CONTINUOUS DISTRIBUTION STRATEGY DEVELOPMENT – MAINTAINING UNIVERSAL COVERAGE AFTER SCALE-UP

Recent examples from Tanzania and Ghana
Hannah Koenker, NetWorks project, JHUCCP
Methodology

- Combination of
  - modeling continuous distribution approaches using NetCALC, developed by Albert Kilian;
  - Field visits and interviews to assess operational feasibility and considerations for implementation
  - Costing (in Tanzania)
Ghana: Step 1 - Strategy matrix

Strategy Matrix: for completion as you work through Steps 1 – 4.

**STEP 1:**
See text on page 15. Add to list of groups as appropriate.

**STEP 2:**
See text on page 15. Whilst working through Table 3 make ticks marks for each delivery channel that is appropriate for your country. Put the tick marks against the rows where you think they will be feasible or appropriate for that population group.

**STEP 3:**
This will also be completed whilst working through Table 3. For each population sub-group write in what is the best option from each column header.

<table>
<thead>
<tr>
<th>Category area of population sub-group</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC</td>
<td>X</td>
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<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
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<td>DDR</td>
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<tr>
<td>HTRA</td>
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<td><img src="image24.png" alt="Image" /></td>
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</tbody>
</table>

**CHOICES FOR DELIVERY MECHANISM DESIGN**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free</td>
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<td><img src="image27.png" alt="Image" /></td>
<td><img src="image28.png" alt="Image" /></td>
<td><img src="image29.png" alt="Image" /></td>
<td><img src="image30.png" alt="Image" /></td>
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<tr>
<td>Voucher or Coupon</td>
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<td><img src="image36.png" alt="Image" /></td>
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<tr>
<td>Supplied or General</td>
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<td><img src="image38.png" alt="Image" /></td>
<td><img src="image39.png" alt="Image" /></td>
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<td><img src="image41.png" alt="Image" /></td>
<td><img src="image42.png" alt="Image" /></td>
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<tr>
<td>Demand or Continuous</td>
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<td><img src="image44.png" alt="Image" /></td>
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<td><img src="image47.png" alt="Image" /></td>
<td><img src="image48.png" alt="Image" /></td>
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</tbody>
</table>

**STEP 3:**
After using the LUP tool to consider the best mix of distribution approaches to meet your LUP need, cross out the delivery channels that you do not plan to use in any particular area.

**STEP 4:**
Review the mix you have now. If any sub-groups will not be reached using this mix then consider re-inventing small targeted distribution approaches to reach these groups.

The end product will be a matrix showing which delivery channels you plan to use in which areas and some of the choices for the more detailed design of the delivery mechanisms. You can use this when documenting your strategy options and as a reference when designing the implementation plans for the delivery mechanisms.
Ghana: Step 2 - NetCALC

- June visit from Albert Kilian as part of the PMI-funded ProMPT Project to use NetCALC for modeling various options and developing an overall strategy for continuous distribution
NetCALC Simulation for Ghana
Ghana: Step 3 - Development of Implementation Guidelines

- November 2011
- Stakeholder meeting to review strategy matrix and examine operational feasibility of specific options (e.g. distribution to under fives)
- Field visits in Eastern Region with regional, district and health center officials, public and private primary schools
- Accra meetings with LLIN distributors.
Ghana: Current plans

- Free distribution:
  - ANC delivery to pregnant women;
  - EPI delivery to 18-month olds at 2nd measles
  - Age 4 delivery during Child Health Promotion Week
  - Primary school distribution at grade 2 and grade 6

- Full cost
  - Secondary school students as part of prospectus (school supply list)
  - Retail

- Subsidized
  - To be determined
Ghana: Which households are reached?

Household composition of non-targeted households

- 1 person: 21%
- 2 people: 10%
- 3 people: 6%
- 4 people: 4%
- 4+ people: 4%

Proportion of population living in targeted and non-targeted households

- Population living in households without a PW, 5 or current primary school student...
- Households with a PW, 5 or current primary school student...

Households with PW, 5 or current primary school student...
Ghana: Next steps

- Review and finalization of implementation guidelines and continuous distribution strategy details
- PMI-funded pilot in Eastern Region for all channels in 2012
- Roll-out of ANC and EPI as regions complete universal coverage distribution
Tanzania:

- Recently completed the <5 and Universal Coverage Campaign (total of >24 million LLIN)
- 5 regional stakeholder meetings
- Field visits and interviews

Prevalence of Malaria in Children 6 – 59 months
Essential Elements of Keep Up

- Keep Up Strategy should:
  - Provide an access point to all households
    - Although not necessarily all the time
  - Provide choice of large and small net
  - Put some responsibility on households to obtain nets
  - Not significantly oversupply nets to households
  - Permit fair competition among suppliers
  - Not be excessively complex or costly to manage
Overview of potential channels – programmatic perspective

- The main cost driver in any channel will be the number of nets required
  - Thus, a channel that delivers the right amount of nets is likely to be the most efficient
TNVS alone (2012-2021)

Coverage would stabilize around 25-30%

Total protection* 45%
Total LLINs 26.5 Million
Cost $179 Million

* % of all person-years covered
UCC 3 Year cycle (2012-2021)

- Coverage fluctuates highly at any location – epidemiological implications uncertain
- Country (mainland) divided into six zones and each zone covered every three years on a six month rotation.

**National Coverage Estimates**

- **Total Protection**: 77-80% of all possible person years
- **LLINs**: 61.5 Million
- **Cost**: $440 Million

**Southern Zone Coverage Estimates**
Commercially Subsidized sales at 1000 TSH

Evidence of demand at various retail prices is very limited – projections are highly subjective. Subsidy level will affect demand considerably.

**Total protection**
52%

**LLINs**
33.4 Million

**Cost**
$214 Million
TNVS plus Schools, or Community?

TNVS plus school voucher at Standard 1, 3, 5, 7 & Form 1 & 4 (red)
Community Distribution (green)

Total Protection
82%/80%

LLINs
65.3/62.7 Million

Total Cost
$449/$466 Million
External Threats

- Loss of sustained funding
- Insecticide resistance/IRS
- Net durability
- Population estimates
Which additional channel(s)?

1. School-based distribution
   1. Can reach 80% of Tanzanian households when combined with TNVS
      - Extremely clear and simple beneficiary identification
   2. Community mechanisms also desirable (but identification mechanism complex and monitoring likely to be expensive)
   3. Repeated campaigns are not to be forgotten (they are the only way that an African country has reached universal coverage so far)
Conclusion

- NetCALC is a useful model to use in planning continuous distribution strategies.
- But it must be used in conjunction with operational feasibility assessments in order to determine which households will and will not be targeted, as well as to identify and overcome potential implementation barriers.
Thank you!