

Rational Pharmaceutical Management Plus

Private Sector Options to Increase Access to Medicines for Child Health

Tanzania: Trip Report, October 25 – November 13, 2004

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About RPM Plus

The Rational Pharmaceutical Management Plus (RPM Plus) Program, funded by the U.S. Agency for International Development (cooperative agreement HRN-A-00-00-00016-00), works in more than 20 developing countries to provide technical assistance to strengthen drug and health commodity management systems. The program offers technical guidance and assists in strategy development and program implementation both in improving the availability of health commodities—pharmaceuticals, vaccines, supplies, and basic medical equipment—of assured quality for maternal and child health, HIV/AIDS, infectious diseases, and family planning and in promoting the appropriate use of health commodities in the public and private sectors.

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Abstract

A trip was made to visit key partners in Tanzania to investigate the possibility of pursuing a number of innovative field interventions that may increase access to medicines for child health through the private sector. Very positive responses were received from virtually all partners contacted, including USAID/Tanzania, the Tanzania Food and Drug Authority, the National Malaria Control Program and a variety of multinational and international aid organizations and NGOs. Three avenues for RPM Plus support are recommended, and these include focused support to the ongoing SEAM ADDO program, to the Novartis Ifakara ACCESS project, and to private sector manufacturers and wholesalers.

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Key Words

Private Sector, Tanzania, Access, Pharmaceuticals, Child Health, Malaria, Diarrhea, Acute Respiratory Infection

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Acronyms

ADDO	Accredited Drug Dispensing Outlet (Also known as <i>Duka la Dawa Muhimu</i>)
AED	Academy for Educational Development
AMREF	African Medical Research Foundation
ARV	Antiretroviral
CAs	Cooperating Agencies
CHF	Community Health Fund
C-IMCI	Community IMCI
CPM	Center for Pharmaceutical Management
CS	Child Survival
DC	District Commissioner
DFID	Department for International Development (UK)
DHS	Demographic and Health Survey
DLDB	Duka la Dawa Baridi
DLDM	Duka la Dawa Muhimu (Accredited DLDB, or ADDO)
DMO	District Medical Officer
DSS	Demographic Surveillance System
ESRF	Economic and Social Research Foundation
FP	Family Planning
GPS	Global positioning systems
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (Germany)
HC	Health Center
HP	Health Post
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IDD	Iodine deficiency disease
IMCI	Integrated Management of Childhood Illness
IPT	Intermittent preventive therapy
ITN	Insecticide Treated Nets
JSI	John Snow, Inc.
MCH	Maternal and Child Health
MEDA	Mennonite Economic Development Associates
MEMS	Mission for Essential Medical Supplies
MOH	Ministry of Health
MSD	Medical Stores Department
MSH	Management Sciences for Health
MYDB	Maduka ya Dawa Baridi (plural of DLDB)
NHIF	National Health Insurance Fund
ORS	Oral rehydration salts
ORT	Oral rehydration therapy
OTC	Over-the-counter
PB	Pharmacy Board
PSI	Population Services International
PVO	Private Voluntary Organization
QAP	Quality Assurance Project
RC	Regional Commissioner

RMO	Regional Medical Officer
RP	Regional Pharmacist
SEAM	Strategies to Enhance Access to Medicines
SP	Sulfadoxine-Pyrimethamine
STI	Sexually Transmitted Infections
TEHIP	Tanzania Essential Health Interventions Project
TFDA	Tanzania Food and Drug Authority
TFNC	Tanzania Food and Nutrition Centre
TOTS	Trainers of trainers
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USAID/W	United States Agency for International Development (Washington, DC office)
VHW	Village Health Worker
WB	World Bank

Background

The 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. 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 target causes of child mortality and enhance access to and appropriate use of medicines. In principle, such an approach has a tremendous potential for reducing child mortality.

Tanzania has been selected as a country for RPM Plus child survival portfolio to initiate some private interventions to improve access to medicine for child health, 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 and current private sector experience in the country and an existing base for RPM Plus to work in the country, as well as possibilities to leverage resources.

Purpose of Trip

The purpose of this visit to Tanzania was to explore interest for private sector interventions and gather data to supplement that collected prior to the MSH SEAM project in order to process and identify options. The trip was from October 25 through November 13, 2004.

Scope of Work

- Brief and debrief with the Mission
- Present RPM Plus private sector initiative to national authorities and donors and ascertain interest
- Identify and meet with key in-country stakeholders
- Gather information needed to complete and update the options analysis conducted prior to the MSH SEAM project
- Identify potential partners and other private sector opportunities
- Start to process options analysis

Activities

The first week consisted of a series of meetings in Dar Es Salaam with key informants, beginning with USAID. There was a one day field trip to Bagamoyo at the end of the first week, and a 3 day field trip to the SEAM program site in Songea during week 2. A final debriefing was held with USAID on November 9 and with MSH staff November 10.

Tuesday October 26

9:00 Meeting with Ned Heltzer and Rogotian Shirima, MSH SEAM

This introductory meeting served to review the purpose, objectives and expected outputs of my trip with SEAM staff, and to plan meetings with other partners and field trips.

12:00 Meeting with John Dunlop, USAID

I attended an initial briefing with John Dunlop at USAID, accompanied by Ned Heltzer, presenting my program of work and requesting Mission guidance. USAID prefers that any RPM Plus work carried out in Tanzania should be through the MSH SEAM Program, as there are many cooperating agencies (CAs) and USAID prefers not to create confusion with local partners. He added that with respect to the Global Fund negotiations that are currently underway, it is not yet certain that COARTEM will arrive soon, so anything that can be done to improve access to and use of SP makes a lot of sense.

The USAID health program focus regions are Iringa, Arusha and Kigoma, and so it would be helpful to work in these regions if at all possible.

A follow-up exit debriefing was arranged for the day before my departure.

15:00 Meeting with National Malaria Control Program

I met with Dr. Fabrizio Molteni and Karen Kramer. Dr. Mwita, the Director was not available.

Dr. Molteni indicated that there are an estimated 2.4 febrile episodes per child per year, and of these, he estimates that 50-60% are treated at a public health facility. The case fatality rate is about 3%, and it is estimated that annually there are 80,000 child deaths due to malaria. Of these deaths, only 14,000 are recorded in health facilities. Furthermore, less than 20% of all cases receive the correct treatment within 24 hours of onset of a febrile illness. With 223,000 child deaths, Malaria accounts for 30% of all child deaths.

Dr. Molteni mentioned that the Ifakara Access Project has shown that over 50% of cases treated for Malaria received Aspirin instead of Sulfadoxine-Pyrimethamine (SP). The project is funded by Novartis, and the principal investigator is Rose Nathan. He suggested that I contact the project to see if there was any potential for collaboration.

The new National Malaria Control Strategy has revised treatment guidelines, but there is no design yet for home based care of Malaria with COARTEM. One major problem is the very high cost of COARTEM. Therefore all the COARTEM that is expected to be made available by the Global Fund is intended to be used in the public sector.

In the meantime, there still exists a need to improve malaria case management in drug shops. There is no need for the formal registration of businesses that sell over-the-counter (OTC) drugs, and following the swap from Chloroquine to SP as first line antimalarial treatment, SP is now considered an OTC drug although the laws and regulations have not yet been amended to reflect this change in treatment policy. SP can therefore be sold in any retail outlet as an OTC preparation.

When I asked if we should try to put together an intervention in the private sector, Dr. Molteni said "there's no way out, it is a must, not just for DLDB but also for the for-profit private sector". Dr. Molteni believes that it will be worthwhile trying to improve SP use even when COARTEM is made available in the public sector because a) after the first trimester of pregnancy, SP is still the recommended treatment, b) SP is still recommended for intermittent preventive therapy (IPT) in pregnant women and c) SP may well gain in popularity as COARTEM is too expensive for most Tanzanians, and will not be available in private sector.

Dr. Molteni suggested that RPM Plus consider Zanzibar as a potential site for testing innovative interventions, as it has a population of 1m and clearly defined margins.

NATNETS

Dr. Kramer is team leader of the NATNETS Program, which is making insecticide treated nets (ITNs) available to pregnant women. The program was just launched through four contractors. MEDA (logistics), KPMG (Audit), CARE/Tanzania (Clinic staff training and sensitization of communities) and the London School of Hygiene and Tropical Medicine and Ifakara (M&E).

Through a subsidy program financed by the Global Fund via the Ministry of Health, vouchers are to be made available in all primary care clinics and targeted at 90% of pregnant women. Information will also be given to women to explain the need for the nets. Each voucher has value of 2,750/=, which is equivalent to 80% of the retail cost of approximately 3,500/=. Mothers will also receive a bundled re-treatment kit which is good for six months.

When a voucher is traded in for the purchase of a new net, the retailer takes the voucher to a wholesaler, and trades in the voucher as a credit against new stocks. Vouchers cannot be exchanged for cash at wholesalers. It is interesting to note that the voucher allows restocking without any financial risk to the retailer, as the voucher is set at the wholesale price of a net. Therefore retailers are risking only profit margin and not the total value of nets when restocking. This makes it easier for retailers to carry stocks of nets. Outlets for the nets include general retail stores and also pharmacies. Wholesalers can trade in the vouchers at manufacturers either for nets or for cash. Reimbursements to the manufacturers is managed by MEDA.

Annual net sales are currently at 1.5m, and the vouchers target an additional 1.5m, and hopefully will double the market size.

The roll out plan began last week with Dar Es Salaam, Morogoro and Dodoma regions, with 11 regions to be covered by June 2005 and all 21 by June 2006.

Wednesday October 27

12:30 Meeting with Dr. Rene Salgado, Child Survival Specialist, BASICS II

I met with Rene Salgado to discuss the recent Child Health Assessment he had prepared for BASICS II, and to identify other key contacts with whom to set up meetings.

15:00 Meeting with Greg Foster and Akim Boaz, MEDA

This meeting was to review the contributions MEDA is making to a) the SEAM ADDO program, b) the NATNETS voucher scheme, and c) Microfinance schemes, and to then discuss the intervention options RPM Plus may pursue in Tanzania.

SEAM ADDO Program

MEDA is providing loans of up to 2m/= to ADDOs on the following terms:

- the shop first becomes accredited as an ADDO
- a business assessment is carried out by MEDA
- the shop owner has attended the ADDO training course
- the shop owner agrees to repay the loan at 2.5% per month over 8 months

The loan capital is provided by the SUMMA Foundation, and 29 loans have been issued to date with zero defaulters. The loans are to be used as working capital, especially for the purchase of the initial essential drug stocks. They are not intended to be used for capital improvements.

The program appears to be very successful

NATNETs Voucher Scheme

This program is financed through the Global Fund, and net distribution is presently planned only for urban centers. The voucher system has been instituted to increase demand for the nets, and the private sector has responded exactly as was predicted, for example with one manufacturer to creating 50 retail outlets for nets almost overnight

1.5million vouchers will be distributed via approximately 3,000 maternal and child health (MCH) clinics nationwide, and nets will be on open sale in retail outlets. While DLDBs have not yet become outlets for the nets, this could be a suitable avenue for sales as staff are better educated and DLDBs tend to have more working capital than small retail stores.

The Vouchers are printed in South Africa in booklet form like personal check books. To increase security and reduce opportunities for fraud they are numbered uniquely, bar coded, watermarked and UV encoded. The commercial redeemable value of the voucher is also printed on each one.

At the MCH clinic, when a voucher is given to a mother, the voucher number is to be recorded on the MCH clinic card of the mother.

At the retail outlet a mother can trade the voucher in *only* against the purchase of a treated net, and upon redemption of the voucher, the retailer is to record on the reverse of the voucher the clinic card number and other pertinent details of the mother.

At the wholesaler correctly completed and redeemed vouchers can then be traded in by the retailer for replacement nets. They cannot be traded for cash, except in Dar Es Salaam, where monthly reimbursements are to be made directly by MEDA.

At the manufacturer, vouchers collected from retailers and cash may be used by wholesalers to purchase additional net stocks.

At MEDA, monthly reimbursements are to be made to manufacturers for the value of the vouchers collected from wholesalers. Additionally *all* retailers that will be permitted to sell the nets are to be visited by and then approved by MEDA. Each retailer must submit an application form to MEDA to become part of the NATNET program.

The program was launched on Monday October 18, 2004 in Dar Es Salaam, and in the first week, 2,000 vouchers were released.

MEDA has set up a database system to track the release and redemption of the vouchers, and the cost of the vouchers and database system is approximately 6 US cents per voucher. This does not include MEDA technical assistance and management costs of approximately US\$600,000 per annum.

It is possible that a similar voucher system could be set up to target malaria treatment subsidies. The combination of such a voucher with the net voucher would probably give the wrong message to the client as it would suggest that the net does not work, and so any treatment subsidy offered via a voucher system would almost certainly have to be separate from the net system. Also, the subsidy would have to be a large proportion if not the entire cost of treatment to make it attractive to clients.

Net Retreatment Kits

Free kits will be available at public sector MCH clinics, and PSI is responsible for the social marketing of the *Ngao* branded private sector net retreatment kits. They cost 60 US cents to manufacture and are sold at US cents 30 with DfiD providing the subsidy.

Retail Microfinance Scheme

This scheme, managed by MEDA and funded by the Canadian International Development Agency presently has 5,000 active clients in Tanzania. The majority of clients (95%) are retail outlets, and the remainder carpentry works, oil production enterprises or marketing associations.

Thursday October 28

9:30 Meeting with Barry Chovitz and Tim Rosche, JSI DELIVER

Barry gave a comprehensive overview JSI's operations in Tanzania. They have been assisting with the distribution of drug kits in Tanzania since 1983. There was a Stock Status Study conducted in February 2002, which demonstrated a massive overabundance of SP, and a shortage of antibiotics for the treatment of ARIs. Barry gave me a draft copy of this report.¹

Tim estimated that in urban areas auto medication rates approach 60%, while in rural areas he believes that it is more likely for patients to attend MoH health centers than the private sector. However he also acknowledged that public sector antibiotic supplies have a tendency to run out by week three of each month, and are not available until the beginning of the following month.

11:00 Meeting with Ms. Ollympia Kowero, Tanzania Food and Drug Authority (TFDA)

The purpose of this meeting was to explain the reasons for my visit to Tanzania, and to seek guidance from TFDA. Ms. Kowero was very supportive of the potential strategies put forth as options to be pursued in Tanzania, and was especially interested in the issue of how to educate drug dispensers/sellers. She is concerned that the majority of counter clerks (drug dispenser/sellers) in the DLDBs have no medical training, and often have no better than a Form 4 level high school education. These human resources are therefore weak, and she is supportive of a program that will develop short effective training courses that will change their behavior so that more effective treatments are provided in the DLDBs.

Ms. Kowero also mentioned that for the purposes of sustainability of the ADDO program in Ruvuma region, fees paid by shop owners to the district committees will provide the resources required to assure supervision by district inspectors. In addition, Ms. Kowero remarked that TFDA has made provision for training of dispensers in its annual budget, and this will be financed through fees that will be levied upon drugs sellers who attend the training courses.

¹ THE UNITED REPUBLIC OF TANZANIA. [MINISTRY OF HEALTH](#). Commodity availability for selected health products: Baseline survey for integrated logistics system UNAPPROVED DRAFT FOR DISCUSSION ONLY. October 15, 2003

14:00 Meeting with Dr. William Mfuko, SEAM Prime Vendor Initiative

Dr. Mfuko briefed me on the SEAM prime vendor program that is being set up with the Mission for Essential Medical Supplies (MEMS). This was in response to the 2001 SEAM study that revealed that the only public sector supplier was too overstretched to be able to act as supplier to faith based organizations in Tanzania.

A quantification exercise was carried out for 12 of 13 large mission hospitals, and following the issuance of an expression of interest in pre-qualification of vendors, 6 of 17 vendors were prequalified to bid. Quotations were requested from pre-qualified vendors for 100% of required drugs and supplies for the 12 facilities, and only one vendor was able to supply as requested. This was Crown Agents in partnership with local company Diocare. Their prices are currently 5% over those of MSD, but remain 4% less than the international price indicator guide.

MEMS now has memoranda of understanding with all 12 facilities, and charges a 10% service fee for effecting consolidated bulk procurement through contracts with the prime vendor. The first major procurement valued at approximately \$200,000 is underway at present.

16:00 Meeting with Dr. Romuald Mbwasi SEAM ADDO Initiative

Dr. Mbwasi provided a very detailed briefing on the history and roll-out of the ADDO program. The DLDBs originally arose as a response to public frustration with the shortages of drugs in public sector facilities. With the ADDO program, the list of drugs that can now be sold has been expanded beyond OTC-only drugs to 31 prescription only drugs, including first line antibiotics for pneumonia.

Training of dispensers/counter clerks has been focused upon how to prescribe, how to manage supplies, and how to evaluate the condition of the patient, and decide whether to treat or refer.

Dr. Mbwasi indicated that training focused upon childhood illness is an area where the program could improve, as there has to date been no special focus upon children. He believes that dispensers need to be more sensitive and reactive to child health issues as children behave differently to adults, and they are the majority of clients treated in the DLDBs. He would prefer to see a one week course of continuing education.

Demand side interventions during the ADDO program have included radio and billboard publicity targeted at informing the public where to get drugs, that they should buy the correct dose, and that they should buy only from TFDA accredited shops. Community mobilization was only carried out at the launch of the program.

Dr. Mbwasi did not think that special antimalarial pre-packs need to be developed as most antimalarials are already presented in pre-packs.

Friday October 29**8:00 Meeting with Dr. Kerida McDonald & Mr. Aubaid Abdool Raman, UNICEF**

Dr. McDonald provided an overview of UNICEF operations in Tanzania. There is an extensive Village Health Worker (VHW) program that supports the community component of IMCI (C-IMCI). There are approximately 8,000 VHWs in Tanzania. UNICEF is providing the drug kits. The recent mid term review revealed that better targeting of interventions towards the poor was required. She is of the opinion that the Essential Drug List for VHWs is too optimistic and needs to be shortened.

UNICEF is also supporting a three component study in two districts (Kilosa and Kibaha) in Morogoro region with AMREF and PLAN international. This is effecting a retail audit, household survey and costing study that will assist to identify mothers who cannot afford ITNs.

The nutrition components of the local UNICEF program promote exclusive breastfeeding (currently 11% 0-6 months, 31% 0-4 months) Vitamin A dose II supplementation (currently 93%, June 2004) and Iodine deficiency disease (IDD) prevention in Pemba. There is also a 3 year micronutrient study being carried out by the Tanzania Food and Nutrition Centre (TFNC).

15:00 Meeting with Dr. Hassan Mshinda, Ifakara

This meeting was to discuss the possible interventions that RPM Plus may support in Tanzania, and for me to learn more about the work that the Ifakara group has been carrying out as it relates to improving the availability and quality of public sector care for childhood disease in Tanzania.

Dr. Mshinda explained the operations of the Tanzania Essential Health Interventions Project (TEHIP) and gave me a copy of the recently published book that describes the project and its accomplishments in detail. The focus of TEHIP is public sector quality of care, as few managers had been trained in case management. The Multi Country Effectiveness Study of IMCI in Tanzania showed a 12% reduction in under five mortality as the result of effective implementation of IMCI in Morogoro region. Dr. Mshinda is convinced that IMCI *as it is* is not easy to render operational without health systems support, and that the key inputs provided by the TEHIP project to render IMCI functional were the reason for its effects on child mortality. The TEHIP measured the burden of disease using a Demographic Surveillance System (DSS) and then designed interventions and programmed resources in direct support of program priorities.

Health facility utilization rates were very high but even with the measured reductions in mortality, 30% of the poorest members of the population did not have access to effective antimalarial therapy from the public sector, and none of the poorest had access to treatments for childhood pneumonia.

Dr. Mshinda's explanation was that in many distant and isolated rural areas, where there tend to be poor communications, few all weather roads, and low levels of economic activity, no drugs are available, and general shops (Not DLDBs) are selling more amodiaquine than SP. This is because SP is considered less desirable by the population due to reported side effects. Dr. Mshinda believes that there exists an opportunity to improve the availability of effective antimalarial treatment by working with private sector outlets, and mentioned the possibility of RPM Plus partnering with the Ifakara-Novartis ACCESS project on shopkeeper interventions. In addition he mentioned that a member of his staff, Dr. Joseph Njau is carrying out an economic analysis of the private sector with the IMPACT project.

Ifakara - Novartis ACCESS Project

Dr. Mshinda informed me that Ifakara was involved in a partnership with the Novartis Foundation for Sustainable Development entitled the ACCESS Project. This consists of a literature review of determinants of access to care, the development of interventions with shopkeepers (both DLDBs and general shops) the ongoing support of the Demographic Surveillance System (DSS) to permit the recording of all drug outlets using global positioning systems (GPS), and the registration of all births and deaths to permit measurement of mortality reductions. The project is supported with approximately \$600,000 from the Foundation, and will try interventions in two districts – Kilombero and Ulanga in Morogoro Region.

He also added that there is a contradiction in Tanzania in that the National Malaria Control Program has agreed that SP should be allowed as an *over the counter* medicine in general shops, but the Pharmacy Board and TFDA do not yet agree. In principle, SP has to be available as close as possible to the home, to allow universal access.

We agreed to meet once more after I had reviewed the materials Dr. Mshinda had passed to me.

Saturday October 30

10:00 Meeting with Dr. Flora Kessy, Economic and Social Research Foundation (ESRF)

This brief meeting was to explain to Dr. Kessy the purpose of my trip, to try to identify reports of studies pertinent to our interests, and in particular those concerning health seeking behavior, and to also better understand the role of ESRF.

Dr. Kessy was only aware of the Demographic and Health Surveys (DHS) as a source of information concerning health seeking behaviors, and referred me to Dr. Fares Mujinja, a Health Economist at Muhimbili University.

ESRF has only been involved in studies of health seeking behavior as they relate to HIV/AIDS prevention and control, and usually is contracted to carry out studies in the areas of poverty reduction, trade and good governance. They would be willing to collaborate with RPM Plus in future on a contract basis if their research skills were both relevant and required.

Monday November 1

Field Trip to Bagamoyo - Duka la Dawa Baridi (DLDB)

I made a one day trip to Bagamoyo to enable me to develop an appreciation for the quality of services provided by DLDBs that have not benefited from any organized and orchestrated management improvements. I met briefly with the District Medical Officer Dr. Dihenga and District Pharmacist David Jonas Mwaipeta. I then visited a number of DLDBs in Bagamoyo accompanied by the District Pharmacist.

In general, DLDB staff visited were not especially well educated, usually having completed at least only primary school education. None reported having received any training to prepare them for their work as counter clerks or dispensers. The stores were mostly small and cramped, and supplies were not necessarily well organized on the shelves. The majority were also stocked with substantial quantities of cosmetics as well as medicines. In some cases, there were stock outs of SP, or of other antimalarials, although all DLDBs visited had oral rehydration salts (ORS) in stock. Likewise, in some but not all cases Amoxicillin and Erythromycin antibiotics were freely available in contravention of the regulations governing the operations of these types of shops.

There were many advertising posters from a variety of local overseas drug manufacturers, but no reference materials at all available to the counter clerks. No registers or accounts records were visible other than simple receipt books, and these were not in systematic use.

A visit to the nearby St Elizabeth's Mission Dispensary and Dr. Gwandu, the resident physician revealed a concern that many patients attending the dispensary have already self medicated in the DLDBs and represent a serious problem for effective diagnosis and treatment. In addition the dispensing staff in the dispensary was also identified by Dr. Gwandu as in need of further training to upgrade their skills and competencies.

Field Trip to Songea - SEAM ADDO Program

I traveled to Songea by public bus on Tuesday November 2nd and remained until midday Thursday November 4th, returning to Dar Es Salaam on a mission aviation flight.

While comparisons of this nature can only be considered superficial and very subjective at best, my overall impressions of the ADDO program were very positive. There was a visible difference in the physical appearance, cleanliness, organization and apparent visible quality of the outlets as well as the appearance, attitudes, apparent clinical knowledge and practices of the staff when I compared the ADDOs with the DLDBs in Bagamoyo.

Wednesday November 3.

9:00 Meeting with Songea District Commissioner Mr. Abed Mwinyimusa

I paid a brief courtesy call upon Songea District Commissioner (DC) Mr. Abed Mwinyimusa. He warmly welcomed me to Songea and offered his full assistance and support to the work at hand. He also remarked that he had observed that supervision of and standards maintained in the *maDuka la Dawa Muhimu* (DLDMs)² in Songea were better than those he had observed in DLDBs elsewhere, where prescribing regulations were being broken. He attributed this improvement to effective targeting and education. He was very optimistic about the ADDO program. The private sector is now considered the engine that will provide the motive force to attain Tanzania's millennium development goals.

9:30 Meeting with Songea Urban Council Director Mr. Tingirawanyuma

I also made a brief courtesy call upon Songea Rural Council Director Mr. Tingirawanyuma. He also warmly welcomed me to Songea and offered his full assistance and support to the work at hand. He too is very optimistic about the ADDO program.

10:00 Meeting with Dr. John Budotela, DMO Songea and Dr. Anton Mashimba, DMO Mbinga.

I made a short presentation of the purpose of my trip and the reasons Tanzania had been selected by USAID and MSH for an exploratory visit as a possible site for the implementation of interventions that will improve access to medicines for child health. I also explained the reason for the focus upon child health, which is related to the resurgence of concern for the under funding of child health services and the need to meet the child health millennium development goals, and a growing recognition of the role the private sector plays in the provision of care.

Dr. Mashimba remarked that the outlined approach is very timely and could be very helpful at a time when most government health facilities are facing critical shortages of essential drugs, and when many NGOs and donors are retreating from supporting drug procurement.

Dr. Budotela then explained that there are three types of providers that form the essential nucleus of the Tanzanian health system, and these are:

1. Government Hospitals, Health Centers and Dispensaries
2. NGO and Mission, not-for-profit Hospitals, Health Centers and Dispensaries
3. Private Dispensaries and Pharmacies

Dr. Budotela explained that in Tanzania, the health system is used to the provision of integrated curative care services, and there is no segregation of care except for certain preventive programs such as MCH/FP, or IMCI. This is an important policy issue that should not be overlooked.

² maDuka is Kiswahili plural of Duka, or shop. Muhimu means Essential, or Accredited. The acronyms DLDM and ADDO are synonymous.

While the idea of a focus upon improvements to prescribing and sales practices for childhood illnesses in the private sector is welcome, Dr. Budotela remarked that the problem is in the technicalities, and the private sector cannot be the primary provider of care in Tanzania, especially in rural areas where he characterized the private sector as very weak. I made a clarification that the approach outlined is not intended to expand private services, but rather to acknowledge that they are being used and find the means to improve the quality of the services that they already provide, and also improve access to those services.

Dr. Budotela also asked if there was also any intention to include preventive services amongst the possible intervention options being considered, as in his opinion this is essential. He also added that presently there is a program of C-IMCI interventions supported by UNICEF. This includes teams of trainers of trainers (TOTs) who work in the villages sensitizing the providers and community members about the control of malaria and diarrheal disease. This is a house to house approach that takes approximately one day per village, and is carried out by government employees and volunteers. Presently, there is only one visit programmed per village, and something needs to be done in future to make this sustainable in the long term.

I mentioned that while this is an essential approach for the public sector, the purpose of this exploratory visit was to try to identify complimentary activities that could be implemented with the private sector. Given the limited resources available through RPM Plus, it is most unlikely that support to the widespread implementation of C-IMCI would be possible.

Reviewing the intervention strategies and options I had presented, Dr. Budotela had the following comments:

a) General

We can focus upon child health due to the USAID funding constraints, and as effective treatment for childhood malaria is a key indicator for the functioning of the ADDOS, there is no conflict with this.

b) Pre-packaged medicines

Dr. Budotela is of the belief that this is an important intervention that should be investigated further in Tanzania especially for the treatment of childhood malaria. Currently this issue is the center of discussion between the MoH and TFDA, where the MoH is advocating that private pharmacies only stock pre-packaged antimalarials.

c) Detailing

This could be a promising behavioral change intervention, perhaps as part of a continuing education program, and to promote cost effectiveness and sustainability. The inclusion of *aides memoire*, posters and other communications materials also needs to be considered.

d) Contracting out

While this may work elsewhere, there are too few NGO's in Songea for this to be a viable option at the present.

e) Non ADDO DLDBS

The vision of the MoH and TFDA is that with the expansion of the ADDO program, albeit slow, a focus upon improvement of non-ADD0 DLDBs does not seem particularly helpful as they are expected to die a natural death.

f) Continuing Education (CE)

Dr. Budotela mentioned that once ADDO funding from the Gates Foundation ends in the summer of 2005, it is the intention of the District to accommodate supervision but not further training from the District Health budget. He remarked also that RPM Plus could consider a variety of continuing education options that could be tested to identify the most cost effective means of maintaining high standards of compliance with sales, prescribing and treatment guidelines. This is of importance to be able to sustain and extend the gains of the program after funding from the Gates Foundation ends.

This would permit an experimental comparison to be made between the one week CE course currently planned with up to three or four other options, such that one district is used to test each option and one district receives no CE so that the effect of doing nothing is measured against the alternative interventions. The Singida control district would be maintained to permit full comparisons to be made with a zone where no intervention has been tried at all. An experimental design such as this could provide evidence for the effects of each intervention and this type of design would be acceptable to the Ministry of Health and political leaders.

One suggestion made by Dr. Budotela was to train up a cadre of dispensers that could be employed by the ADDOs when vacancies arise. I suggested that instead one could perhaps tailor-make a program to respond to the measured attrition and turnover rate of staff in the ADDOs.

11:30 Visits to Rural DLDMs

Njowo DLDM # 7 - Cecilia Njowoba

Counter clerk completed std. 7 in 1996. Trained in second batch of trainings in December 2003, and transferred to this shop from town one week ago. Not familiar with this particular shop. General ADDO improvements said to be better record keeping (though no explanation of why) and no longer selling short doses. Poor clients no longer buying short doses but since store does not offer credit, clients have to find money themselves. No indication of how. Average gross takings said to be approximately 15,000/= (US\$ 15) to 18,000/= (US\$ 18) per day. Few children under 5 years of age recorded in registers.

Likyufussi DLDM # 8 – Blandina Mwera

This very small shop next to a butcher's kiosk was converted from a DLDB to an ADDO earlier this year. The counter clerk has been working here for the past three years. She reported that one of the benefits of ADDOS was an improvement in full dose treatment. Business volume was reported to have improved also, from 2,000/= (US\$ 2) to 3,000/= (US\$ 3) per day to 6,000/= (US\$ 6) to 7,000/= (US\$ 7) per day. Many children under 5 years of age were recorded in the registers.

Visit to Southern Highland Wholesalers

The owner Mr. David Lutta was away on business in Dar Es Salaam. I made a number of attempts to contact him there to set up an appointment, but did not succeed.

16:00 Visits to Urban DLDMs*Msamala DLDM #34 – Esther Chiyombo*

Opposite the Heritage Cottage Hotel this shop was upgraded to an ADDO and staff were trained in May 2004. They used to sell anything they could, but now since the training they sell only full dose medicines. The shop was well organized with mirrors behind the shelves, and with an insightful older counter clerk. The daily takings were reported to be around 18,000/= to 20,000/= (US\$ 18 to US\$ 20) per day. Training was said to be too short and compressed. A copy of the Dispensers Handbook was kept under counter but it was very dusty and clearly had not been touched for a long time. Ms. Chiyombo was concerned about receiving further continuing education, and indicated that she would prefer ½ to 1 day per month rather than a long period away from work. Again only a few children under 5 years of age were recorded in the registers. There were also no MoH approved posters other than one for nutrition counseling. There was also one Orodar SP poster from Elys Pharmaceuticals, Kenya with questionable and possibly incorrect pediatric dose information.

Dr. Malekela DLDM # 32 Ms. Waita – Opposite Songea District Hospital

The DLDM was well stocked, and had electricity. Five clients were served while we were present, but the register was not updated at all. The clerk reported that the local association RUDOC (Ruvuma Drug Outlet Association) has fixed drug prices in all DLDMs so that competition will not be based on price, but rather on quality of service and relations with clients. There was a Shelys Malafin poster figuring a European baby on the wall, and this seemed inappropriate given the local context. (see Annex 1 for examples of promotional and detailing materials encountered). Again there were no MoH approved posters other than one for nutrition counseling.

Thursday November 4, 2004

9:00 Meeting with Songea Urban Council Director Mr. Kigwele

I also made a brief courtesy call upon Songea Urban Council Director Mr. Kigwele. He also warmly welcomed me to Songea. He observed that he had seen much improvement in medical services in the community as a result of the ADDO program.

9:30 Meeting at MEDA with Mr. Celestin Samora Manace

MEDA has been training ADDO owners in business management and has also managed loans to shop owners who had their stores accredited as ADDOs. Eleven loans are finished, 22 are outstanding, and there are discussions underway to work out how to schedule the loans for the new ADDOS.

Mr. Samora indicated that his travel to rural ADDOS was complicated by transport difficulties. He also corroborated my observation that not all transactions may be recorded in the DLDM registers. He estimates that the registers record only 25% of all clients.

Summary Findings from Songea

Of the options proposed for discussion, detailing, including short term vendor-to-vendor interventions, as well as community demand focused neighbor-to-neighbor type interventions with a special focus upon childhood illness could all be considered for further development and implementation as a complement to the ADDO program, both for the existing program in Ruvuma region, as well as for the scale up to other regions.

The development of suitable communications materials that can reinforce training could also be pursued. This latter observation is supported by an apparent lack of locally produced and approved communications materials in those DLDMs visited, combined with the availability of posters from abroad, where the content may be neither technically correct nor appropriate in Tanzania.

The above could all be components of a continuing education program that needs to be developed to maintain standards once the first wave of trainings of ADDO staff has been completed. Cost effective means of maintaining knowledge, skills and good practices need to be developed and RPM Plus may be well placed to assist with this.

Exploration of targeted subsidy mechanisms to promote improved access to treatments for childhood malaria could be carried out in tandem with the roll out of the NATNETS voucher scheme, but this is not planned to reach Ruvuma until the summer of 2006. While it should not be ruled out, this may be too late to be very practical.

Measurement of the impact of prepackaged antimalarials upon access to effective treatment is also warranted.

Detailing in non ADDO DLDBs (retail drug stores) however is not considered suitable in Ruvuma.

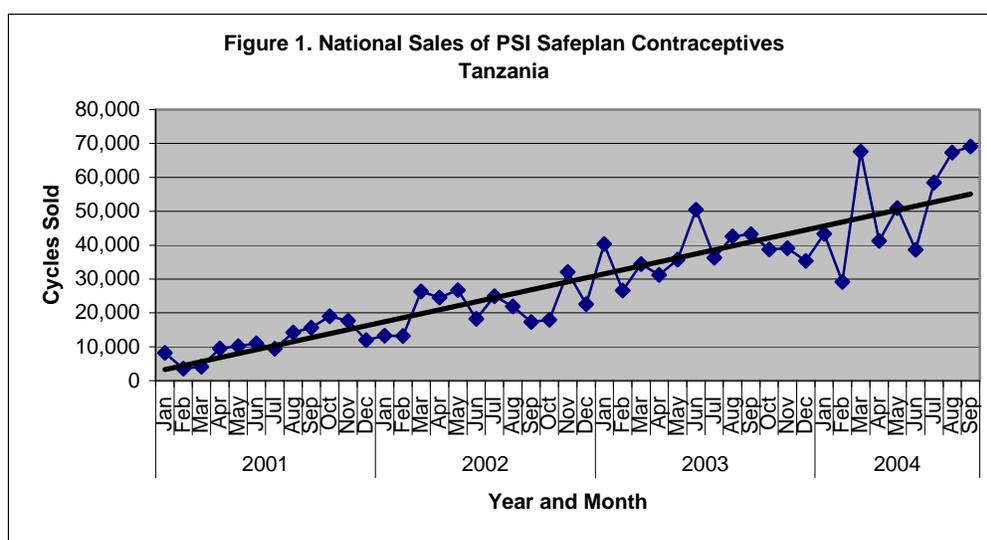
It is not yet clear exactly what proportion of DLDM clients in Ruvuma region are children under five years of age, although the ongoing evaluation of the SEAM ADDO program is likely to reveal that DLDMS are a source of treatment for childhood illnesses for a significant percentage of the population. In addition, estimates in a 2003 report from the Malaria consortium³ suggest that 60% of first visits for childhood malaria treatment in Tanzania are to retail drug stores. It is unlikely that the level of use will be remarkably different in Ruvuma.

Friday November 5

11:00 Meeting with Nils Gade, Deo Ng'wanansabi & Domita Jackson, PSI-Tanzania

PSI has had a presence in Tanzania since 1992, when they began social marketing of condoms. ITNs were added in 1998, Contraceptive Pills in 2000, and Water Treatment kits in 2002.

The Safeplan oral contraceptive social marketing program is ending in December 2004. This program has made use of "Safeguard Sisters" as detailing agents who have targeted health facilities and pharmacies. Using brochures, counseling cards (for providers only) as well as other promotional materials such as T-shirts and stickers, the program has shown a steady and steep rise in contraceptive sales. See figure 1.



In addition PSI has been interested in developing an antimalarial product line, and also in the marketing of rapid home test kits for malaria diagnosis.

³ Improving the Supply, Distribution and Use of Antimalarial Drugs by the Private Sector in Tanzania. Battersby,Anthony; Goodman,Catherine; Abondo,Charles; Mankike,Renata. Malaria Consortium. March 2003.

There is a strong interest in future collaboration if RPM Plus does go ahead with a detailing program for the DLDBs.

13:00 Meeting with Dr. Bergis Schmidt-Ehry & Mrs. Vida Mwasalla, GTZ

Dr. Schmidt-Ehry is of the opinion that the private sector in Tanzania is a reality and that the informal donor working group on public-private partnership is now beginning to address the public-private agenda.

GTZ is supporting the development of accreditation methods in the Tanzanian health sector by contracting the service of the Tanzania Public Health Association to develop a concept of accreditation in the Tanzanian health sector. This is of particular importance for the future accreditation of providers of antiretroviral (ARV) treatments, where there apparently exists a difference of opinion between the MoH and other accrediting institutions over standards and practices. In addition a quality improvement framework for the health sector is to be launched soon.

Dr. Schmidt-Ehry was also very helpful in drawing my attention to the MUHEF and SHARED online bibliographic databases, and Mrs. Mwasalla was kind enough to assist me to use the latter to search to studies of health seeking behavior in Tanzania.

16:00 Meeting with Dr. Hassan Mshinda, Ifakara, Mikocheni

This second meeting with Dr. Mshinda was to review the substantial amounts of information that he had previously passed to me concerning the Tanzania component of the multi country effectiveness study of IMCI, as well the TEHIP monograph and other publications relevant to the improvement of the quality and availability of child health care in Tanzania, and to further discuss possibilities for collaboration.

Of key interest were the conclusions of the MCE study and subsequent data analyses that suggest the following:

As a result of the effective implementation of IMCI in public sector health facilities, case management was measurably improved, but health utilization practices remained unchanged, as did family practices. Mortality was measurably reduced, by 40% over 5 years, and costs of care delivered were within existing available resources limits of approximately US\$1 per capita per annum.

Essentially, those that have access to the public sector facilities offering IMCI may enjoy better case management and improved availability of better quality care, but those not already using the public sector are not benefiting. Therefore there exists a need to work with the private sector as well to improve case management, and especially the DLDBs.

This provides a strong case for RPM Plus to partner with the Novartis-Ifakara group on the ACCESS project because a) it is an excellent opportunity for leverage, b) Ifakara provides a population based laboratory in Morogoro where mortality impact can be measured, c) Novartis already provides approx \$600,000 in funding, d) the arrangement will permit testing and measurement of innovative behavioral change approaches borrowed from the Quality Assurance Project (QAP) in Kenya and from elsewhere, e) it may prepare the ground for the use of COARTEM in the private sector, and f) the work would complement that already accomplished by MSH with the ADDOs in Ruvuma and future roll-out to other regions.

Saturday November 6

9:00 Meeting with Mr. M.S. Gulamhussein, Managing Director, Salama Pharmaceuticals Ltd.

I met briefly with the Managing Director Mr. Gulamhussein to find out more about the operations of the company, and to determine if there could be any possibility of collaboration with RPM in improving sales practices in DLDBs and other drug outlets. Mr. Gulamhussein mentioned an earlier collaboration with SEAM and expressed interest in pursuing collaborative work with RPM Plus as well. A meeting set for the following Tuesday did not take place as planned, and I will therefore follow up later via email and phone.

10:00 Meeting with Dr. Romuald Mbwasi SEAM

This meeting was to review the findings and recommendations of my trip to Ruvuma, and to gather further details of the operations of the SEAM ADDO program.

Monday November 8

14:30 Meeting with Deepak Saksena, Sales and Marketing Manager, Shelys Pharmaceuticals.

Mr. Saksena informed me that Shelys' Pharmaceuticals has in place quite a substantial distribution network with 11 promotional vans and 13 sales representatives. The sales representatives use a variety of audio-visual materials including small DVD players, and target doctors, wholesalers and DLDBs. However with over 4,500 DLDBs nationwide, Shelys does not yet have the resources to reach them all, and is considering expanding its sales force by adding 3 or 4 new vans and 4-5 new sales staff.

Presently, each pickup reportedly makes approximately 20 calls per day, with each call reportedly lasting between 25 to 30 minutes.

Shelys' has recently carried out a small survey of DLDBs and reached their own independent conclusion that the counter clerks are the single most important persons in determining access to

effective treatment in the private sector. Approximately 30% of clients present with prescriptions, and approximately 50% of these do not receive the drug molecule that was prescribed. Counter clerks freely substitute products with completely inappropriate drugs.

Less than 10% of clients present to DLDBs knowing in advance what treatment they require, and therefore depend upon the counter clerks for advice and guidance, which the counter clerks are generally not trained to provide. Mr. Saksena is concerned that there is an acute need for training of DLDB staff, and as a result Shely's is preparing a major DLDB campaign that will begin early next year.

Mr. Saksena expressed considerable interest in collaboration with RPM Plus on vendor-to-vendor interventions.

While the reported numbers and duration of interactions between Shelys detail staff and clients seems somewhat optimistic, it is clear that Shelys is making substantive efforts to reach larger numbers of DLDBs and other retail drug outlets and a partnership with RPM Plus may provide a means of making significant difference to the content and quality of the interactions that take place during these visits. The provision of technical assistance would of course have to be subject to stringent conditions related to the effective demonstration of good pharmaceutical management practices by collaborators.

Tuesday November 8

8:00 Meeting with Camille Saade, AED – TMARC.

A brief breakfast meeting with Camille Saade revealed that it has already been shown that vouchers that require a label be transferred from the product purchased to the voucher can assist to greatly reduce monetization of vouchers and prevent voucher fraud. In addition, the use of voucher subsidies should provide sufficient incentive to the client for their use. Subsidies that do not approach 70-80% of the retail cost of the product may not function at all, or may simply not be cost effective. For treatment, it was suggested that if a voucher system were to be tested, it should be entirely separate from the Net voucher, and represent a very high level of subsidy, especially as SP treatment is relatively inexpensive (300/= or 30 US cents) when compared with a net (3,500/= or US\$ 3.50).

In addition, he mentioned that T-MARC is also considering working with Shely's as part of the contraceptive social marketing program. Also, the project has a child survival component that may not get underway until 2006, but which may begin to address childhood Malaria and its effective recognition and treatment through the private sector.

We agreed to stay in close contact as the T-MARC project extends its operations in Tanzania.

12:00 Debriefing with John Dunlop and Jim Allman, USAID Tanzania

This was attended by myself and Mr. Shirima, where I presented a slide show of findings and recommendations for intervention options that could be pursued (See annex 2). Mr. Dunlop was

pleased with the approaches that were proposed and suggested that as well as promotional materials, RPM Plus should seriously consider the development of appropriate job-aids for DLDB counter clerks, so that they have practical reference materials available when they need them. He also concurred that RPM Plus go ahead with the proposals, indicating however that the suggested timeframe was too ambitious given workloads at the Mission through December 17, and suggesting that since January is already fully booked, the meeting proposed for January be held in February instead.

Thursday November 10, 2004

Meeting with MSH Staff in Nairobi

While in transit in Nairobi awaiting an on bound connection back the USA I made a presentation of my Tanzania trip to local staff and solicited input, especially for making personal contact with the key Kenyan partners involved in the Quality Assurance Project Vendor-to-Vendor program in Bungoma District, and the KEMRI Malaria program in Kilifi District. Gladys Tetteh provided a great deal of useful background material from both of these programs.

Collaborators and Partners

Jim Allman, USAID Tanzania
Mr. Aubaid Abdool Raman, UNICEF
Akim Boaz, MEDA
Dr. John Budotela, DMO Songea
Barry Chovitz, JSI DELIVER
Dr. Dihenga, District Medical Officer, Bagamoyo
John Dunlop, USAID
Greg Foster, MEDA
Nils Gade, PSI
Mr. M.S. Gulamhussein, Salama Pharmaceuticals Ltd.
Dr. Gwandu, St Elizabeth's Mission Dispensary
Ned Heltzer, MSH
Domita Jackson, PSI
Dr. Flora Kessy, ESRF
Mr. Kigwele, Songea Urban Council Director
Ms. Ollympia Kowero, Tanzania Food and Drug Authority (TFDA)
Dr. Karen Kramer, NMCP.
Mr. Celestin Samora Manace, MEDA
Dr. Anton Mashimba, DMO Mbinga.
Dr. Romuald Mbwasia, MSH
Dr. Kerida McDonald Dr. William Mfuko, SEAM Prime Vendor Initiative
Dr. Hassan Mshinda, Ifakara
Dr. Fabrizio Molteni, NMCP
David Jonas Mwaipeta, District Pharmacist, Bagamoyo
Mrs. Vida Mwasalla, GTZ

Mr. Abed Mwinyimusa, Songea District Commissioner
Dr. Mwita, NMCP
Deo Ng'wanansabi, PSI
Camille Saade, AED.
Deepak Saksena, Shelys Pharmaceuticals.
Dr. Rene Salgado, BASICS II
Dr. Bergis Schmidt-Ehry, GTZ
Tim Rosche, JSI DELIVER
Rogotian Shirima, MSH
Gladys Tetteh, MSH
Mr. Tingirawanyuma, Songea Urban Council Director

Adjustments to Planned Activities and/or Additional Activities

Other than extending my stay by four days to accommodate the trip to Songea and additional meetings with Ifakara Director Dr. Mshinda and others, no adjustments were made to my planned activities.

Next Steps

Immediate Follow-up Activities

The recommendations that follow need to be reviewed at MSH and USAID/W.

Recommendations

The recommendations that follow are made in support of the Tanzanian Government's ambitious millennium development goal of reducing child mortality to 48 per 1000 live births by 2015, and in addition, support USAID (USAID/W and USAID/Tanzania) and the Ministry of Health's efforts to improve the access to high quality health services through the private sector. The goal is to improve access to essential medicines for childhood illnesses, and to do so at significant levels of coverage, using cost effective and sustainable methods, tools and approaches that can become part and parcel of the Tanzanian health system.

A three pronged approach is proposed. First the proposed program of work will build upon MSH's considerable experience in working with the ADDOs in Ruvuma region by adding a special focus upon child health conditions. Second, that practical experience may be shared with the Ifakara-Novartis ACCESS project to assist to extend and strengthen private sector malaria interventions in Morogoro region. Third, there may be an innovative program of assistance to the pure private sector manufacturers and wholesalers to improve the quality of their national detailing programs as they relate to child health, to bring them more closely in line with the

Ministry of Health's requirements as laid down in national drug policies, rules, regulations and standards of treatment practice.

Recommendation #1 - RPM Plus support to ongoing ADDO program

It is recommended that RPM Plus provide technical assistance to both maintain & measurably improve the performance of ADDO counter clerks in case management of childhood malaria, acute respiratory infections and diarrhea. This program of support will implement a variety of continuing education/behavior change interventions that have already been shown to be effective in other countries, and identify the most cost effective permutations and combinations, potentially including:

- ~ Long duration (~ 1 to 2 weeks) *once off* interventions
- ~ Short duration (20 minutes contact time) but *frequent* detailing programs
- ~ Peer-to-peer type training (~ 1 day per month)
- ~ Neighbor-to-neighbor type community mobilization/demand creation
- ~ Supervision and Inspection
- ~ Development of accompanying Communications Aides

The most cost effective combination(s) of interventions that have demonstrated significant measurable improvements in access to effective treatment for childhood illness will be rolled out to all zones (Songea urban, Songea rural, Mbinga, Namtumbo, and Tunduru with a control zone in Singida District), and into any additional regions to which the ADDO program may be extended.

Recommendation #2 - RPM Plus support to the Novartis - Ifakara ACCESS Project

The Director of the Ifakara Health Research and Development Centre expressed a high level of interest in RPM Plus providing technical assistance to the Novartis Ifakara ACCESS Project.

Again, building upon MSH's experience with the ADDOs, and the development of a special focus upon child health, it is recommended that RPM Plus explore a partnership with the Ifakara Health Research and Development Centre and the Novartis Foundation ACCESS Project. This may provide focused technical assistance from RPM Plus to measurably improve the performance of DLDB and retail store counter clerks in case management of childhood malaria, as well as to improve community demand for and oversight of such services..

It is proposed that RPM Plus could support the following technical assistance:

- ~ formative research to design a local marketing plan and vendor-to-vendor interventions
- ~ Short-duration high-frequency detailing for DLDBs and general retail stores
- ~ Neighbor-to-neighbor type community mobilization/demand creation
- ~ Development of Supervision & Inspection protocols
- ~ Development of behavior change/training program and IEC materials

- ~ Test of a targeted voucher subsidy combined with NATNETS rollout to increase access to Malaria treatment for lowest income groups.

Recommendation #3 - RPM Plus support to the Manufacturers and Wholesalers

The sales and marketing manager of Shelys Pharmaceuticals and the managing director of Salama Pharmaceutical wholesalers both expressed considerable interest in collaboration with RPM Plus to develop more technically appropriate detailing materials and job-aides targeted at childhood illnesses. These companies have existing and substantial distribution networks, sales & detailing staff already accustomed to using audio-visual materials, pickup-based distribution mechanisms to 11 regions, and one is developing new detailing campaigns for 2005.

It is recommended that collaboration on vendor-to-vendor interventions be pursued, however this must be done with caution to ensure that all partners who may benefit from RPM Plus technical assistance agree to and comply with good management and marketing practices that demonstrably ensure that all relevant pharmaceuticals meet suitable quality standards.

Agreement or Understandings with Counterparts

It was agreed with all institutions and persons consulted that my recommendations would be reviewed at MSH and USAID/W before any decisions were taken to pursue the suggested next steps.

Important Upcoming Activities or Benchmarks in Program

Next Steps

- *November/December 2004*
 - ~ Review possible intervention packages between Mission, Global Bureau and MSH/HQ
 - ~ Further develop details of each possible option to determine content, size and scale of intervention package for decision-making
- *January/February 2005*
 - ~ One/two day meeting in Tanzania to select options with partners
 - ~ Detailed design with partners and development of intervention plan(s)
- *March/April 2005*
 - ~ Begin technical assistance to implement intervention packages

Annex 1.

Annex 1.

Examples of Tanzanian posters and detailing materials courtesy of Shelys Pharmaceuticals Ltd.

Malafin[®]
dry syrup

Malafin Dry syrup
Each 10 ml contains:
Sulphamethoxypyrazine 250mg
Pyrimethamine 12.5mg

AS A SINGLE DOSE :

AGE	WEIGHT (KG)	DOSE
2 - 4 months	5 - 7	5 ml
4 - 12 months	7 - 11	10 ml
1 - 5 years	11 - 20	15 ml
5 - 9 years	19 - 30	20 ml
9 - 14 years	30 - 45	30 ml

The 'trusted' antimalarial
paediatric suspension

Shelys Pharmaceuticals Limited
Sumaria Group

No more bitter taste
of anti-malarials...

SULPHADAR[®]
dry syrup

DRY SYRUP SINGLE DOSE :

AGE	WEIGHT (KG)	DOSE
2 - 4 months	5 - 7	5 ml
4 - 12 months	7 - 11	10 ml
1 - 5 years	11 - 20	15 ml
5 - 9 years	19 - 30	20 ml
9 - 14 years	30 - 45	30 ml

Delicious tasting paediatric antimalarial suspension

Shelys Pharmaceuticals Limited
Sumaria Group

Introducing

1st time

Malafin[®]
dry syrup



Malafin Dry Syrup
Each 10 ml contains
Sulphamethoxypyrazine 250mg
Pyrimethamine 12.5mg

The 'trusted' antimalarial
paediatric suspension

Shelys

Rx Malafin[®]
dry syrup



- Trusted antimalarial for children
- Longer shelf life
- Single dose, first line therapy
- No more bitter crushed tablets
- Delicious Raspberry taste
- Improved Compliance

DRY SYRUP AS A SINGLE DOSE :

AGE	WEIGHT (KG)	DOSE
2-4 months	5-7	5 ml
4-12 months	7-11	10 ml
1-5 years	11-20	15 ml
5-9 years	18-30	20 ml
9-14 years	30-45	30 ml

The 'trusted' antimalarial
paediatric suspension

Shelys

Malafin[®]
dry syrup

Prescribing information

Generic name:
Sulphamethoxypyrazine and Pyrimethamine dry Syrup

Dosage form:
Dry syrup

Route of administration: Oral.

Description:
Dry syrup : White free flowing powder, on reconstitution it gives viscous pleasant suspension.

Content of active ingredient:
Dry Syrup
Each 10 ml of reconstituted suspension contains:
Sulphamethoxypyrazine 250 mg
Pyrimethamine 12.5 mg

Therapeutic category:
Antimalarial.

Indication:
Malafin is indicated in the treatment of malaria caused by *P. falciparum*, *P. vivax*, *P. malariae* and *P. ovale*.

Contraindications:
Malafin is contraindicated in patients with a marked damage of the liver parenchyma, or blood dyscrasia, or severe renal insufficiency when repeated examinations of blood levels are not possible as well as in patients who are hypersensitive to Sulphonamide or Pyrimethamine. Malafin is contraindicated in infants during the first two weeks of life and in pregnant women during the last two weeks of pregnancy.

Side effects/ adverse effects:
At the recommended doses Malafin is well tolerated. Sickness, nausea, vomiting and cutaneous erythema are observed. Since Malafin contains sulfonamide it is advisable to take into consideration the possibility of blood dyscrasia due to the use of sulfonamides, thrombocytopenia, purpura, leucopenia, neutropenia, and very seldom agranulocytosis, which are reversible when the treatment ceases. Elderly patients are more sensitive to these blood alterations.

Precaution and warning:
Should a rash or other allergic reaction appear, stop treatment immediately. An adequate diuresis must be maintained. In case of renal disorders, administer more reduced or less frequent doses to avoid drug accumulation and carry out examinations of blood levels. Regular blood controls are recommended in case of long treatments. Special precaution should be taken in treating patients with conditions predisposing to deficiency of folic acid. In pregnant women and in very early childhood the medication should be administered, if strictly necessary, under direct medical supervision.

Recommended dosage and dosage schedule:
Dry syrup as a single dose:

AGE	WEIGHT (KG)	DOSE
2-4 months	5-7	5 ml
4-12 months	7-11	10 ml
1-5 years	11-20	15 ml
5-9 years	19-30	20 ml
9-14 years	30-45	30 ml

Symptoms and treatment of over dosage
Symptoms: Symptoms of over dosage include vomiting, visual and mental disorders, petechiae, purpura and jaundice.

Treatment: Treatment is symptomatic: gastric lavage, if carried out in time, and forced diuresis can be useful. Alkalinization of urine by administration of alkaliating solutions may favour the excretion of Sulphamethoxypyrazine. Hypersensitivity reactions are treated with corticosteroids. In order to neutralize the effect of Pyrimethamine on hemopoiesis, 3-mg of Leucovorin calcium may be administered by intramuscular route over 5-7 days.

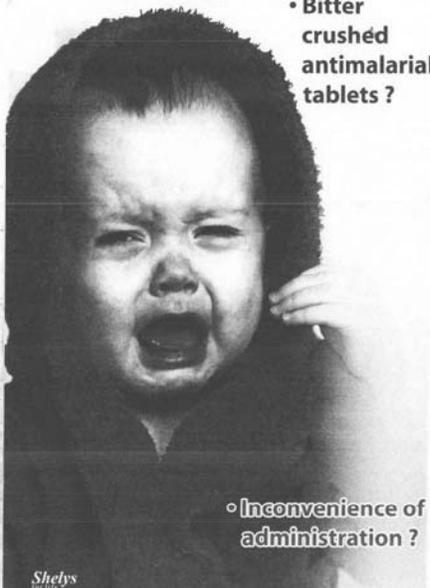
Storage condition:
Dry syrup: Store in dry place below 25°C. Protect from direct light.
Keep out of the reach of the children.
Store the reconstituted Suspension in a cool place preferably in a refrigerator & use within 7 days, discard the remainder.

Shelf life: 18 months

Presentation:
Dry Syrup - 30 ml bottle in a inner box.

Shelys Pharmaceuticals Limited
Sumarko Group

• Bitter crushed antimalarial tablets ?



• Inconvenience of administration ?

Shelys

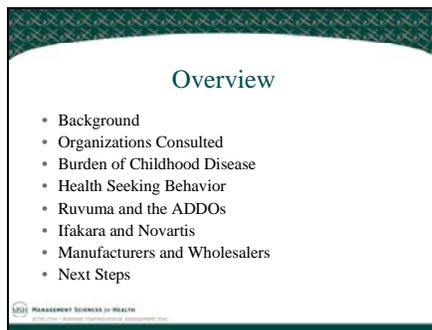
Annex 2.

Annex 2.

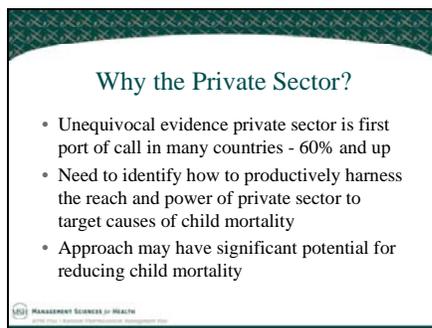
Slide 1



Slide 2



Slide 3



Slide 4

Why Tanzania?

- High level of engagement with national and sub-national authorities
 - MoH, TFDA, Local Government
- Willingness to innovate
- Potential for increased and extensive private sector involvement in health
- MSH foundation of experience with Ministry and Private Sector
- High Child Mortality Rates

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Slide 5

Tanzania – Illustrative Strategies

- Potential of ADDOs to further address Child Health
- Potential role of RPM Plus in scaling up ADDOs
- Detailing in retail drug stores (Non-ADDO DLDBs)
- Explore possibility of pre-packaged, affordable branded COARTEM for childhood malaria
- Explore targeted subsidy mechanisms to promote improved access to treatments for malaria and diarrhea.
 - (e.g. tax breaks, cross pricing subsidies, vouchers, bonus incentives to wholesaler and distributor sales staff etc).

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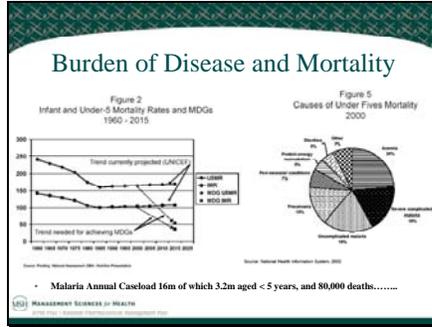
Slide 6

Organizations Consulted

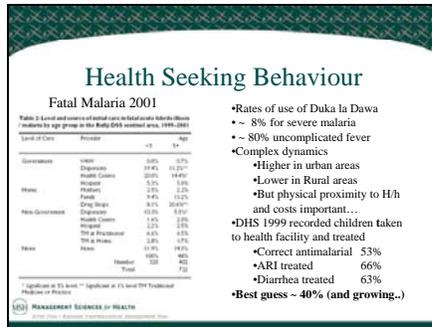
<ul style="list-style-type: none">• MoH<ul style="list-style-type: none">– Malaria Control Program– Health Reform Program– TFDA• Donors<ul style="list-style-type: none">– USAID, UNICEF WR, SDC, GTZ, DfID• Research Institutions<ul style="list-style-type: none">– Ifakara– IFRI• NGOs/CAs<ul style="list-style-type: none">– MSH/SEAM, MEDA, PSI, JSI, BASICS• Private Sector<ul style="list-style-type: none">– Sherys & Salama	<ul style="list-style-type: none">• Bagamoyo<ul style="list-style-type: none">– DMO, DPharm– 4 DRBS– St Elizabeth's Mission Dispensary– Physician– Taxi Drivers• Ruvuma<ul style="list-style-type: none">– DMO Songea– DMO Mbingu– MEDA– 8 ADDOs– District Commissioner, Council & Association Members– Taxi Drivers
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DLDB Baselines – Key Practices

Question	Yes	No	NA
1. Do you have a patient in the ward and attend to it?	25	20	1
2. Do you have a patient in the ward and attend to it?	25	20	1
3. Do you have a patient in the ward and attend to it?	25	20	1
4. Do you have a patient in the ward and attend to it?	25	20	1
5. Do you have a patient in the ward and attend to it?	25	20	1
6. Do you have a patient in the ward and attend to it?	25	20	1
7. Do you have a patient in the ward and attend to it?	25	20	1
8. Do you have a patient in the ward and attend to it?	25	20	1
9. Do you have a patient in the ward and attend to it?	25	20	1
10. Do you have a patient in the ward and attend to it?	25	20	1
11. Do you have a patient in the ward and attend to it?	25	20	1
12. Do you have a patient in the ward and attend to it?	25	20	1
13. Do you have a patient in the ward and attend to it?	25	20	1
14. Do you have a patient in the ward and attend to it?	25	20	1
15. Do you have a patient in the ward and attend to it?	25	20	1
16. Do you have a patient in the ward and attend to it?	25	20	1
17. Do you have a patient in the ward and attend to it?	25	20	1
18. Do you have a patient in the ward and attend to it?	25	20	1
19. Do you have a patient in the ward and attend to it?	25	20	1
20. Do you have a patient in the ward and attend to it?	25	20	1

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ADDOs - SEAM Tanzania

- Development & Approval of Standards for Accreditation
 - Buildings, Personnel, Drug List, Drug Quality, Record Keeping, Shop Location, Code of Ethics
- Training & Continuing Education
 - Dispensers, owners, wholesalers, inspectors
- Incentive to Owners
 - Broader drug list, marketing & advocacy, investment loans
- Regulation & Sanctions
 - TFDA and Local Government
- Impact Evaluation
 - Indicators of coverage, attrition, quality, affordability, oversight & regulation

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ADDOs - SEAM Tanzania

- January 2002 - Mapping
- March 2002 - Baseline Surveys
- May 2002 - Formative Research (FGDs)
- January - March 2003 - Curriculum Development
- July - August 2003 - Songea Urban Training
- November 03 - January 04 - Songea Rural Training
- April - May 2004 - Mbinga Training
- September - October 2004 - Tunduru, Namtumbo Training

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Baridi in Bagamoyo Muhimu in Songea

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ADDOs Possible Intervention Package

- **Goal**
 - Maintain & measurably improve performance of ADDO counter clerks in case management of childhood Malaria, ARI And Diarrheal Disease
- **Comparisons of Effectiveness and Costs in 5 Experimental Zones with control in Singida**
 - Songea Urban, Songea Rural, Mbinga, Namutombo, Tunduru
- **Test of Various Continuing Education/Behavior Change Interventions**
 - Classic long duration - 2weeks
 - Short duration, but frequent detailing program
 - Peer-to-peer type training (- 1 day per month)
 - Neighbour-to-neighbour type community mobilization/demand creation
 - Supervision
 - Inspection (Funded by District Health Budget)
 - Development of accompanying Communications Aides
- Roll out successes to **all** zones, **and any new regions**

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Ifakara, IMCI in Rufiji & Morogoro, TEHIP & DSS

- Started training on adapted treatment algorithms 1997
- Used TEHIP Tools
 - Evidence based planning
 - District Health Budgeting
- Basket Funding \$.92 per capita
- 64% front line workers trained by 1999, 80% by 2001

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Costs & Effectiveness of IMCI

	IMCI	Comparison
Child checked for cough, diarrhea, fever	95%	38%
Child prescribed correct antibiotic or antimalarial	73%	35%
Caregiver reports knowledge of correct treatment	72%	56%
Index of availability of treatment	0.93	0.95

Mortality reduced 13% in two years

Selected indicators showing quality of care and health systems support in IMCI and comparison districts in August 2000

Effectiveness and cost of the City-based Integrated Management of Childhood Illness (IMCI) in Tanzania. Susan RM Armstrong, Schellenberg et al
Lancet Vol 364 October 10, 2004

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Key Findings for Public Sector IMCI

- Results
 - Case Management Improved
 - Health Utilization Unchanged
 - Family Practices Unchanged
 - Mortality Reduced
 - Costs within available resources limits
- Conclusions
 - Those that have access to public sector may enjoy better case management and improved availability of better quality care
 - But those not already using Public Sector not benefiting
 - **Must work with private sector as well**

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Ifakara-Novartis ACCESS Project

BASELINE

- Kilombero & Ulanga Districts study of key determinants of access to effective malaria treatment (including shamba time)

INTERVENTIONS

1. **Community Level Education & Social Marketing for prompt health care seeking and improved compliance.**
 - advocacy for effective home management of malaria,
 - IEC & community mobilization
2. **Health Facility Level Strengthening of Quality of Care**
 - integrated in the training of health facility staff in collaboration with the Council Health Management Teams of the two Districts.
3. **Private Sector Improvement of Performance of drug shops and general stores selling antimalarial drugs.**
 - training aimed at a better understanding of quality malaria treatment and improved prescribing practices,
 - quality control.

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Ifakara - Novartis ACCESS Project Possible Intervention Package

- RPM Plus could support
 - formative research to design local marketing plan and interventions
 - Short-duration high-frequency detailing for DLDs and general retail stores
 - Neighbour-to-neighbour type community mobilization/demand creation
 - Development of Supervision & Inspection (Funded by District Health Budget)
 - Development of behavior change/training program and IEC materials
 - Test of targeted voucher subsidy combined with NATNETS rollout to increase access to Malaria treatment for lowest income groups
- Novartis & Ifakara to support
 - Public Sector Component, Supervision and Regulatory Inspection
 - Measurement of impact on case management
 - Measurement of Mortality changes using DSS

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Ifakara + Novartis + RPMPlus

- Excellent opportunity for leverage
- Ifakara provides population based laboratory in Morogoro where mortality impact can be measured
- Novartis provides approx \$700,000 in funding
- Permits testing and measurement of innovative behavioral change approaches borrowed from QAP/Kenya and elsewhere
- Prepares ground for COARTEM in private sector
- Complements work with ADDOs in Ruvuma and future roll-out

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Manufacturers & Wholesalers Maybe.....

- Substantial distribution networks
- Sales & Detailing Staff with audio-visual materials
- Pickup-based distribution mechanisms to 11 regions
- Unusual detailing materials
- Developing new detailing campaigns
- Expressions of interest in collaboration on vendor-to-vendor interventions ...

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Intervention Packages - Next Steps

- November/December 2004
 - ~ Review possible intervention packages between Mission, Global Bureau and MSH/HQ
 - ~ Further develop details of each possible option to determine content, size and scale of intervention package for decision-making
- January/February 2005
 - ~ One/two day meeting in Tanzania to select options with partners
 - ~ Detailed design with partners and development of intervention plan
- March/April 2005
 - ~ Begin technical assistance to implement package(s)

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