

HOW DO WE KNOW OUR SOLUTION WILL WORK?

The unique and vast experience of each of the partner organizations is the project's main strength.

ACTION AGAINST HUNGER

Action Against Hunger fights hunger and malnutrition in the world. Working through an international network, our organization provides a coordinated response in nearly 50 countries. Action Against Hunger adopts a multi-sectoral approach in order to prevent consequences of hunger such as malnutrition and mortality. In 2017, Action against Hunger reached 5 million people with reproductive, neonatal and child health services including half of a million (486,000) children under five years old for severe acute malnutrition. Action Against Hunger positions health as a key determinant of under-nutrition and child mortality, as well as we believe that improved health of adolescent girls and women has the potential to insure better nutritional status of future generations. Our focus is on nutrition while ensuring that basic health interventions are made available and delivered at scale.



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and has been used for over 3.4 million consultations. In Mali, Tdh has started deployment of leDA in 2 health districts reaching 40 clinics.

WORLD VISION INTERNATIONAL

World Vision International (WVI) is a child-focused international relief, development and advocacy organization active in over 100 countries worldwide. As a global leader in health, nutrition and community health worker (CHWs) programs, WV has adopted a multi-sectoral approach to address malnutrition, including micronutrient deficiencies, since the mid-1990s, and has implemented CMAM programming in 25 countries since 2005. Over the past decade, WV has developed a portfolio of mHealth programs to support CHWs and health facility staff with deployments in over 20 countries in Africa, Asia and Latin America. WV's CMAM mobile application was developed in 2014 and has been piloted in Chad, Mali, Niger, Kenya and Afghanistan.

TERRE DES HOMMES

Terre des hommes (Tdh) works on health programs in 17 countries across Asia and West Africa, focusing on children aged less than 5 years, pregnant women and mothers. Tdh has significant experience in the use of digital technologies to improve the skills and performance of health professionals in primary health care facilities through the leDA project, an m-Health application based on IMCI protocols. Since the deployment of leDA in Burkina Faso in 2014 it has been implemented in 720 health facilities (39% of primary health facilities in Burkina)

AleDia

Alliance for integrated e-DIAgnostic

**An adaptable, digital solution
to reduce childhood mortality
in Low and Middle Income Countries (LMICs)**



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PROBLEM STATEMENT

Despite progress in reducing child mortality in the past two decades, treatable conditions such as diarrhea, pneumonia, malaria and malnutrition remain the leading causes of death among children under the age of five in low-income countries. Adherence to clinical protocols, namely, the Integrated Management of Childhood Illnesses (IMCI) and the Community-based Management of Acute Malnutrition (CMAM), is low and these services are generally not well coordinated. As a result, children presenting with both an infection and severe acute malnutrition are at risk of not receiving the comprehensive treatment they need.

More than **50%** of deaths among children aged <5 years are caused by preventable and treatable diseases.

More than **90%** of children who complete treatment for acute malnutrition are cured.

Severely Malnourished Children are **9 times** more likely to die from infections than well-nourished children.

Less than **20%** of children with acute malnutrition have access to the treatment they need.

Figure 1 : Childhood illnesses and malnutrition



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OUR SOLUTION

Collaboration between Action Against Hunger, Terre des hommes and World Vision International has led to the conception of AleDIA : An alliance for the development of an integrated e-diagnostic solution to improve the quality of health services in low resource settings. The first product to be launched will be an adaptable, digital solution aimed at reducing childhood mortality. This digital solution, based on the integration of IMCI and CMAM protocols and existing mobile applications, will address the most deadly childhood diseases and manage acute malnutrition to reduce child mortality.

The following components will contribute greatly to the success of this innovative digital solution.

- 1. e-Diagnosis and Clinical Decision Support:** Facilitate Health Care Worker adherence to IMCI and CMAM protocols when diagnosing and treating ill children in outpatient health clinics.
- 2. e-Learning and Capacity Building:** Provide training to health care workers to ensure the application is used correctly and accepted by staff and to district health workers to build data-management skills for better analysis of the service.
- 3. Data Management:** Real-time data collection will result in data being readily available for district health management teams for decision making and program improvement.



Figure 2: Project Components

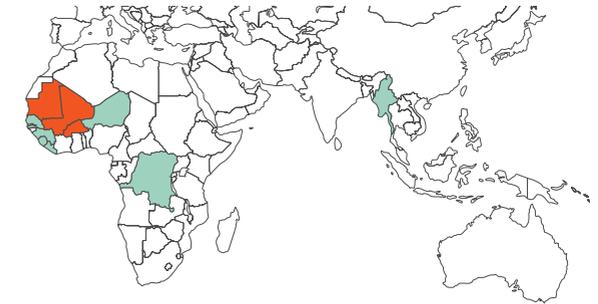
We are currently investigating potential funding opportunities to support the development and deployment of this digital solution. We will commence pilot testing and implementation of the project in **Burkina Faso, Mali and Mauritania**. This will allow us to address lessons learned along the way. Initial pilot testing will take place in Burkina Faso in two districts in two distinct regions. These pilots will make it possible to adjust the orientations proposed during the design of the digital solution for Burkina Faso but also to envisage adaptation to the contexts in Mali and Mauritania.

Lessons learned from each pilot test will be formalized and recommendations for scaling-up will be developed to facilitate expansion of the project to a number of strategically selected countries¹.

¹ Myanmar included due to the current humanitarian situation and increasing levels of displacement and food insecurity. Acute Malnutrition affects 7% of the population. In Rakhine, it is estimated that 80,500 children under the age of five are expected to be in need of treatment for acute malnutrition within the next 12 months. (World Food Programme, "Food Security Assessment in the Northern Part of Rakhine State." 2017.)

Figure 3: Map of priority and potential countries for deployment

- Priority countries**
 - Burkina Faso
 - Mali
 - Mauritania
- Potential countries**
 - Democratic Republic of Congo
 - Guinea
 - Liberia
 - Myanmar
 - Niger
 - Sierra Leone
 - Senegal



Action Against Hunger, Terre des hommes and World Vision International are confident that **ALeDIA will have a lasting impact on the reduction of global child mortality**. The comprehensive approach used for this project will reduce the heavy burden on healthcare workers and decrease fragmentation within health services by ensuring that **just one mobile device is required** to manage all children aged under 5 who need treatment for common infections or acute malnutrition. **This will play a vital role in building high quality health services in low-income countries.**

The success of this project will have a significant impact on the future of mHealth in low-income countries and will have the potential for expansion to to address additional diseases and target groups.



FOR FURTHER INFORMATION,
PLEASE CONTACT :

Riccardo LAMPARIELLO
riccardo.lampariello@tdh.ch

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