

RPM Plus
Strategy for
Country Level
Private Sector
Interventions to
Increase Access to
Essential
Medicines for
Child Health

Final Draft

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Rationale:

A recent set of articles in the Lancet (2003) state that six causes: Neonatal disorders, Diarrhea, Pneumonia, Malaria, Measles and AIDS account for over 80% of child mortality. Treatment interventions that can prevent child deaths due to these causes make use of essentially four classes of medicines, such that up to 40% of child deaths could be prevented by assuring access to i) Oral Rehydration Therapy (15%) ii) antibiotics for pneumonia (6%), sepsis (6%) and dysentery (4%), iii) antimalarials (5%) and iv) zinc (4%). Barriers to essential medicines and vaccines are determinants of elevated child mortality rates and enhancing access to essential medicines for treating childhood illnesses should contribute to reducing child mortality rates.

The WHO/MSH framework defines access to pharmaceuticals in four dimensions including physical availability (on the shelf), affordability (to the client or the client's caregiver), geographical accessibility (in all required places at all times) and cultural accessibility of safe, efficacious, quality and cost effective medicines which includes the rational use of medicines.

RPM Plus mandate

RPM Plus child survival portfolio aims to contribute to increasing *access* (geographic accessibility, availability, affordability, and cultural accessibility/acceptability) to and appropriate use of essential (efficacious, safe, and cost-effective quality) medicines, vaccines and related supplies for child survival.

The Private Sector

There is now unequivocal evidence from most developing countries that the private sector is the first port of call outside the home for the treatment of most childhood illnesses and so there is a need to identify how the private sector can be harnessed to enhance access to and appropriate use of medicines for childhood illnesses. In principle, such an approach has tremendous potential for reducing child mortality. Private providers can be defined as all providers that do not draw a salary from the Government, which can include for example:

- Physicians, nurses, midwives and pharmacists working in individual or group private practice, either in clinics or hospitals, and either working for profit or not-for-profit
- Pharmacists, pharmacy technicians, dispensing technicians and counter attendants working in retail, for-profit pharmacies
- Counter attendants working in retail drug stores registered to sell OTC medicines (Patent medicine vendors)
- Shopkeepers working in general retail stores selling general produce as well as some medicines, although they are not necessarily registered to sell medicines.

- Wholesale suppliers and distributors of OTC and controlled medicines that sell products to all the above.
- Community Health Workers

The term formal and informal are often utilized in relation to the private sector. We use the term “informal” private providers to describe those that are not recognized by the state and are not registered or licensed in some way eg market sellers, shop keepers.

In addition, there are other groups that also play a significant role in shaping the behavior and practices of caregivers and providers, and who may be future intervention partners. These are

- Government policy makers, legislators and regulators
- Health Financing Institutions (Government ministries of finance, treasuries, private banks, credit agencies, micro finance institutions, insurance agencies)
- Pharmaceutical manufacturers, both local and international

RPM Plus recently carried out a systematic review¹ of interventions to improve access to medicines for child health in the private sector. The review showed that there was evidence that the following interventions were effective or showed potential, although the scale and duration of the interventions were often limited making it difficult to determine the feasibility of scaling up these interventions.

i. Prepackaged medicines

There is evidence that prepackaged medicines can in some circumstances be an effective mechanism to improve the quality of treatment for childhood malaria and pneumonia, by promoting adherence and rational use of medicines.

ii. Short duration detailing, peer to peer, or vendor to vendor type training and behavioral change interventions

There is evidence that short duration (usually less than 20 minutes direct contact time) training interventions, such as detailing, can contribute to improved use of appropriate medicines for childhood illness in the private sector. The relative effectiveness of various types of shorter duration provider training and behavioral change interventions in changing prescribing or sales practices still needs to be determined. Of particular interest is how to select the most cost-effective delivery mechanisms, and to optimize content, duration and frequency to minimize costs and maximize effectiveness to facilitate sustainability.

¹ Systematic Review of Private Sector Interventions to Improve Access to Essential Medicines for Child Survival. Briggs, J., Pinnel, V., and Sliney, I. Rational Pharmaceutical Management Plus, 2004 (in draft)

iii. Short duration community demand creation interventions

There is abundant information suggesting that community demand creation interventions can contribute to greater access to medicines for childhood illness in the private sector, but there are also indications that they may only be effective in combination with other interventions. Such interventions as neighbor to neighbor interventions, interactive group discussions between shopkeepers and community members and short duration shop visits (often less than 10-20 minutes) by community members, have yet to be compared in terms of greatest coverage and adherence and cost effectiveness.

iv. Oversight and regulation through intermediaries

There is evidence that enforcement interventions can improve access to and rational use of appropriate medicines for childhood illness in the private sector. However, regulatory agencies find it increasingly difficult, if not impossible, to carry out effective oversight and regulation of rapidly increasing numbers of private sector pharmacies and retail drug stores. Regulation and enforcement is essential, especially for example, to reduce the inappropriate use of antibiotics for childhood pneumonia.

v. Franchising and Accreditation

As implemented by the MSH SEAM project in Ghana, Kenya and Tanzania, both franchising and accreditation share the premise that quality control, standardization of inputs and practices, effective oversight and strong management and regulatory oversight can in combination lead to increased access to quality pharmaceuticals. There are already preliminary findings suggesting an improvement in the availability of essential pharmaceuticals in the three SEAM sites: franchising in Ghana and Kenya and accreditation in Tanzania. However apart from these preliminary findings, there is as yet insufficient documented evidence in the literature that either franchising or accreditation improve access to essential medicines for child survival. These programmes are currently being evaluated. If shown to be cost effective and the context permits, efforts should be made to adapt or replicate these interventions at scale elsewhere.

vi. Contracting

There is evidence from a number of countries that contracting for the delivery of health services between Governments or donor agencies and NGOs or private for-profit providers can rapidly and effectively improve access to health services. In situations where governments contract out health services to NGOs, or other agencies, one should take special steps to ensure that the effective treatment of childhood malaria, pneumonia and diarrheal disease, as well as vitamin A and zinc supplementation are included as contract deliverables. In addition, there may be situations where innovative public-private partnerships may be codified in contracts to improve access to medicines. Information is lacking on the use of contracting with private sector wholesalers or retail distributors to supply and deliver medicines to rural areas or even directly to community health workers that are not easily accessed by public sector agencies.

vii. Incentives

There is evidence that incentives can be used to promote and shape appropriate behavior of drug sellers, health service providers and clients. Incentives can be linked to other types of interventions, and to situations where service contracting is pursued, the design and negotiation of incentives towards effective performance being central to the success or failure of the contract. There is insufficient evidence about the effectiveness of targeted subsidies, such as voucher schemes, or direct cash grants.

Proposed RPM Plus Country Level Strategy

Based on the evidence of the systematic review of published and unpublished literature, an examination of possible intervention options² and current “best practices” (where rigorous evidence does not exist), RPM Plus will develop and implement a country-specific, relevant comprehensive package of linked interventions in the private sector with the aim of enhancing access and appropriate use of essential medicines for child survival.

The country level focus of the RPM Plus private sector child survival strategy will be very practical: make interventions work at scale, and document evidence that they work. This will mean designing tailor-made interventions replicating or adapting from those already known to improve access to medicines for child health or developing other possible interventions and determining their impact. Phased implementation to attain national level will be the goal, commencing in a limited number of provinces or regions. Once the basis for successfully improving access to medicines for child health in one or two geographic zones is documented, (using appropriately designed methodologies), systems for monitoring and evaluating progress will be set in place and the interventions will be rolled out.

As discussed earlier the private sector is diverse, but the particular target group of the RPM Plus child survival private sector strategy and its interventions will most likely be the staff of pharmacies, ie pharmacists and counter assistants, or other retail drug outlets.

The operational approach

These are the steps that RPM Plus will follow in country.

1. Conduct an options analysis of the intervention “package”.

The objectives of the options analysis are:

² Strategic Examination of Intervention Options to Increase Access to Pharmaceuticals for Child Health. Sliney, I. Rational Pharmaceutical Management Plus, September 2004.

- a. Understand the pharmaceutical sector (both the not-for profit and commercial subsectors) using existing studies and reports and interviews with key informants, local experts and other stakeholders from commercial, mission and secular organizations, Ministry of Health, regulators, academics, etc. and also donors and donor-supported projects.
- b. Establish measures of the various dimensions of access to and use of essential medicines for childhood illnesses (antibiotics, antimalarials, oral rehydration salts, etc.) to serve as a baseline for the intervention(s) using:
 - Recent studies and statistics
 - Indicator-based surveys (facility-based, community-based) including treatment-seeking behavior for childhood malaria, pneumonia and diarrhea to understand where people go for drugs, in order to target interventions at the most important providers.
 - Mapping of private sector providers (both for-profit and not-for-profit) documenting the numbers and types of outlets, the supply systems that exist and the knowledge and practices of staff in these outlets
- c. Identify potential country-specific interventions, based on the information, and assess legal, regulatory, political, technical, and financial implications for viability of the interventions/intervention package. The criteria for intervention selection, adaptation and design should include resource requirements, suitability to country context, cost and sustainability.

2. Decision-making assistance to determine “intervention package”

- i) Present options analysis findings to stakeholders
- ii) Discuss potential options for replicating or adapting approaches (from those promising interventions listed earlier) to increase access to appropriate medicines for child health
- iii) Discuss opportunities, risks, barriers of these options.
- iv) Determine interventions or intervention package.

These steps are essential in order to assure “buy-in” and commitment of stakeholders which is necessary if the intervention package is to succeed.

3. Detailed intervention design and development of an intervention plan

Each program will assume a target of national scale coverage or as large a scale as possible and will lay out a set of realistic goals to attain with a suitable timeframe. It is anticipated that segmented and multifaceted approaches will be required to attain maximum scale.

The intervention will be designed with a “phased” implementation plan: from the initial implementation stage, where problems in design are detected and necessary adjustments made to strengthen intervention implementation, to the roll-out phase.

Although the key target group of the strategy will likely be the private sector retail drug outlets, the package of interventions may include components involving the following five key groups:

- i) Caregiver (Mothers, siblings and those that take primary responsibility for seeking care)
- ii) Community (Village committees, women's groups, religious groups etc)
- iii) Providers (doctors, nurses, pharmacists, paramedical staff, retail store staff)
- iv) Supply intermediaries (wholesalers, distributors and itinerant vendors)
- v) Regulators (drug regulatory authorities and delegated agents or counterparts)

4. Technical assistance for implementation of the intervention “package”

Once agreed upon intervention options have been selected as a package, RPM plus will field and manage the necessary technical assistance and resources alongside those of all associated partners.

5. Documentation of intervention impact.

In order to document the impact of the interventions, the design should be as rigorous as possible, using comparison groups and before and after measures with a careful selection of the initial pilot phase. The results of the evaluation of the interventions will add to the evidence-base, which is currently sparse to non-existent for interventions taken to scale. Appropriate indicators will be selected to monitor implementation and to evaluate impact.

Countries Considered for Program Development

Ten countries were shortlisted and considered by RPM Plus for the development of a program of interventions and their implementation. These were: China, Cambodia, Democratic Republic of the Congo, Ethiopia, Ghana, India, Kenya, Nigeria, Pakistan and Tanzania. This list was selected on the basis of the child mortality and ranking in the Lancet articles, international interest, presence of other private sector interventions, as well as the size of the child population and therefore possibility to have impact.

Ethiopia and Tanzania were selected as countries for follow-up, based upon multiple considerations including child mortality rates, the level of engagement of national and international authorities in addressing child mortality, the role and extent of the private sector, previous or current experience and an existing base for RPM to work in the country, as well as possibilities to leverage resources.

RPM Plus will explore a broad range of options in each country, and in consultation with national governments, local USAID missions and other partners, will select those intervention packages most likely to bring about the most substantive and rapid reductions in child mortality.

Ethiopia

Ethiopia is 6th in the ranking of the 42 countries that formed the focus of the Lancet articles on child mortality, with an estimated 472,000 child deaths in 2000. There is an opportunity to act to reduce these rates and great willingness to do so following a high-level visit by Anne Petersen and other member of the Child Survival Partnership in November 2003, and a National Child Survival Conference held in April 2004. Ethiopia is the first target country that the Partnership will support, and will help communities achieve better health, support the integrated training for frontline health workers and support the implementation of the Government's new health extension program.

Ethiopia has set a millennium development goal of reducing under five mortality rates from around 175/1000 live births to 107/1000 by 2015. Ethiopia also suffers from very high levels and rates of poverty, and mortality rates vary by socioeconomic determinants. The U5MR for the poorest 20% of the population (150/1000) is 32% higher than that for the wealthiest 20% (114/1000). The U5MR for children in rural areas is 30% higher than that for children in urban areas (193/1000 versus 149/1000).

Communicable and infectious disease account for 60% - 80% of burden of disease and children are dying mostly from respiratory infections, diarrheal disease, malaria, malnutrition and perinatal complications. On average, each child suffers 6.5 acute respiratory infections per year, 7.3 bouts of fever (presumed to be malaria) and 6.2 bouts of diarrhea. Severe malnutrition affects over half of Ethiopia's 5.5 million children.

Health Seeking Behavior

After many years of civil war, Ethiopia suffers from very weak public health sector institutions – there are too few facilities (despite a recent building program), and those that do exist are understaffed and under-resourced. As a result there are low levels of access to and use of the public sector. In addition, there are unusually low levels of health seeking behaviour. The 2000 DHS reported that of all children with fever in the two weeks preceding the survey, 78% of children received no treatment at all. Only 16% were taken to a health care provider; 8% were taken to a Government facility (estimated 9m visits for IRA, malaria and diarrhea per annum) and 4% to a private doctor, government health center or pharmacy (estimated <4.5m visits for ARI, malaria and diarrhea per annum).

According to the DHS, in the few cases that a child with fever did receive treatment, they were given either aspirin or an antibiotic, very few receive antimalarials. Recent studies of drug sensitivity have shown that *P. Falciparum* is resistant to both Chloroquine and SP, whereas *P. Vivax* remains sensitive to Chloroquine. It is for these reasons that the Government is planning to introduce COARTEM with assistance from the Global Fund.

With approximately 5,000 Government health facilities of all types and 1,200 private practitioners, this equates to a workload of approximately 7.9 cases per working day per

government health facility (all types combined) versus 5.3 cases per private health facility per day. These rates are very low. There is clearly a huge unmet need for the treatment of childhood illness, but no apparent huge demand. This also correlates with the 2003 National Health Accounts II, which reported that only 5% of health related expenditures are in the private sector. However, while there are low levels of use of the private sector, private sector drug outlets are more physically accessible than those of the public sector³ and household expenditures on pharmaceuticals, sourced either from the public sector or private sector, are significant.

With low rates of use of the public sector, where there is cost recovery, and a high level of coverage from the private sector, there exists a high untapped potential in the private sector. With high levels of impoverishment, often exacerbated by the costs of accessing modern medical care any effort to improve access to essential medicines in the private sector, and especially those for childhood illness, is likely to have a significant effect upon mortality trends. Amoxicillin, SP and Chloroquine are reportedly on open sale in retail stores in small market towns in rural areas. In these stores, owners are willing to stock ITNs at a unit cost of \$3.50; shops 30 minutes away are not, suggesting that purchasing power falls rapidly outside rural market towns. (Personal communication D. Crapper) Finally, the second NHA study concluded that any attempt to influence the affordability and availability of pharmaceuticals can significantly improve the welfare of households.

The new Health Sector Development Plan (HSDP) has a commitment to improving the health status of Ethiopia's children, and while heavily focused upon strengthening the public sector, now includes a provision for the creation of an enabling environment for work with the private sector and NGOs.

Efforts to improve access to antimalarial, diarrhea and pneumonia treatment in Ethiopia must therefore seek to rapidly improve both *supply* and *demand* for key treatments:

1. Assure high levels of availability of legally registered, appropriate, quality and effective antimalarial medications, antibiotics and ORT at the level of special pharmacies, private sector clinics, private pharmacies, and antimalarial medications and ORT in the custody of community health extension workers, community pharmacies and retail drug outlets and stores.
2. Rapidly improve the ability of all of these staff to elicit information from caregivers to assist in recognizing and evaluating childhood malaria, diarrhea and ARI and offer appropriate advice, treatment and if required, referral to a formal sector health care provider, especially for ARI.

³ The distribution of drug outlets varies greatly by region. Afar, Oromia and Benishangul-Gumuz have no public or NGO outlets, and both Tigray and Somali have extremely high population to outlet ratios (2 million and 4 million to one, respectively). Gambella, Harari, Addis Ababa and Dire Dawa have far lower ratios – about 200,000 to one or lower. Ratios of population to private drug outlet are about one factor lower, but significant variation still exists across regions. In both analyses, Somali stands out as having especially poor access to drug outlets (Child Health in Ethiopia, Background Document for the National Child Survival Conference. April 22-24, 2004 Addis Ababa, Ethiopia)

3. Rapidly improve the demand for treatment by ensuring that caregivers are aware of signs and symptoms of childhood malaria, diarrhea and ARI and the need to actively seek appropriate care or counsel from the nearest available provider.

Intervention Options

While these represent a quite extensive range of possible intervention options to pursue in Ethiopia, it is most unlikely that all will be followed through. Decisions as to which to implement will be made once a site visit has been conducted and local partners consulted as described in the operational approach. The MoH and other partners will be closely involved in the implementation of all interventions.

A. Public Sector Special Pharmacies

There are almost 150 special pharmacies in Ethiopia that operate as private outlets within public facilities. To rapidly improve the availability of medicines and quality of care in these pharmacies, a strategy must be found to rapidly increase demand and improve treatment practices for childhood malaria, pneumonia and diarrhea in these pharmacies to ensure that a greater proportion of children with presumptive malaria, ARI or diarrhea receive the correct medication at the recommended dosage and at a suitable price.

1. Work with Ministry of Health (MoH) to develop a quick and effective short duration and repetitive detailing program that will assist physicians, nurses, and pharmacy staff to assure better treatment for presumptive malaria, diarrhea and ARI in children. Implemented in a phased manner this will include measurement and documentation of changed practices that are *cost-effective over the long term*.
2. In collaboration with the RPM Plus malaria portfolio and MAC partners, work with the MoH, local manufacturers, or Novartis, if appropriate, to develop age-specific prepackaged antimalarials for childhood malaria that can be distributed through the special pharmacies to improve adherence. If the malaria treatment policy change to COARTEM has been implemented, a means will have to be found to target subsidies so that COARTEM will be affordable in the local market.
3. Work with the MoH to develop appropriate communications materials that create product demand for antimalarials, ARI treatments and ORT. These must change caretaker behavior and encourage rapid, full and effective treatment. The use of schoolchildren in primary and secondary schools as a target audience will be considered.
4. While this is a longer term concern for sustainability, efforts will be made with Ministry and donors, to initiate exploration of targeted subsidy mechanisms to promote improved access to treatments for childhood malaria, ARI and perhaps

ORT by the poor (e.g. tax breaks, cross pricing subsidies, vouchers, bonus incentives staff etc).

B. Rural Community Pharmacies

Founded in 1935, the Ethiopian Red Cross is a large local NGO with 31 branches and 41 sub-branches, and 1,500 local committees nationwide. In partnership with their Danish counterparts, their Essential Drugs program has put into place a network of approximately 20 community pharmacies supplied from a central store in Addis Ababa. Drugs are reputedly sold on a prescription basis and not-for-profit, and it is planned that these pharmacies become an independent business within the Ethiopian Red Cross

5. Develop a quick and effective short duration and repetitive detailing program for prescribers (doctors and nurses of patients that use these pharmacies) and or the pharmacy staff that will assist to assure appropriate treatment for presumptive malaria, diarrhea and ARI in children
6. Develop locally appropriate communications materials that create product demand for antimalarials, ARI treatments and ORT in the Red Cross Pharmacies. These must change caretaker behavior and encourage rapid, full and effective treatment.
7. As a longer term strategy for sustainability, the potential for targeted subsidy mechanisms to promote improved access to treatments for childhood malaria, ARI and perhaps ORT by the poor will be explored (e.g. tax breaks, cross pricing subsidies, vouchers, bonus incentives staff etc).

C. CHWs and HEP

To improve coverage of basic services, a new cadre of community health workers has been created as part of a Health Extension Package (HEP), however as antibiotics can only be prescribed legally by doctors & nurses, they will not yet be allowed to treat ARIs. The HEP focuses on preventive, promotive & minimum curative services targeting households particularly women/mothers and children at the *kebele*⁴ level. Treatment of common childhood diseases is expected to be among the many responsibilities of these volunteers, and as their numbers are large (approximately 20,000) it is will be necessary to identify the most cost effective way of training them to carry out their key responsibilities. Additionally the USAID-funded CRA project with Boston University (BU) proposes to carry out a series of studies designed to plan a system for supplying a new cadre of community health workers with supplies from either IMCI stores and pharmacies, or from retail stores. If approved, RPM Plus will collaborate on the implementation of this intervention.

⁴ The *kebele* is the most basic organizational unit within the health system serving a population of approximately 10,000.

8. Develop a quick and effective short duration and repetitive detailing program that will assist CHWs assure treatment for presumptive malaria and diarrhea in children.
9. Develop locally appropriate communications materials and methods that create product demand for antimalarials, and ORT from the CHWs. These must change caregiver behavior and encourage rapid, full and effective treatment.
10. Investigate the possibility of setting up and running a study of CHW treatment of childhood ARI; training CHWs to recognize the symptoms and signs of ARI and differentiate this from malaria so that they treat with an appropriate antibiotic.

D. Retailers, wholesalers, distributors and manufacturers

The second NHA study (2003) and anecdotal reports suggest that there are large numbers of retail outlets that provide treatment, and that the value of medicine sold is major and significant, despite earlier data showing that private sector retail pharmacies and drug outlets are not a significant source of treatment for childhood illness. 79% of household out of pocket expenditures (which represent 36% of all expenditures) are on pharmaceuticals.

Given the high levels of poverty in Ethiopia, it would be surprising if rates of frequentation of licensed or unlicensed retail outlets for home treatments were as high as in other developing countries. It is possible however that as Ethiopia emerges from a long period of conflict, the private sector will become a more important source of these medications, and therefore early efforts to improve their use and sales will be necessary.

PSI is already energetically engaged in the social marketing of bednets in urban and peri-urban areas, has a segmented approach in place and has already identified a network of distributors, wholesalers and retailers that can get the nets to consumers. These same supply chains and networks of retail stores may be contracted to carry and appropriately sell antimalarials as well as to supply community health workers with their medicines.

11. Interventions, selected from those already listed, will be developed in the retail outlet sector on the basis of the situational analysis

E. NGOs

Local and/or international NGO's account for 10% of Ethiopia's total health expenditures, and one assumes at least 10% of service volumes. This may be either as part of emergency relief efforts, or as part of broader development efforts. The NGO's are likely to be targeting the rural and urban poor, where the highest rates of mortality are to be found.

One can consider the following options dependent on the finding of the situational analysis:

12. Develop a quick and effective short duration and repetitive detailing program that will assist qualified NGO staff to provide appropriate treatment for presumptive malaria, pneumonia and diarrhea in children.
13. Develop locally appropriate communications materials and methods that create product demand for antimalarials, and ORT from the NGO's.
14. In the event that NGOs are contracted to deliver health services, assist in designing appropriate deliverables and performance indicators to promote effective treatment of childhood malaria, pneumonia and diarrhea.

Tanzania

Tanzania is 9th in the ranking of the 42 countries that formed the focus of the Lancet articles on child mortality, with an estimated 223,000 child deaths in 2000. Eighty five percent of these child deaths are preventable with known interventions. Tanzania is poised to change the manner in which it addresses child health, and the government is committed to reducing child mortality, with political leaders advocating for child health as a priority and resources in support of the health sector being increased substantially. The most recent medium term expenditure framework (MTEF) shows substantial increases in allocations to preventive and primary care services (33.6% in 2000 to 45.2% in 2003). There is an emphasis in targeting the rural poor and reducing infant and child mortality. In particular, the Ministry wishes to strengthen malaria case management, including home based diagnosis and treatment. This situation offers opportunities for private sector interventions to improve access to medicines for child health.

Health Seeking Behavior

The 1999 Tanzania DHS reported that in the two weeks prior to the survey 36% of children under five experienced a fever, 15% an acute respiratory infection and 13% a bout of diarrhea. Of these, 66% were reported to have consulted a health service provider (although public and private providers were not differentiated in the survey).

One source of medicines is the *duka la dawa baridi* (DLDBs). DLDBs constitute the largest network of formally licensed outlets for basic essential drugs in Tanzania. It is estimated that there are more than 4,600 DLDBs in the country - about one for every 7,400 people. The DLDBs exist to serve a market, and supply a demand. There are twice as many DLDBs as there are public sector health facilities in Tanzania. It is therefore highly likely that the DLDBs are a major and significant source of treatment for childhood illnesses, and may well be the first port of call for the treatment of childhood illnesses in Tanzania. DLDBs already sell antimalarials and ORT. They are not licensed to sell antibiotics, but many do. Any effort to improve access to medicines for child health must therefore seek to do the following:

- i. Assure high levels of availability of legally registered, appropriate, quality and effective antimalarial medications in the DLDBs, and ORT.
- ii. Rapidly improve the ability of DLDB staff to elicit information from caretakers to assist to recognize childhood malaria, diarrhea and ARI and offer appropriate advice, treatment and if required, referral to a formal sector health care provider, especially for ARI.
- iii. Rapidly ensure that caretakers are aware of signs and symptoms of childhood malaria, diarrhea and ARI and the need to actively seek appropriate care or counsel from the nearest DLDB.

The MSH SEAM project has been working with the DLDBs to create a network of accredited stores called ADDOs or accredited drug dispensing outlets. This ongoing intervention is designed to enhance access to essential medicines, including some for child health.

Intervention Options

A. ADDOS

With an ongoing SEAM program in place, there exists an opportunity to explore accreditation as a means of scaling up improved access to medicines for childhood conditions, and especially for targeting of the poor. This would assist to refine and further extend the ADDO program, and build upon the extensive experience already gained.

1. Explore the potential of the ADDOs to further address child health
2. Explore the role of RPM Plus in scaling up the ADDOs programme

B. Retail Drug Stores – The non-ADDO DLDBs

There are presently over 4000 DLDBs nationwide that are not yet enrolled in the ADDO program, and the local market is flooded with inexpensive SP, which is still therapeutically effective despite rising resistance. The DLDBs are a likely source of treatment for the estimated 92 million cases of childhood malaria, diarrhea and ARI per year. A strategy must be found to rapidly increase demand and improve sales practices for childhood malaria and diarrhea treatment in these shops, either as an interim awaiting extension of the ADDO programme or as a long term measure in addition to or in absence of the ADDO programme, to ensure that a greater proportion of children with presumptive malaria or diarrhea receive the correct medication at the recommended dosage and at a suitable price. This could involve using a variety of peer to peer (vendor to vendor and neighbor to neighbor) approaches to identify the most effective content, duration and frequency of contacts to maximize coverage and adherence. The target group is the outlet staff, but the following groups may be employed as a medium through which to work.

3. Work with wholesalers and distributors, in coordination with the SEAM ADDO programme to develop a quick and effective short duration and repetitive detailing program that will assist DLDB staff better recognize presumptive malaria, diarrhea and ARI in children.
4. In collaboration with the RPM Plus malaria portfolio and MAC partners, work with manufacturers, if appropriate, to develop age-specific prepackaged, affordable branded COARTEM for childhood malaria that can be distributed nationwide to improve appropriate provider behaviour and patient adherence in both private and public sector outlets.
5. Work with manufacturers, distributors and wholesalers to develop responsible communications materials that their own staff and outlets can use to create product demand for antimalarials (Coartem) and ORT. These must change caregiver behavior and encourage rapid, full and effective treatment. This would be carried out in partnership with PSI, JHU or other CAs with a comparative advantage in the area of social marketing and communications.
6. As a longer term strategy for sustainability, a targeted subsidy mechanism will be explored to promote improved access to treatments for childhood malaria and perhaps ORT by the poor. (e.g. tax breaks, cross pricing subsidies, vouchers, bonus incentives to wholesaler and distributor sales staff etc).

C. Financing the Treatment of Childhood Illness

The newly created NHIF and the presence of Community Health Funds (CHF) may provide an opportunity to investigate a means of targeted subsidies for treatment of childhood illnesses through, for example, a pharmacy benefit program.

7. Identify existing pharmacy benefit packages in NHIF and CHFs
8. Determine if there is a possibility to extend and focus benefits to cover the treatment of childhood malaria, pneumonia and diarrhea. This may be particularly relevant to the introduction of COARTEM.

Next Steps:

1. Meet with Al Bartlett (USAID SO3 team) to discuss the strategy
2. Pre-assessment (intervention feasibility and options analysis) country visit to Tanzania and Ethiopia to:-
 - i. Present RPM Plus private sector initiative to national authorities and USAID
 - ii. Determine interest to support initiative
 - iii. If interested, obtain approval for options analysis
 - iv. Agree on objectives of options analysis
 - v. Identify key in-country stakeholders
 - vi. Determine information needed for options analysis (what is available and accessible, what needs to be gathered)
 - vii. Identify data collection needs, sources, (and potential partners)
 - viii. Gather information to update SEAM options analysis (Tanzania only)
3. Options analysis preparation (Ethiopia only)
4. Country visit for options analysis data collection, initial discussion of viability of potential interventions with the various stakeholders (Ethiopia only)
5. Options analysis data processing and analysis, preparation of finding report and “policy dialogue/workshop” materials
6. Discussion of findings with stakeholders (“policy dialogue/workshop”)
7. Decision on intervention
 - i. national authorities
 - ii. USAID
8. Detailed intervention design and planning
9. Technical assistance for phased implementation
10. Monitoring and relevant evaluation