiences with community-based delivery</li> </ul>
<b>NGOs</b> <ul style="list-style-type: none"> <li>• Antenatal care</li> <li>• Community NGO workers</li> <li>• Community health programs</li> </ul>	<ul style="list-style-type: none"> <li>• Include IPTp in NGO antenatal care and appropriate community activities</li> <li>• Train NGO health staff</li> </ul>	<ul style="list-style-type: none"> <li>• Increases coverage</li> <li>• Reaches most vulnerable in communities</li> </ul>	<ul style="list-style-type: none"> <li>• Pricing policy should be same as public not to confuse beneficiaries</li> <li>• Only few experiences with community-based delivery</li> </ul>
<b>Private sector</b> <ul style="list-style-type: none"> <li>• Antenatal care</li> </ul>	<ul style="list-style-type: none"> <li>• Include IPTp in private antenatal care</li> <li>• Train private health staff</li> </ul>	<ul style="list-style-type: none"> <li>• Increases coverage</li> <li>• Sustainable for long-term</li> </ul>	<ul style="list-style-type: none"> <li>• Pricing policy should be same as public not to confuse beneficiaries</li> </ul>
<b>Community</b> <ul style="list-style-type: none"> <li>• e.g. community health committees</li> </ul>	<ul style="list-style-type: none"> <li>• Leverage existing community health structures</li> </ul>	<ul style="list-style-type: none"> <li>• Increases coverage</li> <li>• Cost-effective when leveraging volunteers</li> <li>• Reaches most vulnerable in communities</li> <li>• Sustainable for long-term</li> </ul>	<ul style="list-style-type: none"> <li>• Only few experiences with community-based delivery</li> </ul>

Source: Expert interviews; literature review; REACH analysis

# Scaling up malaria control at country level requires strong national commitment and coordination

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## Roll Back Malaria's recommendations for effective scale-up

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### **Communicate strong and sustained political commitment**

- Articulate clear priority for malaria control scale-up
- Create institutionalized structures

### **Employ accurate planning**

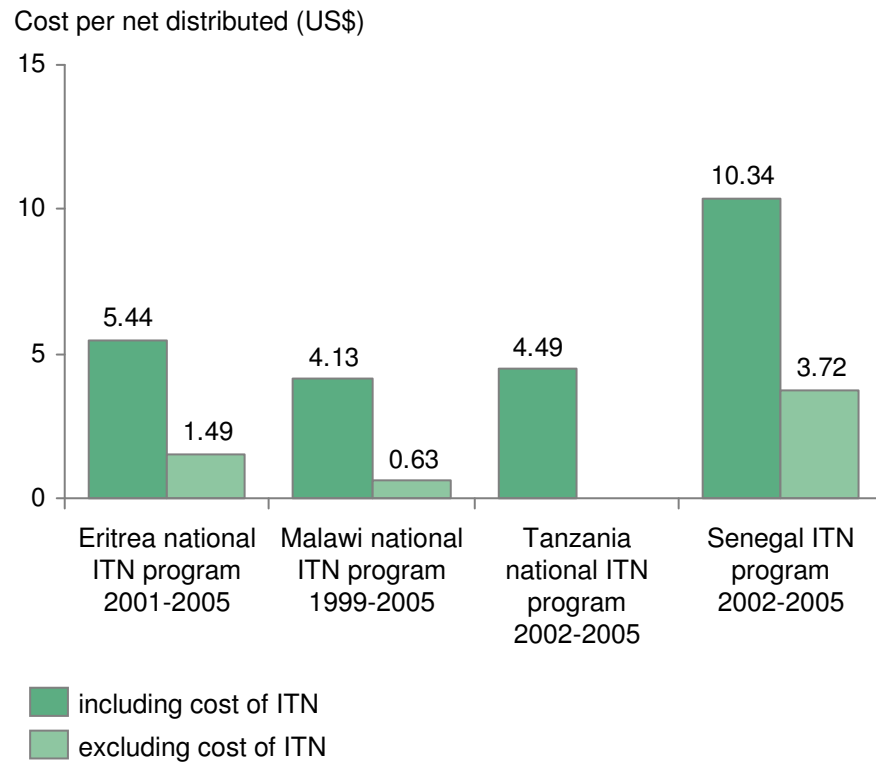
- Define goals in a strategic plan
- Explain activities necessary to achieve goals with clear milestones, responsibilities, and budgets
- Detail action in an annual work plan

### **Plan timely access to resources**

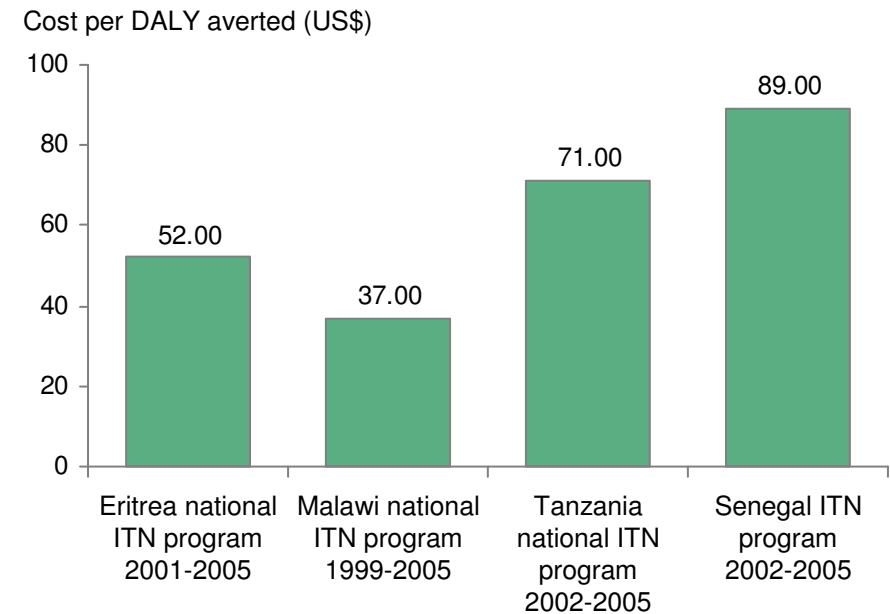
## What it costs

# Cost and cost-effectiveness of ITN distribution vary widely across countries

Range of net and delivery costs



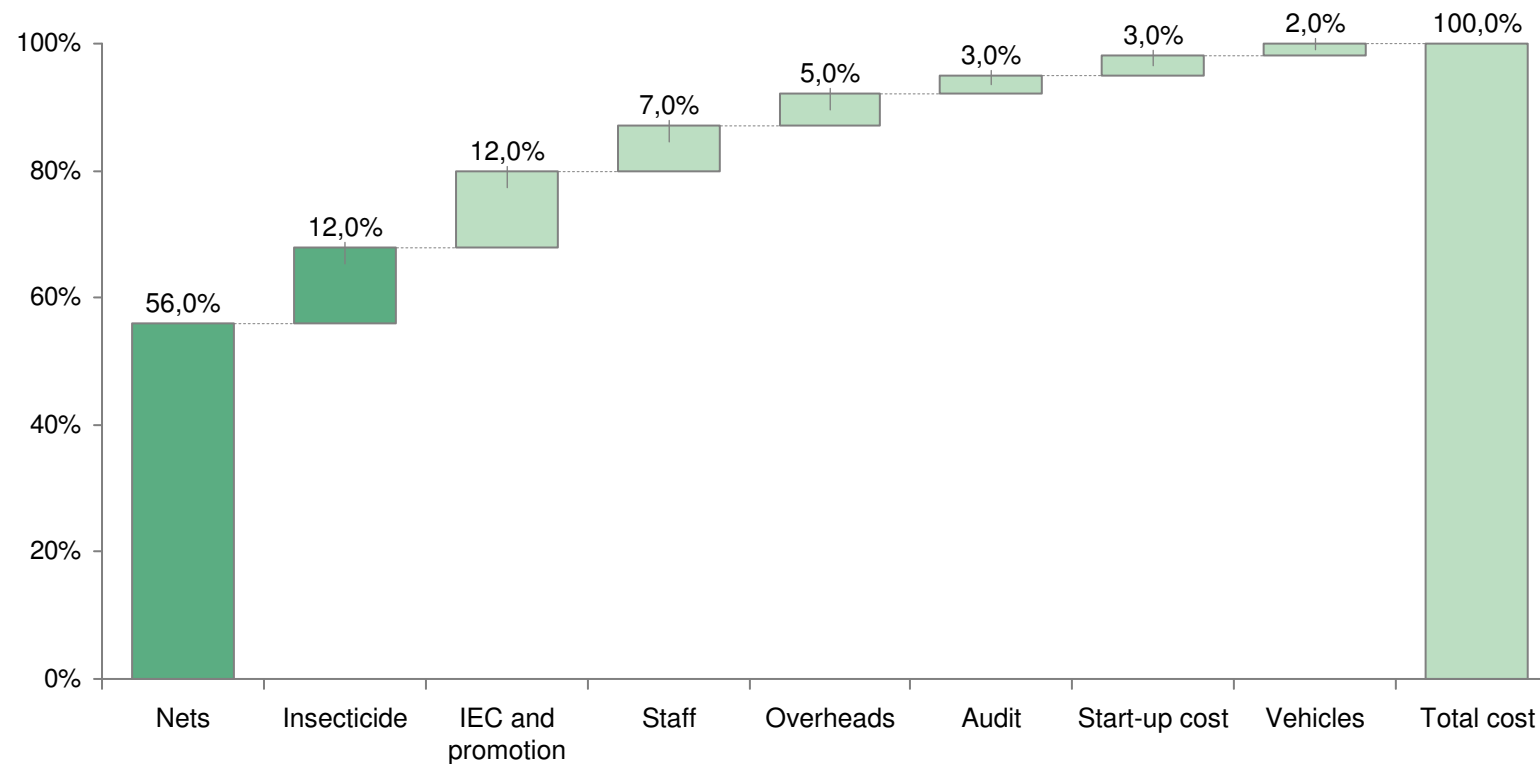
Range of cost effectiveness



Source: Yukich et al: "Operations, costs and cost-effectiveness of five ITN programs and two IRS programs." Swiss Tropical Institute, 2007.

# Materials comprise largest share of ITN program costs

Example: materials comprise 68% of Tanzania's national ITN program budget



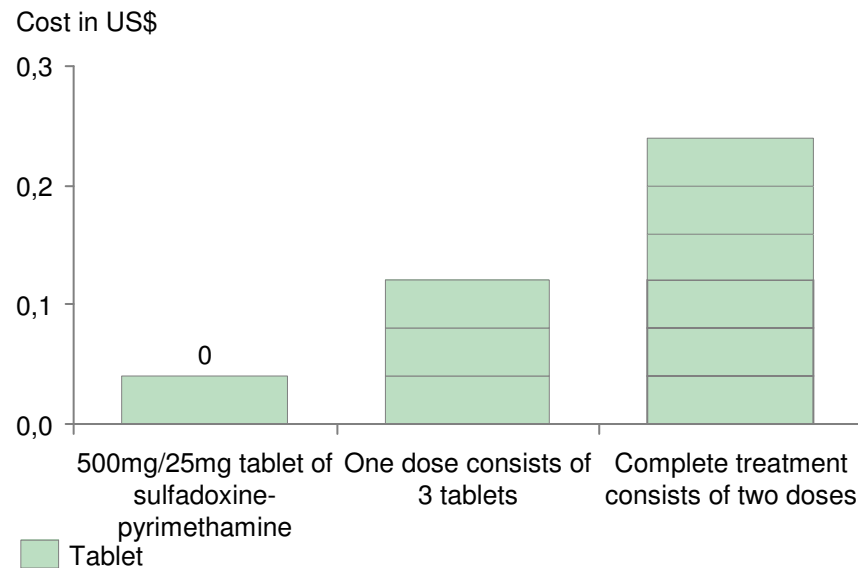
1. IEC = information, education, communication

Source: Yukich et al: "Operation, costs and cost-effectiveness of five ITN programs and two IRS programs." Swiss Tropical Institute, 2007.

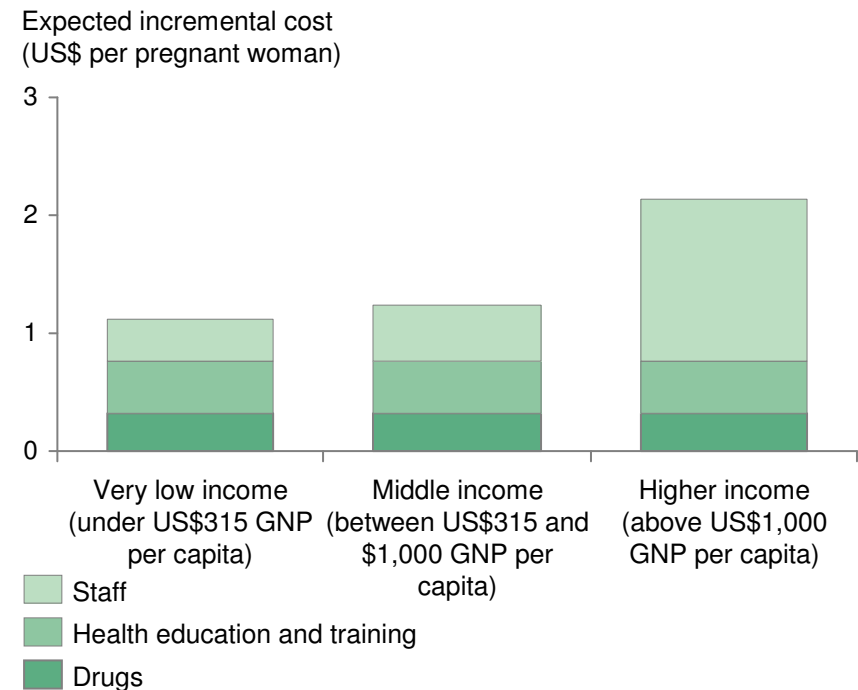
# IPTp delivery costs are lower if integrated into ANC programs

Highly cost effective, at US\$4-27 per DALY averted

**Cost for IPTp treatment with SP/SP<sup>1</sup> regimen administered twice during second and third trimester of pregnancy**



**Incremental cost per pregnant woman if adding IPTp delivery to existing antenatal care program**



1. SP = sulfadoxine-pyrimethamine  
 Source: Goodman CA et al. "The cost-effectiveness of antenatal malaria prevention in sub-Saharan Africa." Am.J.Trop.Med.Hyg., 2001.



## Where to go for further information

# Key reference materials: ITNs and IPTp

## Normative guidance

- "Malaria control today. Current WHO recommendations." WHO, 2005
- "Joint statement: Malaria Control and Immunization: a sound partnership with great potential." WHO/UNICEF, 2004
- "The Abuja Declaration and the Plan of Action." RBM, 2000
- ITNs
  - "Joint statement: Protecting vulnerable groups in malaria-endemic areas in Africa through accelerated deployment of insecticide-treated nets." WHO/UNICEF, 2005
  - "Instructions for treatment and use of insecticide-treated mosquito nets." WHO, 2002
  - "Report of the Third Meeting of the Technical Support Network. Insecticide-treated netting materials." RBM, 2002
  - "Technical consultation on specifications and quality control of netting materials and mosquito nets. Updated WHO specifications for netting materials and mosquito nets. WHO Headquarters, Geneva, Switzerland. 29 November - 2 December 2005." WHO, 2007
- IPTp
  - "Technical Expert Group meeting on intermittent preventive treatment in pregnancy (IPTp)." WHO, 2007

## Operational guidance

- "Global Strategic Plan 2005-2015." RBM, 2005.
- "Monitoring and Evaluation Toolkit: HIV/AIDS, Tuberculosis, and Malaria." WHO et al, 2006.
- "Strategic orientation paper on prevention and control of malaria. For national and international programme officers involved in malaria control at country level." WHO, 2006
- "Community involvement in rolling back malaria." RBM/WHO, 2002
- "Malaria control in complex emergencies: an inter-agency field handbook." WHO, 2005
- ITNs
  - "Scaling up Insecticide-treated Netting Programmes in Africa. A Strategic Framework for Coordinated National Action." RBM, 2005.
  - "Insecticide-treated mosquito net interventions. A manual for national control programme managers." WHO, 2003
  - "Long-lasting insecticidal nets for malaria prevention. A manual for malaria programme managers. Trial Edition." WHO, 2007
  - "Targeted subsidy strategies for national scaling up of insecticide-treated netting programmes – Principles and approaches." WHO, 2005
- IPTp
  - "A strategic framework for malaria prevention and control during pregnancy in the African region." WHO, 2004
  - "Malaria in pregnancy. Guidelines for measuring key monitoring and evaluation indicators." WHO, 2007

## Training materials

- N/A

# Organizations: ITNs and IPTp (I)

	Organization	Description	Key activities
Multilateral	<b>WHO</b> <ul style="list-style-type: none"> <li><a href="http://www.who.int/malaria">www.who.int/malaria</a></li> </ul>	<ul style="list-style-type: none"> <li>Collects data for up-to-date health statistics</li> <li>Provides technical guidance and official recommendations</li> <li>Advocates for global action against malaria</li> </ul>	<ul style="list-style-type: none"> <li>Advocate</li> <li>Provide guidance</li> </ul>
	<b>UNICEF</b> <ul style="list-style-type: none"> <li><a href="http://www.unicef.org">www.unicef.org</a></li> </ul>	<ul style="list-style-type: none"> <li>Supports implementation of ITN and IPTp</li> <li>Focuses on pregnant women and children &lt;5</li> <li>Provides health statistics for children</li> <li>Funds projects and support procurement of materials</li> </ul>	<ul style="list-style-type: none"> <li>Implement</li> <li>Fund</li> <li>Advocate</li> </ul>
	<b>Roll Back Malaria Partnership (RBM)</b> <ul style="list-style-type: none"> <li><a href="http://www.rollbackmalaria.org">www.rollbackmalaria.org</a></li> </ul>	<ul style="list-style-type: none"> <li>Global partnership of multilaterals, bilaterals, country governments, NGOs, private sector</li> <li>Advocates for global action against malaria</li> <li>Provides technical assistance</li> <li>Provides country support for strategy development</li> </ul>	<ul style="list-style-type: none"> <li>Advocate</li> <li>Provide guidance</li> <li>Provide technical assistance</li> </ul>
	<b>Global Fund to fight AIDS, Tuberculosis and Malaria</b> <ul style="list-style-type: none"> <li><a href="http://www.theglobalfund.org">www.theglobalfund.org</a></li> </ul>	<ul style="list-style-type: none"> <li>Funds primarily net and drug programs equally across regions and interventions</li> <li>Largest global funding source for national malaria control programs</li> </ul>	<ul style="list-style-type: none"> <li>Fund</li> <li>Advocate</li> </ul>
	<b>The World Bank</b> <ul style="list-style-type: none"> <li><a href="http://www.worldbank.org">www.worldbank.org</a></li> </ul>	<ul style="list-style-type: none"> <li>Funds national programs with focus on Africa</li> <li>Provides technical assistance</li> </ul>	<ul style="list-style-type: none"> <li>Fund</li> </ul>
	<b>UNITAID</b> <ul style="list-style-type: none"> <li><a href="http://www.worldbank.org">www.worldbank.org</a></li> </ul>	<ul style="list-style-type: none"> <li>International drug purchase facility</li> <li>Supports purchase and distribution of malaria drugs</li> </ul>	<ul style="list-style-type: none"> <li>Advocate</li> <li>Fund</li> </ul>

# Organizations: ITNs and IPTp (II)

	Organization	Description	Key activities
Bilateral	<b>USAID</b> <ul style="list-style-type: none"> <li><a href="http://www.usaid.gov">www.usaid.gov</a></li> </ul>	<ul style="list-style-type: none"> <li>Supports and funds malaria control programs</li> <li>Supports and funds research</li> </ul>	<ul style="list-style-type: none"> <li>Fund</li> <li>Implement</li> </ul>
	<b>DFID</b> <ul style="list-style-type: none"> <li><a href="http://www.dfid.gov.uk">www.dfid.gov.uk</a></li> </ul>	<ul style="list-style-type: none"> <li>Supports and funds social marketing</li> <li>Supports and funds malaria vaccine research</li> </ul>	<ul style="list-style-type: none"> <li>Fund</li> <li>Implement</li> </ul>
	<b>Japan International Cooperation Agency (JICA)</b> <ul style="list-style-type: none"> <li><a href="http://www.jica.go.jp">www.jica.go.jp</a></li> </ul>	<ul style="list-style-type: none"> <li>Focus on capacity building</li> </ul>	<ul style="list-style-type: none"> <li>Fund</li> <li>Implement</li> </ul>
	<b>CIDA</b> <ul style="list-style-type: none"> <li><a href="http://www.acdi-cida.gc.ca">www.acdi-cida.gc.ca</a></li> </ul>	<ul style="list-style-type: none"> <li>Supports net distribution</li> <li>Contributes to GFATM</li> </ul>	<ul style="list-style-type: none"> <li>Fund</li> <li>Implement</li> </ul>
	<b>GTZ</b> <a href="http://www.gtz.de">www.gtz.de</a>	<ul style="list-style-type: none"> <li>GTZ BACKUP Initiative provides information about existing resources</li> <li>Technical assistance with program organization</li> </ul>	<ul style="list-style-type: none"> <li>Fund</li> <li>Implement</li> </ul>
	<b>President's Malaria Initiative (PMI)</b> <ul style="list-style-type: none"> <li><a href="http://www.pmi.gov">www.pmi.gov</a></li> </ul>	<ul style="list-style-type: none"> <li>USAID implemented</li> <li>Focuses on selected countries</li> <li>Focuses activities on IRS, LLINs, IPTp, and antimalarials</li> </ul>	<ul style="list-style-type: none"> <li>Fund</li> </ul>

# Organizations: ITNs and IPTp (III)

NGOs	Organization	Description	Key activities
	<b>Population Services Int'l (PSI)</b> <ul style="list-style-type: none"> <li><a href="http://www.psimalaria.org">www.psimalaria.org</a></li> </ul>	<ul style="list-style-type: none"> <li>Implement malaria prevention, treatment and social marketing programs</li> <li>Promotes behavior change communication for malaria control</li> <li>Supports research</li> </ul>	<ul style="list-style-type: none"> <li>Implement</li> <li>Conducts research</li> </ul>
	<b>The Malaria Consortium</b> <ul style="list-style-type: none"> <li><a href="http://www.malariaconsortium.org">www.malariaconsortium.org</a></li> </ul>	<ul style="list-style-type: none"> <li>Focus on most vulnerable</li> <li>Conducts operational research</li> <li>Builds capacity</li> <li>Advocates for mobilization against malaria</li> </ul>	<ul style="list-style-type: none"> <li>Implement</li> <li>Advocate</li> <li>Conduct research</li> </ul>
	<b>Malaria No More</b> <ul style="list-style-type: none"> <li><a href="http://www.malarianomore.org">www.malarianomore.org</a></li> </ul>	<ul style="list-style-type: none"> <li>Advocates at large scale against malaria</li> <li>Fundraises bed nets</li> </ul>	<ul style="list-style-type: none"> <li>Advocate</li> <li>Fundraise</li> </ul>
	<b>PATH</b> <ul style="list-style-type: none"> <li><a href="http://www.path.org">www.path.org</a></li> </ul>	<ul style="list-style-type: none"> <li>Research through Malaria Vaccine Initiative</li> <li>Technical assistance through Malaria Control Partnership (MACEPA) currently in Zambia</li> </ul>	<ul style="list-style-type: none"> <li>Implement</li> <li>Conduct research</li> </ul>
	<b>IntraHealth</b> <ul style="list-style-type: none"> <li><a href="http://www.intrahealth.org">www.intrahealth.org</a></li> </ul>	<ul style="list-style-type: none"> <li>Implements programs in Rwanda and Senegal</li> <li>Focus on most vulnerable</li> </ul>	<ul style="list-style-type: none"> <li>Implement</li> </ul>
	<b>Health Unlimited</b> <ul style="list-style-type: none"> <li><a href="http://www.healthunlimited.org">www.healthunlimited.org</a></li> </ul>	<ul style="list-style-type: none"> <li>Provides health education at village level</li> <li>Distributes and treats mosquito nets</li> <li>Promotes and improves access to diagnosis and treatment</li> <li>Ethiopia, Cambodia, Laos, Yunnan (China) and Myanmar</li> </ul>	<ul style="list-style-type: none"> <li>Implement</li> <li>Fund</li> </ul>

# Organizations: ITNs and IPTp (IV)

	Organization	Description	Key activities
NGOs (cont'd)	<b>Nothing But Nets</b> <ul style="list-style-type: none"> <li><a href="http://www.nothingbutnets.net">www.nothingbutnets.net</a></li> </ul>	<ul style="list-style-type: none"> <li>Fundraising campaign for bed nets</li> </ul>	<ul style="list-style-type: none"> <li>Fundraise</li> <li>Advocate</li> </ul>
	<b>Constella Group (former Futures Group)</b> <ul style="list-style-type: none"> <li><a href="http://www.constellagroup.com">www.constellagroup.com</a></li> </ul>	<ul style="list-style-type: none"> <li>Fosters PPP and market development for bed nets</li> <li>Provides information and data for advocacy</li> <li>Success story: social marketing for bed nets in Nigeria</li> </ul>	<ul style="list-style-type: none"> <li>Implement</li> <li>Advocate</li> </ul>
	<b>Society for Family Health Nigeria</b> <ul style="list-style-type: none"> <li><a href="http://www.sfhnigeria.org">www.sfhnigeria.org</a></li> </ul>	<ul style="list-style-type: none"> <li>Implements social marketing in Nigeria for LLINs and pre-packaged antimalarial drugs</li> </ul>	<ul style="list-style-type: none"> <li>Implement</li> </ul>
Foundations	<b>Bill &amp; Melinda Gates Foundation</b> <ul style="list-style-type: none"> <li><a href="http://www.gatesfoundation.org">www.gatesfoundation.org</a></li> </ul>	<ul style="list-style-type: none"> <li>Funds GFATM, RBM and MACEPA (PATH)</li> <li>Funds research</li> </ul>	<ul style="list-style-type: none"> <li>Fund</li> </ul>
	<b>Zambia Malaria Foundation</b> <ul style="list-style-type: none"> <li><a href="http://www.malaria.org.zm">www.malaria.org.zm</a></li> </ul>	<ul style="list-style-type: none"> <li>Improves communication between key player</li> <li>Supports national monitoring and evaluation</li> <li>Compiles best practices</li> </ul>	<ul style="list-style-type: none"> <li>Facilitate communication</li> <li>Support national program</li> </ul>

# Organizations: ITNs and IPTp (V)

	Organization	Description	Key activities
Academic	<b>Swiss Tropical Institute</b> <ul style="list-style-type: none"> <li><a href="http://www.sti.ch">www.sti.ch</a></li> </ul>	<ul style="list-style-type: none"> <li>Conducts research on diagnostics, vaccine, drugs, vector control, implementation</li> <li>Builds research capacity</li> </ul>	<ul style="list-style-type: none"> <li>Conduct research</li> <li>Train</li> </ul>
	<b>US Centers for Disease Control and Prevention (CDC)</b> <ul style="list-style-type: none"> <li><a href="http://www.cdc.gov">www.cdc.gov</a></li> </ul>	<ul style="list-style-type: none"> <li>International activities include policy development, program guidance and support, scientific research, and monitoring and evaluation of progress toward RBM goals</li> <li>Conducts basic and field research</li> </ul>	<ul style="list-style-type: none"> <li>Conduct research</li> <li>Provide guidance</li> </ul>
	<b>National Institutes of Allergy and Infectious Diseases</b> <ul style="list-style-type: none"> <li><a href="http://www.niaid.nih.gov">www.niaid.nih.gov</a></li> </ul>	<ul style="list-style-type: none"> <li>Research on diagnostics, vaccine, drugs, vector control</li> <li>Builds research capacity</li> </ul>	<ul style="list-style-type: none"> <li>Conduct research</li> <li>Build capacity</li> </ul>
	<b>IFAKARA Health Research and Development Center</b> <ul style="list-style-type: none"> <li><a href="http://www.ihrdc.or.tz">www.ihrdc.or.tz</a></li> </ul>	<ul style="list-style-type: none"> <li>Conducts research on diagnostics, vaccine, drugs, vector control, IPT in infants, implementation</li> <li>Implements social marketing program in Tanzania</li> </ul>	<ul style="list-style-type: none"> <li>Conduct research</li> </ul>
	<b>IPTi Consortium</b> <ul style="list-style-type: none"> <li><a href="http://www.ipti-malaria.org">www.ipti-malaria.org</a></li> </ul>	<ul style="list-style-type: none"> <li>Gates funded</li> <li>Partnership of research institutes</li> <li>Focus on (implementation) research for IPT in infants</li> </ul>	<ul style="list-style-type: none"> <li>Conduct research</li> <li>Advocate</li> </ul>

# Scaled-up programs: Malaria interventions

Name/country	Implementing partners	Other information
Buy-A-Net <ul style="list-style-type: none"> <li>Uganda</li> </ul>	Buy-A-Net	<ul style="list-style-type: none"> <li>Bed net distribution</li> </ul>
Accelerated child survival and development (ACSD) <ul style="list-style-type: none"> <li>11 countries in West Africa</li> </ul>	UNICEF	<ul style="list-style-type: none"> <li>Bed net, immunization, breastfeeding, complementary feeding, vitamin A supplementation, iodine fortification</li> </ul>
The President's Malaria Initiative (PMI) <ul style="list-style-type: none"> <li>Angola, Benin, Ethiopia, Ghana, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Rwanda, Senegal, Tanzania, Uganda, Zambia</li> </ul>	US Government	<ul style="list-style-type: none"> <li>Bed net distribution</li> <li>IPT</li> </ul>
NetMark Plus <sup>1</sup> <ul style="list-style-type: none"> <li>Sub-Saharan Africa</li> </ul>	USAID, AED, country governments	<ul style="list-style-type: none"> <li>Private sector approach; millions of ITNs distributed</li> </ul>
Net distribution with EOS <ul style="list-style-type: none"> <li>Ethiopia</li> </ul>		<ul style="list-style-type: none"> <li>Integrated into larger nutrition program</li> </ul>
National malaria control program <sup>1</sup> <ul style="list-style-type: none"> <li>Zambia</li> </ul>	Zambia Government	<ul style="list-style-type: none"> <li>For IPT as well (reached Abuja target!)</li> </ul>
National malaria control program <ul style="list-style-type: none"> <li>Malawi</li> </ul>	Malawi Government	<ul style="list-style-type: none"> <li>For IPT as well</li> </ul>
National malaria control program <ul style="list-style-type: none"> <li>Mozambique, Uganda</li> </ul>	Uganda Government	
National malaria control program <ul style="list-style-type: none"> <li>Tanzania</li> </ul>	Tanzanian Government, SMARTNET	
Hang-Up/Keep Up Program <ul style="list-style-type: none"> <li>Ghana, Kenya, Mozambique, Niger and Togo. Additional programs are planned for Sierra Leone, Uganda and Indonesia</li> </ul>		<ul style="list-style-type: none"> <li>Begins with a short term campaign of volunteers moving from house to house to ensure that nets are put up properly prior to the rainy season when malaria transmission is greatest;</li> <li>Followed by a longer phase of periodic household visits to reinforce net use and other malaria prevention messages</li> </ul>

1. Initial case study provided



## Appendix: experts consulted

## Experts consulted during preparation of this document

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<b>Name</b>	<b>Organization and title</b>	<b>Area of expertise</b>
Richard Carr	Roll Back Malaria; Secretariat	Country planning; scaling up
David McGuire	AED; NetMark Program Director	Private sector role
Franco Pagnoni	WHO, Evidence for Antimalarial Policy and Access; Acting Business Line Leader	Research, M&E
Melanie Renshaw	UNICEF; Regional malaria advisor, East and Southern Africa	Scaling up