Case Management Working Group
Meeting 27th and 28th July, 2011

Expanding Access to Treatment / Service Delivery Workstream
(A Cross Cutting Issue in Case Management)

Progress Update

27th July, Geneva

Membership

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Activities in the work plan for 2011

• Evaluate key success factors and barriers for rapid scale up of timely and effective diagnosis and treatment within 24 hours.

• Provide guidance to countries to program malaria interventions within ANC & IMCI services and plans; follow up with malaria in pregnancy working group to ensure all MIP packages include diagnosis for malaria illness.

• **Support update of WHO manual for treatment of severe malaria**

• Develop position paper on need to prioritize resources for management of severe disease within the context of health systems strengthening

Progress

• 3 Conference calls held prior to the 4th CMWG meeting in July 2010 to develop activities for inclusion in the CMWG work plan.

• No progress was made on activities until October 2010 when efforts were made to collaborate with PSM WG on a position paper with recommendations to the RBM Board. Unfortunately, this was not completed and the activity remains outstanding.

• Only one activity for this workstream is currently funded ‘Support update of WHO manual for treatment of severe malaria’ which is being undertaken by Peter Olumese.

• This is the only activity moving forward at this time
Artesunate vs quinine in the treatment of severe falciparum malaria in African children (AQUAMAT)

- Open label, randomized trial
- 11 sites in 9 countries
  - DR Congo, The Gambia, Ghana, Kenya, Mozambique, Nigeria, Rwanda, Uganda, Tanzania
- N=5425 (2712 artesunate, 2713 quinine)
  - P. falciparum confirmed by pLDH rapid diagnostic test
  - One or more of 10 signs of severe disease
- Minimum of 24 hours parenteral treatment
- Followed by complete 6 dose course of oral artemether-lumefantrine


**Figure 2:** Kaplan-Meier curves comparing survival in African children with severe falciparum malaria treated with either parenteral artesunate or quinine.

The number in parentheses are the deaths during the indicated time. In eight patients, the exact time of death during the night was missing and was estimated as 240 h.
Artesunate vs quinine in the treatment of severe falciparum malaria in African children (AQUAMAT)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Artesunate</th>
<th>Quinine</th>
<th>Relative difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatal outcome (ITT)</td>
<td>8.5%</td>
<td>10.9%</td>
<td>22.5%</td>
</tr>
<tr>
<td>Fatal outcome (per protocol)</td>
<td>8.1%</td>
<td>10.2%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Neurological sequelae at 28 d</td>
<td>3.4%</td>
<td>3.1%</td>
<td>NS</td>
</tr>
<tr>
<td>Development of coma</td>
<td>3.5%</td>
<td>5.1%</td>
<td>31.4%</td>
</tr>
<tr>
<td>Worsening of coma score</td>
<td>6.1%</td>
<td>7.7%</td>
<td>20.8%</td>
</tr>
<tr>
<td>Convulsions at 6 hours</td>
<td>8.3%</td>
<td>10.1%</td>
<td>21.8%</td>
</tr>
<tr>
<td>Hypoglycemia</td>
<td>1.8%</td>
<td>2.8%</td>
<td>35.7%</td>
</tr>
<tr>
<td>Severe anemia after admission</td>
<td>4.6%</td>
<td>5.7%</td>
<td>19.3%</td>
</tr>
<tr>
<td>Adverse events</td>
<td>n=2</td>
<td>n=1</td>
<td>NS</td>
</tr>
<tr>
<td>Median time to discharge</td>
<td>3 days</td>
<td>3 days</td>
<td>NS</td>
</tr>
</tbody>
</table>


REVISED sections 8.4-8.6

- Strong recommendation
- High quality evidence
- IV/IM artesunate preferred for severe malaria
- Minimum of 24 hours parenteral
  - Dosed at 0, 12, and 24 hours (2.4 mg/kg)
- Follow with complete course of oral ACT
- Pre-referral options:
  - artesunate PR or IM
  - artemether IM
  - quinine IM

Background to access to care issues

In order to achieve RBMs objectives

- To reduce to zero deaths from malaria by 2015 and
- To make sure all suspected malaria cases are parasitological confirmed by 2013 in both the public and private sector

1. Access to early diagnosis and effective treatment has to improve very rapidly. A clear road map is necessary to reach targets by 2013 and 2015 especially in the 10 high burden countries

2. Improved management of severe malaria to reduce mortality

- Management of severe malaria has been a less focused on area but in order to reduce mortality it will need extra focus.
- Severe malaria cases may increase in the scenario where malaria cases decline and immunity declines with it

Mechanisms to manage severe malaria

- A better referral system: A recent paper from Sierra Leone found that only 1.3% of people referred by village health workers actually went to the health facility due to lack of geographical, financial and time access
- Pre referral treatment with rectal artesunate and treatment of severe malaria with iv artesunate which would be instrumental in reducing deaths are not yet widely deployed
- Need for guidelines on fluid management following the FEAST study
Mechanisms to increase access to care

- CHWs
- AMFm
- Regional networks support to countries in quantification of RDTs and ACTs
- Global fund grant application support to countries
- Training and supportive supervision on the job training public and private sector providers
- Public private cooperation e.g. in Cambodia referrals and data collection
- Improvement in procurement and supply systems including prequalified drugs and quality assured RDTs

Some methods to improve access to quality case management

- Improved care in health facilities including no stock outs of medications and diagnostics
- Improved care for non malaria fever to minimise overuse of antibiotics
- Role of CHW volunteers /paid / motivation
- Home management of malaria provided by outreach from primary health facilities or by village ‘volunteers’
- Village health teams in some countries
- Mobile workers accessing with mobile and migrant populations
- IEC/BCC for communities and health workers to improve care seeking and compliance to treatment regimes
Cooperation to provide more integrated care

- Funding mechanisms for more integrated approaches e.g. Global fund HSS and funding for non malaria fever
- Improved antenatal care to address malaria in pregnancy and placental malaria (reproductive health)
- ICCM/IMCI
- Inclusion of other conditions neonatal health and nutrition/malnutrition

Unfunded Activities for Reassessment (1)

- Support inclusion of referral for severe diseases within health systems strengthening proposals
- Hold regional workshop(s) to share training methodologies with NMCPs and key stakeholders
- Expanding Access Workstream to participate in PSM Working Group activities
- Submit a Position Paper with recommendations to the RBM board in collaboration with the PSM WG
Unfunded Activities for Reassessments (2)

- Support inclusion of referral for severe diseases within health systems strengthening proposals
- Hold regional workshop(s) to share training methodologies with NMCPs and key stakeholders
- Expanding Access Workstream to participate in PSM Working Group activities
- Submit a Position Paper with recommendations to the RBM board in collaboration with the PSM WG