Terre des hommes
Helping children worldwide.

IeDA IMCI

8+ million
children cared for with the support of our digital tools (since 2014)

2200+
facilities equipped with digital tools and supported by IeDA IMCI

6500+
healthcare workers supported by our digital tools in their daily work

Context

In rural areas of low- and middle-income countries, front-line health workers are often poorly trained and unfamiliar with medical protocols. This results in low quality of healthcare services and increasing health risks for the most vulnerable: children. For the care of children under 5 years old, the protocol for the **Integrated Management of Childhood Illnesses (IMCI)** remains difficult to be applied and the uptake is low. The mortality rate of children under 5 remains high globally and is of major concern in Africa and parts of Asia.

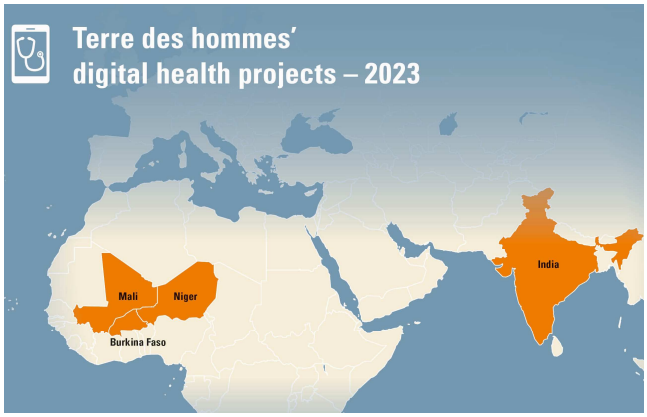
A holistic approach to saving lives of children

UNICEF and WHO have developed the IMCI protocol for caring of sick children in areas where healthcare personnel are poorly trained. This protocol remains complex to apply, and adherence rates are low.

The digital solutions of today offer an unprecedented opportunity to transform and improve primary healthcare by providing job aids to healthcare workers. In 2010, Terre des hommes in Burkina Faso developed the **Integrated e-Diagnostic Approach (IeDA)**, centered on digital tools, to encourage application of the IMCI protocol. Thanks to this approach, health workers are better trained, data from digital tools are used to improve the effectiveness of supervision, and the same data are used to build evidence-based strategies, strengthening health systems overall.

IeDA IMCI in now at scale in Burkina Faso, and rolled out in Mali, Niger and India. With the aim of creating sustainable impact on the quality of care provided to children, Terre des hommes works closely with the Ministries of Health, local health authorities, and research institutes.

Intervention map



IeDA IMCI Components

- A **medical decision support algorithm** that allows the health worker to conduct a quality consultation and also other services
- **Analysis of individual patient data**
- A **strategy for continuing education through coaching**

Results

IeDA IMCI increases adherence to medical protocols

IeDA has increased adherence to IMCI from 15-20% to over 80%, significantly improving the quality of care provided to children under 5 in Burkina Faso, India and Mali.

IeDA IMCI reduces operating costs

The cost analysis shows that IeDA's deployment brings overall savings on a daily basis due to a reduction of costs in IMCI training time and IMCI paper forms. In Burkina Faso, thanks to IeDA, net savings in operating costs are estimated between 33 $ and 66 $ per health centre per month.

IeDA IMCI reduces over-prescription of antibiotics

Independent studies have shown that IeDA can reduce antibiotic over prescription by 7-15%, the main threat to antimicrobial control in low- and middle-income countries.

IeDA IMCI improves quality of data, and decision making

The data collected is individual, making it possible to create innovative longitudinal indicators that will lead to better healthcare policies and improved use of healthcare funding.

High modular design

Recently, WHO has recommended **the integration of pulse oximeters** into IMCI, to detect hypoxemia early and save more lives. Terre des hommes integrated a module into its tool in record time, enabling agents to be trained quickly, and making the use of the pulse oximeter efficient, even in low-resource settings.

Prior to this, Terre des hommes was able to digitise the tuberculosis diagnosis algorithm and integrate it into IeDA IMCI. A module was developed to improve patients' overall compliance with treatment, and to reduce the number of patients lost to follow-up.

Our roadmap

Terre des hommes' digital health focuses on the main protocols for the care of children under 5 and pregnant and breastfeeding women at the primary level of the healthcare system. In the future, the approach can be adapted for preventive care, vaccination campaigns and the community level, and can be deployed in many other low- and middle-income countries.
Artificial intelligence, mastered by Terre des hommes, can now enhance the quality of the tools while increasing data processing capabilities tenfold.

Advocacy

Tdh's work in the field of digital health is now recognised worldwide as a best practice to be followed, as evidenced by international publications and its participation in networks like the Geneva Digital Health Hub, Transform Health Coalition, and others.
Ministries of health are involved from the design phase onwards, ensuring ownership and sustainability.

Main partners

- Burkina Faso Ministry of Health
- The Bill and Melinda Gates Foundation
- The Global Fund
- GIZ
- UNITAID
- UNICEF
- WHO
- Alive and Thrive
- Dimagi
- Swiss TPH
- Government of Jharkhand, India
- HWG Foundation
- LSHTM
- ITU
- Patrick J McGovern Foundation
- The World Bank
- USAID
- ENABEL
- University of Geneva

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