International efforts to reduce child deaths have yielded impressive results: the global under-five mortality rate has dropped by 53% since 2000. But the world can and must do better: 2.9 million children died in Africa in 2015. Over one third of these deaths, which were due to malaria, pneumonia and diarrhoea, could have been prevented by improving access to effective, affordable treatment.

One solution is to train community health workers who live in areas beyond the reach of the national health system to manage childhood cases of malaria, pneumonia and diarrhoea, and other underlying conditions like malnutrition. This approach, known as the integrated community case management of childhood diseases (iCCM), has gained recognition across sub-Saharan Africa as an effective strategy for child survival.

In 2012, WHO and UNICEF recommended iCCM as an equity-focused strategy that can improve access to essential treatment services for children who live in hard-to-reach areas. The WHO Global Technical Strategy on Malaria 2016-2030 recommends that national malaria programmes expand integrated community case management of malaria, pneumonia and diarrhoea programmes, with a focus on children under five, as a way to accelerate progress towards universal access to diagnosis and treatment. This approach underpins the Rapid Access Expansion Programme (RAcE).

A COST-EFFECTIVE INTERVENTION

Evidence shows that the integrated diagnosis, treatment and referral as needed of sick children with fever improves:

- the promptness and frequency of care-seeking behaviour for fever;
- the number of children who obtain timely and appropriate treatment for malaria; and
- the quality of care for children who have different illnesses with overlapping symptoms.
In addition, compared to simple malaria case management at the community level, iCCM reduces:

- the workload of health centres;
- the unnecessary use of artemisinin-based combination therapy; and
- the cost of malaria care.

**iCCM programmes treat more children, save more lives, and are more cost-effective than malaria-only community services.**

**AN IMPORTANT ROLE FOR WHO**

More countries are adopting iCCM policies and programmes, and new funding mechanisms are emerging to meet the health needs of children in underprivileged and remote communities. Countries now need technical support, operational guidance, and stronger monitoring and evaluation systems to make well-informed funding, policy and programme decisions. As the United Nations technical agency for health, WHO has a clear role to promote iCCM scale-up in sub-Saharan Africa.

In 2012, in alignment with the Muskoka Initiative on Maternal, Newborn and Child Health, and as a contribution to the United Nations Secretary General’s Every Woman, Every Child movement, Canada awarded a grant to the WHO Global Malaria Programme to manage the RAcE Programme. The grant, for a 5-year action plan, supports ministries of health to initiate or expand iCCM programmes in five countries: the Democratic Republic of the Congo, Malawi, Mozambique, Niger and Nigeria. A panel of external public health experts, assembled by WHO, provided strategic guidance to the programme once a year. Another external group of technical experts, the project review panel, reviewed grant applications and renewal requests by nongovernmental organizations (NGOs).

In this framework, WHO awarded sub-grants to NGOs to work with ministries of health and WHO on iCCM programmes in the designated countries. Indeed, the implementation of an integrated community treatment strategy is complex: it requires policy support and creation of community demand, as well as training, supervision, performance monitoring and the regular supply of commodities. These varied tasks necessitate the sustained and harmonized efforts of many different actors. The establishment of RAcE partnerships has enabled countries to benefit from government coordination and leadership; beneficiary community participation; NGO implementation support; ICF International and Swiss Tropical and Public Health Institute expertise; and WHO’s technical, financial, and programmatic stewardship.

In Niger, the RAcE programme led to a policy shift, and for the first time the relais communautaires started treating sick children. Now, children who live in RAcE-supported areas don’t risk death just because they have fallen ill with diarrhoea, malaria, or pneumonia. Niger will work with its partners to implement policies and secure the necessary funding so we can keep the momentum and continue saving children’s lives.

**Dr Mahamadou Idrissa Maïga, Secrétaire général du Ministère de la Santé Publique, Niger**
THE RACE PROGRAMME: RESULTS

With its commitment to evidence-based policy options, innovative partnerships, and country leadership, WHO is uniquely placed to coordinate iCCM projects and offer malaria-endemic countries the policy and operational guidance needed for iCCM scale-up.

RAcE partnerships, initiated and facilitated by WHO, have provided:

- **Support for iCCM scale-up.** RAcE partners have given logistical, technical and financial support to implementing countries. This support resulted in over 7.1 million cases of correct diagnosis and treatment of malaria, pneumonia and diarrhoea among children under five at implementation sites. To facilitate iCCM expansion, participating countries have updated their national policies, introducing, for example, the use of rapid diagnostic tests for malaria, and dispersible amoxicillin at the community level.

- **Solid evidence from a range of countries.** RAcE partners have generated evidence on iCCM programme implementation through research on topics that include supervision, community health worker motivation, quality of care, supply chain management, and the use of innovative tools like mobile telephone applications. The Swiss Tropical Institute is assessing how different programme choices affect iCCM coverage, quality of care and rates of use in complex health systems. WHO has been sharing lessons learned in the RAcE project to a wide audience including ministries of health and NGOs.

- **Stronger monitoring and evaluation systems.** RAcE partners have worked with governments to strengthen in-country systems for monitoring and evaluating iCCM. In RAcE programme areas, ICF International supported grantees’ and countries’ iCCM monitoring and evaluation efforts.

- **Strategies to promote country ownership and sustainability.** The success of the RAcE programme encouraged the Democratic Republic of the Congo and Nigeria to plan to expand these programmes nationally. WHO, NGOs, and ICF International facilitated plans to hand over the programme to governments, to minimize the risk that iCCM services are interrupted once project funding ends. Defined by the visions of the ministries of health, the transition plans will promote the integration of iCCM within the national health system.

As a result of RAcE programmes, 8491 community health workers have been trained to work in iCCM, and over 7.1 million cases of malaria, pneumonia and diarrhoea have been diagnosed and treated in the five countries. Furthermore, ministries of health have evidence-based policy solutions, operational guidance and technical support for

The RAcE programme provides the Government with comprehensive and coordinated technical support, covering all aspects of iCCM programme implementation. RAcE-supported health zones are perceived as centres of excellence for iCCM service provision, and integrated approaches are now seen as effective options for child health. The Ministry has requested recently that malaria-specific approaches in the Democratic Republic of the Congo be expanded into integrated solutions that will improve child survival.

**Dr Bakary Sambou, a technical officer at the WHO Country Office in the Democratic Republic of the Congo**
iCCM scale-up, as well as better systems for measuring the performance of their iCCM programmes. Thus, the RAcE programme created favourable conditions for iCCM scale-up and better iCCM services, which, in turn, may help governments to access additional funding opportunities to deliver child health. Finally, WHO’s assessment and wide dissemination of information may catalyse the scale-up of iCCM in other malaria-endemic countries.

Global mortality rates among children under five have decreased more rapidly in the past 15 years than at any other time in history. All children should benefit from this progress, and the Sustainable Development Goals agreed to by all nations underscore this commitment. The RAcE Programme has demonstrated that iCCM services – with country leadership, innovative partnerships, technological advances and sufficient, sustained funding – can help to end needless deaths and suffering.

For further information, please contact:

Dr Salim Sadruddin,
Team Leader, RAcE, WHO Global Malaria Programme
Tel: +41 22 791 4743 – Email: sadruddins@who.int

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>CASES CORRECTLY DIAGNOSED &amp; TREATED</th>
<th>WORKERS TRAINED</th>
<th>CHILDREN SERVED</th>
<th>NGO PARTNER</th>
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<td>Society for Family Health</td>
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<td>Malaria Consortium</td>
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<td>5 countries &amp; 6 implementation sites</td>
<td>7.1M+ cases diagnosed &amp; treated</td>
<td>8420 community health workers trained</td>
<td>1.49 million children covered</td>
<td>5 partners</td>
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