Epidemiological context
Evolution of Malaria Morbidity, Mortality and Case Fatality, 2001 - 2009

- Proportional Morbidity
- Proportional Mortality
- Case Fatality Rate

Malaria Case = Any Fever

- IPTp: Intermittent Preventive Treatment during pregnancy
- ACT: Artemisinin-based Combination Therapies
- RTD: Rapid Diagnostic Tests
- HBMM: Home-Based Management of Malaria

Sources: RBMME_NMCP, April 2010
Malaria Incidence per 1,000 Population by District, 2009

Legend
- < 5 cases per 1,000
- > 5 and <= 15 cases per 1,000
- > 15 cases per 1,000

Sources: RBMME / PNLP
Prevalence of Malaria Parasitemia by Region

Saint-Louis: <1%
Thies: 1%
Fatick: 3%
Diourbel: 3%
Kaffrine: 6%
Kaolack: 4%
Kolda: 12%
Tambacounda: 7%
Kedougou: 14%
Ziguinchor: 2%
Dakar: 2%
Louga: 1%
Matam: 1%
Senegal: 3%

Proportion of children 6-59 months testing positive, DHS 2010-11
LLIN DISTRIBUTION STRATEGIES
LLIN distribution background

- Between 2005 and 2007, routine distribution through health facilities, CBOs and NGOs
- 2008-2009 mass campaigns for « under five »
  - 2.7 million LLINs distributed
- Between 2010 and 2012, universal coverage mass campaigns (12 of 14 regions completed)
  - 4,500,000 LLINs, following household census and sleeping space strategy (98% of identified sleeping spaces covered)
Introduction of Routine Systems

- In 2012, routine distribution began in health facilities
- In 2013, community-based distribution will begin in 2 regions
  - Based on successes, distribution strategies will be scaled-up into other regions
- In 2013, social marketing in pharmacies and gas station shops will begin nationwide
Continuous distribution strategies

- Distribution through **health facilities**
  - Distribution of LLINs through **antenatal consultations** (free)
  - Distribution of LLINs through **general health consultations** (cost recovery-subsidized $1)
- Distribution through **community-based organizations** (subsidized)
- Distribution through **primary schools** (free)
- Distribution through the **private sector** (subsidized $3)
History of targeting interventions
History of Targeting

• Early awareness of the necessity of targeting the interventions according to the epidemiology and the risks since PSN 11-15 and Round 10 proposal
<table>
<thead>
<tr>
<th>Interventions</th>
<th>Zones à incidence Elevée (&gt;15/1000 HBTS)</th>
<th>Zones à Incidence intermédiaire (5 à 15 /1000 HBTS)</th>
<th>Zones à Incidence faible (&lt;5/1000HBTS)</th>
<th>Zone urbaine et périurbaine de la région de Dakar</th>
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</thead>
<tbody>
<tr>
<td>CU/MILDA</td>
<td>OUI</td>
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<tr>
<td>AID en étude pilote</td>
<td>OUI (Vélingara Koumpentoum et Malem Hodar)</td>
<td>Oui (Guinguinéo)</td>
<td>Oui (Richard-Toll et Nioro)</td>
<td>NON</td>
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<tr>
<td>TPI femme enceinte</td>
<td>OUI</td>
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<td>Prise en charge (formations sanitaires)</td>
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<td>PECADOM</td>
<td>OUI</td>
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<td>Surveillance sentinelle</td>
<td>NON</td>
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</tbody>
</table>
History of Targeting

• Due to an insufficient quantity of LLINs, UC mass campaign began in only 4 regions (all located in red zone)

• Because of low prevalence:
  – 2011: withdrawal of IRS in Richard Toll replacement by Kounghheul
  – 2013: withdrawal of IRS in Nioro replacement by Maka Colibantan ???
PERSPECTIVES?

• In a context of stringent resources, need to be strategic

• Consider epidemiological and risk stratification
  – Free LLIN distribution for high transmission and high risk areas
  – Cost recovery scheme in low transmission areas
  – Surveillance program countrywide (focus on low transmission areas)/EARS

• Define criteria and how to combine its

• Define what other interventions to roll out in each strata