TACKLING THE CHALLENGE OF CHILD MORTALITY THROUGH iCCM

A BRIEF FOR POLICYMAKERS

INTRODUCTION

While much progress has been made in reducing child mortality over the past two decades, too many preventable deaths are still occurring in children under five around the world. The more than six and a half million children who died before their fifth birthday in 2012 are a vivid testimony of that fact.[1] As of 2013, trends indicate only eight of the 49 sub-Saharan African countries will meet Millennium Development Goal 4 to reduce child mortality.[2] Accelerating progress towards child mortality reduction requires greater attention to preventable causes such as pneumonia, diarrhea, or malaria, which account for over 6,000 deaths globally every day. It also requires addressing the unmet needs for treatment in hard-to-reach areas with low access to health care.

The Child Survival Call to Action convened in 2012 by the Governments of Ethiopia, India and the United States in collaboration with UNICEF challenged the world to reduce child mortality to 20 or fewer child deaths per 1,000 live births in every country by 2035. That same year, WHO and UNICEF issued a joint statement in support of integrated Community Case Management (iCCM) as a strategy to improve more equitable access to treatment.[3] As part of their commitments to the new global movement spurred by the Call to Action – *A Promise Renewed* (APR), a growing number of countries are reviewing their national child health plans and strategies, with a view to prioritizing evidence-based solutions focused on the leading causes of preventable child deaths.[4]

Evidence demonstrates that achieving the mortality reduction goal requires a decisive strategic shift to focus on 'high impact solutions' and accelerate access to life-saving interventions

IN BRIEF

KEY RECOMMENDATIONS FOR POLICYMAKERS

▶ Customize iCCM so it **fits with the existing health system and community health platform**

▶ Strive for **implementation success** through strong, evidence-based and CHW-centered iCCM policies

▶ Develop **synchronized** iCCM policies and budgets

through the implementation of strategies such as iCCM. The Translating Research Into Action (TRAction) project, a USAID-funded project focusing on implementation research on maternal, newborn, and child health issues, commissioned three studies that contributed to that evidence and addressed some important policy issues relevant to iCCM implementation.[5,6,7]

WHY iCCM?

The data shows that interventions leveraging community health care workers (CHWs) can contribute successfully to accelerated progress towards meeting the health-related Millennium Development Goals.[8] iCCM is a strategy that seeks to extend the reach of health care services to typically isolated populations by relying on the careful use of CHWs, who have shown in many settings to identify and correctly treat children suffering from pneumonia, diarrhea, and malaria.[9]

The two main drivers for iCCM lie at the center of many health policies: accelerating access to essential treatment for vulnerable

children in the most remote areas, and reducing under five mortality. Many studies highlight the effectiveness of community-based treatment of diarrhea, malaria, and pneumonia,[10,11] and the integrated approach of iCCM has proven to increase treatment coverage and improve the rational use of drugs in many settings by allowing providers to address various conditions simultaneously.[12,13] Therefore, investing in CHWs represents a valid option for policymakers interested in harnessing the potential of iCCM.

The status and responsibilities of CHWs vary vastly by country, as do issues related to their availability, remuneration, and supervision, but a common denominator in their deployment for iCCM is the need for thorough training and effective supervision. With those elements in place and the support of an adequate supply of medicines and equipment, CHWs can play an important role in improving access to care and increasing the impact of universal health coverage as well as improving equity.[14]

iCCM POLICYMAKING IN PRACTICE: RECOMMENDATIONS FROM THREE TRACTION STUDIES

Even if the strategy has proven to be effective in many settings, policymakers will want to consider key issues while developing iCCM policies, such as the fit between iCCM and existing programs and priorities, the relationship between policy and implementation, as well as the cost and potential impact of iCCM. The three recent TRAction iCCM studies which analyzed iCCM policy development and implementation, developed an iCCM costing and financing tool, and examined iCCM monitoring approaches, provide some answers to these questions.* The following recommendations emanate from these findings.

FRAME iCCM SO IT FITS THE HEALTH SYSTEM

▶ **Design and implement a customized iCCM strategy.** There is no standard approach for iCCM policymaking and the process will vary depending on the country's health system and its readiness to support CHWs and the program's related requirements. Countries that were early adopters of iCCM usually had a community-level health care delivery system that fit well with the strategy from the start. Those countries where policy development was a lengthier process usually had to go through further national dialogue and policy reforms. A key message is that iCCM is easier fit within a health system if the policymaking process remains a logical, stepwise process, based on a country's experience and local evidence, and with timing appropriate to the country context.

▶ **Develop the right CHW approach for the health system.** Because there is no specific model of human resource management for community-based interventions such as iCCM, the strategy can fit within the health system as long as it is framed correctly. The variety of CHW situations was highlighted in the TRAction studies: some countries use paid CHWs, others volunteers; some use iCCM implementation to create a cadre of CHWs, others train existing community workers to provide the services. There is flexibility in the CHW approach, and it should ideally be planned alongside other health sector activities, such as Human Resources for Health policies. In all cases, planning for recruitment, retention, motivation, training, and supervision cannot be omitted. With political will and careful planning, iCCM CHWs can find their place in the health system.

▶ **Integrate iCCM with successful existing programs.** One challenge of iCCM is the integration of all conditions under one service delivery platform. Where well-funded parallel health programs already exist, coordination can be complicated. Yet using the experience of existing programs and initiatives as the foundation for iCCM should be a priority and can actually jump-start iCCM implementation. The key is strong high-level leadership and effective coordination among stakeholders.

STRIVE FOR IMPLEMENTATION SUCCESS THROUGH STRONG, EVIDENCE-BASED AND CHW-CENTERED iCCM POLICIES

▶ **Maximize the use of local and already available evidence.** A strong policy should be driven by data and context, and as with any policy process, planning for iCCM should start with solid evidence of the potential feasibility and efficacy of the strategy. There is no lack of data on the potential of community-based interventions to reduce mortality due to malaria, diarrhea, or pneumonia. However, the lack of local evidence and doubts about replicability of results to the local context were identified by the TRAction studies as potential deterrents for policymakers. There are many potential sources of local information that can be leveraged for iCCM, including research studies, surveys, or program data. In many instances, pilot projects answered doubts and provided insight on the feasibility and effectiveness of iCCM in the local context. If scaling-up is incorporated into pilot designs, they can be a first step towards full iCCM implementation.

▶ **Create an enabling environment for CHWs.** The status and training of CHWs are extremely varied and the iCCM policymaking process is sometimes complicated by doubts on their capacity to effectively diagnose and treat the conditions included in iCCM. There is a growing body of research which demonstrates that under the right circumstances, CHWs

---

* To access TRAction iCCM project reports and resources, visit: http://tractionproject.org/community-care-strategies/integrated-community-case-management-iccm

are able to provide adequate and impactful care, including both diagnosis and treatment.[15] A key factor for successful CHW service provision is providing the most supporting and enabling environment possible. This may be achieved in policymaking decisions based in the local context which maximize elements such as continuous training, adequate supervision, a functioning supply management system, and strong motivators and incentives to guarantee CHW retention.

▶ **Prioritize program monitoring and evaluation in the policy process.** Monitoring and evaluation (M&E) should be an integral part of any strong iCCM policy. Such systems will provide the core information needed to demonstrate impact and allow for timely, data-based decisions for planning and continuous improvement to the program. The TRAction studies highlighted the importance of quality, complete data that include relevant program start-up and recurring costs, as well as output cost drivers such as the trained workforce and treatments provided. They pointed to the central role of CHWs in the M&E process, and tested interventions to better leverage this role. Training CHWs in data use and analysis, and providing them with the necessary tools to carry out monitoring activities had a positive effect on the consistency of reporting both cases and drug stocks. An innovative data collection approach via cellular phones tested during the studies also produced accurate data on gathering implementation strength indicators at low cost. Those examples illustrate that a solid monitoring and evaluation plan elaborated during the policymaking process can be backed at the time of implementation by simple, innovative solutions for maximum results.

DEVELOP SYNCHRONIZED iCCM POLICIES AND BUDGETS

▶ **Secure funding through all available sources.** A central issue for iCCM is that of sustainable, long term financing to support all aspects of implementation, from training and remuneration of the CHW cadre to procurement of drugs and other supplies. Ideally, iCCM should be seen as a priority health care delivery platform, completely integrated in the national health system, with a clear budget line in national health sector plans. Yet there is high dependence upon volatile external funding for iCCM. Careful planning and consideration of all available sources of iCCM funding from the top down can help remediate this barrier to sustainability. In that regard, working with the Ministry of Finance from the start of the process should be prioritized, as well as cultivating constructive, understanding relationships with donors to ensure that financial sustainability can be achieved.

▶ **Analyze and monitor cost at every stage.** The costs of iCCM can be considerable and should be taken into account when planning for start-up and maintenance of an iCCM program including costs for training, remuneration, supervision, equipment and drugs. Although costs alone may deter policymakers from considering iCCM, costing exercises during the planning and policymaking process can help clarify which iCCM implementation strategies can be applied within each country's budget. Understanding the current and future costs will help secure future funding to guarantee sustainability. In addition, linking those costs to program results through M&E is key to tailoring investments in iCCM to a country's situation during implementation.

▶ **Increase cost-effectiveness through utilization.** The cost-effectiveness of any iCCM program should be analyzed in view of whether or not there are alternatives for providing access to treatment, as well as their costs. But a key factor in cost-effectiveness is utilization. A simple, customizable costing model highlighted the importance of understanding output, notably coverage and utilization, to optimize the return on investing in iCCM, in particular training and management of CHWs. Strong, integrated supervision and management structures, investing in demand generation activities such as involving the community in iCCM planning, monitoring of CHW performance, and addressing care-seeking behaviors are strategies to consider during the policymaking process that will impact utilization.

CONCLUSION

iCCM is a strategy that is driven by some of the most fundamental public health principles: protecting the most vulnerable and reducing child mortality. Because it relies on frontline health workers and seeks to extend coverage, it requires, by essence and to varying extent, changes in the care delivery system. The TRAction studies highlighted that framing iCCM for a customized fit to a specific health system, while ensuring that the resulting policy lies on solid human, technical, and financial grounds, may lead to better implementation. And when implemented optimally, iCCM has the potential to be a strong contributor to progress towards the health-related MDGs.

Policymakers play a fundamental role in the process. They provide the leadership and coordination required by such a cross-cutting strategy, and help ensure that iCCM is part of high level issues such as planning for human resources and financing. By engaging in participative iCCM development and addressing barriers to implementation, they can lead the way to improved access to care and better health outcomes for children through this life-saving strategy.

Sources:

1   United Nations Children's Fund, Committing to Child Survival: A Promise Renewed, Progress Report 2013, UNICEF, New York, 2013. Retrieved from: http://www.apromiserenewed.org/.

2   United Nations, The Millennium Development Goals Report, 2014. Retrieved from: http://mdgs.un.org/unsd/mdg/Default.aspx.

3   UNICEF/WHO. Joint statement: Integrated Community Case Management (iCCM) - An equity-focused strategy to improve access to essential treatment services for children. New York, June 2012. Retrieved from: www.unicef.org/health/files/iCCM_Joint_Statement_2012.pdf.

4   United Nations Children's Fund, Committing to Child Survival: A Promise Renewed, Progress Report 2013, UNICEF, New York, 2013. Retrieved from: http://www.apromiserenewed.org/.

5   Bennett, S., George, A., Rodriguez, D., Shearer, J., Diallo, B., Konate, M., Dalglish, S., Juma, P., Namakhoma, I., Banda, H., Chilundo, B., Mariano, A. and Cliff, J. Policy challenges facing integrated community case management in Sub-Saharan Africa. *Tropical Medicine & International Health*. Print not yet published. Retrieved from: http://onlinelibrary.wiley.com/doi/10.1111/tmi.12319/full.

6   Jarrah, Z., Lee, A., Wright, K., Schulkers K, and D. Collins. Costing of Integrated Community Case Management: Malawi. Submitted to USAID by the TRAction Project: Management Sciences for Health, 2013. Retrieved from: http://tractionproject.org/costing-iccm.

7   Jarrah, Z., Wright, K., Suraratdecha C., and Collins D. Costing of Integrated Community Case Management in Senegal. Submitted to USAID by the TRAction Project: Management Sciences for Health, 2013. Retrieved from: http://tractionproject.org/costing-iccm.

8   Perry H., Zulliger R. How effective are community health workers? An overview of current evidence with recommendations for strengthening Community Health Workers Programs to accelerate progress in achieving the health-related Millennium Development Goals. Johns Hopkins University Bloomberg School of Public Health. September 2012. Retrieved from: www.coregroup.com.

9   Perry H., Zulliger R., & Rogers M. Community Health Workers in Low-, Middle-, and High-Income Countries: An Overview of Their History, Recent Evolution, and Current Effectiveness. Annual Review of Public Health. 35:399–421, 2014.

10 Yeboah-Antwi K., et al. Community case management of fever due to malaria and pneumonia under 5 in Zambia: a cluster randomized controlled trial. *PLoS Medicine*, 7(9), 2010.

11 Theodoratou E., et al. The effect of case management on childhood pneumonia mortality in developing countries. *International Journal of Epidemiology*, 39(Suppl 1):i155-171, 2010.

12 Kalyango J., et al. Increased Use of Community Medicine Distributors and Rational Use of Drugs in Children Less than Five Years of Age in Uganda Caused by Integrated Community Case Management of Fever. *American Journal of Tropical Medicine and Hygiene*. 87(Suppl 5):36-45, 2012.

13 Chinbuah M., et al. Impact of Community Management of Fever (Using Antimalarials With or Without Antobiotics) on Childhood Mortality: A Cluster-Randomized Controlled Trial in Ghana. *American Journal of Tropical Medicine and Hygiene*. 87(Suppl 5):11–20, 2012

14 Guenther T., et al. Beyond Distance: An Approach to Measure Effective Access to Case Management for Sick Children in Africa, *American Journal of Tropical Medicine and Hygiene*. 87(Suppl 5):77–84, 2012.

15 Perry H., Zulliger R., & Rogers M. Community Health Workers in Low-, Middle-, and High-Income Countries: An Overview of Their History, Recent Evolution, and Current Effectiveness. *Annual Review of Public Health*. 35:399–421, 2014.