



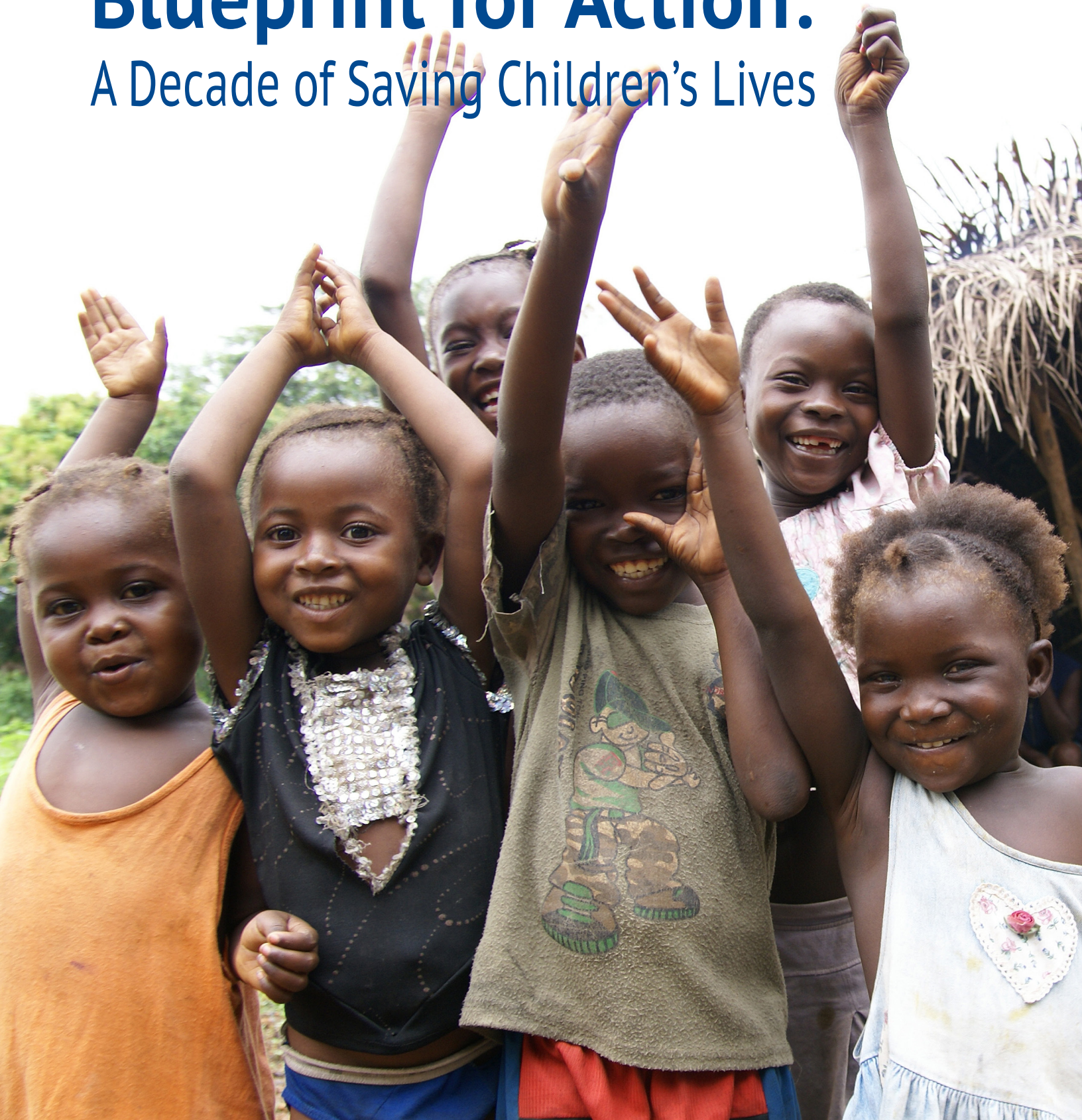
**USAID**  
FROM THE AMERICAN PEOPLE



Strengthening Health Outcomes  
*through the Private Sector*

# Blueprint for Action:


## A Decade of Saving Children's Lives









A close-up portrait of a young child's face, looking directly at the camera with a neutral expression. The child has dark skin and is wearing a blue shirt. The background is dark and out of focus.

# Blueprint for Action: A Decade of Saving Children's Lives

Jessica Scranton

**CHILDREN ARE OUR FUTURE,**  
yet too many perish from preventable diseases early in life.

Each year, an estimated 2.5 billion cases of diarrhea occur among children under five years of age—too often with fatal outcomes. Although diarrhea-related mortality has declined, it remains the second leading cause of death among children globally. Nearly one in five child deaths is due to diarrhea.

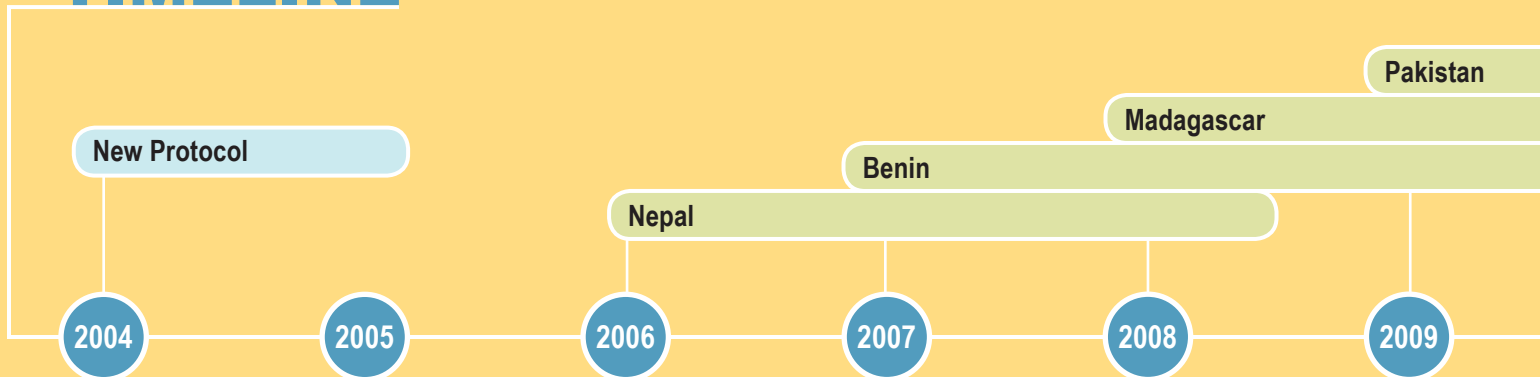
**Diarrhea kills more children than AIDS,  
malaria, and measles combined.**

# Combatting childhood diarrhea: A new treatment protocol

In 2004, the WHO and UNICEF issued a Joint Statement on the Clinical Management of Acute Diarrhea that called for treating pediatric diarrheas with oral rehydration solution (ORS) and zinc, an essential micronutrient for healthy immune function. It specified that antibiotics were not to be used when treating uncomplicated cases, and that anti-diarrheals should not be given to children under five. While ORS had been a cornerstone of diarrhea management since the early 1980s, zinc, with its prophylactic properties, was relatively new.

Prior to 2005, zinc was virtually unknown to caregivers and providers as a diarrhea treatment. Pediatric formulations of zinc to treat childhood diarrhea were unavailable. Meanwhile, ORS use had declined to about 35 percent globally — failing to address dehydration, the major killer of children with diarrhea.

## TIMELINE



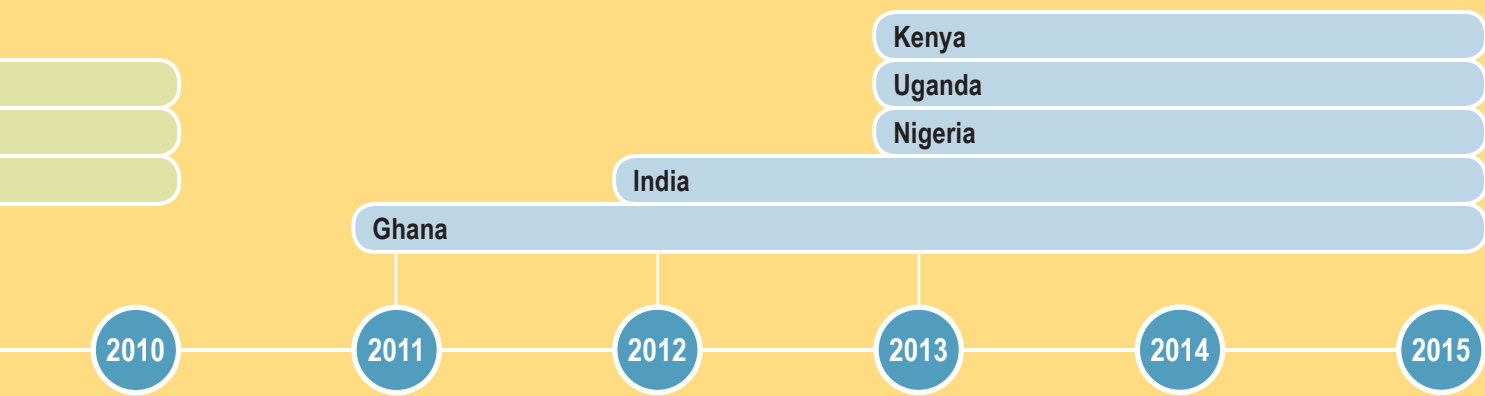
## POUZN Project



**From 2005 to 2015**, Abt Associates engaged with the private health sector through two USAID-funded projects: POUZN (Social Marketing Plus for Diarrheal Disease Control: Point-of-use Water Disinfection and Zinc Treatment) and SHOPS (Strengthening Health Outcomes through the Private Sector) to improve access to and use of ORS and zinc as the first-line treatment for acute diarrhea.



Jessica Soranton



## SHOPS Project



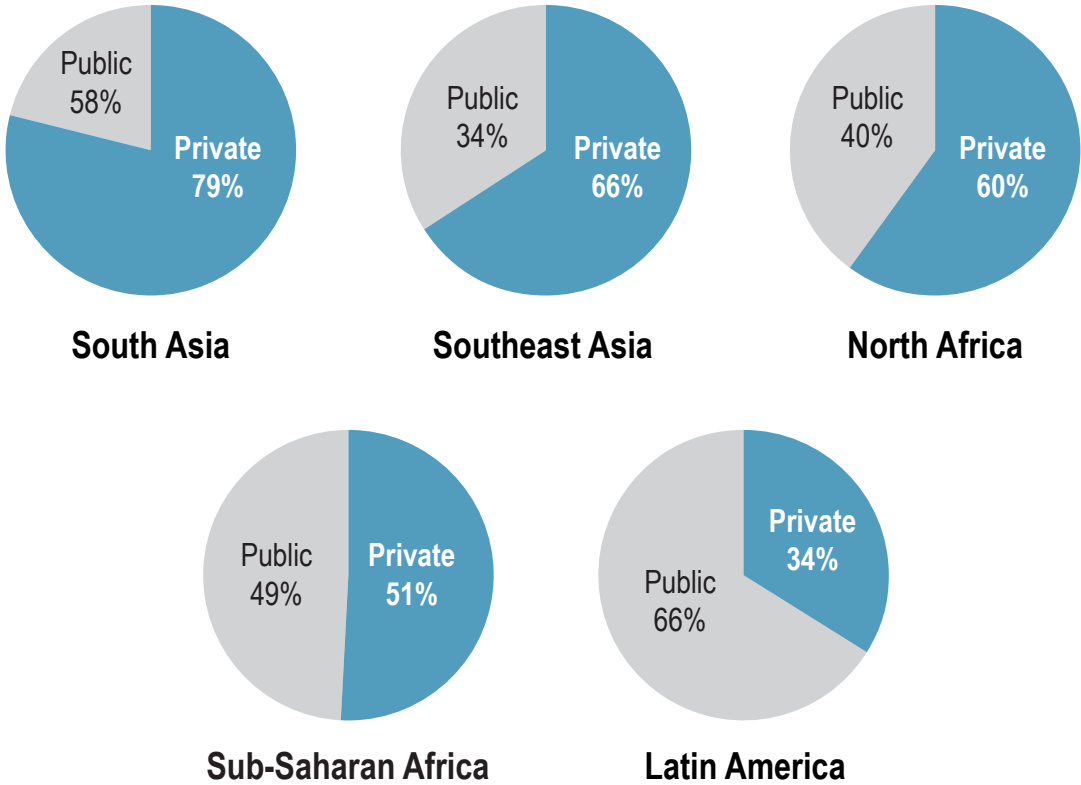




# Caregivers turn to the private sector

Globally, the private sector is a significant source of treatment for childhood illnesses, especially diarrhea and pneumonia.

In every region except Latin America, families seeking care for childhood illness most often turn to the private sector—ranging from nearly 80 percent in South Asia to just over 50 percent in sub-Saharan Africa.



Source: D. Montagu and A. Visconti, *Analysis of multicountry DHS data, 2008*. [www.ps4h.org/globalhealthdata.html](http://www.ps4h.org/globalhealthdata.html).

The private sector includes formal sources (privately-owned hospitals and clinics, facilities operated by nongovernmental organizations, and pharmacies) and informal sources, such as retail drug shops.



# A DECADE OF ENGAGING WITH THE

**Our private sector programs are based on four broad strategies:**

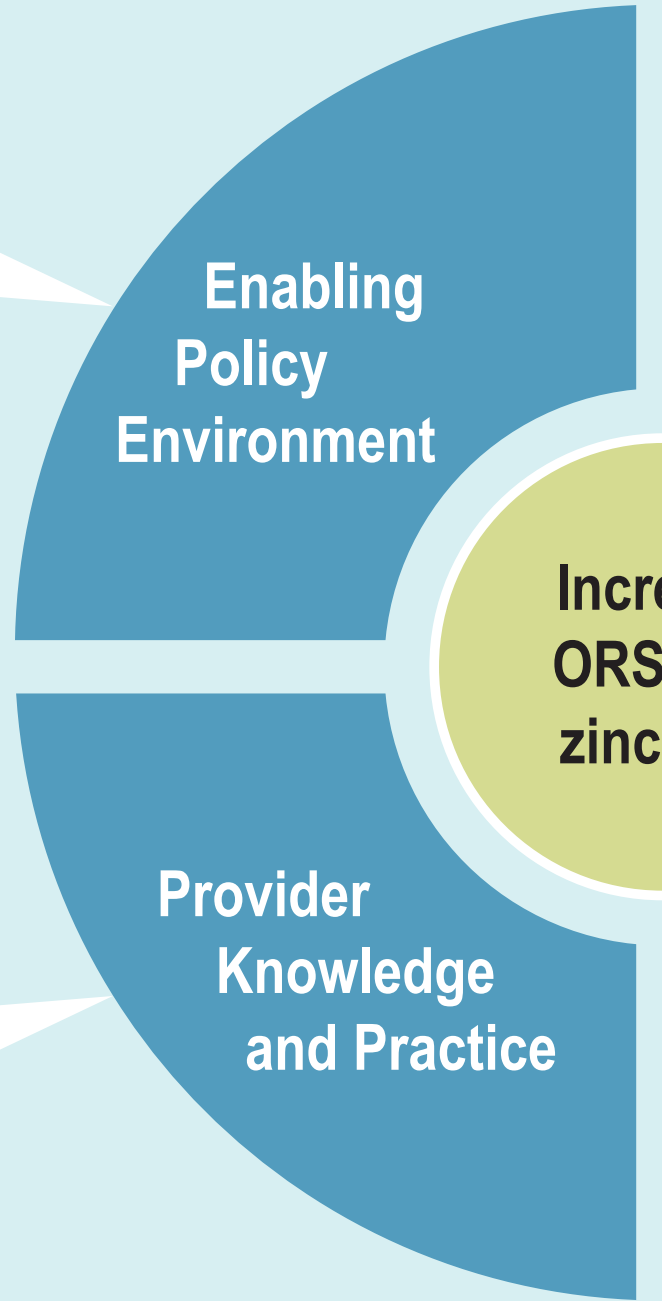
Creating an enabling policy environment that supports the new diarrhea treatment protocol, recognizing the important role of the private sector in improving access and use.

**Enabling  
Policy  
Environment**

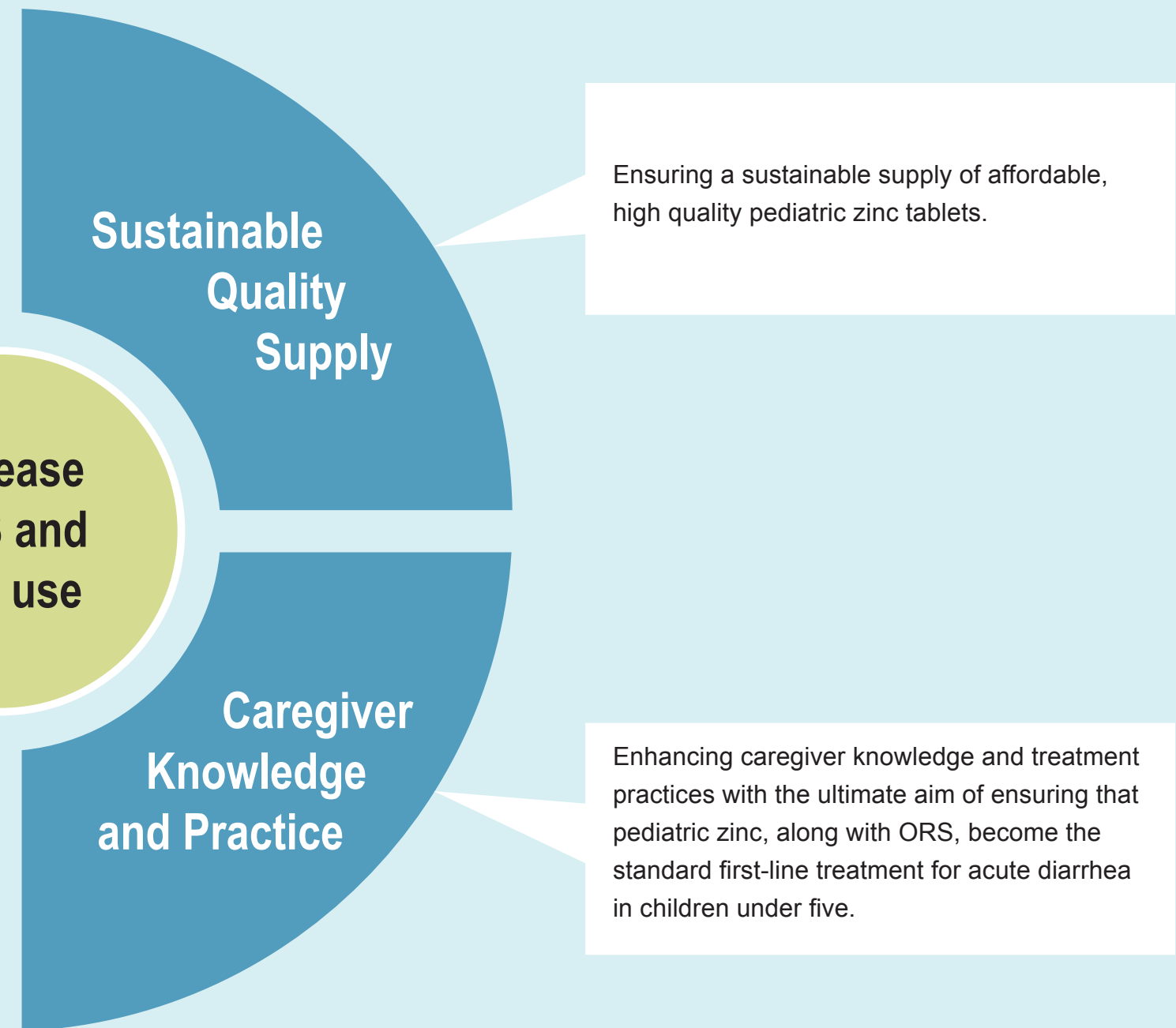
Improving provider knowledge and treatment practices to discourage the use of antibiotics and anti-diarrheals and promote the use of ORS and zinc.

**Provider  
Knowledge  
and Practice**

**Incre  
ORS  
zinc**



# PRIVATE SECTOR

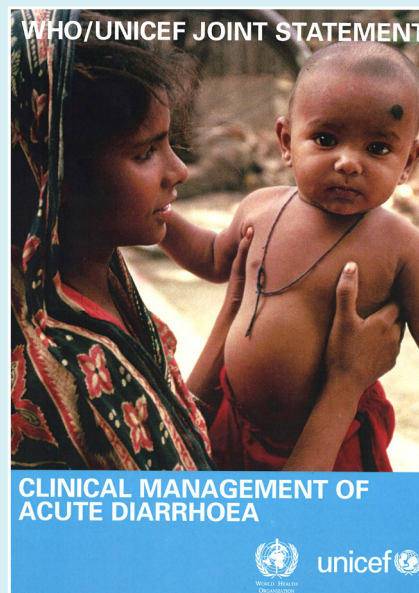


**This four-pronged approach** resulted in increased access to ORS and zinc in the eight target countries, as well as a significant increase in use of these treatments by caregivers.





# Policymakers Leveraging Public-Private Partnerships



**Diarrhea treatment programs** are most effective when the public and private sectors are coordinated, and the relationship between sectors is collaborative. For a private sector program to succeed, ministries of health must agree that the private sector has a role to play, and be willing to register zinc as an over-the-counter product so that it can be available without prescription wherever ORS is sold. Regulatory agencies can be vital partners, both in identifying retail drug shops and in supporting local production of ORS and zinc. They ensure quality and can streamline the product registration process. Government purchases of these products can be a significant portion of revenue, allowing local firms to continue to manufacture zinc and ORS even when profit margins are small.

**Starting—and sustaining—a successful program means engaging with a wide array of stakeholders (ministries of health, regulatory agencies, professional associations, opinion leaders, well-known pediatricians, and local manufacturers) to find zinc champions who advocate for policy changes and encourage local manufacturers to commit to production.**

Working with a local zinc task force or zinc champions permitted programs to move forward quickly. Leading pediatricians also played an important role by influencing their colleagues as well as general practitioners, who in turn influence the prescribing behaviors of pharmacists and druggists.



# Enabling Environment

## Ghana

### Public-Private Partnership

In 2010, the Ghana Health Service (GHS) established a new policy and protocol for management of diarrhea using ORS and zinc. With funding and an initial supply of zinc from UNICEF, the GHS was ready to make zinc available in public sector clinics and work with the SHOPS project to implement a public-private partnership for diarrhea management. In collaboration with the GHS Child Health Coordinator and other stakeholders, SHOPS developed a training curriculum that was subsequently used to train providers in both sectors and implemented a joint training-of-trainers program. SHOPS also linked the GHS with a pharmaceutical partner, M&G Pharmaceuticals, from whom they purchased zinc for public clinical facilities.

“Our collaboration with SHOPS is an important success story because we saw ourselves moving quickly from having no zinc production in country to have not just one producer but two, and with distribution going quickly nationwide.”

– Dr. Isabella Sagoe-Moses,  
Child Health Coordinator, Ghana Health Service



Elizabeth Corley



Jessica Scranton

## Pakistan

### Zinc Champions

Zinc champions can advocate for policy change, stimulate local manufacturers, and facilitate private sector participation. They play a particularly important role in the introductory phase of a new diarrhea management effort. In Pakistan, an active zinc task force was essential to quick startup. A set of champions, including internationally recognized academics and leading pediatric gastroenterologists, was already working with the Ministry of Health. Their primary focus was to change protocols, include zinc treatments in the scope of Lady Health Workers' practice, and encourage local pharmaceutical companies to manufacture pediatric zinc products.



Vicki MacDonald

## Kenya and Uganda



### Harmonized work planning

In both Kenya and Uganda, the ministries of health were already being assisted by a number of public, private, and NGO implementing partners to address their millennium development goals. SHOPS worked collaboratively with a consortium of implementing partners in each of these countries to develop a harmonized work plan for diarrhea management that specified clear roles and responsibilities for each partner. This process created synchronized programs that avoided duplication of effort and ensured that demand and supply side interventions fully covered both public and private sectors.

Jessica Scranton

public-private partnerships





# Manufacturers

## Ensuring availability of quality, affordable ORS and zinc



**The availability** of high quality, affordable ORS and zinc products is critical to ensuring a successful private sector approach to diarrhea management. POUZN and SHOPS forged partnerships with local manufacturers who had the capacity to produce quality zinc products, in either syrup or dispersible tablet form, and who could ensure wide distribution of the products.

**Working with local pharmaceutical partners allowed the programs to take advantage of existing supply and distribution channels. This also provided a possibility for coinvestment in expanding distribution in rural areas.**

Although profit margins are small on ORS and zinc, firms will enter the market if they can see long-term potential and government commitment. Benefits include the opportunity to compete for and win institutional tenders, supplementing sales in the commercial sector. Programs like SHOPS can help to defray the costs of introducing a new treatment product by providing marketing assistance through grants, linking retailers and other providers to sources of supply, and creating demand through generic mass media advertising. SHOPS partnerships helped to create commercial markets for zinc where they did not previously exist.



# Sustainable Supply

## Ghana, Nepal, Nigeria



### Ensuring Affordable and High Quality Products

To jump-start local manufacturing, project teams offered qualified local firms technical assistance from U.S. Pharmacopeia, funded through the USAID Promoting the Quality of Medicines project. Experts from USP assisted the firms to obtain international Good Manufacturing Practice certification, which would qualify them to compete for international tenders, and to produce quality dispersible zinc treatment products.

Jessica Scranton

## Ghana

### Encouraging new entrants into commercial markets

In Ghana, the SHOPS project provided grants to qualified local manufacturers to catalyze the market for zinc. Two firms took advantage of this offer, using these funds to produce marketing and point-of-sale materials to expand into rural areas and air branded radio advertisements. These firms saw significant increases in sales, coinciding with their participation during early training sessions, and expanding later with the media campaign. By the end of year three, sales were averaging 150,000 treatments per month, and partners had made 4 million treatments available to caregivers. In just three years, retail audits indicated that 70 percent of shops were carrying zinc products, and 90 percent of shops were carrying ORS.



Jessica Scranton

## India

### Investing in Rural Markets Pays Off

In India, SHOPS's Market-Based Partnerships for Health project worked with Pharma Synth, a local pharmaceutical firm, to realize the market potential offered by targeting rural informal providers.

Pharma Synth invested in identifying and building a rural network of private health care providers.

SHOPS helped Pharma Synth identify and build a rural network of private health care providers. It

also supported Pharma Synth in the development of a launch package for the brand, providing technical information and provider-directed communication tools, including brochures and posters. With the distribution network in place, and appropriately priced and branded products, SHOPS implemented an innovative consumer-oriented outreach designed to prime the market and introduce ORS and zinc. The network reaches 1,000 rural providers, who serve an estimated 3 million people in 22 districts in Uttar Pradesh. In the first 17 months, Pharma Synth sold almost 91,000 sachets of ORS and 34,000 courses of zinc. Rural sales of ORS and zinc doubled, from 7 to 15 percent, and Pharma Synth expanded this model from 22 to 45 districts.



Devika Varghese

## Ghana, Nigeria, and Uganda



### Mobiles connect demand to supply

In Ghana, Nigeria, and Uganda, mobile technologies effectively linked drug retailers to their supply partners. Text messaging was a very cost-effective way to remind providers of the advantages of using ORS and zinc. The promotional messages also served as stock-up reminders: many retailers used the supplier phone numbers provided in the SMS blast to request additional stock of both products. Similarly, during supportive supervision, supervisors were able to use smart phone tools to assess a retailer's zinc and ORS stocks and immediately notify suppliers

of any that were out of stock. Both of these channels allowed the distribution system to efficiently pinpoint providers in need of stock and immediately respond.

“Now suppliers of pharmaceuticals have accepted the Zintabs in their various outlets, making it very easy for licensed chemical sellers to access the products any time they run out of stock... my salesmen visit these shops on a regular basis to re-stock shops.”

– *George Abu Boateng, business development consultant, M&G Pharmaceuticals*

Elizabeth Corley

availability







# Providers Influencing Prescribing Behaviors



**Private health providers**, particularly drug retail outlets, are a key source of diarrhea treatment for many caregivers. They interact frequently with caregivers, but have established diarrhea treatment practices that focus on treating diarrhea with ORS and/or antibiotics. Training alone is not enough to change the prescribing behavior of providers, particularly in an environment of entrenched antibiotic use.

**To complement training of private providers, SHOPS used a multi-faceted approach to translate knowledge of the new treatment protocols into behavior change.**

Project teams worked with stakeholders to identify appropriate cadres of providers for training. In some settings, these were clinical providers or pharmacists, but, more often, retail drug sellers were prime candidates, given their key roles in rural communities. We worked with government agencies that regulate retail shops and pharmacies to identify opportunities for training providers. Refresher trainings were held during annual training sessions or monthly professional association meetings. Supportive supervision was integrated into mandated inspection systems, allowing for teaching new skills, which greatly strengthened trust between shop owners and regulatory inspectors. Mobile platforms facilitated supportive supervision, reinforced training, and linked retail shops to suppliers. Finally, we linked providers with sales representatives of local manufacturers.



# Provider Knowledge and Practice

## Ghana

### Capitalizing on regulatory agency mandates

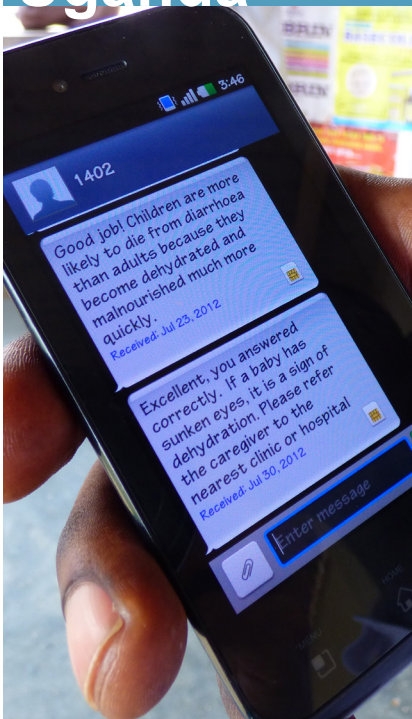
In Ghana, SHOPS partnered with the Pharmacy Council of Ghana, the regulatory body responsible for accrediting, training, and inspecting all shops carrying pharmaceutical products, to train over-the-counter medicine sellers (OTCMS) in diarrhea management at their annual required training. These trainings were followed by SMS messages with reminders and quizzes. SHOPS also trained and equipped Pharmacy Council inspectors with programmed smart phones to provide supportive supervision.

In just three years, 60 percent of OTCMS recommended zinc as a first line treatment for diarrhea, and only 9 percent of OTCMS were recommending an antibiotic along with ORS and zinc—a decrease from 46 percent two years earlier.



Vicki MacDonald

## Uganda



### Innovating with mobile technology

A mystery client survey conducted in April 2014 showed that private providers in the Northern Region of Uganda were performing poorly. Only 10 percent of the providers visited by the mystery client dispensed ORS, 20 percent dispensed zinc, and not one dispensed zinc and ORS together. An extremely high 65 percent dispensed an antimotility drug, and 55 percent dispensed an antibiotic.

Given these results, SHOPS selected this location to pilot its supportive supervision program using mobile phones, reaching 910 of the 1000 retail drug shops in the region. A follow-up mystery client survey in November 2014 showed significant improvements in just six months: 39 percent mentioned ORS, 61 percent mentioned zinc, and 33 percent mentioned both. Recommendations for antibiotics dropped to 33 percent.

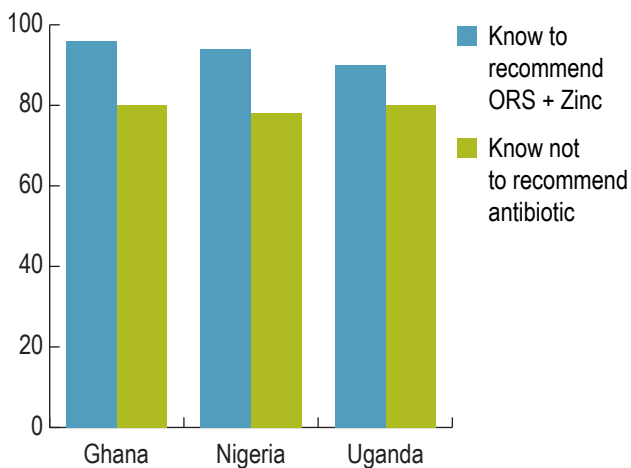
Elizabeth Corley

## Multiple Countries

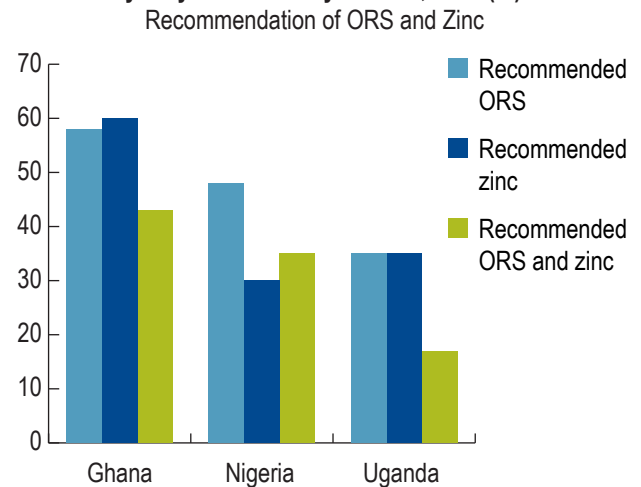
### Identifying the know-do gap

Even when providers know the correct treatment for diarrhea, they do not always offer it. The SHOPS project conducted surveys to measure the effectiveness of its training. Supportive supervision reports, which are available in real time, collected data on provider knowledge of the correct treatments, actual counseling practices, and stock levels. Reports from Ghana, Nigeria, Uganda and indicated that approximately 90 percent of providers knew that the correct treatment is ORS and zinc, and more than 70 percent knew that antibiotics are not to be used for acute diarrheas. However, when visited by a mystery client, fewer providers actually recommended ORS and zinc together for diarrhea treatment.

Supportive Supervision Monitoring Results, 2014 (%)



Mystery Client Survey Results, 2014 (%)



## Multiple Countries

### Mobiles facilitate supportive supervision

In Ghana, Nigeria, and Uganda, SHOPS designed a diarrhea management supervisory checklist for mobile devices and installed this application on smart phones for use by regulatory agency inspectors/supervisors. During supportive supervision, inspectors used their smart phone tools to cover a number of topics with drug vendors related to counseling and appropriate treatment protocols. This provided an opportunity to reinforce training concepts and served as a kind of on-the-job training for shop assistants who had not attended the training. Supervisors were also able to assess ORS and zinc stocks and immediately notify suppliers that an outlet was out of stock.







# Caregivers

## Reaching households through multiple channels



**From our earliest** diarrhea management programs, research has shown that reaching caregivers themselves is key to encouraging trial and realizing sustained use of ORS and zinc.

**Zinc promotion through mass media is essential to creating awareness of and demand for previously unknown products among both caregivers and providers.**

Project teams worked with advertising partners to create generic campaigns to be aired on local and national television and radio stations, designed to expand awareness that ORS and zinc are the recommended, appropriate treatments for childhood diarrheas. These mass media messages encouraged retailers

to stock sufficient quantities of the products in anticipation of increased consumer demand. We also supported local pharmaceutical firms to air branded advertisements and create marketing materials for consumers.

Targeted community mobilization can be an effective method of reaching caregivers, particularly in rural areas where television and radio ownership is low or non-existent. Information about diarrhea management is frequently obtained from family, friends, and community leaders indicating the need for effective community-based interpersonal communications and correct information. Key opinion leaders in the areas of health and childcare were recruited, creating a network of community influencers that could be activated for multiple objectives.



# Caregiver Knowledge and Practices

## Multiple Countries



### Mass media makes a positive impact

In every program country, household research among the caregivers of children under five indicated a strong relationship between recall of mass media messages and use of the products. Caregivers who could recall hearing or seeing a message about zinc for diarrhea treatment were significantly more likely to use zinc along with ORS than those who did not recall hearing a message.

Vicki MacDonald

## Nigeria

### Mobilizing the Community

Given the importance of the community as a source of both information and treatment during bouts of diarrhea, SHOPS partnered with a number of community-based organizations. The organizations identified and sensitized community opinion leaders and trained a set of zinc champions who organized village meetings, met with women's micro-credit groups, developed roadshows and other community events, gave educational talks at clinics, and paid visits to households. In some cases, community-based sales agents were also trained to sell zinc in their villages along with other consumer products.

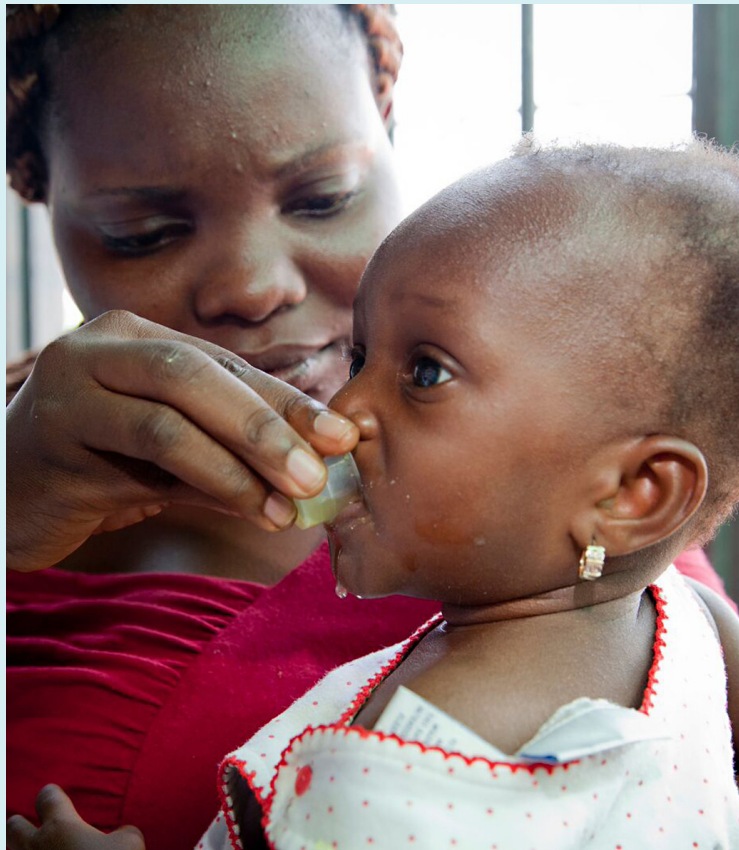


Esther Oigoga

# Ghana

## Integrating zinc into a multi-channel platform

To develop a multi-channel media campaign for zinc treatment, SHOPS collaborated with USAID's Behavior Change Support (BCS) project in Ghana, which was implemented by the Johns Hopkins University-Center for Communication Programs (JHU-CCP). The goal was to integrate messages about ORS plus zinc into the Good Life umbrella



campaign, which aired media messages dealing with a variety of health topics. SHOPS worked with BCS to develop, test, and air radio, television, and print advertising. These were followed up by disseminating job aids, treatment guideline wall charts, and client brochures for use in pharmacies and medicine shops. Through the BCS project, the program was able to work with district health management teams, 18 NGOs, and over 2,000 community volunteers in the three regions to integrate ORS and zinc messaging into their community outreach activities.

Odartey Lamptey

Jessica Scranton

impact



# BLUEPRINT FOR ACTION

**Our approach**, developed and refined over ten years of program implementation, has proven to be effective in increasing awareness and use of zinc, improving provider knowledge and treatment practices, and ensuring that supplies of locally manufactured, quality, affordable ORS and zinc products are available for caregivers. We are continually refining and improving this approach. Nevertheless, challenges remain as we continue to improve the effectiveness of diarrhea management programs.

## **Tackling the provider-client interaction**

A complex relationship exists between informal providers (such as drug shop managers) and the customers who rely on them. Changing traditional approaches can be difficult; both providers and caregivers have for years used antibiotics or antimicrobials, like metronidazole, for diarrhea treatment, and many are convinced—incorrectly—that this is the treatment of choice. Recent qualitative research conducted in Ghana identified a set of issues surrounding this interaction: client expectations and past treatment experience, providers' multiple roles; and the level of knowledge and experience in diarrhea management, of both customers and providers.

To address these issues, SHOPS is redesigning its training programs to give providers the tools they need to help guide caregivers to accept appropriate treatment. The new approach has two new elements:

1. Educating providers in the pathology of diarrhea, so that they can explain to their customers how zinc and ORS work and why antibiotics and anti-diarrheals are not recommended.
2. Enhancing providers' counseling and negotiating skills, and developing tactics to help them persuade clients to try the new treatment regimen.

## **Moving caregivers from awareness to action**

Mass media is an excellent channel for raising awareness and encouraging correct use. The next phase of program development will place greater emphasis on interpersonal channels — targeting both mothers and fathers, using peer-to-peer channels, and informing elders, who are major sources of advice and information. Messaging must focus on correct treatment for acute diarrheas, conveying these three points: always use zinc alongside ORS; ensure that the child receives zinc for the full ten days; and antibiotics and/or antidiarrheals should not be used and the reasons why.

### **Motivating pharmaceutical partners to be more proactive in marketing their products**

In most program countries, potential profits and program-sponsored demand-generation efforts were sufficient to persuade pharmaceutical partners to introduce zinc products into the commercial market. In some countries, however, programs have struggled to convince firms to actively market their products, in the absence of large institutional (public sector) sales to support production costs and when other product lines are more profitable. Continuing efforts are needed to identify appropriate incentives that will motivate manufacturers to be proactive.

### **Building the credibility of informal providers**

Much of SHOPS work has been with informal providers, a key source for treatment, particularly in rural areas. While the majority has a secondary education, most have little training in appropriate case management or rational drug dispensing practices. Most drug shops are permitted to dispense over-the-counter products but do not have legal status as a formal provider of health services. Accordingly, they are seen not as credible sources of medical advice. There is also high turnover among this cadre, and especially among their sales assistants, who tend to have little or no

training due to funding constraints. More needs to be done to build their capacity, improve the quality of their services, and build their reputation as a credible source of advice.

### **Leveraging mobile technology: Text Z-I-N-C**

While text messages by themselves do not appear to improve dispensing behaviors, SMS and other mhealth tools provided very effective follow-on. Mobile messaging was helpful in reinforcing messaging and knowledge from trainings, connecting retailers with suppliers, and assisting in data collection from supportive supervision visits. Additional efforts to capitalize on new mhealth applications must be explored and tested.







# Achievements

In 2012, a Call to Action to address childhood diarrhea and pneumonia was issued. On the second anniversary of that call, the ministers of health from partner countries came together with UNICEF, USAID, and other donors, to recommit to achieving child health goals and to mobilize new efforts around the results-oriented action plans outlined in *Acting on the Call: Ending Preventable Child and Maternal Deaths*. Our decade of experience in improving diarrhea management shows that preventing childhood deaths from major diseases is an achievable goal. With a coordinated, multi-pronged approach that engages the private sector, these programs accomplished important results. We have

- Assisted 9 countries to introduce zinc as a diarrhea treatment and bring it to scale through public-private partnerships

- supported 12 local manufacturers to introduce high quality, affordable zinc products
- trained over 55,000 private providers in diarrhea management with ORS and zinc
- provided over 19 million treatments of ORS and zinc through private sector channels
- helped spur zinc use in program countries from zero at baseline to as high as 54 percent.

By coordinating the efforts of partner agencies, organizations, and businesses, these public-private partnerships have saved the lives of countless children, pointing the way toward achieving an end to preventable child deaths by 2035.



A Decade  
of Saving  
Children's  
Lives



**The private sector** is a significant source of treatment for childhood illnesses for all wealth quintiles. Over the past 10 years our programs have harnessed the power of both formal and informal segments of the private sector, enabling caregivers to have access to affordable, quality diarrhea treatment products.





**The Strengthening Health Outcomes through the Private Sector** project is the flagship private health sector initiative of the United States Agency for International Development. The five-year project focuses on increasing availability, improving quality, and expanding coverage of essential health products and services in family planning and reproductive health, maternal and child health, HIV, and other health areas through the private sector.

**[shopsproject.org](http://shopsproject.org)**



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This summary is based on research conducted by the SHOPS project. For the full report, contact [info@shopsproject.org](mailto:info@shopsproject.org).

The views expressed in this material do not necessarily reflect the views of USAID or the United States government.