Prioritising the pneumonia and diarrhoea agenda in Ethiopia: Strengthening strategies for child survival

- Pneumonia and diarrhoea remain leading causes of mortality in children under five, despite these illnesses being preventable and treatable.
- To improve child survival, Ethiopia's Ministry of Health has developed a targeted action plan that will improve equitable access to high-quality services for pneumonia and diarrhoea control.
- Operationalising child survival strategies, such as the action plan, requires a multisectoral approach. This is integral to addressing critical gaps and challenges in the health system.

Background

Ethiopia has made remarkable progress in improving child survival, reducing the mortality rate among children under five by 56 percent since 1990. Despite these efforts, under-five mortality remains high. Almost 80 percent of child deaths are attributed to neonatal causes, such as premature birth, childbirth-related complications and defects, and illnesses including diarrhoeal disease and pneumonia. Pneumonia and diarrhoea alone account for 17 percent and eight percent of this total, respectively, despite being preventable and treatable.

To target child survival at the community and health facility level, Ethiopia has adopted several programmatic strategies, including the integrated management of newborn and childhood illnesses (IMNCH) approach. The Ministry of Health (MoH) recently developed the National Newborn and Child Development Strategy 2021–2025, which aims to reduce the national under-five mortality rate from 59 to 43 deaths per 1,000 live births; the infant mortality rate from 47 to 35 deaths per 1,000 live births; and the neonatal mortality rate from 33 to 21 deaths per 1,000 live births, all by 2025. This strategy plays a key role in Ethiopia's contribution to Sustainable Development Goal 3.2 to end preventable newborn and child deaths by 2030.

Alongside the 2021–2025 strategy, the government is now collaborating with development partners to improve child survival through the implementation of a national action plan that addresses pneumonia and diarrhoea, key contributors to child mortality. The action plan will address critical gaps and challenges in the health system, particularly as they relate to pneumonia and diarrhoea control.
**Our view**

Malaria Consortium believes that effectively combating pneumonia and diarrhoea requires a health system strengthening approach, modelled on the World Health Organization’s Health Systems Framework. Such an approach entails improving prevention, diagnostic aids and health worker training, and guaranteeing equitable access to treatment at the community, health facility and hospital levels. Referral of children diagnosed with these illnesses also needs to be improved, such as with support for patient transport and sharing of health records between different levels of the health system. We recognise that interventions should be integrated with child health programmes, including integrated community case management (iCCM) at the community level and IMNCI at the health facility level.

Over the past 10 years, Malaria Consortium has been at the forefront of pneumonia case management implementation research supporting child survival, leading randomised controlled trials with thousands of community health workers and researching the use of technology and innovations in social and behaviour change communication. We chair the research group of the Every Breath Counts Coalition, which aims to end preventable child pneumonia deaths by 2030. We have also supported the implementation of iCCM to improve child survival through our projects funded by the James Percy Foundation.

**Improving the chances of survival for children under five**

In 2022, Malaria Consortium and Ethiopia’s Maternal, Child Health and Nutrition directorate conducted a formative assessment of the implementation of IMNCI in Ethiopia, with a special emphasis on pneumonia case management. The formative assessment involved focus group discussions with 53 health workers and health extension workers in Southern Nations, Nationalities, and Peoples’ region and Oromia, as well as interviews with 22 key stakeholders representing academia and leading non-governmental organisations (NGOs).

The formative assessment identified several factors that adversely affect service uptake and management of IMNCI at the community and health facility levels. This provided the foundation (see Figure 1) for the Federal Ministry of Health to create a national IMNCI action plan focusing on pneumonia and diarrhoea. The action plan promotes an integrated approach through multisectoral action, largely focusing on community and primary healthcare. It aligns with, and builds on, existing strategies that are critical to strengthening reproductive, maternal and child health. The action plan was reviewed by key stakeholders — including donors, the MoH, the Ethiopian Paediatrics Society, the United Nations and NGOs involved in child survival — and disseminated at the regional level.

As its core objectives, the action plan advocates for equitable access to, and use of, high-impact pneumonia and diarrhoea control interventions that are affordable and of high quality. The action plan also seeks to ensure the continuous availability of essential child health commodities, and to improve regular monitoring and evaluation of child health programmes.

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**Figure 1: Process for developing the action plan for integrated management of newborn and childhood illnesses**
Recommendations

It is imperative that we continue to contribute to ending preventable deaths caused by pneumonia and diarrhoea among children under five, and to improve their chances for survival. We recommend the following priority actions for consideration by the Ethiopian MoH and its partners to strengthen the control and case management of these illnesses. These actions will have relevance for other ministries of health experiencing similar burdens of childhood illness:

1. **Exert additional efforts and resources to improve equitable access to, and use of, pneumonia and diarrhoea control services.** The MoH needs to work with donors and technical partners to strengthen interventions within facility- and community-based care. Essential aspects of this include improving awareness among caregivers of the services available and promoting positive health-seeking behaviours to improve demand for services and uptake, including immunisation, diagnosis and treatment. Engaging private sector service providers and civil society organisations will help to support behaviour change communication at the community level. In this way, communities will be better supported to recognise and prevent pneumonia and diarrhoea.

2. **Improve the quality of pneumonia and diarrhoea control services.** All stakeholders should work jointly with the MoH to strengthen performance review and clinical mentoring meetings at district and regional levels; document, scale up and strengthen quality improvement practices and systems at the facility and community level; and strengthen referral and follow-up systems. Donors should additionally fund innovations and technologies that support the scale-up of the Electronic Community Health Information System (eCHIS), to allow for more accurate and rapid data collection and analysis. This will, in turn, facilitate timely decision-making.

3. **Ensure the continuous availability of essential, life-saving child health commodities.** By mobilising financial resources across multiple sectors, ministries of health, both in Ethiopia and elsewhere, can work with key partners to support pneumonia and diarrhoea control efforts. This can be achieved through supporting the local manufacturing of medicines — such as amoxicillin dispersible tablets for pneumonia, and zinc and oral rehydration salts for diarrhoea — and increasing availability of medicines across all public points of care. It is equally important to strengthen the supply of pulse oximeters (which are used to measure pulse and blood oxygen levels), oxygen and related products at health facilities. Another key activity is increasing the availability and affordability of clean cooking fuels via government and private sector engagement. The latter is an important consideration for reducing air pollution and, consequently, pneumonia incidence in children.

4. **Improve regular monitoring and evaluation of child health programmes.** Regular supportive supervision and programme review meetings at all levels will ensure that health workers and their supervisors are adequately equipped and supported to deliver health services. Support can be strengthened through the rollout of online supervision systems and evaluating their use. Programme evaluation can be enhanced through better data management. This includes strengthening the collection, analysis and use of critical pneumonia and diarrhoea data, and ensuring the use of relevant indicators at the facility level.

5. **Support operational research on priority areas identified.** Priorities include coverage, quality and use of services delivered by health extension workers; the quality of supportive supervision; aetiology and prevalence of pneumonia and drug resistance levels for first line treatment; and determining the feasibility and effectiveness of the eCHIS and how it can be improved.
References


