

Objective 1.3 Tanzania—Improve the availability, quality (products and services), and affordability of essential drugs in the private retail sector						
Service Characteristic & Access Dimension: Availability						
Outcome Indicator: % of a set of tracer items in stock (Part I and Part II Medicines)						
Intervention Ruvuma	61%	80%	+31%	<p>According to Tanzania regulation, Part II drugs are non-prescription drugs and may be sold without a prescription by DLDB (Part II shops) or pharmacies (Part I shops). Part I drugs are prescription drugs and, at baseline, were only allowed to be dispensed against a prescription by Part I shops. At the time of the ADDO program there was a revision to this regulation that specifically allows ADDOs to sell certain Part I medicines. At the time of the endline survey, all of the Part I items on the tracer list were approved for sale in ADDOs but were not approved for sale by DLDB.</p> <p>Key reasons cited for improved availability in the February 2005 stakeholder meeting include:</p> <ul style="list-style-type: none"> • Authorizing ADDOs to carry some Part I tracer items • Programmatic financial support • Training for resource management from MEDA • Establishment of a reputable wholesaler in the Ruvuma region 	<p>Pre-post comparison of a set of 20 tracer items</p> <p>Baseline March 2003</p> <p>Intervention 70 DLDB Ruvuma Region</p> <p>Control 76 DLDB Singida Region</p> <hr/> <p>Endline November 2004</p> <p>Intervention 50 ADDOs Ruvuma Region</p> <p>Control 60 DLDB Singida Region</p>	
Control Singida	47%	53%	+13%			
Service Characteristic & Access Dimension: Quality of Products						
Outcome Indicator: % of items sampled that were registered with the TFDA or locally manufactured						
Intervention Ruvuma	74%	98%	+32%	<p>Improvements in both regions due to increased TFDA capacity to register drugs and inspect facilities for illegal products. Also, a strengthened legitimate market encouraged more locally produced goods, which the TFDA considers equivalent to registration.</p>	<p>Pre-post comparison of 10 drugs whose manufacture information was gathered</p> <p>Baseline March 2003</p> <p>Intervention 70 DLDB Ruvuma Region</p>	
Control Singida	70%	90%	+29%			
Control Singida	71%	90%	+27%			

					Control 76 DLDB Singida Region
					Endline November 2004
					Intervention 50 ADDOs Ruvuma Region
					Control 60 DLDB Singida Region
Service Characteristic & Access Dimension: Quality of Services (Appropriateness of Recommendations) (malaria)					
Outcome Indicator: % encounters in which appropriate first-line antimalarial was sold for treatment of malaria					
Intervention Ruvuma	16%	32%	+100%	ADDOs and controls both experienced an increase in dispensing of appropriate antimalarial treatment, although results still need improvement. Participants of the February 2005 stakeholder workshop identified a need to emphasize the malaria component of ADDO training in future rollouts and for continuing education activities.	Baseline March 2003
Control Singida	29%	48%	+66%		Intervention 69 DLDB Ruvuma Region
					Control 77 DLDB Singida Region
					Endline November 2004
					Intervention 50 ADDOs Ruvuma Region
					Control 61 DLDB Singida Region
Outcome Indicator: % encounters in which appropriate first-line antimalarial was dispensed exactly according to STGs for treatment of malaria					
Intervention Ruvuma	6%	24%	+300%		
Control Singida	9%	21%	+133%		

Outcome Indicator: % encounters in which any antimalarial was sold for treatment of malaria					
Intervention Ruvuma	54%	46%	-15%	The decrease in any antimalarial sold in Ruvuma was due to a 93% decrease in dispensing of the third-line treatment, quinine (30% vs. 2%).	
Control Singida	74%	77%	+4%		
Outcome Indicator: % encounters in which any antimalarial was sold or recommended for treatment of malaria					
No antimalarials were recommended, but not sold.					
Outcome Indicator: % encounters in which the attendant did NOT refer the client to a doctor or clinic					
Intervention Ruvuma	58%	38%	-34%	Medical personnel interpreted the increased rate of referrals as evidence of the efforts of ADDO dispensers to conduct business ethically and professionally; however, the goal is for dispensers to recognize and treat uncomplicated childhood malaria. Future training should focus on building these skills.	
Control Singida	70%	68%	-3%		
Service Characteristic & Access Dimension: Quality of Services (Appropriateness of Recommendations) (URTI)					
Outcome Indicator: % encounters in which an antibiotic was NOT sold or recommended for treatment of URTI					
Intervention Ruvuma	2001 DLDB: 61%	86%	+41%	Antibiotics are not the recommended treatment for URTI. ADDOs in Ruvuma now have a legal right to sell selected antibiotics and are selling them more responsibly than in 2001, while DLDB, including those in Singida, the control region, are still legally restricted from selling prescription drugs. However, without baseline data it is difficult to associate the endline results with the intervention.	Baseline February–May 2001 SEAM Tanzania Country Assessment 33 DLDB in multiple regions <hr/> Endline November 2004 Intervention 49 ADDOs Ruvuma Region Control 59 DLDB Singida Region
Control Singida	—	75%	-13% (compared with ADDOs)		
Outcome Indicator: % encounters in which the attendant did NOT refer the client to a doctor or clinic (URTI)					
Intervention	—	65%			

Ruvuma					
Control Singida	—	86%	+32% (compared to ADDOs)		
Service Characteristic & Access Dimension: Quality of Services (Dispensing Communications)					
Outcome Indicator: % encounters in which attendant provided instructions on how to take the medication (malaria)					
Intervention Ruvuma	81%	60%	-26%	Although the ADDO attendants had some improvement in assessing a child's malaria, dispensing communication needs additional focus in training.	See above for Malaria and URTI scenarios
Control Singida	77%	77%	0%		
Outcome Indicator: % encounters in which attendant provided instructions on how to take the medication (URTI)					
Intervention Ruvuma	2001 assessment 88%	78%	-11%		
Control Singida	—	78%	0% (compared to ADDOs)		
Outcome Indicator: % encounters in which attendant gave information on possible problems with malaria medications (danger signs)					
Intervention Ruvuma	3%	4%	+33%	Very few ADDO or DLDB attendants gave the client information on danger signs related to the medication.	
Control Singida	7%	2%	-71%		
Outcome Indicator: % encounters in which attendant gave information on possible problems with URTI medications (danger signs)					
Intervention Ruvuma	—	20%	+185% (compared to controls)		
Control Singida	—	7%			
Outcome Indicator: % encounters in which attendant asked about the symptoms of the child <u>and</u> any medications the child may have taken (malaria)					
Intervention Ruvuma	25%	30%	+20%	The ideal scenario would be for the shop keeper to ask the client questions about the symptoms and medication history. In the malaria simulated client, there was a 20% increase in the number of attendants of ADDOs who asked about both	
Control Singida	54%	44%	-19%		

				symptoms and medications, while there was a 19% decrease among DLDB attendants.	
Outcome Indicator: % encounters in which attendant asked about the symptoms of the child <u>and</u> any medications the child may have taken (URTI)					
Intervention Ruvuma	—	37%	+85% (compared to controls)		
Control Singida	—	20%			
Service Characteristic & Access Dimension: Affordability					
Outcome Indicator: Average % difference in median price to patients between ADDOs and DLDB for a set of tracer items (Part I and Part II Medicines)					
Intervention Ruvuma	—	TSH 195	0% difference	<p>Though average median prices increased slightly from baseline to endline in both regions, prices in Ruvuma are more in line with national market prices than they had been. The average median price for a set of tracer items was the same at both Ruvuma ADDOs and Singida DLDB at endline.</p> <p>Endline patient register data show that the customer base has remained stable, suggesting that prices have not affected sales. The consensus of regional stakeholders is that the increase in prices has not impacted access in Ruvuma.</p>	<p>Pre–post comparison of a set of 20 tracer items Sample sizes for each individual median drug price vary depending on how many shops had the item available on the date of the visit.</p> <p>Baseline March 2003</p> <p>Intervention 70 DLDB Ruvuma Region</p> <p>Control 76 DLDB Singida Region</p> <hr/> <p>Endline November 2004</p> <p>Intervention 50 ADDOs Ruvuma Region</p> <p>Control 60 DLDB Singida Region</p>
Control Singida	—	TSH 195			
Outcome Indicator: Median cost for malaria treatment					
Intervention	—	TSH 200	–60% compared to		

Ruvuma			controls		
Control Singida	—	TSH 500			
Outcome Indicator: Median cost for URTI treatment					
Intervention Ruvuma	—	TSH 900	-10% compared to controls		
Control Singida	—	TSH 1000			
Service Characteristic & Access Dimension: Acceptability/Satisfaction					
Outcome Indicator: % of customers who expressed satisfaction with service (Customer rating of overall quality of experience)					
Intervention Ruvuma	—	Average: 4% Good: 83% Excellent: 13%	9% more clients rated ADDOs as <i>excellent</i> regarding overall quality of experience	Though client perceptions of ADDOs were generally better, other dispensing communication indicators show that ADDO attendants need additional training and monitoring in this area.	The 21-question survey tool assessed overall satisfaction as well as other perceptions of service and quality
Control Singida	—	Average: 12% Good: 84% Excellent: 4%			Baseline None Endline November 2004 Intervention 50 ADDOs Ruvuma Region Control 60 DLDB Singida Region
Outcome Indicator: % of customers who expressed satisfaction with information received					
Intervention Ruvuma	—	Poor: 1% Average: 4% Good: 67% Excellent: 28%	13% more clients rated ADDOs as <i>excellent</i> regarding quality of drug information		
Control Singida	—	Poor: 3% Average: 5% Good: 77% Excellent: 15%			
Outcome Indicator: % of customers who expressed satisfaction with knowledge of dispensers					

Intervention Ruvuma	—	Average: 5% Good: 69% Excellent: 26%	10% more clients rated ADDOs as <i>excellent</i> regarding attendant knowledge/ expertise		
------------------------	---	--	--	--	--