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99952

RATIONAL PHARMACEUTICAL MANAGEMENT PROJECT

PROPOSED ANNUAL WORK PLAN

JANUARY 1998 - SEPTEMBER 1998

Rational Pharmaceutical Management Project

C A No HRN-A-00-92-00059-13

C A No HRN-A-00-95-00002

Executive Summary and Financial Information

The Management Sciences for Health (MSH) Rational Pharmaceutical Management (RPM) Project began in September 1993, with a planned completion in September 1997. In mid-1997, MSH submitted a request to USAID to extend the end-date of RPM to September 23, 1999, primarily because it was felt that additional time was needed to complete a variety of core-funded and country program level activities. At the same time, MSH requested that the funding ceiling be raised from \$8,900,000 to \$13,607,000 in order to accommodate proposed Mission and Bureau support for existing activities and new initiatives. On the request of the CTO, MSH submitted an additional request to raise the funding ceiling to \$15,300,000. These requests were approved by USAID on November 19, 1997 and the ceiling was raised to \$15,265,666.

To-date, USAID has obligated \$8,737,311 to RPM. Based on information provided by USAID, RPM expects USAID to obligate another \$2,010,000 in FY97 funds which were not obligated in FY97 due to the delay in the approval of the extension request. Based on FY98 work plans and activities under discussion for FY99, RPM will require \$4,518,355 in FY98 obligations.

As of January 1, 1998, the total RPM pipeline was \$1,303,840. It should be noted that most of this pipeline consists of NIS add-on funds. As shown in the table, "RPM Estimated Costs and Funds," most country programs are in a deficit situation. Pursuant to USAID guidance, the deficits have been supported by using NIS funds. The funding pots will be balanced once FY97 funds are received.

RPM's proposed package of activities for the period January 1, 1998, to September 23, 1998, is budgeted at \$4,339,541. With the existing ceiling, \$3,492,654 will be required for the period September 24, 1998 to September 23, 1999. This package of activities will result in RPM expending funds up to the funding ceiling, as shown in the table *RPM Ceiling Report*. Individual funding levels and budgets are shown in the table *RPM Estimated Costs and Funds*.

The proposed work plan shows a significant increase in the number and intensity of activities being undertaken by RPM. During the period addressed in this plan, RPM proposes to begin technical activities in a number of new areas, including polio, rational drug use, State Of The Art Training, and antimicrobial resistance. To address this increased activity level, the LOE for existing MSH staff has been significantly increased in comparison to previous years. The Drug Management Program (DMP) is actively recruiting three additional technical staff members, who are expected to contribute 16.5 person months to this plan. RPM projects a total level of effort during the period January 1, 1998, to September 23, 1998, of 227.50 staff person months.

During this period, RPM will also engage 91.25 months of consultants. Please see the table *Level of Effort and Travel*.

In order to be able to respond to additional technical opportunities, 17 months of non-specified time for existing and new DMP staff are included in the plan.

With the commencement of known new initiatives and hiring of new staff, RPM's average monthly expenditures are projected at about \$482,171 for the period January 1, 1998 to September 23, 1998. During this time RPM will incur a number of up-front costs, these include RPM support of local organizations through approximately \$341,722 in subagreements and \$173,200 in computers and furniture for new RPM staff members and upgrades to obsolete hardware. Spending during the period September 24, 1998 to September 23, 1999, will continue close to the previous year's rate through the first three quarters of the year. Spending will then decrease as RPM brings activities toward completion as the CA nears its end date of September 23, 1999. Please see the table *Detailed RPM Work Plan Budget* for budget line item estimates.

Funds from both the RPM Russia CA, and the NIS add-on to the RPM CA, will be used to support activities in Russia. A separate budget for the Russia CA expenditures is included (please see the table *RPM Work Plan Budget, Russia CA*). The Russia CA funds will be used for in-Russia costs, including salary and travel for local service providers, translation costs, and participants costs for the Man and Drugs Congress. Add-on and OYB transfer funds will be used for Washington-based expenses and international travel, including the impact meeting that will take place in Washington - these costs are included in the Add-on, Russia, information included in the *RPM Estimated Costs and Funds* table.

The work plan consists of twenty-one individual plans addressing core funded and field support activities, as follows:

Core Funded Activities

- Tools Development and Information Dissemination
- Reproductive Health
- Development of Managing Drug Supplies Materials
- IMCI
- State of the Art Training
- Pharmaceutical Management Workshops
- Technical Leadership
- Rational Drug Use
- Polio Eradication
- Antimicrobial Resistance

RPM Country Programs/Field Support Activities

- Ecuador
- Peru
- REDSO/Logistics Initiative
- Zambia
- Mozambique
- Bangladesh
- Nepal
- Hungary
- Central Asia Infectious Disease Program
- Ukraine
- Russia

Individual plans provide background on activities to date, and proposed activities for the period January through September 1998, including expected outcomes, RPM support to Mission or Global Bureau Strategic Objectives, and response to evaluation recommendations.

RPM Ceiling Report	
RPM Funding Ceiling	15,265,666
Spent thru Dec 31, 1997	7,433,471
Estimated FY98 workplan costs	4,339,541
Estimated FY99 workplan costs	3,492,654

	15,265,666

RPM Estimated Costs and Funds

Reflecting the Period Jan 1, 1998 to Sep 23, 1999

	Pipeline as of Jan98	Expected FY97 Funds	Estimated Costs for Jan98-Sep98	Required FY98 Funds	Projected Costs for Oct98-Sep99
Global Bureau Funds					
Core	402,842			1,791,355	
Tools'			272,660		
Reproductive Health			322,765		
MDS			97,132		
IMCI			165,668		
SOTA			28,822		
RPM Workshops			31,054		
Technical Leadership			64,017		
Rational Drug Use			82,192		
Poland	(11,070)				
Total Core	391,772		1,064,310	1,791,355	1,118,817
Budgeted Global Bureau Activities					
New Initiatives			251,751		(251,751)
Polio	79,210		63,278		15,932
Antimicrobial Resistance			388,919	800,000	411,081
Field Support					
Ecuador	(151,538)	250,000	179,849	67,000	(14,387)
Peru	28,885	50,000	190,107	200,000	88,778
REDSO	(56,772)	200,000	172,203	100,000	71,025
Zambia	(111,956)	300,000	182,438	100,000	105,606
Mozambique	73,007	310,000	367,007	360,000	376,000
Bangladesh	(7,713)	250,000	274,883	250,000	217,404
Nepal	(17,284)	400,000	433,523	400,000	349,193
Hungary	(12,572)	250,000	182,584	200,000	254,844
CAIDP	39,213		38,514		699
Add-ons					
Ukraine	184,853		236,683	250,000	198,170
Russia (Add-on and OYB)	864,485		313,491		550,994
Mozambique (Add-on)*	250				250
Total**	1,303,840	2,010,000	4,339,540	4,518,355	3,492,655

* Mozambique Add on activity is closed and the \$250 will not be spent

** Total estimated cost for Jan98 Sep98 is \$4 339 541 The amount shown is \$1 less because of rounding

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Work Budget
Level of Effort and Travel

	Home Office	T	R	M	I	P	E	P	R	Z	M	B	N	H	C	U	S	New Initiatives	RPM Workshops	Anti-microbial	Russia	Tech Lead	RDU	Total	FY99 Estimate	
	O	O	R	D	M	P	C	U	E	A	Z	A	N	N	A	A	O									
Salaries & Wages																										
A RPM Technical Staff																										
Savelli	3.25	0.25	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.50	0.05	0.25	0.75	0.25		0.35	0.05	0.60	0.30	0.25	1.40	0.25	0.15	9.00	11.00	
Beracochea	1.25	0.15	1.50	0.15	0.90	0.15	0.50	0.65	0.75	0.55	0.75	0.05	0.05	0.05		0.05	0.10	1.10	0.05	0.05	0.05	0.10	0.05	9.00	11.00	
Moore	1.00	0.25						0.75		6.00					0.75			1.05	0.10			0.10		9.00	11.00	
Gabra	0.20				0.25			2.75	4.15									1.50	0.15					9.00	11.00	
Keene	0.50				2.50								3.00					3.00						9.00	11.00	
McFadyen	0.50	5.34	0.15	0.50	0.55	0.25		0.50					0.05	0.05				0.86	0.25					9.00	11.00	
Zagorak	1.00															0.50		0.40			6.75	0.35		9.00	11.00	
Duzey	0.50															6.55					0.10			7.15	9.00	
Dias	0.50												6.00											6.50	8.00	
Fujisaki	0.75		3.60										4.00					0.65						9.00	11.00	
Nelson	0.65				1.50		2.65	1.65										2.35						9.00	11.00	
SPA	1.00																	2.60		1.40				5.00	11.00	
SPA	1.00		0.65															2.85		0.50				5.00	10.00	
Jones	7.70	0.50					0.30						0.50											9.00	11.00	
Chomyszak	8.25	0.50																0.25						9.00	11.00	
Vincent	8.75		0.25																					9.00	12.00	
B DMP Technical Staff																										
Rankin	0.50	1.00		0.25																			0.05	0.70	2.50	3.00
Bates		0.25		0.50	0.15							1.25	1.75												3.90	2.00
Lee		0.65		0.25					0.50				1.00	0.25				0.15		3.85	0.05	0.70	1.00		8.40	3.00
Miralles		0.40	0.25	3.00										0.10	0.05		0.50			1.35	0.30		1.30		7.25	3.00
Pinell		0.05			1.45	2.75														2.35			1.75		8.35	3.00
C MSH Technical Staff																										
Newbrander																		0.25							0.25	
Sanchez					2.85																				2.85	1.00
Donaldson				1.60					0.75																2.35	1.00
Coburn										3.50															3.50	1.00
Sacca			0.25										3.75												4.00	3.00
Ickx					1.00											0.75									1.75	
D RPM Support Staff																										
Kuhn	1.00			1.75			0.50	0.50	0.50	1.00		1.00	1.00	1.25	0.25		0.25								9.00	12.00
DePass	1.00			1.50						1.50						2.00							2.75	0.25	9.00	11.00
Senior Program Asst	1.00	1.50	2.75	1.00	1.00													0.50	1.00				0.25	9.00	11.00	
Parker	1.00	0.25		1.75																3.70		0.50	1.05		8.25	3.00
Receptionist	9.00																								9.00	12.00
Total Salaries & Wages	51.30	11.09	15.40	8.45	9.85	4.45	4.00	6.05	6.05	6.70	10.80	6.30	15.05	6.45	1.85	9.45	1.55	17.46	1.85	13.45	11.55	3.10	5.30	227.50	250.00	
Consultants																										
Total Consultants		4.00	4.75		36.50	18.50	1.00	1.50	12.00	4.75	3.75	2.50	0.50	0.25		0.50		0.75							91.25	30.00
Travel & Transportation																										
Airfare	9	16	2	5	4	1	6	12	8	15	10	21	9	1	5	2	6	2	5	2	5	27	5		186	97
Per Diem	9	118	93	8	80	38	9	54	138	80	310	163	378	99	26	75	2	60	18	82	1430	35	68	2383	1545	
Avg. Trip Length	1	7	8	4	16	10	9	9	12	10	21	18	18	11	26	15	11	10	4	16	16	7	17		13	16

Detailed RPM Work Plan Budget
Reflecting the Period Jan 1, 1998 to Sep 23, 1999

Management Sciences for Health

Total					
Budget Line Item	Base Monthly Rate	(Jan 1, 98 - Sep 23 98)		(Sep 24 98	Sep 23 99)
		Quantity	Amt	Quantity	Amt
I Salaries & Wages					
A RPM Technical Staff					
Savelli		9 00		11 00	
Beracochea		9 00		11 00	
Moore		9 00		11 00	
Gabra		9 00		11 00	
Keene		9 00		11 00	
McFadyen		9 00		11 00	
Zagorski		9 00		11 00	
Duzey		7 15		9 00	
Dias		6 50		8 00	
Fujisaki		9 00		11 00	
Nelson		9 00		11 00	
Senior Program Associate		5 00		11 00	
Senior Program Associate		6 50		10 00	
Senior Program Associate		5 00		10 00	
Jones		9 00		11 00	
Chomyszak		9 00		11 00	
Vincent		9 00		12 00	
B DMP Technical Staff					
Rankin		2 50		3 00	
Bates		3 90		2 00	
Lee		8 40		3 00	
Miralles		7 25		3 00	
Pinell		8 35		3 00	
C MSH Technical Staff					
Newbrander		0 25		0 00	
Sanchez		2 85		1 00	
Donaldson		2 35		1 00	
Coburn		3 50		1 00	
Sacca		4 00		3 00	
Ickx		1 75		0 00	
D RPM Support Staff					
Kuhn		9 00		12 00	
DePass		9 00		11 00	
Senior Program Assistant		9 00		11 00	
Parker		8 25		3 00	
Receptionist		9 00		12 00	
Total Salaries & Wages		227 50	1 067 421	250 00	1 218 061
II Consultants					
Total Consultants		91 25	331 812	30 00	173 250
III Overhead					
Total Overhead			1 006 571		1 054 144
IV Travel & Transportation					
Total Travel & Transportation			997 123		649 635
V Non Expendable Equipment & Supplies					
Total Equip & Supplies			173 200		0
VI Expendable Equip & Office Supplies					
Total Expendable Equip & Supplies			180 826		182 760
VII Other Direct Costs					
Total Other Direct Costs			240 866		26,302
VIII Subagreement/contracts					
Total Subagreements/contracts			341 722		188 502
Total Amount			4,339,541		3,492,654
		Avg/mo	482 171	Avg/mo	291 055

RPM Work Plan Budget
Reflecting the Period Jan 1, 1998 to Sep 23, 1999

Management Sciences for Health

Russia (CA)

Budget Line Item	(Jan 1, 98 - Sep 23, 98)		(Sep 24, 98 - Sep 23, 99)	
	Quantity	Amt	Quantity	Amt
I Salaries & Wages Total Salaries & Wages	0 00	0	0 00	0
II Consultants Total Consultants	0 00	0	0 00	0
III Overhead Total Overhead		0		0
IV Travel & Transportation Total Travel & Transportation		40,980		0
V Non-Expendable Equipment & Supplies Total Equip & Supplies		0		0
VI Expendable Equip & Office Supplies Total Expendable Equip & Supplies		18,150		0
VII Other Direct Costs Total Other Direct Costs		46,188		23,319
VIII Subagreement/contracts Total Subagreements/contracts		33,600		0
Total Amount		138,918		23,319
	Avg/mo	15,435	Avg/mo	1,943

Work Plan Matrix Key

AK	Aigul Kuttumuratova
AZ	Andrei Zagorski
BS	Budiono Santoso
BST	BASICS Survey Team
CK	Christine Kuhn
CO	Chris Olson
CP	Carlos - local Ecuador consultant
CV	Crispin Vincent
DD	Dayle Donaldson
DK	Douglas Keene
DL	David Lee
DN	David Nelson
DRD	Dennis Ross-Degnan
EA	Ed Armstrong
EB	Elvira Beracochea
EM	Edgar - local Ecuador consultant
HS	Hernan - local Ecuador consultant
IG	Ivan Grijalva
JA	Jose - local Ecuador consultant
JAB	Jim Bates
JC	Josh Coburn
JD	John Davies
JJ	Jennifer Jones
JM	Julie McFadyen
JR	Jim Rankin
LB	Lyle Bootman
MC	Maria Chomyszak
MG	Michael Gabra
MM	Maria Miralles
MPS	Maria Pia Sanchez
NE	Neya
OD	Olya Duzey
PI	Paul Ickx
PL	Paul Lalvani
PS	Phil Smith
SP	Sam Patel
SP	Serena Parker
SPA	Senior Program Associate
SS	Stephen Sacca
SU	Sharad Unewal
TBD	To be determined
TF	Tomoko Fujisaki
TM	Tom Moore
TS	Tony Savelli
VD	Vim Dias
VDP	Valarie DePass
VP	Veronica Pinell
WN	William Newbrander
YG	Yolanda de Grijalva

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I TOOLS' DEVELOPMENT AND INFORMATION DISSEMINATION WORK PLAN

A Background

The Rational Pharmaceutical Management (RPM) Project's mandate is to develop state-of-the-art tools, techniques, methodologies, software, information resources, and training materials, test them in project countries, and make them available to other USAID projects and to other agencies and organizations active in providing pharmaceutical management technical assistance. The tools' development and information dissemination program is based on both publications and software, and includes a wide variety of activities.

In the last planning year, the project's major accomplishments included the following:

RPM

Developed 16 sessions of training materials based on the new edition of *Managing Drug Supply* for MSH/IDA course.

Added several new features to the INVEC-2 software program, including multi-site data exchange capabilities and ten new usage reports.

Conducted a three-day training of trainers session on INVEC-2 for three people, to capacitate them to install the INVEC-2 software.

Completed the ESTIMED drug needs quantification software and user manual. The software was tested in Kenya as part of the reproductive health field test.

Completed the ECPRO-2 pooled procurement and tendering software, which is installed at the Eastern Caribbean Drug Service. The manual for the software was not written because of the possibility of upgrading the software to Windows.

Installed MSH drug management software on staff computers and trained staff individually on the programs. The programs covered included PASS, ESTIMED, and INVEC-2.

Updated RPM section of MSH Web page, and produced informational sections on several tools for FPMD's ERC Web site.

Produced one RPM update for the *INRUD News* because newsletter has only been published once in the planning year.

Russia

Developed and produced drug utilization review manual *Guidelines for Implementing Drug Utilization Review Programs in Russian Hospitals*.

The community pharmacy manual is in progress.

DMP

Published and distributed the fully revised, second edition of the textbook, *Managing Drug Supply*

Produced and distributed the *1996 International Drug Price Indicator Guide*

Created a special 1997 edition of the *International Drug Price Indicator Guide* for WHO-AFRO, including prices from 16 African countries

Certain activities planned in the last work plan were not accomplished, in part because the last work plan's end date was March 1998, and this plan overlaps it by three months. Other activities were changed, or postponed, as the project evolved. The activities not accomplished include the following

RPM

Instead of INVEC-2 installation manual for trainers, RPM created a list of questions to ask and issues to raise when planning an installation. This can be used for self-assessment by interested parties as well.

The INVEC-2 users manual will be updated in January 1998.

A graphing capability was not added to the PASS software program, but new reports were added to the software. The PASS manual was not updated. Both of these activities were postponed because the program is being changed in response to the needs of the Integrated Management of Childhood Illness (IMCI) program.

A formal presentation to USAID on RPM software was not given, but the project did give several tools presentations to AID staff and others as part of evaluation process.

The non-country-specific drug utilization review manual was not written.

Russia

Russia project documents have not yet been added to the MSH/RPM Web site.

DMP

The software version of the *International Drug Price Indicator Guide* was not produced due to lack of funds.

B Plan

Overall Implementation Strategy

The tools' development and information dissemination program works in the technical areas of development, registration, procurement/logistics, and drug information/rational drug use. Most of the report and information dissemination activities fall under the heading of "development," while the other areas are primarily represented by work with software programs designed for specific aspects of drug management. RPM also plans to develop additional marketing materials for the project. The project intends to collaborate with the World Health Organization (WHO) to produce the guidelines for computerized drug registration. The RPM project plans the following activities, in addition to related cost-sharing work, between January and September 1998.

Planned Activities

1 Multiple Areas

The RPM Project plans to organize and lead a working group to conduct a feasibility study to determine if it should develop a Windows-based suite of the MSH drug management software programs and selected WHO software. The working group will include representatives from WHO-DAP, the World Bank, and the Euro Health Group. The MSH programs to be considered for upgrade are INVEC-2 for inventory control and management, ESTIMED for drug needs quantification, PASS for prescription analysis, ECPRO-2 for pooled procurement and tendering, and the Guide, which is the software version of the *International Drug Price Indicator Guide*. The WHO program is SIAMED, for drug registration. The feasibility study will determine if some or all of these programs should be re-written and modified on a Windows platform.

The feasibility study will include a review of other programs available on the world market for these same purposes, and will attempt to identify an accounting program that could be included as part of the package. The study will also survey current and potential users of the software programs to determine if features should be added or changed in the new version. It will also assess challenges related to developing, disseminating, and supporting a software suite. The feasibility study will result in a report that will be used to make a decision on RPM's future activities in software development.

When the report is ready, RPM will host a workshop to present findings of the study and determine how to move forward. It is expected that approximately five representatives from the working group will attend this three-day workshop, the last day of which will include a presentation to USAID and other donors. The presentation, with reception to follow, will be designed to gain support for development of the software suite, if that is what the feasibility study indicates.

If the study, workshop, and presentation determine that RPM should go forward with development of Windows-based programs, the next step will be to design the suite and the software programs. The programming and production of the suite will be contracted to an outside firm. RPM will be closely involved in the development and testing of the suite. The project plans to collaborate with other agencies, such as WHO and Danida, in the development and support of the software suite.

A continuing activity for the tools' development and information dissemination program is editing and producing documents for other RPM projects. This will remain true in the next planning period.

2 Development

RPM plans to update the project's Web pages to expand the information available on the project. Certain documents or products, such as the formulary development manual or INVEC-2 demonstration software, may also be made available through the Web site. This will increase the mechanisms by which the project can disseminate information.

RPM will update the Drug Management Program *Capability Statement*, to include new program accomplishments. This activity will provide an additional means of publicizing the RPM Project, and will contribute to expanding cost-sharing activities.

The RPM project anticipates developing additional marketing material, such as a brochure, for the project.

RPM will write the project's required quarterly and annual reports to keep USAID informed of project activities.

Because the RPM project has just moved to a new office, the project will re-organize the office library and report archives. The expected result of this is to make the office resources more useful to both project staff and people from other organizations.

RPM plans to continue to produce *RPM Updates* for inclusion in the *INRUD News*. The next edition of this newsletter is expected to be produced in February 1998. The newsletter is sent to over 3,000 people, worldwide, and is an excellent way to disseminate information on the RPM project.

RPM and DMP staff plan to continue to make presentations at major conferences such as the American Public Health Association and National Council on International Health meetings.

3 Registration

The RPM project intends to collaborate with the World Health Organization (WHO) to produce a manual on how to implement a computerized drug registration system. The manual is expected to assist countries worldwide in efficiently installing drug registration software.

4 Procurement/Logistics

The RPM project will update the INVEC-2 users' manual to reflect the changes in the software since the last update of the manual in 1995. This will assist both current users of the program, and designers of a possible Windows version of the software.

RPM will send INVEC-2 program upgrades to all users, which includes sites in Zimbabwe, Yemen, Cambodia, Zambia, St. Vincent and the Grenadines, St. Lucia, Grenada, Dominica, and Antigua. The upgrades will include new features added to the program, such as the multi-site data exchange capability, new usage reports, and greater flexibility in allocating items.

5 Drug Information/Rational Use

RPM intends to finalize the PASS software program and update the PASS manual, based on the results of the IMCI field test in Ecuador. The program may become part of a software package, to be used in conjunction with the manual, for drug management assessments for IMCI.

Expected Outcomes

If all of the activities described in this work plan are successfully completed, the following outcomes are expected:

The software feasibility study will allow a determination of the software available on the market for various aspects of drug management, allowing the RPM project to recommend programs for clients. The study will also provide a blueprint for RPM's future work in software development.

Project information dissemination capabilities will be strengthened and improved.

Computerizing drug registration, worldwide, will be facilitated by formal written guidelines.

Inventory management capabilities will be enhanced by improvements in INVEC-2 and its manual.

RPM Response to Evaluation Team Recommendations

The RPM project evaluation team made several recommendations regarding tools' development in its final report. This work plan addresses them as follows:

"The project should approach investment in additional software or packages (i.e., "suites") of software very cautiously." RPM plans to lead a multi-lateral group of donors and collaborators to determine the real need for, and specifics of, a new suite of software. The project will ensure that there is broad support for the programs before beginning any major development efforts.

"The project should continue to engage in tools development activities, particularly in areas where the tools have direct relevance for shaping country interventions. [t]he project should continue to coordinate closely with other entities with a global mandate to ensure that the materials satisfy clearly defined needs and that there is no duplication of effort." Through collaboration with WHO, and frequent communication with counterparts and other donors in-country, the project plans to continue to develop and improve its tools.

"[T]he project should consider the development of generic guidelines or a procedures manual for management and marketing of a DIC." RPM will consider this recommendation, and plans to discuss it with USP.

"RPM should continue its efforts to disseminate and demonstrate drug information and management tools to local officials and developing country decision-makers through articles, presentations, and lectures. RPM should increase its efforts, however, in disseminating such information to other USAID global programs, CAs, NGOs." The project plans to follow this recommendation by completing the activities described in this work plan, as well as those activities detailed in other project work plans, such as those for workshops and the State of the Art (SOTA) orientation.

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is 15 person months, at an approximate cost of \$272,660 This cost will be paid from RPM core funds

ILLUSTRATIVE RPM TOOLS' DEVELOPMENT AND INFORMATION DISSEMINATION WORK PLAN MATRIX (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
A Development							
1 IEC/Social Marketing							
Update project Web pages	New Web Pages	JM MC	32 5	DC Boston X1d			
Update DMP Capability Statement	New Cap Statement	JM JR DL MM	15 15 15 15				
Write RPM Project reports	New Reports	JM TS JJ	5 15 25				
Re organize office library and archives	Organized library	JM JJ	5 25	DC Boston X1d		Intern?	
Produce RPM Updates for INRUD News	RPM Update	JM VP TS	1 05 05		INRUD		
Editing and producing reports	Reports	JM SP	75 5				
Produce RPM marketing materials	Brochure flyers etc	JM TS SP	25 05 25			Printing (\$1000)	
Presentations at conferences	Presentations	JR DL TS MM	25 25 05 25	DC CA X3d			
		EB JM SP	15 15 25	DC CA X3d			
				DC GenevaX1w			
				DC EcuadorX1w			
B Registration							
1 Technical Interventions							
Software implementation manual with WHO	Manual	JM JR DL	1 25 25	DC GenevaX2w	WHO		
		TS JAB	25 25				
C Procurement/Logistics							
1 MIS/Automation							
Windows suite feasibility study	Study Report	PS JM JR SR SP	3 5 85 35 25 5	DC GenevaX1w	WHO EHG WB		Software (\$1 000)
				Geneva Copenhagen X1w			
				DC Harare X2w			
				DC GenevaX1w			
				DC HarareX1w			
				DC GenevaX1w			
				DC GenevaX1w			
				DC CAX1w			
				DC CAX1w			
Update INVEC 2 users manual	New Manual	JM	0 1			JET Computer (\$2 500)	
Send INVEC 2 upgrades	Diskettes & Instructio	JM SP	0 32 25				
D Drug Information/Rational Use							
1 MIS/Automation							
Finalize PASS software	Software Program	JM TM SR	25 25 25				
Update PASS users manual	New Manual	JM	0 1			JET Computer (\$2 500)	

II REPRODUCTIVE HEALTH PROGRAM WORK PLAN

A Background

Half a million women in developing countries die every year without access to safe, effective, affordable and acceptable reproductive health care (RH) (UN, 1995). The recommendations of the *International Conference on Population and Development* (ICPD) in Cairo in September 1994 called for action to reduce maternal morbidity and mortality. Governments and donor agencies are responding to the ICPD by supplying commodities, i.e. pharmaceuticals, medical supplies and basic equipment necessary for improving women's RH care. However, there is lack of information to determine the cost and quantities of commodities required by new or expanded RH programs.

In 1995, representatives from USAID Office of Health and Nutrition, the Rational Pharmaceutical Management project (RPM) and MotherCare formed the "RH working group" to respond to the cost implications of the ICPD recommendations. Their response is the *Cost Estimation Strategy (CES)* to provide the donor community and governments with suitable methods and information to estimate the cost of supplying the needed RH commodities. The purpose of this work is to find ways of improving the availability and management of these commodities.

The CES provides a source of reference information about the cost of reproductive health commodities and about how to manage them efficiently. The CES uses a number of tools for selecting, planning and budgeting the additional quantities of drugs and other supplies required for phasing the upgrade and expansion of reproductive health services, as funds permit.

In collaboration with the MotherCare project, RPM designed and tested the CES tools and has collected commodity cost information for drugs, medical supplies and equipment for antenatal, delivery, maternal and neonatal complications, and selected reproductive tract infections (RTI). The CES is based on a participatory step-wise decision-making process. Decisions are made based on cost and standards of quality of care for the specific country, district or service being considered for upgrade and/or expansion. By estimating the required quantity and cost of reproductive health commodities, policy-makers, donors, program and facility managers become aware of the affordability of their ICPD programmatic goals and become able to phase-in the implementation of such goals within their means. In a concerted way, the CES provides all parties with the tools and information to define their role and plan their immediate action to ensure continuous supply of reproductive health commodities and thus meet service delivery targets.

In 1996, the RH working group developed and refined the first of the three components of the CES: *the normative cost estimate*, based on international standard treatment guidelines and prices. In 1997, RPM developed the second component: *the country-specific cost estimate* which was field tested in Kenya. In this way, RPM has gathered cost information for the first region (Africa). Now in 1998, RPM will continue refining of the country-specific cost estimate by applying CES in other regions (Latin America and Asia). RPM will also measure the third estimate: *the actual cost* of reproductive health commodities based on prescribing practices, product availability and performance of the supply system in other two regions as observed in Kenya.

Until now, the CES tools include

Normative RH cost estimate

- Framework for commodity policy dialog
- Process for selecting required commodities by type of service

Country-specific RH estimate

- Process for adapting standard treatment guidelines
- Process for developing lists of essential RH commodities drug, medical supplies, and equipment by type of services and reference prices
- Cost estimating spreadsheet model for estimating the cost per episode

Actual RH cost estimate

- Data collection tools for estimating the current actual cost estimate of the services
- ESTIMED, software for planning and budgeting the required commodities using WHO consumption and morbidity-based methods
- Framework for promoting the rational use of commodities

B Plan**Overall Implementation Strategy**

The development of the CES, and the dissemination of its tools and cost information will continue being the focus of the program. To complete the development of the CES, RPM will attempt to carry out two more tests of the CES in two other regions: Latin America and Asia. RPM will disseminate the CES and cost information about reproductive health commodities through presentations and dissemination of reports and other informational materials. RPM will continue collaborating with MotherCare until this project ends in 1998.

Planned Activities

1 Refinement of the CES Having applied the CES in at least one country in Africa, which will become the regional reference of donors and policy-makers, RPM plans to start the last phase of the development of the methodology. RPM will look for options for applying the CES in at least one country in Latin America (LAC) and in Asia. Countries with potential for becoming a regional reference and that would benefit from CES are Peru or Bolivia in LAC, and Indonesia or Thailand in Asia. In this way, RPM will be able to provide country-specific cost estimates for regional reference, and will have refined the methodology in different reproductive health care delivery settings (home-based, private, etc), and by different health care providers (traditional birth attendants, community health workers, etc) in two regions. INRUD-Thailand or INRUD-Indonesia are probable partners in the Asia study.

2 Expansion of the CES Given the usefulness and the positive feedback from the Evaluation Team concerning the CES, RPM will look into possible applications in other program areas (e.g. IMCI, other RTI and antibiotic resistance issues, family planning commodities, etc). It is also expected that CES relate or complement other RH costing tools, contributing to estimate total costs (human resources, etc)

3 Dissemination of CES and Cost Information Donors and program managers need to become aware and make use of cost information and the CES methods for planning and coordinating the supply of required commodities. In 1998, RPM will host formal and informal presentations leading to a donor round table at the end of the year to disseminate the CES methodology and the available cost information. Proceedings of this round table will inform the preparation of the CAIRO+5 Meeting. Also in preparation for the CAIRO+5 Meeting, RPM will moderate an electronic conference about the rational management of reproductive health commodities.

To disseminate the methodology, RPM will complete the production of the following reports

- *Managing Reproductive Health Supply: The Cost Estimate Strategy* (in preparation)
- *Managing Reproductive Health Supply in Kenya* (in preparation)

Expected Outcomes

Upon successful completion of these activities, RPM anticipates the following outcomes

- The CES, a methodology for improving the availability and management of reproductive health commodities will have been tested
- Further tests of the CES tools will ensure the methodology is applicable in different settings and circumstances
- Donors will have access to the CES tools and information to support the preparation of the Cairo +5 conference

RPM Support for Strategic Objectives

This work directly supports USAID's second strategic objective in Population and Health, which is "increased use of safe pregnancy, women's nutrition, family planning and other reproductive health interventions" by identifying ways to improve the availability and access to safe, effective and affordable reproductive drugs, medical supplies and basic equipment.

RPM response to Evaluation Team Recommendations

This plan of activities responds to the Evaluation Team recommendation that RPM "continue to undertake operations research as related to drug issues in terms of reproductive health, [and] should complete this study as soon as possible and disseminate the findings and methodology, and begin to identify possible applications in other program areas." This operations research is also country-specific, as recommended by the Evaluation team and promotes the integration of different services.

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix.

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is 20 person months, at an approximate cost of \$322,765 This cost will be paid from RPM core funds

Leverage of Other Funds and Resources RPM expects to negotiate an agreement with USAID Missions to cover local implementation costs, including equipment, disbursements to local organizations, and costs associated with participant training and workshops

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
A Coordination							
1 Home office technical coordination		EB	0 5	DC Bos x 3 times			
		MM	0 25				
		JM	0 15				
2 Program management		TF	1	DC Bos x2 times			
3 Home office administrative coordination		VDP	4				
B Refine the CES							
1 Carry out informative visit to Peru and Bolivia		MPS	0 25	Bos Lima1 wkx2times		data collectors 2	Other Expense 3
2 Contact INRUD Thailand and INRUD Indonesia to explore collaboration develop plan for applying the CES		TF	0 25	Bos Jakarta2wkx		data collectors 2	Other Expense 3
3 Prepare plan and budget for country studies		TF	0 1				
4 Travel to Thailand or Indonesia for launching country specific estimate		TF	0 5	Bos Jakarta2wkx2times			
		TBD 1	2				
5 Travel to Peru or Bolivia for launching country specific estimate		MSP	0 5	Bos Lima2wkx2times			
	2 Country specific database	TBD 1	2				
C Expand CES							
1 Create normative cost estimate for other RH services		TF	0 25				
		MPS	0 5				
		DD	0 25				
2 Explore interface with other RH costing tools		MPS	0 5				
		DD	0 5				
		SS 4	0 25				
D Disseminate cost information rational management options and CES methodology							
1 Organize brown bag presentations		TF	0 05				
2 Prepare electronic conference		CV	0 25				
3 Moderate electronic conference		EB	0 5				
		MPS	0 1				
		DD	0 1				
		TBD	0 5				
4 Prepare presentations and slideshow for NCIH APHA		EB	0 25				
5 Prepare brochure fact sheet etc	Information package	TDB	0 15				
		VDP	0 25				
6 Prepare CES report	Report	EB	0 25				
		TF	0 45				
		DRD	0 25				
7 Prepare CES Guide	Guide	TF	0 25				
		MPS	0 25				
		DRD	0 25				
		DD	0 25				
8 Prepare and present Kenya report	Report Workshop	TF	0 75	Bos NBI x 1			
		MPS	0 75	Bos NBI x 1			
		DD	0 5				
		DRD	0 25				

III DEVELOPMENT OF MANAGING DRUG SUPPLY TRAINING MATERIALS WORK PLAN

A Background

The first edition of *Managing Drug Supply* is the best-known and most widely used reference on pharmaceutical management in the world. The second edition of *MDS* has been thoroughly revised and updated with lessons learned from the last 15 years. The second edition is larger and more comprehensive than the first, and will likely be even more widely distributed, especially after it is translated into Spanish, French, and Russian. This work plan's focus is on developing the basic training materials based on the second edition of *MDS*, as well as a series of case studies to be used as a teaching tool to accompany these materials.

The project to develop these materials is a joint effort between MSH and the World Health Organization's Drug Action Programme (WHO/DAP).

B Plan

Overall Strategy

The goal of this project is to create a companion volume for *MDS-2*, composed of training materials suitable for short courses in drug management and integration into an undergraduate or graduate pharmacy/pharmacy technician course syllabus. Dr. Maria Miralles will lead the MSH part of this work and Dr. Sam Muziki will take the lead for WHO/DAP. MSH and WHO will involve other collaborating institutions in the activity, including pharmacy schools from the US, Europe and developing countries, and selected country-level essential drugs programs. The following potential individuals and institutions have been identified: University of Nairobi, Kenya, Gadjah Mada University, Indonesia, Aberdeen University, South African Essential Drugs Programme, Hugh Kabat, University of New Mexico, President of the American Association of Colleges of Pharmacy, and the University of Maryland at Baltimore.

Planned Activities

- 1 A Working Group will be established by March 1998 and meet in April 1998 in New Orleans in coordination with the World Congress on Pharmaceutical Education. At this meeting, the Working Group will agree on formats, priorities and procedures for developing and testing materials, and assign responsibilities among group members.
- 2 Materials' development and testing will proceed over a 12 month period. Materials will be developed by designated writers from MSH and WHO staff, and then tested by participating group institutions as the materials are ready. The testing institutions will prepare detailed comments on the testing experience and provide recommendations for revision.
- 3 A second Working Group meeting will be convened (see 1999 Work Plan) to discuss results of testing and recommendations for revision. Materials will be revised by MSH and WHO over a three month period, and revised materials will be turned over to the publisher for hard copy publication.
- 4 The materials may be published in various formats besides hard copy manuals. For example, MSH and WHO will evaluate the feasibility of various forms of electronic publication (CD-ROM, WWW, etc.) during the course of the collaboration.

Intermediate Outputs

- 1 The Working Group meeting in April 1998, will result in a detailed plan for action for drafting new sessions and case studies, and field test protocols and funding sources for the field tests will be identified
- 2 Drafts of 24 sessions will be completed by the end of September 1998

Expected Outcomes

These materials have wide applicability in the RPM project. The RPM project has already extensively used the original training materials from *MDS*, translating them into Russian and Portuguese for the Russia and Mozambique country programs, respectively. The Zambia country program is planning to conduct district-level training courses using this material, and after translating them into Spanish, the materials will be useful for the new decentralized drug management system in Ecuador. The training materials can also be applied in the planned workshops in Peru for the Project 2000. Once completed, the training materials can be disseminated as needed, as well as translated into additional languages.

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix.

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is eight person months, at an approximate cost of \$97,132. This cost will be paid from RPM core funds.

Leverage of Other Funds and Resources The project to develop these materials is a joint effort between MSH and WHO/DAP. It is unclear at this time the extent of WHO participation in funding of Working Group activities or field testing.

ILLUSTRATIVE RPM DEVELOPMENT OF MANAGING DRUG SUPPLY TRAINING SERIES (2nd Edition) WORK PLAN MATRIX (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
1 Materials development and testing	Draft MDSTraining Materials:	MM	3	DC NEW ORLEANS-DC	WHO-DAP	Graphics person Editor	
		CK	2.75				
		DL	0.25				
		JR	0.25				
		JB	0.5				
		EB	0.15				
		TS	0.05				
		JM	0.5				
TBD may require assista	1						
	8.45						

IV IMCI PROGRAM WORK PLAN

A Background

The Integrated Management of Childhood Illness (IMCI) is a health promotion strategy designed to reduce global mortality and morbidity associated with the major causes of disease in children and to promote their healthy growth and development. The strategy involves the case management of the five most important causes, globally, of childhood deaths: acute respiratory infection (ARI), diarrhea, measles, malaria and malnutrition, and of common associated conditions.

The World Health Organization, Division of Child Health and Development (WHO/CHD) began implementation of IMCI in 1996. As part of its operations research agenda, WHO/CHD has identified research on improving the supply and management of essential drugs and vaccines as a critical part of improving the health system. In response to the need for support in improving IMCI drug management, the Pan American Health Organization (PAHO), USAID, the BASICS Project and RPM held a number of discussions that led to the formation of the Latin American and the Caribbean (LAC) Regional IMCI Initiative.

In support of LAC regional IMCI activities, PAHO, BASICS and RPM have collaborated to develop an IMCI Drug Management Assessment Manual that can be integrated into the IMCI planning process. The purpose of this indicator-based Manual is to assist the user in assessing those aspects of the drug management system that are critical to ensure the availability and proper use of drugs and supplies essential to IMCI. The complete assessment is built around three complementary, but conceptually independent, studies: Logistics Management Study, Prescribing Practices Study, and Dispensing Practices Study. Each study uses specific indicators to measure the performance of a particular aspect of the IMCI drug supply system.

DMP/RPM is also interested in developing its Pharmaceutical Analysis Software System (PASS) into a practical, self-assessment problem-solving tool that others may use to support implementation of IMCI. The IMCI initiative is an opportunity to further test and refine PASS. Ultimately, PASS should be able to create a rapid assessment data summary, incorporate data and harmonize with INRUD/WHO drug use indicators and all of the Patient Access and Drug Utilization indicators from the Rapid Assessment Manual, and create morbidity-specific summaries. The morbidity-specific summaries should, at a minimum, include 1) drugs by therapeutic category, and 2) cost per encounter compared with standard treatment norms.

Ecuador was the site agreed upon for field testing in November 1997. For the purposes of the initial field test, drug prescribing in relation to ARI and diarrhea was assessed. Four PAHO essential drugs program (EDP) representatives from the countries of Nicaragua, Honduras, Bolivia, and Peru were invited to Ecuador to participate in the field test. The country representatives received training in how to use the Manual and participated in testing of the study data collection methodologies.

The primary objectives of the Ecuador field test were to

- test the "user-friendliness" (i.e., lay-out, language, clarity, etc.) of the Manual,
- test the data collection methodologies,
- determine if the data collection forms were appropriate for the type of data sought,
- determine if PASS is useful for tabulating and organizing the drug prescribing data, and
- expose the Manual to the intended end users and get their feedback on its use.

B Plan

Overall Implementation Strategy

RPM's IMCI initiative addresses two technical areas, namely procurement/logistics and drug information/rational use. RPM's support for IMCI is through an operations research activity focused on developing a tool, or manual, to conduct diagnostic, indicator-based assessments and the subsequent technical interventions that may be proposed based on the country-specific assessment findings.

For FY98, activities will focus on follow-up activities to the initial Ecuador field test and further field testing and refinement of the IMCI Drug Management Assessment Manual. Depending on the results of the initial field test, the Manual will be revised and may be tested again in up to three additional LAC countries (Honduras, Bolivia, and Peru). These activities will likely involve RPM staff, outside consultants, and local NGOs when feasible. RPM will continue to collaborate with BASICS and PAHO for these activities during FY98.

Planned Activities

1 Procurement/logistics and drug info/rational use

- Compilation and analysis of the Ecuador field test data will be performed by RPM. RPM entered into a subcontract with CEPAR, a local health care consulting NGO, to conduct data collection in Ecuador. CEPAR was responsible for training data collectors, collecting data for the Logistics and Prescribing studies, entering the data into PASS and EPI-Info, and developing a detailed process evaluation report of the experience. Training of data collectors and field data collection took place in December 1997. Data entry and development of a process evaluation report is currently ongoing and the data is expected to be submitted to RPM in mid-February. Completing data analysis is dependent on timely completion of data entry by CEPAR. RPM paid CEPAR \$16,000 for this activity.
- Revisions to the Manual are estimated to be completed during the month of February 1998. The goal is to have the Manual ready for the second phase of field testing by mid-March 1998.
- The countries proposed for the second phase of field testing include Honduras, Bolivia, and Peru. It is proposed that the next phase of testing be divided into two parts as follows:
 - Part I - Test the revised Manual (all three studies) in one of the three proposed countries, possibly Bolivia. As in Ecuador, this part will only test drug prescribing in relation to ARI and diarrhea. The date proposed for this field test is April 1998. After data collection, the data will be analyzed.
 - Part II - Revise the Manual to include the additional IMCI conditions. Testing the Manual in either of the remaining two LAC countries, including all three studies and all five core IMCI conditions, would take place during the fourth quarter of 1998.

The further revision and testing of the IMCI Drug Management Assessment Manual will continue to be in collaboration with PAHO and BASICS. It has not been determined how much support for this activity is available from BASICS, nor has it been determined how much local, country-level support is available to fund further field testing. PAHO can only commit the participation of its EDP staff in Bolivia, Honduras, and Peru. Please note that in the Work Plan Matrix and Time Line, "data collectors" under the outside resources column refers to a local health care NGO similar to CEPAR, the Ecuador NGO.

- Two members of RPM will attend the PAHO meeting in July 1998. RPM will use this as an opportunity to present data from the two field tests (Ecuador and the part I country mentioned above). The meeting is tentatively scheduled to take place in Ecuador.
- Final revisions to the Manual are planned based on the Part II country assessment results. The Manual would then be available in English and Spanish.
- Based on the results of field testing, the IMCI drug management assessment tool and methodology will be packaged and presented in a series of technical workshops for trainers and responsible officials of the LAC region. Training workshop topics will be developed based on needs identified in the assessment, such as organization of drug supply, quantification techniques, improving prescribing practices, improving dispensing practices among drug retail sellers, etc. This activity is not included in the work plan and time line matrix because of the uncertainty of what it will involve and when it would actually take place. However, it is a follow-up activity to the assessment that PAHO and BASICS have requested.
- To facilitate dissemination of the IMCI drug assessment tool, following the second phase (Part I) of field testing, the Global Bureau, Africa Bureau, and WHO-Afro will be approached about implementing the IMCI Drug Management Assessment tool in other countries.

Expected Outcomes

If the activities outlined in this work plan are successful, the following outcomes should be achieved:

- A comprehensive IMCI drug management tool to assess the status of the pharmaceutical system, including strengths and weaknesses, for managers and donors.
- Provide data on availability and prescribing practices of IMCI drugs and supplies in assessment countries.
- Identify possible ways to improve IMCI drug management (availability, treatment, and cost) and, once the baseline assessment is performed, provide a tool for monitoring changes in systems and the impact of interventions.
- Transfer self-assessment technology by creating country-based operations research capacity.
- Improve IMCI prescribing practices by identifying specific problem behaviors that should be targeted when designing and planning interventions.

RPM Response to Evaluation Team Recommendations

The 1997 RPM evaluation team outlined several recommendations in its final report concerning core activities such as IMCI. The IMCI work plan addresses these as follows:

- Regarding operations research, the team recommended that "RPM should continue to engage and collaborate in OR, focusing project resources on country-specific studies that would directly benefit country programs." It is the intent of RPM's IMCI initiative to address this recommendation by conducting country-specific field test assessments, sharing the results of the assessment with country programs, and working at the country level to develop training workshops, etc., in response to assessment findings.
- For tools development, the evaluation team recommended that "the project should continue to develop documents and manuals, both for specific countries and for general applicability. As with operations research, the project should continue to closely coordinate its plans for producing materials of general applicability with other international entities." From the perspective of OR and tools development, RPM continues to work with the BASICS project and PAHO in further refinement of the IMCI drug management assessment tool. In addition, RPM attends international IMCI OR meetings coordinated by WHO/CHD and USAID/Global to share experiences and information.

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix.

D Resource Inputs

RPM's Level of Effort and Funding The Ecuador field test activity was supported with funding from BASICS with an approved budget of \$98,034 of which approximately \$95,570 will have been spent by the end of February 1998. This did not include the \$16,000 subcontract that was paid by RPM to CEPAR for data collection and data entry into PASS. Excluding the Ecuador field test support from BASICS, RPM has invested \$58,838 from June-September 1997 (FY 1997) and \$80,032 from October-December 1997 (FY 1998) in the IMCI initiative.

The estimated level of RPM's effort for this activity this year is ten person months, at an approximate cost of \$165,668. This cost will be paid from RPM core funds.

Leverage of Other Funds and Resources As mentioned above, it has not been determined how much additional support for this activity is available from BASICS. PAHO's contribution will be the participation of its local EDP staff in Honduras and Bolivia. USAID, PAHO, BASICS, and RPM have all acknowledged that the country-level assessments must be supported by local funding from the USAID missions or other international donors working in the country. The details of how to obtain the funding have not been finalized.

ILLUSTRATIVE RPM IMCI WORK PLAN MATRIX FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
1 Home Office Support		DK TS	0 5 0 05				
2 Analysis of Ecuador field test data	Assessment results Evaluation of PASS	DK, JM, DN VP	0 25,0 15,0 25 0 5			CEPAR	
3 Revisions to Manual	Manual for second phase - part I	DK JB, EB JM, VP, SP PI	0 25 0 25, 0 15 0 15,0 15,0 5 0 5		PAHO BASICS	translator	
4 Second phase of field testing- Part I (possibly Bolivia)	Country Assessment	DK, DN EB, VP, SP JB	75, 1 0 25, 0 5, 0 5 0 25	Quito-La PazX2 DC-La PazX1	PAHO BASICS	data collectors interpreter	
5 Analysis of Bolivia field test data	Assessment results	DK, JM, DN VP	0 25,0 15,0 25 0 15				
6 Revisions to Manual	Manual for second phase - part II	DK JB, EB, VP JM SP PI	0 25 0 25,0 25,0 15 0 15 0 5 0 5		PAHO BASICS	translator	
7 PAHO Meeting	trip report and workshop proceedings	DK, EB SP	0 25, 0 25 0 25	DC-QuitoX1	PAHO BASICS	interpreter	

V STATE OF THE ART TRAINING (SOTA) ON DRUG MANAGEMENT FOR PUBLIC HEALTH WORK PLAN

A Background

The objective of State of the Art Training (SOTA) is to introduce USAID staff to the inter-related components of drug and vaccine management and their relationship to the achievement of public health objectives. The project's aim is to develop the training materials (session outlines, readings), coordinate special speaker presentations, and produce proceedings from the course.

B Plan

Overall Strategy

This SOTA will consist of a one and a half day survey style course to cover important topics in drug and vaccine supply management. The course materials will be developed by MSH technical staff in collaboration with invited experts in the style of standard MSH drug supply management training materials. Trainer materials will include a session planning guide and overheads. Participant course materials will include a one to two page summary sheet for each session outlining the session's purpose and content, objectives and a bibliography. Formal presentations will be complemented by case studies when appropriate and key readings.

The course will be held in the Washington, DC area in a venue selected by USAID.

Planned Activities

- 1 Participant materials will be developed and speakers arranged to cover the following topics

Overview of the drug supply system This session provides the conceptual framework for understanding how drugs are supplied. The main components of the drug supply system (selection, procurement, distribution, use) are described along with key issues within each component for the optimal functioning of the system.

Challenges in drug supply management Many primary health care services are faced with new challenges presented by health services integration, health sector reform and decentralization. This session focuses on the implications of these for drug supply management, including the financing of drug supply, disease management, performance monitoring and evaluation, and the role of the private sector in assuring the availability of essential drugs.

Promoting rational drug use This session focuses on the use component of the drug supply system, emphasizing the importance of mutual understanding and collaboration between managers and clinicians to assure not only the availability of essential drugs but, more fundamentally, their appropriate use. This will be presented in the context of increasing concerns about antimicrobial resistance. Topics will focus on developing research agendas and choosing and implementing interventions aimed at improving drug use.

Developing sustainable immunization programs This session will focus on the unique issues relative to the sustainability of immunization programs given the new challenges in health care finance, decentralization and integration of services

The role of drug information This session focuses on the importance of access to objective, current, and unbiased drug information in drug supply management Presented are sources of such information, dissemination, and training in the interpretation and use of such information

- 2 Produce the proceedings and materials in hard copy and in electronic format as WordPerfect for Windows 6.1 for USAID information dissemination purposes

Expected Outputs

The project's goals are to develop the training materials (for trainers and participants), including session outlines and supplemental readings, coordinate special speaker presentations, and produce proceedings from the course These materials will be designed and produced so that they may be used in a variety of settings as the need arises

Expected Outcomes

USAID staff will be sensitized to the critical role of good drug and vaccine management in the achievement of public health objectives Staff will learn about how these are being addressed in other projects and may assess how their own programs and projects may benefit by improvements in their drug management components Staff will also become familiar with important support materials, including *Managing Drug Supply* text and training series

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is two person months, at an approximate cost of \$28,882 This cost will be paid from RPM core funds

ILLUSTRATIVE RPM STATE OF THE ART TRAINING ON DRUG MANAGEMENT FOR PUBLIC HEALTH WORK PLAN MATRIX (F

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
A Development 1 training/workshops	SOTA training proceedings	MM	0 5		USP		
		DL	0 15				
		TDB (perhaps	0 25	Boston-DC-Boston for one day			
		CK	0 25				
		TBD (someon	0 25	Phoenix-DC Phoenix for one day			
		MC	0 25				
		TS	0 05				
		EB	0 1				
			1 8				

VI PHARMACEUTICAL MANAGEMENT WORKSHOPS WORK PLAN

A Background

Through its country programs and core-funded activities, the Rational Pharmaceutical Management Project (RPM) has developed a variety of tools and methodologies to solve pharmaceutical sector problems. Many issues addressed by RPM, and the resulting interventions, have cross-cutting implications in areas such as reproductive health, child survival, HIV/AIDS, polio and infectious disease.

An increase in the demand for RPM services, as indicated by the number of country programs now being implemented, and the number of core activities, indicates a growing interest in drug management issues. This work plan, in which RPM proposes to conduct a series of workshops for Global Bureau staff, was developed in response to that interest.

B Plan

Overall Implementation Strategy

RPM proposes to conduct several workshops for Global Bureau staff, and other interested organizations, at a venue to be decided by USAID during the life of the project. The first two will be conducted during the time period addressed in this plan. RPM staff will develop workshop materials and make most of the presentations. Expert consultants will be used where appropriate. RPM tools will be disseminated at the workshops.

Planned Activities

RPM plans to conduct two workshops in the time period covered in this plan. A list of topics which RPM is considering for inclusion in the series follows:

- 1 Pharmacoeconomics and cost-effectiveness
- 2 Integrated Management of Childhood Illnesses (IMCI)
- 3 Drug management software applications
- 4 Rapid pharmaceutical sector assessments
- 5 Implementation of formulary systems
- 6 Improving drug supply management at the district level
- 7 Costing Reproductive Health commodities
- 8 Promoting Rational Drug Use
- 9 Drug Procurement
- 10 Antimicrobial Resistance

Topics can be combined where it is appropriate and desirable to do so. The final workshop schedule will be decided during the first quarter of 1998 by RPM and the CTO, although RPM is proposing to address pharmacoeconomics and the rapid assessment process in the first workshops. The workshops will begin after RPM conducts the State of the Art (SOTA) Training on Drug Management for Public Health, tentatively scheduled for the first half of 1998.

Expected Outcomes

Through this series of workshops, which is expected to continue during FY99, USAID Global Bureau staff will be more aware of the complexity of pharmaceutical systems, the financial and clinical implications of irrational selection, procurement, distribution and use of drugs, and how drug management activities can enhance other USAID initiatives

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is two person months, at an approximate cost of \$31,054 This cost will be paid from RPM core funds

Leverage of Other Funds and Resources Since the exact content of the workshops has not been decided, it is not clear if resources will be provided by other organizations

ILLUSTRATIVE RPM PHARMACEUTICAL MANAGEMENT WORKSHOPS WORK PLAN MATRIX (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
I Development							
1 Training/Workshops Pharmacoeconomics Workshop	Training materials	TS EB LB EA SPAssistant	0 15 0 05 0 25 0 25 0 5	TC-DCX2 days TC-DCX2days	University of Arizona	Copies \$500	
2 Training/Workshops Rapid Assessment Workshop	Training materials	TS JM MG TM SPAssistant	0 15 0 25 0 15 0 1 0 5			Copies \$500	

VII TECHNICAL LEADERSHIP/MEETINGS PROGRAM WORK PLAN

A Background

The Rational Pharmaceutical Management Project (RPM) regularly participates in conferences and meetings, including the National Council for International Health (NCIH) and American Public Health Association (APHA) annual meetings. Other meetings in which RPM had a significant role in 1997 include the International Conference on Improving Use of Medicines, the Conference on WHO Guidelines on Drug Donations and a meeting at WHO on Pharmaceutical Sector Indicators. RPM would like to increase its level of participation at national and international meetings during the final two years of the project to present and disseminate information on the project.

B Plan

Overall Strategy

RPM plans to attend several meetings during this time period to present and disseminate RPM-related information, and interact with other donors and organizations. While it is not possible to make a definite list of meetings at this time, the following possibilities are being considered:

Public Health Meetings

- National Council for International Health (NCIH)
- American Public Health Association (APHA)

Pharmaceutical Meetings

- Man and Drugs (Russia)
- International Pharmaceutical Federation (FIP)
- International Society of Pharmacoepidemiology (ISPE)
- Drug Information Association (DIA)
- World Congress on Clinical Pharmacology
- Association for Pharmacoeconomics and Outcomes Research (APHOR)

Meetings in Related Fields

- International Clinical Epidemiology Network (INCLIN)
- Cochrane Colloquium Meeting
- International Society for Technology Assessment in Health Care (ISTAHC)
- Association for Health Services Research

Planned Activities

For purposes of budgeting this portion of the core-funded portion of activities, an illustrative set of six meetings was selected, taking place at local, national, and international venues.

Expected Outcomes

The main outcome of RPM participation in national and international meetings, such as those proposed in this plan, will be the dissemination of information and tools on RPM activities and accomplishments to a large audience

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is three person months, at an approximate cost of \$64,017 This cost will be paid from RPM core funds

Leverage of Other Funds and Resources RPM does not anticipate leveraging other funds or resources for this set of activities

ILLUSTRATIVE RPM TECHNICAL LEADERSHIP WORK PLAN MATRIX (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
I Development							
Coordination		EB	0 1				
1 IEC/social marketing							
NCIH Annual Meeting		AZ	0 35				
		VDP	0 25				
Cochrane Colloquium Meeting		DL	0 35	DC-AmsterdamX1			
		SP	0 25				
ISPE Annual Meeting		DL	0 35	DC-AmsterdamX1			
		SP	0 25				
APHOR Annual Meeting		JR	0 35	DC-Philix1			
		SPAssistant	0 25				
Meeting at WHO TBD		JR	0 35	DC-GenevaX1			
Meeting at WHO/Euro TBD		TS	0 25	DC-CopenX1			
			3 1				

VIII RATIONAL DRUG USE WORK PLAN

A Background

In April 1997 RPM co-sponsored the First International Conference on Improving Use of Medicines (ICIUM), held in Chiang Mai, Thailand, in partnership with the Applied Research on Child Health Project (ARCH), WHO Action Programme on Essential Drugs (WHO/DAP), The International Network for Rational Use of Drugs (INRUD), and the United States Pharmacopeia (USP) ICIUM was attended by 272 researchers, policy makers, and health managers from 46 countries representing universities, ministries of health, non-governmental agencies, consumer organizations, donors, and the pharmaceutical industry

The conference identified key areas for research on improving professional prescribing and dispensing practices, improving community use of medicines, and developing effective pharmaceutical policies and regulations In line with these priority areas, ARCH, INRUD, RPM, and WHO/DAP issued a joint call for proposals emphasizing interventions to improve professional practices, especially interventions aimed at improving use of antibiotics and antimalarials, interventions targeting chronic diseases, and interventions in hospital and private sector settings In response to this call, 88 proposals were received The proposals have been assessed independently by technical representatives of the partner organizations in order to select innovative proposals The selected proposals will be included in a joint initiative to develop, implement, evaluate and facilitate dissemination of successful drug use interventions In addition, the initiative will work to develop several African "centers of excellence" in improving the use of medicines to serve as hubs in an African network of drug use research and policy development

RPM will provide technical assistance for the development of the most innovative and relevant proposals, so that they can compete for funding by interested agencies Some of the research projects may be funded by the collaborating organizations

Established in 1989, INRUD is an action research network in which multi-institutional and multi-disciplinary country core groups in 10 African and Asian countries work together to develop, test and disseminate interventions to improve the use of medicines The network currently includes Bangladesh, Ghana, Indonesia, Nigeria, Nepal, Philippines, Tanzania, Thailand, Uganda, and Zimbabwe Technical assistance is provided by Management Sciences for Health and Harvard Medical School in the USA, Karolinska Institute in Sweden, the University of Newcastle in Australia, and WHO/DAP in Switzerland The Danish Agency for International Development (Danida) has been the primary supporter of INRUD since its inception, although many multilateral and bilateral agencies have supported its training and research activities, including USAID Danida has expressed to the INRUD Coordinator its interest that other agencies provide increased support to the network RPM welcomes this opportunity to establish closer links and collaboration with the INRUD country core groups and expand its role in promoting rational drug use beyond the current RPM country programs RPM can also provide important technical and administrative resources to further strengthen this action research network

B Plan

During this period RPM will conduct two proposal development workshops in collaboration with ARCH, INRUD, and WHO/DAP. The first workshop will be held in Yogyakarta, Indonesia, hosted by the Centre for Clinical Pharmacology and Drug Policy Studies. It will be conducted in April for up to 20 participants. It is expected that up to 10 research proposals will be fully developed, some of which will be supported by the partners in this capacity building and research initiative. Funding to implement the research projects is expected from various sources, including USAID, Danida, WHO/DAP, and other agencies.

RPM and its partners propose to conduct the second workshop in Africa between July and September. The Centre for Tropical Clinical Pharmacology and Therapeutics in Accra, Ghana, is expected to host the workshop. This activity should produce up to 10 research proposals to be funded through a mix of sources including the USAID Africa Bureau, WHO, and Danida.

RPM will also provide technical and administrative support to INRUD through its secretariat at Management Sciences for Health. From its secretariat, technical and support staff will maintain correspondence with INRUD country core groups, network support institutions, and provide assistance by correspondence to those who seek such assistance in developing and implementing drug use research.

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix.

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is five person months, at an approximate cost of \$82,192. This cost will be paid from RPM core funds.

Leverage of Other Funds and Resources RPM has submitted a joint proposal with ARCH, INRUD and WHO/DAP to the Africa Bureau for the amount of \$684,000 over three years to support local research implementation costs, including equipment, disbursements to local organizations, and costs associated with participant training and workshops. INRUD has committed US\$65,000 to provide technical support, support researchers' participation in one of the workshops and also fund one to two research projects. Another proposal for the amount of \$250,000 over two years is being submitted to the Multilateral Initiative on Malaria in Africa (MIM) of the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR).

ILLUSTRATIVE RPM RATIONAL DRUG USE WORK PLAN MATRIX FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
A Drug info/rational use							
1 Proposal development workshop Asia	Fully developed proposals	MM VP SP	0 65 0 75 0 40	DC Yogyakarta 2 weeks DC Yogyakarta 2 weeks	ARCH (HIID) INRUD (MSH) WHO DAP Centre for Clinical Pharmacology and Drug Policy Studies		
2 Proposal development workshop Africa	Fully developed proposals	MM VP SP	0 65 0 65 0 20	DC Accra 2 weeks DC Accra 2 weeks	ARCH (HIID) INRUD (MSH) WHO DAP Centre for Tropical Clinical Pharmacology & Therapeutics Makerere University Uganda Centre for Tropical Disease Research Zambia		
3 Technical coordination/collaboration		DL VP SP TS EB	1 00 0 35 0 45 0 15 0 05 5 3		Danida Denmark WHO DAP Geneva Karolinska Institute Sweden Newcastle University Australia INRUD country core groups		

IX POLIO ERADICATION INITIATIVE PROGRAM WORK PLAN

A Background

In 1988 the World Health Assembly committed the World Health Organization (WHO) to the global eradication of poliomyelitis by the year 2000. To achieve eradication, all countries have to be certified as polio-free, by providing virological and epidemiologic evidence of having eliminated indigenous wild poliovirus circulation as established by the WHO. Furthermore, to achieve polio eradication, the WHO recommends the following strategies¹

- 1 High, routine immunization coverage with oral polio vaccine (OPV),
- 2 National immunization days (NIDs),
- 3 Acute flaccid paralysis (AFP)² surveillance and laboratory investigation, and
- 4 Mopping-up immunization campaigns

The strategies implemented in each country vary according to the country's progress towards polio eradication. In polio endemic countries, priority is given to NIDs which are implemented to interrupt the wild poliovirus transmission in endemic areas, but are not meant to replace routine immunization. Similarly, in areas with focal transmission, mopping-up campaigns are conducted in the high risk area(s) following an outbreak or specific reported case. However, the 1996 WHO Global Polio Eradication action plan recommends that all countries strengthen their routine immunization and AFP surveillance programs. Routine immunization programs aim to administer four doses of OPV in the first year of life to at least 90% of infants, and should be included as part of the recommended Expanded Programme on Immunization (EPI). AFP surveillance system report and investigate any case of AFP in a child less than 15 years suspected of polio diagnosis and detect progress towards eradication.

USAID's Polio Eradication Initiative (PEI) has identified the need to strengthen routine immunization and acute flaccid paralysis surveillance systems. Improvement of cold chain and logistics management have been recognized as crucial to sustaining routine systems, therefore, the PEI must ensure adequate supplies of vaccines, laboratory supplies, cold chain and reverse cold chain in order to support routine immunization. In addition, the PEI is facing challenges in meeting these goals in the context of the recent trend towards decentralization of the supply system and the move towards integrated management strategies, such as IMCI. These trends will impact the planning, policy, management, and implementation strategies of PEI in Africa, where many countries still have endemic levels of polio.

RPM has extensive experience in supply systems reform and policy development that promote rational logistics management and improved health outcomes which is particularly relevant to PEI strengthening. RPM has developed several indicator based rapid assessment tools which can be revised to focus on PEI. In addition, RPM has experience in developing assessment, and management tools in the context of decentralization and integrated management. For example in Ecuador RPM has worked closely with the MOH and international organizations on the implementation of a Decentralized Pharmaceutical Management Systems based in the

¹ WHO Global Programme for Vaccines and Immunization, Expanded Programme on Immunization. Global poliomyelitis eradication by the year 2000. Plan of action. WHO, Geneva, 1996

² AFP, including Guillain-Barre syndrome, in a child aged 15 years or less is an indication of poliomyelitis

Health Areas and related policy reform In Zambia RPM has worked with the district health boards to produce the District Integrated Logistic's Self Assessment Tool (DILSAT), a self assessment tool for the management of drug supply In 1998 RPM proposes developing a focused assessment tool and review of a polio eradication programs' supply and surveillance systems in the context of decentralization of supply systems and IMCI

B Plan

Overall Implementation Strategy

The RPM work in support of the Polio Eradication Initiative's (PEI) goal is to provide information to policy-makers and planners about issues to consider when implementing the initiative in the context of decentralization of supply systems This goal supports USAID's strategic objective of increasing the use of key child survival and health interventions (SO3) To this end RPM will work in the technical area of procurement/ logistics The proposed operations research activities include identifying how decentralization of supply systems and IMCI strategy affects the planning and implementation of PEI RPM will carry out a case study of Zambia to identify problems that prevent the efficient management of PEI This work should complement the ongoing RPM activities of improving drug procurement and supply management RPM and MSH staff will carry out this study with help from outside services by local consultants RPM will seek to collaborate with local counterparts, these potential collaborator include MOH, BASICS, UNICEF, and WHO

Planned Activities

The activities proposed for 1998 are all operations research activities in the technical area of **procurement/logistics** and include

1 Identify if and how decentralization of supply systems affects the planning and implementation of PEI

To identify the implications of decentralization on PEI planning RPM plans to conduct targeted interviews with PEI managers or decision makers, including interagency committee members, at the regional, country and district level that are responsible for PEI planning, coordination and implementation committees

2 Case study of Zambia

RPM proposed conducting a case study of Zambia's PEI problems to identify problems that prevent the efficient management of PEI in the context of decentralization and implementation of the IMCI strategy This is timely because Zambia is in the process of decentralization of the health sector and the districts are currently preparing their annual plans which must incorporate PEI activities Zambia was also chosen as the case study site because of RPM's ongoing activities there which will facilitate local support for the study, allow for the activity to be carried out within the programmed time, and encourage continuity in the implementation of the findings of this study Potential collaborators include BASICS Zambia project, UNICEF, and WHO

3 Dissemination of reports

In accordance with the recommendations of the evaluation, RPM will seek to disseminate the PEI management recommendations to officials in both district health boards and the central health board in Zambia, and to other countries undergoing decentralization of supply systems and implementing PEI The findings will be presented in Washington as part of a brown bag session inviting agencies, organizations, and NGOs interested In addition, RPM will share these findings with WHO and UNICEF

Expected Outcomes

If activities outlined in this plan are successful, the following outcomes should be achieved

- A concept paper on the impact of decentralization and IMCI on the operation of PEI in Zambia
- A case study on the problems that prevent efficient management of PEI in Zambia
- Policy dialogue will have occurred regarding recommendations for PEI management in the context of decentralization and implementation of the IMCI strategy

RPM Support for Strategic Objectives

The activities presented all support USAID's strategic objective of increasing the use of key child survival and health interventions (SO3)

RPM Response to Evaluation Team Recommendations

In 1997 the RPM evaluation team recommended that RPM continue to undertake operations research as related to drug issues in terms of child survival which the both the concept paper on the impact of decentralization and IMCI on the operation of PEI in Zambia and the case study on the problems that prevent efficient management of PEI in Zambia support. In addition, the work plan outlines plans for wide dissemination of findings through presentation, and brown bags, another recommendation of the evaluation team

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is four person months, at an approximate cost of \$63,278. This cost will be paid from RPM core funds

Leverage of Other Funds and Resources As mentioned above, it has not been determined how much additional support for this activity would be available from country USAID missions or other sources. The details will be outlined in the future

ILLUSTRATIVE RPM POLIO ERADICATION INITIATIVE WORK PLAN MATRIX (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
A Procurement/Logistics Operational Research							
1 Identify if and how decentralization of the supply systems affect the planning and implementation of PEI	Concept paper	Pinell Parker Beracochea Savelli	1 25 0 25 0 05 0 05	DC-LusakaX2	TBD		Reference Materials
2 Conduct Case Study of Zambia	Case study report	Pinell Gabra Parker Beracochea	1 25 0 25 0 5 0 05	DC-LusakaX2	TBD	Data Collectors	
3 Dissemination of Findings	Presentation of findings	Pinell McFadyen Parker Beracochea	0 5 0 25 0 25 0 05	DC-NYCx1d DC-NYCx1d			

X ANTIMICROBIAL RESISTANCE PROGRAM WORK PLAN

A Background

In 1997 the Rational Pharmaceutical Management Project (RPM) co-sponsored the First International Conference on Improving Use of Medicines (ICIUM), held in Chiang Mai, Thailand. International partners included the Applied Research for Child Health Project (ARCH), the International Network for Rational Use of Drugs (INRUD), the United States Pharmacopeia (USP), and the WHO Action Programme on Essential Drugs (WHO/DAP).

The ICIUM conference identified the need to develop guidelines and performance indicators for Drug and Therapeutics Committees (DTC), a key structural component of an effective pharmaceutical management system. Although these committees have been in existence for many decades in both advanced industrialized and developing countries, materials are unavailable to assist in capacitating committee members to effectively perform their roles. Relative to an antimicrobial focus, there is a need to develop relevant skills to strengthen DTC, Antibiotics, and Infection Control Committees. The conference also recommended the development of indicators to study drug use in hospitals. Adequate studies addressing effectiveness of rational drug use interventions in developing country hospitals are sorely lacking.

The ICIUM conference identified key topics for research on improving prescribing and dispensing practices, improving community use of medicines, and developing effective pharmaceutical policies and regulations. In line with these priority areas, the partner organizations (RPM, INRUD, ARCH, and WHO/DAP) issued a joint call for proposals emphasizing the most important gaps in experience that were identified at ICIUM. Areas highlighted in the call for proposals were the need for innovative interventions to improve malaria case management, and the scarcity of well-designed interventions in hospital and private sector settings. In response to the call for submissions, 88 pre-proposals for intervention research were submitted from Africa, Asia, and Latin America. These pre-proposals have been reviewed and ranked; the partners plan to assist worthy researchers, using a structured process, to develop completed proposals and to implement and analyze their research. These studies will either be funded directly or the partners will assist the researchers in finding other sources of funding.

RPM can make a significant contribution to USAID's initiative to slow the emergence of antimicrobial resistance through research and development of tools that have general applicability for improved selection and use of antimicrobial agents.

B Plan

Overall Implementation Strategy

RPM plans to work on three major activities to improve the use of antimicrobial agents: (1) development of training materials for Drug and Therapeutics Committees, (2) development of an indicator-based methodology to assess antimicrobial use in hospitals, and (3) support antimicrobial drug use intervention research. Each of these projects will begin during FY98 and will continue into FY99. Implementation will include background literature reviews, targeted surveys, workshops, and technical and financial support for intervention studies. RPM plans to engage the collaboration of INRUD, ARCH, and WHO/DAP. The Alliance for Prudent Use of Antibiotics (APUA) would also be a potential collaborator. The Harvard Drug Policy Research Group will assist in the design of planned activities and provide direct technical assistance to the rational antimicrobial use intervention research activities.

Planned Activities

- 1 **Training modules for Drug and Therapeutics Committees, Antibiotics Sub-Committees, Hospital Infection Control Committees** RPM proposes to design, draft, and test a set of training modules aimed at members of Drug and Therapeutics Committees, Antibiotics Sub-committees and Infection Control Committees of local hospitals and at the national level. The planned activities for FY98 include a review of relevant literature and a selective survey of these committees to gather information that should be useful in designing the training modules. By the end of FY98, RPM intends to produce (1) a discussion paper on the role of these committees and the need for skills development in developing countries and (2) a draft outline of modules, stating the rationale, objectives, key content, and a preliminary list of suggested readings for each module. It is expected that key members of the INRUD network, staff of WHO/DAP, and the USP, will collaborate as technical reviewers. RPM intends to draft and test the modules in FY99.
- 2 **Indicators for measuring antimicrobial use in hospital** RPM proposes to develop a rapid assessment methodology and indicators to assess antimicrobial use in hospitals. Proposed preparatory activities include a focused literature review and survey of key researchers and INRUD members. During FY98 RPM intends to produce a draft instruction manual which would include the rationale, definition, and calculation for proposed indicators, model data collection forms and proposed methods, and techniques to collect data needed to derive the indicators. Field testing of the indicators and data collection method will be planned for FY99. It is expected that members of the INRUD network will collaborate in the field test.
- 3 **Antimicrobial drug use intervention research** RPM intends to provide technical support to two proposal development workshops in FY98 for 20 to 30 participants, in collaboration with INRUD, the ARCH project, and WHO/DAP. The first workshop will be hosted by the WHO Collaborating Centre for Clinical Pharmacology and Drug Policy Studies in Indonesia and the country coordinator for the INRUD-Indonesia Country Core Group. The second workshop is contingent on funding support requested from USAID Africa Bureau as an initiative to strengthen drug use intervention research capacity in collaboration with three African "centers of excellence", two of which participate in the INRUD network. RPM intends to provide continuing technical support to selected researchers who will carry out the study protocols developed at the workshops. RPM proposes to provide financial support for up to four intervention studies, depending on estimated costs and level of funding available. By the end of FY98, RPM work should have contributed to development of approximately 20 fully developed drug use intervention research protocols, some of which will address antimicrobial use. Technical assistance to the conduct of antimicrobial use intervention research will continue in FY99, when completion of RPM-supported studies would be expected.

Expected Outcomes

The proposed activities will begin this year and continue into the next. If successful, the following outcomes should be achieved by the end of the next fiscal period (FY99)

- Training materials will be available to strengthen capacity of Drug & Therapeutic Committees, to improve selection and use of antimicrobial drugs in developing country hospitals, and contribute to slowing emergence of antimicrobial resistance.

- A standardized methodology and indicators will be introduced, which should contribute to an increase in studies to assess antimicrobial use in hospitals, possibly leading to implementation of monitoring and intervention (Drug Use Evaluation) programs
- Capacity to undertake intervention research to improve antimicrobial drug use will be strengthened in developing countries
- A number of studies will have produced useful information on the effectiveness of interventions to improve antimicrobial use

RPM Evaluation Team Recommendations

In its report, the 1997 RPM evaluation team included a number of recommendations which are addressed by the proposed activities

- The evaluation team recommended that “RPM should continue to engage and collaborate in operations research, focusing project resources on country-specific studies that would directly benefit country programs ” RPM is a partner in the collaborative ARCH-INRUD-RPM-WHO/DAP initiative for Drug Use Intervention Research, and proposes to continue providing technical and financial support to developing country researchers to develop rigorous and relevant research protocols focusing primarily on antimicrobial drugs
- The evaluation team recommended that “RPM should also continue to develop documents and manuals, both for specific countries and for general applicability ” RPM intends to address two key ICIUM recommendations The development of training materials targeting antimicrobial use is RPM’s contribution to the need for guidelines and eventual selection of performance indicators for Drug and Therapeutics Committees RPM also intends to address the identified need to develop indicators for assessing drug use in hospitals RPM proposes to engage the collaboration of key players, such as INRUD and WHO/DAP

The proposed plan of activities are in compliance with the RPM evaluation team’s recommendation that “RPM should explore the potential of providing support for INRUD core activities and for development of a Latin American rational use network allied with INRUD ” RPM intends to support INRUD core activities with a focus on rational antimicrobial use, through research proposal development, study implementation, and data analysis under the collaborative work with ARCH, INRUD, and WHO/DAP RPM also plans to engage INRUD in the development and testing of both the training materials and the hospital antimicrobial use indicators

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Illustrative Work Plan Matrix

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is 13 person months, at an approximate cost of \$388,919 This cost will be paid from RPM core funds

Leverage of Other Funds and Resources RPM will collaborate with WHO/DAP. It is unclear at this time how much WHO/DAP will contribute to these activities, in terms of staff time, support for field activities, support for participants to research workshops and to the training activities. INRUD intends to submit proposals to Danida and other donors, requesting support for INRUD member participation in field tests and capacity building activities. The amount of resources that ARCH will contribute is not known.

ILLUSTRATIVE RPM ANTIMICROBIAL RESISTANCE WORK PLAN MATRIX (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
A Antimicrobial resistance							
Home Office Technical Support		DLee Savelli Beracochea	0 25 0 25 0 05				
1 Hospital Antimicrobial Use Indicators	Proposed indicators & methodology Draft instruction manual	DLee VPinell Sparker MMiralles COlson RPM Tech to be D RossDegnan (	1 10 2 10 0 85 0 60 0 50 0 50 0 50		INRUD WHO DAP		Budget for literature search & compilation US\$5000 Budget for questionnaire survey to DTCs and panel
Timeline						DRD sub	
1 1 Literature Review							
1 2 Formulation of indicators							
1 3 Methodology for data collection							
1 4 Data collection forms and manual							
2 Training Modules for D&T Committees	Outline of draft modules Discussion Paper	DLee VPinell Sparker MMiralles RPM Tech to be COlson D RossDegnan (	1 15 0 85 2 05 0 60 0 40 0 50 0 50		INRUD WHO DAP APUA?		Budget for literature search & compilation US\$3000 Budget for questionnaire survey US\$5 000
2 1 Literature Review						DRD sub	
2 2 Survey of DTC & relevant committees							
2 3 Draft outline of modules							
3 Intervention Research on AM Use (ICIUM)	Publications/documents Fully developed proposals Draft study reports Reports	DLee VPinell Sparker MMiralles D RossDegnan (	1 35 2 00 1 25 1 45 3 00	DC Accra 2 weeks Africa Accra 2 weeks	DIARCH INRUD WHO DAP		Studies to be funded 3@US\$25 000 each
Timeline						DRD sub	
3 1 On going Technical Support							
3 2 Proposal Development Workshop							
3 3 Studies (funded by RPM)							

XI ECUADOR PROGRAM WORK PLAN

A Background

The principal purpose of the RPM program in Ecuador through 1997 has been to provide support to the Ministry of Health in drug procurement and distribution. From 1995 to 1997, RPM has worked closely with the MOH and international organizations on the implementation of a Decentralized Pharmaceutical Management System based in the Health Areas and related policy reform. This is being accomplished through collaboration with the *Dirección Nacional de Control Sanitario y Farmacia* (DNCSF) and the *Direcciones Provinciales de Salud*.

In 1997, RPM Ecuador established a strategy of collaboration with a whole range of other civic organizations, including municipalities, schools, NGOs, universities and professional organizations. With encouragement from USAID/Quito, RPM embarked on several new initiatives including Rational Drug Use (RDU) education in primary schools, assurance of drug supplies for Integrated Management of Childhood Illnesses (IMCI) and training of private drug-sellers.

During 1997, the RPM Ecuador program developed important methodological tools which are being applied in a variety of situations. The Monitoring-Training-Planning (MTP) self-teaching modules represent an innovative training tool for decentralized health districts which can be generally applied to a whole spectrum of training needs. RPM Ecuador is currently developing applications for hospital drug management systems, good prescribing practices, IMCI and quality assurance.

The URMES (Rational Drug Use in Healthy Schools) activity, developed during 1997, marks a novel approach to public RDU education. School children are ready recipients of the RDU content as well as effective communicators of these messages to their family and friends. The program has been praised by a number of municipalities which are seeking to apply it in their own schools. The World Food Program has expressed interest in expanding the program to schools nationwide and Rotary Action (youth groups associated with Rotary Clubs into) is considering adoption of the program as a national project.

With RPM support, *Fundación Terapia* (FT), a local NGO, has developed and applied a training program in good dispensing practices for drug sellers in private pharmacies. The program prepares local professional organizations to train and certify drug sellers in coordination with national and provincial MOH authorities.

B Plan

The RPM Ecuador country program for 1998 will work in five technical areas: complete the implementation of the decentralized drug management system in health areas, IEC in rational drug use in primary schools, improvement of hospital formularies and drug management systems, support the national drug information system and the accreditation of private pharmacies with good dispensing practices in the context of IMCI. The main activity is the implementation of the decentralized system. Given the very limited resources of the MOH, RPM aims at covering as many provinces as possible in the life of the project, leaving for MOH to monitor the system. Currently activities take place in 10 provinces, but if funds permit, RPM plans to cover most of the country. Besides working closely with MOH counterparts, RPM utilizes the services of local experienced consultants to maximize the coverage of program activities to as many provinces as possible and to create a local critical mass of experts.

Planned Activities

- 1 The first phase of the decentralized drug management system is currently being implemented in 10 provinces with well over 3/4 of the total population and 2/3 of the health areas (or districts) RPM coordinators are assisting provincial MOH teams to apply the MTP modules covering the following subjects

- The Health Area Pharmacology Committee
- The Health Area Drug Warehouse and Supply System
- Medicine Chests in Health Centers and Sub-centers
- Financial Management of the Drug System and Cost Recovery
- Good Prescribing Practices
- Accreditation of Areas with Quality Drug Management

The first phase of implementation will be completed in April 1998 and resources permitting, the system will be expanded to the remaining 11 provinces, becoming operational in the whole country by the end of the year. If additional funds become available, a number of additional MTP modules have been suggested for implementation including computerization of warehouse operations and points of sale, drug use research, patient education and compliance.

- 2 In 1998, URMES (RDU education) will continue using the innovative, modular approach developed and initiated in 1997 to teach proper drug use to some 7000 children in 32 schools of the Imbabura province. RPM will assist in the development of three remaining teaching modules and will work with municipalities, local NGOs and international organizations to expand the program widely. URMES should be operating in the schools of 10 major cities and should be self-supporting by the end of the year.
- 3 RPM will support *Fundacion Terapia* to expand drug seller training activity to two more provinces and to organize collection of user fees to finance the effort permanently.
- 4 Also during 1998, RPM Ecuador will design and implement the MTP self-teaching modules for hospital drug management and formulary development. Six modules are planned and will be applied in at least two hospitals by the end of the year. The method and materials will be disseminated to MOH and IESS (social security) hospitals nationally by the end of the year.

All of the above methodologies will be prepared for translation and dissemination through other RPM country programs as necessary.

Expected Outcomes

Upon successful completion of these activities, RPM anticipates the following outcomes

- Ecuador will have a functional decentralized drug management system that enables health districts to efficiently manage the supply cycle and related funds
- Provincial authorities will have a system for monitoring and supporting district staff
- Along with decentralization of the supply system, provincial and county authorities will have an IEC strategy to raise the knowledge and skills of the community about the rational use of drugs i.e. URMES. This strategy is expected to be financially sustainable.

- Provincial authorities will have a tool for giving accreditation to private pharmacies that have participated in training on good dispensing practices

RPM Support for Strategic Objectives

Besides contributing to global strategic objectives, RPM is also contributing to the following USAID/Ecuador mission's strategic objectives

- SO 1 - Improve the quality of primary and secondary services by assisting in the design and implementation of a rational and decentralized drug management system RPM is assisting the MOH to implement standards for accreditation of pharmaceutical services that achieve access, quality and self-financing goals
- SO 2 - Expand access to PHC services by assisting in decentralization and in redefining the role of national and provincial authorities RPM's activities contribute to ensuring that PHC drugs are available in all MOH facilities

RPM response to Evaluation Team Recommendations

Both, the URMES and Decentralized Supply System activities have prepared baseline studies which will form the basis of outcome evaluations per Evaluation team recommendations RPM's work in support of supply decentralization in the Ecuador country program is in response to the findings of the drug management self-assessment conducted in 1995 The promotion of rational drug use through IEC methodology is expected to be sustainable by 1999 The products of this program promise to be useful tools for the "District Supply Management Package" recommended by the Evaluation Team

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is 41 person months, at an approximate cost of \$179,849 The USAID/Quito field support funds remaining from the FY-97 assignment of \$250,000 are approximately \$100,000 which should carry program implementation through April, 1998 USAID has expressed intent to assign additional field support monies to RPM in FY-98 but amounts are uncertain

Leverage of Other Funds and Resources

- RPM Ecuador has negotiated an agreement with the MOH and USAID to use \$30,000 of Mission Child Survival funds assigned to the MOH to cover local implementation costs of the decentralized drug management system, including training and supervision expenses as well as printing of forms and training materials
- RPM is negotiating with the MOH's Contingency Unit to provide technical assistance to local MOH units in drug management during the current El Niño emergency. A scope of work has been written and a level of funding (\$34,000) discussed
- The World Food Program and Rotaract are interested in supporting the URMES activity and municipalities are apparently willing to provide own funds for local implementation
- The Municipality of Ibarra has budgeted \$7000 for the URMES program in 1998 and parents of Ibarra school children are contributing another \$2000. It is anticipated that parental contributions will increase substantially in 1998 with the full implementation of the program and that additional municipalities will fund their own participation

ILLUSTRATIVE RPM ECUADOR WORK PLAN MATRIX (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
A Development							
1 Office management	Progress reports	EB CK	0 25 0 5	DC UIO X 1	USAID		
2 Program evaluation	Eval report	EB DN	0 25 ea				
3 Planning/coordination	Planning trip to DC	DN	0 25				
4 Fund raising	Money	DN	0 25				
B Procurement/logistics/finance <i>Decentralized drug management syst</i>							
1 Design complementary MTP modules	2 modules	DN	0 5			Fund Ter \$3000	
2 Tech Assist to MOH units 1st phase	90 Areas implemented	JA CP EM HS	3 ea	36LOC X 1			
3 Tech Assist to MOH units 2nd phase	60 Areas implemented	JA CP EM HS	2 0 3 ea	48LOC X 1			
4 Print materials	2000 price posters 8000 generic equiv booklets						
5 El Niño emergency support		JA	1	5LOC X 1	FASBASE		
6 Prov /Area training & sup 2nd phase	900 persons trained				Unid Proyectos	TBD \$30000	
C Rational Drug Use							
1 Design URMES modules	3 modules	YG NE SP	1 2 0 5		Rotaract WFP		
2 Implement URMES in Ibarra	Evaluation report	NE IG	1 ea				
3 Expansion and institutionalization	10 munic implemented	IG	3				
4 Drug seller training	2 provinces trained	DN	0 1				Fund Ter \$3000
5 Drug information system	Coverage report	DN	0 1				
6 Promotion & dissemination	Video Dissemination pkg SINAFA bulletin	IG YG IG NE DN	0 25 ea 0 5 ea 0 1				
D Formulary dev /Hosp drug system							
1 MTP module design	6 modules designed	YG DN	2 0 5				
2 MTP sessions in hospitals	2 hospitals implemented	YG DN	1 0 6				
3 Printing materials	6 modules printed	YG	0 5			Printer \$200	
	TOTALS	DN 2 65 EB 0 5 CK 0 5 YG 4 75 IG 4 75					
NOTE * LOC = Local travel \$100/trip * 1st phase funds from USAID Child survival project							

XII PERU COUNTRY PROGRAM WORK PLAN

A Background

USAID/Lima has utilized the technical services of the Rational Pharmaceutical Management Project (RPM) during the past two years in support of the Mission's reproductive health project, ReproSalud, and to assist the MOH's Directorate of Drugs and Medical supplies, DIGEMID

ReproSalud is operated by a local NGO, *Movimiento Manuála Ramos* (MMR), which supports community-based organizations (CBOs), to provide reproductive health services in remote, rural areas RPM will assist MMR in designing a medical service and drug delivery system using local service providers, especially MOH hospitals and health centers and regional drug supply centers, PACFARMS Over-the-counter drugs will be supplied from these units to CBOs which will establish rotating funds to maintain drug supplies and exemption funds to defray drug costs for indigents

DIGEMID has established a decentralized drug supply system, PACFARM, which is currently selling drugs to MOH ambulatory units which, in turn, sell the drugs with a modest markup and repurchase drugs from PACFARM Furthermore, DIGEMID has undertaken the development of regional and national drug formularies and has requested that RPM assist in completing this effort while assisting DIGEMID to strengthen the rotating funds

The USAID Mission's PROJECT 2000 is a major effort to strengthen MOH maternal-child health service delivery Project management has requested that RPM support the development and implementation of hospital formularies in 18 pilot hospitals from which activities would be expanded to more than 100 other regional and provincial hospitals

The DIGEMID and Project 2000 activities are converging around the development and application of a National Drug Formulary (NDF) to be disaggregated at the service level (hospitals, health centers health posts) A national consensus meeting is planned for April 1998 with official promulgation planned for June RPM has developed self-teaching Monitoring-Training-Planning (MTP) modules in Ecuador which have been instrumental in designing and applying formularies in health districts A similar methodology may be useful for applying the NDF in Peru

B Plan

RPM will provide technical assistance to the two Mission-supported activities mentioned in the Background procurement/logistics/finance planning and development with ReproSalud and rational use with DIGEMID/Project 2000 Both projects are focused on regions with the greatest health and development needs, as determined by the USAID/Lima mission

Planned Activities

1 ReproSalud

Assistance to ReproSalud's RH service and drug system will be provided by RPM staff and local consultants to a) negotiate agreements with regional MOH offices to facilitate service and drug delivery in project areas, b) design and implement MTP modules for decentralized program implementation, and c) implement community medicine chests including training in drug management and rational drug use (RDU) by patients

RPM will assist ReproSalud to develop

- a **Regional MMR service agreements** Each MMR regional office would negotiate umbrella agreements with regional MOH offices (or other service providers) to support the ReproSalud project in three areas RH services in MOH units, RH drugs in the MOH service units provided through PACFARM, community-level training by MOH and PACFARM staff
- b **Community-level service provision** Based on an annual plan, CBOs would negotiate service provision, including drug supply, with local service providers (usually MOH units, under the regional umbrella agreement) The plan would specify places, times, dates and services to be provided by, along with responsibilities of, each institution Bimonthly MTP sessions will provide the opportunity to agree on specific community and unit activities to implement the program Prescription drugs for RH problems would be stocked at service units providing medical attention (physician, midwife) and OTC drugs could be stocked in communities Drugs would be sold at preferential prices (PACFARM prices are typically 50% below retail drugstore prices) and CBOs would be encouraged to assign income surpluses to insurance funds to defray drug costs

Specific activities to be undertaken by RPM are

- c Investigation of recent advances in decentralized program management Gather representative materials and prepare demonstration package for ReproSalud
- d Help ReproSalud use demonstration package materials to prepare annual RH program plan, including specification of priority RH problems and calendarization of themes ReproSalud will use annual plan as basis of negotiation with DIRES and Project 2000
- e Facilitate a workshop to design and test MTP modules on priority RH problems Participants will learn how to develop self-teaching tools for CBOs and MOH establishments to implement the annual RH plan Tentative themes to be included are
 - Vaginal infections
 - Family planning
 - Pregnancy and safe birthing
 - Drugs and rational use
 - RH preventive care
 - Common community health problems and solutions
- f Help ReproSalud to utilize monitoring information derived from MTP sessions to evaluate program process and outcomes

2 DIGEMID/Project 2000

RPM staff will assist DIGEMID to a) prepare for and carry out a national consensus workshop to define the NDF, b) provide technical assistance to 18 pilot hospitals to disaggregate the NDF and organize hospital-level pharmacology committees, c) design, test and apply self-teaching modules for hospital drug management systems and RDU, and d) develop supervision and evaluation criteria for accreditation. Specific activities include

- a RPM will help DIGEMID conduct the national consensus meeting for NDF and will accompany the process of disaggregation by service delivery level in the 18 pilot hospitals
- b RPM will facilitate a workshop to help DIGEMID design or adapt six to eight self-training modules based on the Monitoring-Training-Planning (MTP) system
- c RPM will hire a full-time, local consultant to work in 18 pilot hospitals with DIGEMID and PAHO facilitators to implement PC, disaggregate formularies, revise procurement procedures and apply MTP self-teaching modules
- d RPM will facilitate a workshop to design a dissemination strategy to implement the NDF in the remaining 72 hospitals
- e RPM will help DIGEMID develop and apply supervision, evaluation and accreditation criteria for pharmaceutical services in MOH service units

Expected Outcomes**1 ReproSalud**

- a Reproductive health annual program plan developed and negotiated with regional MOH offices and Project 2000
- b MTP modules designed and implemented in CBOs

2 DIGEMID/Project 2000

- a National Drug Formulary promulgated, published and disseminated to regions. Regional formularies disaggregated at the service level
- b NDF applied in 18 pilot hospitals, including strengthened Pharmacology Committees (PC), purchasing procedures reviewed and modified, RDFs established

RPM Support for Strategic Objectives

Besides contributing to global strategic objectives, RPM is also contributing to the following USAID/Lima's strategic objective and intermediate results

<i>SO 3</i>	<i>Improved health, including family planning, of high-risk populations</i>
Intermediate Result 3 3	People take appropriate curative actions RPM activities will increase access to and appropriate use of essential drugs including oral rehydration therapy, appropriate treatment of pneumonia, treatment of genital tract infections, and de-parasitation
Intermediate Result 3 4	Sustainable institutions and operations in place RPM activities will strengthen the drug policy environment (NDF) while improving logistics and introducing effective, decentralized training methods

RPM Response to Evaluation Team Recommendations

The products of the DIGEMID/Project 2000 activities promise to be useful tools for the "District Supply Management Package" recommended by the Evaluation Team The program's emphasis on decentralized program implementation will increase likelihood of achieving sustainable drug supply programs Baseline information is being collected in each of the 33 health regions to ensure that outcomes related to improved drug purchasing and prescribing practices can be documented

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is 25 person months, at an approximate cost of \$190,107 This cost will be paid from RPM field support funds

ILLUSTRATIVE RPM PERU WORK PLAN MATRIX (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
A Development							
1 Office management	Progress reports	EB,CK	0 5 ea	DC-LIM X 1	USAID		
2 Program evaluation	Eval report	DN	0 1				
3 Planning/coordination	Planning trip to DC	DN	0 25	UIO-DC X 1			
B Procurement/logistics/finance - MMR							
1 Design RH service/drug mgt system	System designed	DN, TBD	0 5, 2 0	UIO-LIM X 1			
		EB	0 1	DC-LIM X 1			
2 Implement service/drug mgt system	Regional agreemts	TBD	3				
3 MTP modules for CBO self-training	Wrkshop, 4 modules	DN, YG	0 25, 2 5	UIO-LIM X 1 UIO-LIM X 1			
C Rational Use - DIGEMID/Project 2000							
1 Develop 1998 workplan	Plan	DN	0 25 *				
2 National Formulary Workshop	Report	DN, TBD	0 25, 2 0				
		EB	0 15				
3 Design MTP modules	Modules	DN, TBD	0 25, 2 0 *				
4 Print Formulary and Pharm Guide	Documents printed	TBD	4				
5 Implement NDF in 18 hospitals	Certif/accreditation	TBD	3				
NOTE * Trip covered in Sect B							

XIII REDSO/ESA LOGISTICS INITIATIVE PROGRAM WORK PLAN

A Background

A well functioning logistics system that assures supplies and commodities such as drugs, contraceptives, vaccines, expandable medical supplies and laboratory supplies is a prerequisite for sustained provision of preventive and curative health services. At a time of health sector reforms, sector wide approach to health development and cost recovery, the availability of these commodities is also a prerequisite for maintaining credibility with the public expected to pay in the future for these services.

In 1996, logistics was identified by REDSO/ESA as a critical component of strategies to improve quality of care and was added to their portfolio of major activities. At the Quality Improvement Conference in Mombassa from April 28-May 1, 1997, logistics for public health supplies was ranked as a top priority to improve quality of care. A series of other meetings elevated the logistics improvement to the highest policy level and confirmed the desirability and feasibility of REDSO developing a Regional Logistics Initiative.

Major RPM achievements in 1997

REDSO/ESA asked both the Rational Pharmaceutical Management Project (RPM) and the Family Planning and Logistics Management Project (FPLM) to conduct a desk top assessment of eight countries: Kenya, Zambia, Mozambique, Uganda, Malawi, Tanzania, Ethiopia, and Eritrea. FPLM and RPM agreed to use FPLM's Composite Indicators. This instrument was modified to include supply performance indicators for drugs, vaccines and medical laboratory supplies. RPM reviewed the information collected with a view towards identifying both positive and negative experience in logistics management within the region. As a result, it has been possible to develop two lists: one for apparent "better practices" and a second for "problems in common."

Better practices

The information available suggests that there are a number of promising developments in the region. While most have been verified by empirical measurement, it appears that the following experiences may be worth sharing among the countries participating in the Regional Logistics Initiative.

- Improved contraceptive and drug distribution in Kenya, using the "distribution resource management" or DRP approach
- Emphasis on self-help and avoidance of donor dependence in Eritrea
- Well documented stores management procedures in Zimbabwe. In the same country, use of private sector transport services for delivery of public health commodities
- Integrated storage and distribution of different categories of public health supplies in Malawi
- Political will for decentralization in Zambia, which so far has resulted in delegation to the district level of budgetary decision making and development of a district level logistics self-assessment and problem solving tool
- Creation of a national drug logistics training team and implementation of training for district and regional staff in Mozambique

Problems in Common

The eight problems identified fall into two groups: general problems that seem to affect the environment in which the logistics process takes place, and specific problems that characterize certain operations of the logistics system.

The design of the assessment instrument allowed informants to rate the effectiveness of different logistics operations and to provide specific examples of strengths and weaknesses. The problems summarized below were distilled from those examples, but in many cases the information provided lacked detail. The list below is therefore preliminary.

General Problems

- Questionable sustainability for some major donor assisted interventions
- Lack of clarity on how logistics systems should function within the context of health sector reforms
- Insufficient host country budgetary support for logistics services, in contrast to substantial donor support for contraceptive and drug supplies
- Difficulties with donor coordination

Specific Problems

- Weak staff capacity in product selection, quantification of needs and procurement
- Lack of accountability in distribution
- Waste occurring as a result of irrational use of drugs
- Staff in place lack training in logistics management skills

B Plan

Overall Implementation Strategy

RPM plans to work in all the technical areas that would contribute to a general improvement of logistics and management of drugs and public health supplies. RPM will assist the countries that participated in the RLI workshop to achieve these improvements through country visits by RPM and MSH staff. Activities include country specific and regional technical assistance, courses, workshops, tools development, study tours and donors collaboration. As mentioned earlier, RPM plans to collaborate with REDSO/ESA and USAID Family Planning Logistics Management project in supporting these activities.

Planned Activities

REDSO/ESA has invited six countries, Kenya, Tanzania, Zambia, Mozambique, Uganda and Botswana, to participate in the RLI workshop. RPM and FPLM, two USAID centrally-funded agencies, will assist REDSO/ESA in conducting the technical sessions of the workshop and will offer, as needed, in-country technical assistance. Michael Gabra is overseeing the REDSO/RLI project on behalf of MSH/RPM. In the coming fiscal year, FY98, MSH/RPM is planning to conduct the following activities:

Conduct the Regional Logistics Initiative (RLI) Workshop

The RLI workshop will be held in Mombassa from February 16-20, 1998. RPM and FPLM are in charge of presenting the technical sessions. The sessions will focus on the different components of management and logistics of public health supplies such as selection, quantification, procurement, distribution and logistics management, rational use, financing of logistics, policy development and lessons learned from the private sector. The expected outcomes of the workshop are:

- creation of a task force that will promote the RLI concepts and act as a resource group,
- development of a South/South network,
- development of the first drafts of country specific logistics work plans, and
- improvement of the collaboration and dialogue with the donors

Create the RLI Task Force - The beginning of the RLI Network

RPM will facilitate the creation of the task force. The task force will include at least one person from each country and will focus on the following issues:

- specific needs in logistics improvement of the countries that were present during the workshop,
- organizing study tours to countries that have shown better practices in one or two areas of logistics,
- acting as a resource group and offering technical assistance,
- promoting the RLI concepts in the countries that were not present during the Mombassa workshop, and
- organizing in-country workshops and training

These workshops can be conducted by members of the task force or by MSH/RPM and JSI/FPLM staff.

Capacity building and Training in Logistics

The desk top assessment showed that the staff in place has a weak capacity in product selection, quantification of needs and procurement, and rational use of drugs. The assessment also showed that the staff lack training in logistics management skills. Each year, RPM and FPLM conduct several in-country courses in all components of the logistics cycle in the countries where they are operating. These courses are tailored for each country's needs and could easily be customized to suit other countries in the region. This year MSH/RPM is conducting a course entitled "Managing Drug Supply For Primary Health Care" in Amsterdam and another one on management in South Africa.

Improve Donor/Country Collaboration

The collaborating partners have for many years supplied the countries in the Eastern and Southern Region of Africa with public health supplies through development loans (World Bank), bilateral agreements (SIDA, DGIS) and donations. Recurrent costs to cover the logistics and management of these supplies is the responsibility of the recipient country. For many reasons that can not be developed here, these procedures were not always followed. The donors must be convinced by the task force that the lack of funding and training in management and logistics of public health supplies are the most important obstacles impeding the availability of drugs at all levels of the health system. The task force will keep the donors informed on progress done in this area through quarterly reports and in developing channels of communications with the donors. RPM will coordinate with the recipient countries on creative ways to support the financing by the donors of management and logistics of public health supplies.

Adopt Better Practices from the Region and the Private Sector

The private sector in many of the participating countries has adopted modern logistics procedures to improve availability of their products and increase profits. Although the problems of logistics in the public sector differ from the private sector, certain systems can be adopted. The NGOs and the Christian Health Association and Mission Hospitals have adopted some of these logistics systems. In Kenya, for example, MEDS, the Christian Medical Association Stores, is reputed to have one of the best distribution systems of public health supplies in the region. MEDS is also known to re-invest its profits on in-house training of their personnel. RPM can help the task force and the RLI countries document and disseminate better practices in the region and coordinate in-house training of stores personnel.

Disseminate lessons learned under the health sector reforms

Most of the countries in Eastern and Southern Africa are going through extensive health sector reforms to develop and improve their health systems. The South/South collaboration is expected to bring to light certain issues and problems in logistics that were not expected under the health sector reforms. In Zambia, for example, integrating the logistics of supplies from the vertical projects became a number one priority for the CBOH. There are several other important issues that should be taken into account under the health sector reforms mainly, the decentralization to the districts of supply systems, drug budgets and training of staff.

Expected Outcomes

If the activities outlined in this plan are successful, then the following outcomes should be achieved

- Technical interventions will improve access to public health supplies and contribute to the improvement of the quality of care
- Institutionalization of the RLI task force will be facilitated through RPM and FPLM support of regional and country workshops
- Policy dialogue with the donors about new approach to logistics and management of public health supplies will have occurred leading to better understanding of public health supplies management components

- Logistics management skills in the countries that participated in the RLI will be strengthened
- Improved public health supplies information systems will be available for national and regional use, for feed back of needs at national levels

RPM support for Strategic Objectives

RPM's work in the REDSO/RLI program is expected to contribute significantly to the achievement of USAID's Center of Population, Health and Nutrition Strategic Objectives. For the REDSO/ESA office, RPM's work on general improvement of management and logistics of drugs and public health supplies can contribute to the networking and dissemination of better practices improving regional collaboration, thus contributing to improve the quality of care, increase access to services and supplies, enhance local capacity in logistics management, and contribute to improve policies on logistics.

SO1 Increase use by women and men of voluntary practices that contribute to reduce fertility. In Zambia, RPM has demonstrated the importance of family planning supplies and logistics through special effort to collaborate with USAID FPLM project.

SO2 Increased use of safe pregnancy, women's nutrition, family planning and other key reproductive health interventions. RPM's contribution to this SO by means of its work is to develop a costing model for drugs, medical supplies, and equipment for reproductive health.

SO3 Increased use of key child health and nutrition interventions. RPM's work on strengthening district management of public health supplies, development of a monitoring tool (DILSAT), procurement and inventory management and work to improve integration of logistics of supplies in Zambia contribute to improve drug availability for all child survival interventions. RPM's work in Zambia will contribute to improve the logistics and management of supplies in the region. RPM's work on rational use of drugs and drug use review will contribute to a rational use of drugs, improve prescribing habits, minimize inappropriate use of antibiotics and polypharmacy. RPM's work in the REDSO/RLI project will lead to a decrease in waste, reduced costs and increased availability of supplies.

SO4 Increased use of proven interventions to reduce HIV/STD transmission. RPM's work on general improvement of supplies management, logistics, and product availability would be the most problem-specific contribution to achievement of this SO.

RPM Evaluation Team Recommendations

The 1997 RPM evaluation team outlined several recommendations and future directions in its final report. The work plan addresses these as follows:

- improving drug supply management. RPM plans to evaluate the existing systems in the region and provide assistance for improving drug logistics and management at the central, district, and health centers level.
- RPM should continue to support procurement and supply management at the central through installation/training for INVEC-2 and through technical assistance in procurement methods and management. The RPM REDSO/RLI manager plans to provide assistance to countries participating in the RLI workshop and others in the region.

- RPM should proceed with the promising work of strengthening districts' logistics management support and capacity building the RPM REDSO/RLI project manager will review supply systems in the region and look for opportunities for RPM technical assistance
- RPM should identify potential country programs for implementation of DUR-type activities RPM plans to evaluate existing systems and develop proposals on how this activity should be carried out RPM plans to facilitate drug use review (DUR) training to senior medical staff in the region
- Health reforms and the decentralization process RPM plans to share lessons learned from Zambia which would include integrating logistics of public health supplies, capacity building in drug management, rational use, and supervision at the district level

RPM intends to address any remaining recommendations and future directions from the evaluation team's final report as the project makes progress and in the FY99 plan

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is seven person months, at an approximate cost of \$172,203 This cost will be covered from RPM field support funds The REDSO/ESA field support remaining from the FY97 assignment of \$200,000 is approximately \$143,228 REDSO/ESA has expressed intent to assign additional field support monies to RPM in FY98 but amounts are uncertain

ILLUSTRATIVE RPM REDSO/RLI WORK PLAN MATRIX (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
General RLI Management							
1 Coordinate Program		MG	0 5		JSI/FPLM		
		TS	0 05				
2 Home office administrative support		CK	0 5				
3 Technical support		MG	0 5				
Plan RLI workshop							
1 Coordinate Workshop and presentations	Agenda Program	MG	0 25		JSI/FPLM		
2 Prepare technical presentations	Presentations	DD	0 25	2xBOS/WDC			
		EB	0 25				
		JM	0 25				
		TM	0 25				
3 Facilitate workshop	Proceedings	MG	0 5	WDC/NAI/MOM			
		EB	0 5	WDC/NAI/MOM			
		TM	0 5	WDC/NAI/MOM			
		JM	0 25	WDC/NAI/MOM			
		DD	0 5	BOS/NAI/MOM			
RLI Implementation							
1 Finalize country / regional w plans	Work plans	MG	0 25		JSI/FPLM		
2 Plan RPM/REDSO/FPLM interventions	trip report/plans	MG	0 25	WDC/NAI			
3 Coordinate training / Country visits	Trip report	MG	0 25	WDC/DAR/KAM			
4 Conduct 2 training / workshops	Training / Report	Lalvani	0 5	WDC/DAR/KAM			
		Lalvani	0 5				
5 Coordinate study tours	report	MG	0 25	2xLUS/DAR/KAM			

XIV ZAMBIA PROGRAM WORK PLAN

A Background

The Government of the Republic of Zambia began a program of structural reforms in the health sector in 1992. The overall theme of the reform is to bring equitable cost effective health services as close to the family as possible. Some major accomplishments to date include the decentralization of management of health services to the district level, the institution of user cost sharing payments, and moving health workers out of the civil service system and into contract employment. The major components of the reforms are

- decentralization of planning, budgeting, managing capacity,
- accountability and financial performance,
- provision of essential health care packages,
- introduction of cost sharing, and
- increased community involvement and private sector participation

The Rational Pharmaceutical Management Project (RPM) initiated its activities in Zambia in June 1996 by participating in the consensus workshops on the national drug policy, evaluating the 1996 bids of a World Bank tender, facilitating the policy dialogue on the National Strategic Health Plan, and participating in an international consulting team to review the restructuring of the central medical stores.

In March 1997, the RPM director presented to the Ministry of Health (MOH), the Department of Pharmaceutical Services (DPS), the Central Board of Health (CBOH) and the donors, a concept paper on strengthening management and logistics of public health supplies at district level. The concept paper was accepted by all stakeholders as a stepping stone for RPM to begin its activities in Zambia and that the reforms can benefit from RPM's assistance in the areas of procurement, rational use and management of public health supplies.

Major RPM achievements in Zambia in 1997

- **DILSAT**

DILSAT (District Integrated Logistics Self Assessment Tool) is a rapid assessment method based on a set of indicators that can be used to supervise, compare and improve significant aspects and processes of pharmaceutical systems and processes at the district level. DILSAT was developed by counterparts from the DPS, CBOH and the staff of Lusaka and Petauke district health office. Two pilot tests were conducted, one in an urban district, Lusaka, and the second in Petauke Rural district.

- **Quantification workshop**

The CBOH requested that RPM conduct a training workshop in quantification methods in collaboration with JSI/FPLM and Irish Aid. In August 1997 RPM conducted five regional workshops in collaboration with BASICS and trained 300 participants in the use of consumption method to quantify public health supplies. The participants were given hands-on training on the method including the use of ABC and VEN analysis.

- **Integration of logistics**

RPM took the lead in organizing a Logistics Steering Committee at the CBOH and in building a consensus among the donors and different division directors on the need of integrating the logistics supply system. The RPM deputy director visited Zambia in August 1997 and laid the framework to integrate supplies in the central medical stores.

- **Sector Program Assistance/Joint Consultative meeting**

RPM prepared the technical USAID/SPA report on the pharmaceutical sector during a mission in October 1997. During the same mission, RPM participated in the bi-annual government and donors Joint Consultative meeting and helped the CBOH draft the Action Plans for 1998.

- **Information systems - INVEC-2**

In November 1997, RPM installed INVEC-2 at EDMSS and the Lusaka Urban District Health office. INVEC-2 is an inventory software program designed to manage inventory, procurement and accounts in central medical stores. During this mission RPM trained a total of ten staff members of the EDMSS in the use of the software program and assisted the stores' personnel in completing a stock inventory.

- **Promoting Rational Use of Drugs**

RPM, in collaboration with the lecturer and students at the Evelyn Hone College, conducted a drug use study in Lusaka Districts. The data were compiled by the students in November and presented to the health personnel of the Lusaka Urban Clinics during a UNDP funded workshop in November 1997.

There were several activities that were planned but not achieved. There were plans to roll out DILSAT to six districts in October 1997, plans for a national roll out of DILSAT in December and to conduct a training of trainers on quantification methods and procurement. These activities were not implemented because the CBOH asked RPM not to distract the districts during the preparation of the district action plans, and because of the de-linkage process of MOH staff from the civil services.

B Plan

Overall Implementation Strategy

RPM plans to work in the following technical areas

- Decentralized drug management system,
- capacity building at district level,
- training in drug management including rational use of drugs,
- stores management and procurement including, and
- policy development

Planned Activities**1 Strengthen drug management systems at district level****• District and Hospital Integrated Logistics Self Assessment tool (DILSAT)**

As described earlier DILSAT is a method based on a set of indicators that rapidly describe, compare, and evaluate a set of pharmaceutical processes at district level RPM plans to develop DILSAT as a supervisory tool for the district health management team In collaboration with the CBOH, Irish Aid and JSI/FPLM, RPM plans to roll out DILSAT to six more districts Following the results of the roll out RPM plans to revise the questionnaire and prepare plans for a national roll out The output of this activity is a revised DILSAT accompanied by a problem solving manual

2 Capacity building Training in Drug Management**• Promoting Rational Drug Use**

RPM plans to assist the CBOH to develop the essential drugs and medical supplies lists, formularies and standard treatment guidelines RPM plans to conduct a workshop for 30 participants in August 1998 on rational use of drugs in collaboration with INRUD, SIDA and BASICS

Because of the acute problem with rational drug use in Zambia, RPM and CBOH have agreed that the training at regional level should include training in drug use review (DUR) and in establishing District Drug and Therapeutic Committees

RPM/INRUD Collaboration RPM plans to fund two Zambian candidates from the Tropical Diseases Research Center in Ndola to attend a proposal development workshop in Yogyakarta, Indonesia in March 1998 The Zambian candidates will conduct a study on the use of antimalarial drugs

3 Procurement and Stores Management**• Integration of Logistics and Information Systems**

RPM has laid the framework for the integration of logistics of public health supplies RPM plans to continue its assistance to EDMSS to integrate logistics of public health supplies to the central stores RPM is also planning to assist the EDMSS in drafting a stores operations manual, a procurement guideline for the districts, and in updating the catalogue

• INVEC-2

RPM is piloting the use of INVEC-2 at the EDMSS The first review of the pilot with INVEC-2 will be in March 1998 The need for additional assistance will be determined at that time

4 Policy development

- **National Drug policies and Pharmaceutical Regulatory Authority/NAPHRA**

RPM is planning to assist the CBOH to review the National Drug Policy before its enactment by parliament. RPM plans to hire a consultant to assist the MOH and the CBOH to assess the feasibility of establishing the National Public Health Regulatory Authority (NAPHRA).

- **Policy dialogue**

RPM plans to continue to participate in the policy dialogue with the donors on the Health Sector Reforms and participate in the Strategic Planning, Action Plans and Joint Consultative meetings in April and October, 1998.

- **RPM Core Activities**

RPM is planning to conduct a study in logistics of Polio Vaccines under the Polio Eradication Initiative/Supply Management Tool. The purpose of the study is described in the Polio Eradication Initiative work plan.

Expected Outcomes

If activities outlined in this plan are successful, the following outcomes should be achieved:

- DILSAT will be used as a supervisory tool by the district staff
- Local drug management capacity at district level will be strengthened
- Training capacity in the area of drug management and rational use will be improved at central and district level
- Drug Supply management and procurement skills at EDMSS and CBOH will be strengthened
- Rational use of drugs and prescribing habits will be improved through training of providers and strengthening the Drug and Therapeutic Committees
- INVEC-2 software will be in use for inventory management at EDMSS and other districts
- Improved drug information systems will be available at central and district level
- Suggestions will be made on ways to move forward with the formation of the regulatory body (NAPHRA)

RPM Support for Strategic Objectives

In Zambia, USAID relies on three bilateral projects as the primary team for achieving the objectives. These projects are the Zambia Health Project (ZCHP), the Zambia Family Planning Services Project (ZFPSP), and the Zambia HIV/AIDS project. The ZCHP is coordinated by Basic Support for Institutionalizing Child Survival (BASICS). The ZCHP's main objectives are

- Establishing a health center community partnership,
- Improving pre-service and in-service training of health center staff,
- Strengthening the technical capacity of MOH and CBOH, provincial and district levels,
- Improving collection, analysis and use of data for decisions making, and
- Mobilizing the private sector to improve child health

USAID has three strategic objectives in health and population, including

- *SO3 Increased use of Modern Contraceptives,*
- *SO4 Improved HIV/AIDS control practices in high risk Individuals,*
- *SO5 Improved Child Survival*

The strategic importance of RPM's work in Zambia is to assist USAID health workers' training activities to achieve the SO, through specialized input in drug management with a specific focus to improve drug management at the district level.

To achieve these objectives RPM is assisting the CBOH Zambia in the following areas

- decentralization of drug management and supply systems
- capacity building at CBOH and at the district level
- stores management and procurement, including rational use
- policy dialogue with the donors, contributing to the strategic plans of the health sector reforms

RPM Evaluation Team Recommendations

The 1997 RPM evaluation team outlined several recommendations and future directions in its final report. The Zambia work plan addresses these as follows

- District logistics management support and capacity building/training. RPM plans to roll out DILSAT to six more districts in 1998 before starting a national roll out. RPM also plans to accompany the questionnaire with a problem solving manual. RPM is assisting the CBOH to draft a stores management and quantification training manuals. RPM also plans to follow up on training in quantification methods, procurement and rational use of drugs.

- Management support to EDMSS including installation of INVEC-2, training and modern computers RPM plans to provide EDMSS continued support in managing the integration of logistics of public health supplies RPM also plans to provide assistance to EDMSS in managing the transition to a PULL system, revolving funds and international procurement of supplies RPM is piloting INVEC-2 at EDMSS and may provide assistance in computer training and assess future needs in computer equipment and the feasibility of developing a network system
- Technical assistance in procurement methods and management RPM plans to provide assistance to the CBOH to develop the essential drug lists, formularies and standard treatment guidelines RPM is providing assistance to the CBOH in selection and quantification for procurement of supplies RPM has started training the procurement officer on the use of the procurement module on INVEC-2
- RPM plans to look into the possibility of hiring a local advisor to coordinate the work plan

RPM intends to address any remaining recommendations and future directions from the RPM evaluation team in the FY99 plan

C Work Plan Matrix

The planned activities for FY 98 are summarized in the attached Work Plan Matrix and Time Line

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is eight person months, at an approximate cost of \$182,438 This cost will be covered from RPM field support funds USAID has expressed the intent to assign additional field support to RPM in FY98 of \$100,000

Leverage of Other Funds and Resources RPM has negotiated an agreement with BASICS to cover local implementation costs, including equipment, disbursements to local organizations, and costs associated with participants training and workshops These have not been estimated for the life of the project but for FY98 they are estimated at \$90,000

ILLUSTRATIVE RPM ZAMBIA WORK PLAN MATRIX (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
General Management							
<i>1 Coordinate Country Program</i>							
1 1 Home Office Technical Coordination		MG	1	WDC/LUX1			
		EB	0.55				
1 2 Home Office Administrative support		CK	1				
1 3 In country technical support		MG	1	WDC/LUX4			
		TS	0.5				
Strengthening District Logistics							
2 DILSAT							
2 1 Disseminate tool in Lusaka district	DILSAT	MG	0.5	WDC/LUX1	JSI & Irish Aid		
		MA	0.5				
2 2 Disseminate tool in Petauke District	DILSAT						
2 3 Coordinate with CBOH/FAMS/HMIS	Report						
2 4 Revise DILSAT	Final Draft of DILSAT						
2 5 Develop training Manuals for DILSAT	Training Manual						
2 6 Develop problem solving manual	Draft Manual						
2 7 Pilot in six districts	Report						
2 8 Prepare plans for a national roll out	Work plans						
2 9 Train district staff							
2 10 Monitor Use							

ILLUSTRATIVE RPM ZAMBIA WORK PLAN MATRIX AND TIME LINE (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
3 Integration of Logistics at EDMSS		MG	0.5	WDC/LUX1	Irish Aid		
3.1 Facilitate integration process	Report	MA	0.5				
3.2 Assist and monitor data collection	Data						
3.5 Procurment of computers							computer
3.6 Develop operational procedures	Manual for Stores						
3.7 Develop Operations Manual	Manual for Districts						
4 Promoting Rational Use		MG	0.5	WDC/LUX2	SIDA		
4.1 Develop EDL, STG and formulary	Manuals	DL	0.5		INRUD		
4.2 Plan national workshop	Work plans				BASICS	20 000	
4.3 Hire trainers	Contract	DOA	0.5	AC/LUX1		local impl	
4.4 Research proposal workshop	TDRC Proposal			LU/YogX2			
4.5 Assist Evelyne Hone College	Drug Use Study	MG	0.15	LU/YogX2			
5 Technical Cooperation		MG	0.5				
5.1 Collaboration with IHCAR	Action plans						
5.2 Collaboration on study WHO/DAP	Study Report						
5.3 Select 2 candidates to MSH courses	Candidates Names						
5.4 Coordinate REDSO/Zambia	Report						
5.5 Coordinate NAPHRA	Report						
5.6 Facilitate donor Coordination (JCM)	Trip report						

XV MOZAMBIQUE PROGRAM WORK PLAN

A Background

The Rational Pharmaceutical Management Project (RPM) initiated its activities in Mozambique in October 1993 using USAID add-on funding by conducting an assessment of the pharmaceutical sector. Responding to results reported in the assessment, the Ministry of Health (MOH), requested that USAID provide funding for RPM training activities in drug management and rational drug use. RPM adapted the *Managing Drug Supply (MDS)* training series developed by MSH, and the MOH staff translated the material. RPM conducted the first national course in July 1995, including a training the trainers workshop. These were followed by three regional courses during 1995 and 1996.

Because of successes with these training activities, the MOH requested an expansion of RPM activities to the provincial and district levels in 1997. RPM, in collaboration with the MOH, modified the course format to include more practical exercises and in-service training at the participants' work sites, as well as to pair a physician and pharmacist from each district in order to bridge working relationships. Approximately 15 physician and pharmacist trainers throughout the three regions of the country now have experience in all aspects of course preparation, logistics, and teaching. Approximately 165 physicians, pharmacists, and technicians have received training based on the course material. A third course planned for Nampula province in 1997 was not conducted due to time constraints within the MOH.

After having created the basis for local technical capacity, RPM had planned an information system evaluation and a recurrent cost component for 1997. This was not accomplished due to MOH resource constraints.

In December 1997 the new national drug law was passed by the general assembly. The president is expected to sign it in January or February 1998. As a result of repeated scandals of drug diversion, the donors supported an independent audit/tracer study of the drug sector. Results of these findings should be available to RPM during the first quarter of 1998.

B Plan

Overall Implementation Strategy

RPM plans to work in three technical areas: policy/pharmaceutical legislation, procurement/logistics at the provincial level, and drug information/rational use at the provincial level. Activities include technical assistance, workshops, courses, and tools development, which will be accomplished through country visits by RPM and MSH staff, outside services consultants, and the engagement of a local advisor to coordinate in-country technical activities. As in the past, RPM plans to collaborate with UNICEF and the Swiss Cooperation in supporting drug management courses. The RPM program in Mozambique is moving into a broader phase in FY98, utilizing the capacity built during the past three years in drug management and rational use at the MOH's pharmacy department and provincial medical-administrative units.

Planned Activities

1 **Policy/pharmaceutical legislation** RPM plans to review the new national drug law and independent sector drug audit reports, and meet with the MOH and donors to discuss drug policy options in areas that implicate decentralization of drug management. This will ensure conformity of RPM decentralization activities with recent changes in the policy area. In addition it may open some opportunities for further RPM work at the central level. This activity is contingent on the availability of the new drug law and audit reports, which RPM expects to receive in January or early February 1998.

2 **Procurement/logistics and drug info/rational use** RPM plans to improve drug management at the provincial level through the following activities

- Conduct two drug management and rational use (DMRU) courses at the provincial level in FY98 in the provinces of Nampula and Niassa. RPM will provide funds and technical support, with an emphasis on development of local technical capacity. Participants will come from various districts throughout the respective provinces, and the MOH will select trainers from those previously trained at the provincial and national levels to serve as instructors, thus further promoting sustainability. The course sessions will
 - Introduce new MOH procedures, including logistics cycles
 - Explain MOH warehouse management procedures at the district and provincial levels
 - Describe inventory control concepts with practical exercises
 - Provide practice in use of MOH stock cards for drug inventory control
 - Demonstrate information systems used in drug selection/procurement, distribution and use
 - Illustrate how to systematically reduce the cost of drugs
 - Explain common techniques to recover costs of drugs
 - Describe various drug distribution systems
 - Practice implementation of drug management procedures for individual work sites
 - Identify problems caused by the irrational use of drugs
 - Explain pharmacy/physician responsibilities in promoting rational drug use
 - Present results of the Mozambique drug indicators study using WHO guidelines

It is anticipated that an additional 100 physicians and pharmacy personnel will be trained as a result of these courses

- Implement a district supervisory monitoring program by providing technical assistance to the MOH in designing a supervisory tool, and in implementation of a program of supervisory staff visits to district drug services on a regular basis. The program will monitor if pharmacies and health facilities are following regulations of the new drug law. USAID has budgeted funds through UNICEF to provide for local costs, and RPM plans to utilize those funds
- RPM plans to design and carry out an evaluation of managing drug supplies in the provincial health sector, and identify mechanisms for improving cost recovery. The evaluation will include current donor and MOH financing, costs of procuring, managing, and supplying drugs to health facilities, and a quantification of drug needs at the provincial level. If appropriate, private sector health care funding will also be evaluated. During the recurrent cost evaluation,

RPM will look for opportunities for potential cost savings in drug procurement, inventory management, and supply, and for adequacy of cost recovery mechanisms already in place. Since 60% of drugs prescribed in Mozambique are used in inpatient settings, it may be appropriate to focus more intently on hospital treatment to achieve greater improvement in the shortest time.

- RPM plans to evaluate drug information systems at the provincial level, identifying weaknesses in existing feedback systems, and providing in-service training to improve the systems for provincial and district staff. This activity will support the MOH strategic plan of improving management of drug selection and procurement at the national level, and inventory control and distribution at the provincial and district levels. Through donations the MOH intends to install a computer in all provincial medical stores in the near future. RPM plans to evaluate information systems with both computerization and manual options in mind.

3 Drug information/rational use. RPM plans to conduct two drug use review (DUR) training courses as follows:

- The first will train a core of approximately five physicians at the Medical University in Maputo, where clinical pharmacology is better understood.
- The second will train approximately 20 provincial medical chiefs and hospital directors, providing step by step guidelines on how to implement a DUR program in the central provincial hospitals. RPM plans to provide technical assistance in performing the hospital drug studies in collaboration with Medical University staff.

Since the hospital staff often treats patients in MOH outpatient centers as well, there should be a DUR spillover effect into this sector of care. It is expected that this activity will contribute to cost recovery strategies through improved drug use.

Expected Outcomes

If activities outlined in this plan are successful, then the following outcomes should be achieved:

- Training capacity in the areas of drug management/rational use will be improved.
- Institutionalization of DMRU training, which is already part of the MOH strategic plan for the drug sector, will be facilitated through RPM support of workshops.
- A supervisory drug management monitoring program will be implemented in two provinces.
- Policy dialogue with MOH and donors about the new drug law will have occurred leading to understanding of drug management components, and how they affect decentralization to the provinces.
- Drug supply management skills in hospitals of two provinces will be strengthened.
- Rational drug use will have been improved through implementation of DUR programs in two provincial central hospitals.

- Improved cost recovery schemes will be identified in hospitals of two provinces
- Suggestions for improved drug information systems will be available for provincial use and for feedback of drug needs to the national level

RPM Support for Strategic Objectives

The planned activities contribute overall to the achievement of the mission's program objectives (PO), as follows

PO 3 1 3 More health facilities with trained staff

- RPM plans to continue development of local capacity by supporting two provincial drug management and rational use (DMRU) courses, where approximately 100 MOH staff will be trained (50 teams of physicians and pharmacists) Cost for participants will be provided by UNICEF and the Swiss Cooperation
- RPM plans to conduct two training courses in drug use review (DUR) a train the trainers course for physicians and pharmacologists at the medical university, and a second course for provincial medical chiefs and hospital directors

PO 3 3 Strengthened provincial management of MCH/FP service delivery

- The DMRU courses will institutionalize training capacity of MOH staff, since approximately 12 previously trained national and provincial trainers will plan and conduct the courses
- RPM plans to provide technical assistance to the MOH in designing a monitoring tool for supervising district drug management activities in the province
- RPM consultant in health financing plans to identify mechanisms for improving cost recovery in hospitals and health centers, and will provide technical assistance and training to provincial MOH staff
- RPM consultant in drug information systems plans to provide technical assistance for improving decentralized drug management, and feedback mechanisms to MOH for better quantification of national drug needs

RPM Evaluation Team Recommendations

The 1997 RPM evaluation team outlined several recommendations and future directions in its final report The work plan addresses these as follows

- drug audit/tracer study RPM country manager will review results of and identify areas which affect decentralization activities of this work plan, simultaneously looking for new opportunities for RPM technical assistance

- technical assistance in drug management supervision RPM consultant plans to provide assistance in developing a provincial supervisory monitoring tool and implementing a program of supervisory visits to district health facilities
- improving drug supply management RPM consultant plans to evaluate existing information systems and provide techniques for improving drug supply management at provincial hospitals and health centers
- long term in-country advisor RPM plans to engage a long term local advisor to coordinate activities in this work plan
- implement modified DUR programs in developing countries RPM will facilitate drug use review (DUR) training to provincial medical chiefs and hospital directors, and the implementation of DUR programs at central provincial hospitals

RPM intends to address any remaining recommendations and future directions from the RPM evaluation team's final report in the FY99 plan

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is 30 person months, at an approximate cost of \$367,007 This cost will be paid from RPM field support, and remaining OYB funds

Leverage of Other Funds and Resources These have not yet been estimated for the life of the project, but since 1995, the Swiss Development Cooperation and UNICEF have provided additional support in excess of \$50,000, through payment of local costs for translations, lodging and transportation for course participants and trainers



ILLUSTRATIVE RPM MOZAMBIQUE WORK PLAN MATRIX (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
General Management							
1 Coordinate Country Program							
1 1 Home office technical coordination		TM EB	1 5+0 75	DC Moz X2(EB)			
1 2 Home office administrative support		TS	0 05				
1 3 In country technical coordination		VDP SU	1 5 9	Maputo Prov x4			computer fa
Improve Drug Management System							
2 Analyze Drug Policy Options							
2 1 Review new National Drug Law	Report	TM	0 25	DC Moz X3			
2 2 Support discussions with MOH and Donors							
3 Improve Drug Management at Provincial Level							
3 1 Support provincial courses by MOH staff		TM	0 25				
3 1 1 Nampula Province	Workshop materials and manuals for 50 participants ~	GF	1 5	Oslo MaputoX3			
3 1 2 Niassa Province	Workshop (materials and manuals for 50 participants ~			Oslo MaputoX3			
3 2 Institutionalize training capacity of MOH staff		TM	0 25				
3 3 Evaluate cost recovery mechanisms	Report	JC	1 5	Bos MaputoX3 Bos MaputoX3			
3 4 Improve information systems	Report	JC	2	Bos MaputoX3 Bos MaputoX3			
3 5 Implement district supervisory program	Written procedures (300 copies ~ \$1 000)	TM	0 5	DC Moz X2 DC Moz X2			
4 Improve Use of Drugs at Provincial Level							
4 1 Drug use review (DUR) in provincial hospitals							
4 1 1 Train core of trainers	2 day course (materials ~ \$200 per diem in province t	TM	0 25				
4 1 2 DUR course for provincial medical chiefs and hospital directors	2 X 1 day courses(materials ~ \$400 per diem for 10	TM SP	5 5	DC Moz X3			
4 1 3 DUR technical assistance in provinces	Report	TM SP	1 1				
TM = Thomas Moore EB = Elvira Beracochea VDP = Valene DePass SU = Sharad Unewal/Maputo _\$50/day JC = Josh Coburn/MSH HFP SP = Sam Patel/Maputo MOH							

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XVI BANGLADESH PROGRAM WORK PLAN

A Background

In September 1996, USAID launched the National Integrated Population and Health Program (NIPHP). This program is being implemented by seven partners. Each partner manages a different element of the program that includes the following: Urban Services Delivery (JSD), Rural Services Delivery (Pathfinder), Quality Improvement (AVSC), Urban Immunization (BASICS), Operations Research (ICDDR/B), Social Marketing (SMC), and Contraceptive Logistics (FPLM).

At USAID's invitation, an RPM representative visited Bangladesh in September 1996. The purpose of the visit was to review assumptions concerning the role of drug cost recovery activities in the NIPHP. Through the development of several reports and subsequent visits by RPM, it became clear to the mission that additional and focused technical support was required for developing an appropriate drug management strategy for the NIPHP project.

In February 1997, the RPM Project Director visited Dhaka, met with USAID and NIPHP partners and proposed a program of activities leading to the implementation of revolving drug funds in support of participating NGOs. The work plan called for three phases of implementation that included initial information gathering and assessment, the design of required drug management systems, and implementation, monitoring, and supervision. This plan was accepted by USAID which provided RPM with a FY97 field support allocation of \$250,000. October 1997 was set as the target date for program start up.

In November 1997, RPM Director, James Bates and RPM consultant, John Davies visited Bangladesh. This visit provided an opportunity for RPM to receive feedback from the NIPHP partners and to update the work plan based on their sense of technical priorities and timing. This work plan reflects that feedback.

B Plan

Overall Implementation Strategy

RPM's overall drug management work plan strategy addresses two technical areas, namely procurement/logistics and drug information/rational use. For FY98, the work plan will focus on revolving drug funds (RDF) and rational drug use (RDU) as the two main streams of activities. The primary RPM management team will consist of two MSH staff members and a consultant. These include Douglas Keene as the country program manager and drug management specialist, Stephen Sacca as the financial analyst, and a consultant, John Davies, as the organizational development specialist. RPM will continue to collaborate with NIPHP partners and participating NGOs during FY98.

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Planned Activities

1 Procurement/logistics

- Revolving Drug Fund activities are to be implemented in support of NIPHP partners and participating NGOs. The work plan for this activity involves three phases of implementation. However, for the period of this work plan, only Phase One information gathering and assessment and Phase Two preparations for implementation are planned. Phase Three implementation, monitoring, and supervision, is planned for FY99. Activities proposed for the first two phases are as follows:

Phase One - Information Gathering and Assessment. These activities include organization of the Revolving Drug Fund Core Group and preparation of a "Situation Analysis for Rational Pharmaceutical Management." The RDF Core Group has been formed and includes three members from the NIPHP partners and participating NGOs. The group will work with RPM on the design and implementation of RDFs. The RDF group will be responsible for pushing along the work between visits of RPM staff. The group has also begun work on the situation analysis report which is estimated to be completed by May 1998.

Phase Two - Preparations for Implementation. These activities will include proposing suitable model(s) for RDFs, estimating drug needs and RDF capitalization requirements, and identifying and organizing management unit(s). These activities are scheduled for completion during the months of May and June 1998. Phase Two activities also include selection of suppliers and negotiation of contracts, and preparation of required management and training materials. The latter Phase Two activities are planned for completion during July-September 1998.

2 Drug information/Rational drug use

- Rational Drug Use activities are proposed in response to demand and interest from NIPHP partners for technical assistance in support of promoting rational drug use. At least initially, work on the RDF and RDU should proceed as two distinct, but parallel, streams of activities, with significant communication and coordination between the two streams. Therefore, the work plan for RDU activities also involves three similar phases of implementation. Phase One information gathering and assessment and Phase Two preparations for implementation are planned during this work plan period. Phase Three implementation, monitoring, and supervision, is planned for FY99. Activities proposed for the first two phases are as follows:

- Phase One - Information Gathering and Assessment These activities involve information gathering and preparation of a "Situation Analysis for Rational Pharmaceutical Management" The organization of a Revolving Drug Fund Core Group is planned to facilitate the work of RPM As with the RDF group, the RDU group will also be responsible for pushing along the work between visits of RPM staff The situation analysis report for RDU activities is estimated to be completed at the same time as the RDF report in May 1998
- Phase Two - Preparations for Implementation Phase Two activities are planned to begin in May 1998 and will include proposing training, supervision and monitoring strategies and required print materials These activities are scheduled for completion during the months of June through September 1998

Expected Outcomes

If the activities outlined in this work plan are successful, the following outcomes should be achieved

Revolving Drug Fund Stream of Activities

- Improvement of drug management activities of the NIPHP partners
- Strengthening the capabilities of local NGOs to implement an efficient, high-percentage drug cost recovery operation
- Suggestions for models of drug cost recovery operations in both rural and urban settings
- Enhancement of the economic viability and sustainability of drug management systems through drug cost recovery activities

Rational Drug Use Stream of Activities

- Improvement in the safe and rational use of drugs through the development of standard treatment guidelines
- Strengthening the supervision and monitoring capabilities of local NGOs through the development of management interventions
- Improvement of prescribing and dispensing practices through the development of targeted training activities and materials

RPM Support for Strategic Objectives

USAID's Strategic Objective in population and health for Bangladesh is to reduce fertility and improve family health The NIPHP partners, with support from RPM, will assist the MOH to realize this objective through collaborative work with a group of 40 NGOs This extended team will assure progress through achievement of five intermediate results use of high impact family health services in target populations increased,

capabilities of individuals families and communities to protect and provide their own health increased, quality of information, services and products improved, and consumer satisfaction improved, local services delivery organizations strengthened and support systems for the high impact family planning services improved, and sustainability of family health services and support systems improved

In terms of health services delivery, the primary vehicle for achieving the intermediate results is a Basic Services Package (BHP), consisting of the following components Family Planning, Reproductive Tract Infections and Sexually Transmitted Diseases, Maternal Health, Child Health, Selected Communicable and Vector Borne Diseases, and Locally Endemic Diseases USAID and the NIPHP partners recognize that effective drug management is a precondition to achieving the intermediate results, efficiently delivering the BHP, and ultimately, achieving the project's strategic objective

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is 11 person months, at an approximate cost of \$274,883 This cost will be paid from RPM field support funds

ILLUSTRATIVE RPM BANGLADESH WORK PLAN MATRIX (FY98)

WORK PLAN FOR FY 98

TECHNICAL AREA AND ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
HOME OFFICE MANAGEMENT							
1 Technical support		Sacca Bates Savelli Beracochea Kuhn	1 0.5 0.25 0.05 1	WSH/DKAX1			
2 Administrative support							
REVOLVING DRUG FUND (RDF) STREAM OF ACTIVITIES							
Phase One Information Gathering and Situation Analysis							
1 Organize Core Group	Report	Davies Sacca Bates	1.5 0.75 0.75	KAR/DKAX3 BOS/DKAX2 WSH/DKAX2			
2 Prepare situation analysis Collect and organize required information	Reports						
Drugs and other supplies to be stocked and sold Local procurement options Regulatory issues Survey of currently operating drug sales programs Case studies of selected programs Morbidity and consumption data							
Phase Two Preparations for Implementation							
3 Propose suitable model(s) for RDF(s)	Proposal	Davies Sacca	1.5 1	KAR/DKAX2 BOS/DKAX3			
4 Estimate drug needs and RDF capitalization requirements	Estimates						
5 Identify and/or organize management unit(s)	Report						
6 Select suppliers and negotiate contracts	Contracts in place						
7 Prepare required management materials (forms manuals) for all levels	Management Materials						
8 Prepare required training activities and materials	Training Materials						

ILLUSTRATIVE RPM BANGLADESH WORK PLAN MATRIX (FY98)

WORK PLAN FOR FY 98

TECHNICAL AREA AND ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
RATIONAL DRUG USE (RDU) STREAM OF ACTIVITIES							
Phase One Information Gathering and Situation Analysis		Davies Sacca	0 25 0 25				
1 Prepare situation analysis Collect and organize required information	Report						
* Technical standards and service delivery guidelines * Drug lists generated by standards and guidelines Manuals and visual aids now available Prescribing and dispensing practices Packaging and labeling							
Phase Two preparation for Implementation		Davies Sacca	1 5 0 75	KAR/DKAX3 WSH/DKAX2			
2 Propose training supervision and monitoring strategies and required print materials Illustratively Standard drug treatment schedules and related visual aids RDU training for prescribers RDU training for dispensers Monitoring and supervision Set up drug information site	Materials						
3 Prepare required training activities and materials	Training materials						
			11 05				

Information Gathering and Situation Analysis for both the RDF stream and the RDU stream will occur during the trip to Bangladesh scheduled under RDF Phase One

XVII NEPAL PROGRAM WORK PLAN

A Background

RPM began working in Nepal in August 1993 through participation in an evaluation of the national Essential Drugs Program, in collaboration with WHO. Subsequently, in February 1994, RPM collaborated with the bilateral Child Survival and Family Planning Services (CSFPS) Project, which is managed by John Snow Inc (JSI), in the preparation of the "Logistics System Improvement Plan (LSIP)". As a result of input from RPM, a number of activities specific to drug management were incorporated into that plan. In March 1994, USAID Nepal formally requested that RPM establish a program in Nepal under the umbrella of the LSIP.

Throughout 1994, RPM operations in Nepal were funded from core funds provided through the two CAs. In 1995, following agency-wide changes in funding mechanisms, USAID Nepal allocated to RPM field support funding in the amount of \$430,000, with \$380,000 of that sum going to the MSH CA, and \$50,000 going to the USP CA.

The LSIP is attempting to overhaul the MOH's logistics services for drugs, medical supplies and family planning supplies. Within the MOH, the focal agencies are the Logistics Management Division (LMD) and the Department of Drug Administration (DDA). To assist LMD and DDA with implementation of the LSIP, USAID has brought together a team consisting of staff from the bilateral CSFPS Project, the centrally funded Family Planning Logistics Management (FPLM) and Rational Pharmaceutical Management (RPM) projects, and two local NGOs, Management Support Services (MASS) and New Era.

Within this team, the RPM Project is responsible for providing specialized support in drug management. The work undertaken by staff from these organizations falls into three technical areas: procurement and inventory management, drug information and rational use, and drug registration. Through these efforts, RPM is attempting to increase the financial sustainability of MOH's drug supply, and promote greater efficiency in the use of these critical, but scarce, resources.

B Plan

Overall Implementation Strategy

RPM's overall implementation strategy for the Nepal country work plan focuses on three technical areas, namely procurement/logistics, drug information and rational use, and drug registration. Activities include establishing a Program Management Unit, developing and implementing a control of antimicrobial resistance program, developing a package of training and supervisory materials for improving drug management at the district level, establishing selected drug information dissemination and promotion of rational use activities and setting up a procurement tracking and reporting system. These activities will likely involve RPM staff, outside consultants, and local NGOs when feasible. RPM will continue to collaborate with LSIP team members for FY98 activities.

Planned Activities

1 Procurement/logistics

- RPM is planning to develop a package of training and supervisory materials for improving drug management at the district level. Preparation and data gathering will serve as the first step in this activity. This will involve conducting a management baseline study, a prescribing practices baseline study, and a qualitative study of drug management systems operations. RPM is exploring collaboration with INRUD and GTZ to support these baseline studies. Through this process, it should be able to define the overall implementation and required training and supervisory materials needed to improve management systems. This will lead to the development and proposal of a sequence of training and supervisory steps and the drafting of required manuals and supervisory materials. Completion of the baseline studies is planned for March-May 1998. However, this is dependent on funding support from GTZ. The drafting of manuals and supervisory materials is scheduled to begin in July 1998.

2 Drug information/rational use

- RPM is planning to assist in the development and implementation of a control of antimicrobial resistance (AMR) program. This will involve participation in conducting a feasibility study and the development of a system design for an AMR surveillance system. The feasibility study and system design report is currently scheduled for completion in May 1998. Activities also include RPM assistance in organizing a national center at IOM, working with the Teaching Hospital's Microbiology Lab and Drug Information Unit. RPM will also work to assure that there is appropriate AMR content integrated into all existing program activities. The control of antimicrobial resistance program will be progressively implemented during FY98 and into FY99.
- RPM will continue selected drug information dissemination and promotion of rational use activities by supporting INRUD-Nepal participation in the RPM/ARCH/WHO/INRUD Proposal Development Workshop in Indonesia in April 1998, supporting the INRUD-Nepal Promoting Rational Drug Use (PRDU) course in March 1998 by providing tuition for two participants, and supporting the development of RHECPEC consumer drug information bulletin. The production of revised Standard Drug Treatment Guidelines (Nepali and English editions) is also planned as part of the FY98 work plan activities.

3 Registration

- RPM is planning to assist the MOH in establishing a procurement tracking and reporting system. The first step in this activity will be to specify procurement activities to be monitored and identify data resources. A data collection and reporting plan will be developed and presented to the MOH and other donors for review and comment. This should result in a final system design by April 1998. RPM will then begin to implement a system that collects relevant data and provides periodic reports by May 1998.

Expected Outcomes

If the activities outlined in this work plan are successful, the following outcomes should be achieved

- Increased product availability of essential drugs within MOH clinical facilities, and particularly those at district and sub-district levels,
- Increased capacity of the MOH staff to efficiently manage drug procurement and distribution systems,
- Improved rational use of drugs by care providers, as measured by conformity to standard norms of treatment,
- Reduced financial dependency of the MOH on donors for its drug supply, and
- Improved use of the private sector through increased availability of essential drugs in drug retail outlets

RPM Support for Strategic Objectives

USAID Nepal's Strategic Objective 2 (SO2) is *the reduction of fertility and improvement in maternal-child health*. RPM's work contributes most directly to Program Outcome 2.3 *increased use of selected maternal-child services* by working to increase the availability of essential drugs. Three of the four program indicators depend directly on availability and correct use of drugs for success: Vitamin A for vitamin A deficiency, ORS for diarrheal disease, and selected antibiotics for pneumonia.

RPM's work also supports Program Outcomes 2.1 *increased use of family planning services*, and 2.2 *increased quality of family planning services*. Increasing the use and quality of family planning services requires availability and proper use of both contraceptive supplies and the significant range of drug products required for reproductive health services. Support for this PO is due in part to RPM's contributions to procurement, distribution and MIS activities under the LSIP Project. It is also due to RPM's contribution to strengthening of child survival services.

Concerning Nepal's Target of Opportunity 2 (TO2) *increased STD/HIV prevention and control practices by high risk groups in targeted areas*, the AIDSCAP Project is working with the Nepal Chemists and Druggists Association (NCDA) on outreach activities for STD/HIV control. At AIDSCAP's request, RPM included NCDA in the Drug Information Network of Nepal. NCDA and other network sites have undertaken or will be undertaking outreach activities, and presentations on drugs for STD/HIV control will be specifically included.

RPM Response to Evaluation Team Recommendations

The 1997 RPM evaluation team outlined several recommendations in its final report concerning RPM activities in Nepal. The Nepal work plan addresses these as follows:

- Regarding the recommendation that “RPM quickly places a competent person in Nepal to work as part of a team” and “a visit by the RPM Director to Nepal is recommended, to discuss RPM district and other work as part of support to the country’s policy framework and decentralization process.” Current funding levels for RPM Nepal do not support the placement of a full time staff person in Nepal. However, the RPM Director visited Nepal in December 1997 to discuss the proposed FY98 work plan. Since that visit, RPM has assigned a new Nepal country manager. The Nepal country manager, with the assistance of a MSH staff person and a consultant to serve as field coordinators will work to ensure continued support to the country’s policy framework and decentralization process.
- The evaluation team recommended that RPM provide support to mechanisms for effective procurement of drugs at the two GTZ supported districts. In response to this recommendation, RPM is planning to conduct a management baseline study and a prescribing practices baseline study in the two GTZ supported districts. The drug management and prescribing studies will also be conducted in two control districts for a total of eight district assessments (four in management and four in prescribing). Following the assessments, a package of training and supervisory materials for improving drug management at the district level is planned for implementation in the two GTZ districts.
- The evaluation team recommended that RPM/MSH engage in a discussion with the MOH and USAID to see if there is a role for drug assessment, etc., in the introduction process of the Integrated Management of Childhood Illness (IMCI) strategy. Whenever possible, RPM should look for ways to demonstrate the link between essential drugs and health outcomes. The software developed for the reproductive health costing activity could be very useful in guiding and monitoring IMCI implementation. The IMCI drug management assessment manual is being field tested in the LAC region. Upon completion of the LAC regional field tests, RPM will approach the MOH and USAID about supporting Nepal as a field test site for the IMCI assessment tool. At this time, RPM will also discuss the use of the software developed for the reproductive health costing activity.

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix.

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is 19 person months, at an approximate cost of \$433,523. This cost will be paid from RPM field support funds.

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ILLUSTRATIVE RPM NEPAL WORK PLAN MATRIX (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT			COLLABORATORS	RESOURCES	
		PERSON	MONTHS	TRAVEL		OUTSIDE	EQUIP
I Home office support		Keene	1				
1 Technical oversight		Bates	0.5				
		Kuhn	1				
2 Administrative support		Beracochea	0.05				
II Set Up Project Management Unit		Dias	1	CBO/KTMX2		a Agreement	b Office Set Up
1 Put in place Agreement between RPM and DDA	Agreement	Keene	0.25	WSH/KTMX1			
		Jones	0.5	WSH/KTMX1			
		Bates	0.5	WSH/KTMX1			
2 Purchase equipment							
3 Recruit staff							
4 Set up management and accounting procedures	Procedures						
III Develop and implement a Control of Antimicrobial Resistance Program		Lee	1	WSH/KTMX3			
		Keene	0.75	WSH/KTMX2			
		Budiono	0.75	YKT/KTMX2			
1 Assure that there is appropriate CAMR content integrated into all existing program activities	Report	Surveillance Expertise	2	BOS/KTMX3		k Subcontract \$25K FY98	
		Dias	1	WSH/KTMX3		\$75K FY99	
Strengthening Drug Management at the District Level (IV below) Drug Information and Promotion of Rational Use Activities (V below) Procurement Tracking and Reporting System (V1 below)							
2 Carry out a feasibility study and develop system design for an AMR surveillance system	Report						
3 Progressively implement the surveillance system illustratively							
A Organize national center at IOM working with the Teaching Hospital's Microbiology Lab and Drug Information Unit	Periodic reports						
B Purchase and install any required equipment	Equipment installed						l Lab equip
C Define surveillance objectives and designate sentinel sites	Report						
D Define information dissemination objectives and designate methods	Report						
E Progressively implement							

ILLUSTRATIVE RPM NEPAL WORK PLAN MATRIX (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
IV Develop a package of training and supervisory materials for improving drug management at the district level		Dias	2	CBO/KTMX2			
		Keene	0.75	WSH/KTMX2			
		Budiono	1	YKT/KTMX2			
		Savelli	0.75	WSH/KTMX2			
		Bates	0.75	WSH/KTMX2			
1 Preparation and Data Gathering							
A Complete management baseline	Report				c INRUD thru GTZ		
B Carry out prescribing baseline	Report				INRUD thru GTZ		
C Carry out qualitative study of drug management systems operations	Report				d DDA thru Agreement		
D Collect relevant documents from partners and other sources	Documents						
2 Define overall implementation and required training and supervisory materials							
A Review all options and propose sequence of training and supervisory steps	Strategy Document						
B Share proposed strategy with district level staff and take feed back	Workshop						
C Revise strategy and produce detailed outline for required materials	Revised Strategy and Outlines						
3 Draft required manuals and supervisory materials for	Draft Materials						
Needs Estimation							
Procurement							
Store Keeping							
Prescribing							
Dispensing							
Community Involvement							

ILLUSTRATIVE RPM NEPAL WORK PLAN MATRIX (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
V Continue selected drug information dissemination and promotion of rational use activities		Budiono Keene	1 0 25	YKT/KTMX2			
1 Support INRUD Nepal participation in the RPM/ARCH/WHO/INRUD Proposal Development Work Shop	Proposal	e INRUD Staff		KTM/JKTX2 KTM/JKTX2			
2 Support INRUD Nepal RDU Course						f Tuition for 2 participants	
3 Support RHECPEC consumer drug information bulletin	Bulletins					g Subcontract costs in FY99	
4 Produce revised Standard Drug Treatment Guidelines Test existing draft revise and lay out final version Print English and Nepali editions	Published STGs					h Subcontract and printing	
5 Participation in international gatherings for rational drug use		i MOH staff		KTM/WSHX2 KTM/WSHX2			
VI Set up Procurement Tracking and Reporting System		Dias TBD	2 1	CBO/KTMX2 WSH/KTMX2			
1 Specify procurement activities to be monitored and identify data resources		j Local Hire	9				
2 Specify reporting periodicity and formats	Report						
3 Present data collection and reporting plan to MOH and donors and take in feed back							
4 Finalize system design	Report						
5 Implement system that is collect data and provide periodic reports	System in Place						
				21			

XVIII HUNGARY PROGRAM WORK PLAN

A Background

Hungary has been experiencing significant changes in its political, economic, and social systems during the last decade, and the health care system is no exception. The health care system in Hungary under the socialist government has been characterized by universal and free-of-charge health care for all citizens. However, demographic, epidemiological, and financial pressures of the changing society in recent years are forcing the government to consider fundamental reforms in the system. A number of measures are already underway, including the health insurance system reform and the shift of emphasis to preventive care and outpatient services. According to the government, Hungary spent 1.7% of GDP on drugs in the early 1990s, accounting for 30% of its total health expenditures.

During the first half of 1997, the USAID Mission in Budapest invited the Rational Pharmaceutical Management Project (RPM) to explore the possibilities of providing assistance to Hungary in the area of pharmaceutical management. RPM started the process by obtaining various perspectives on the issues regarding the health care system and the pharmaceutical sector in the country through document review, meetings and telephone/e-mail communications with USAID Global Bureau and the Mission, and interviewing representatives of a number of projects working in Hungary. The preliminary research based in the US allowed RPM to come to the following assumptions regarding the environment in which RPM's technical assistance would be conducted:

- Hungary is attempting to deal with serious health problems, including high incidence of cardiovascular and respiratory diseases, cancer, alcoholism, and tuberculosis in the midst of profound changes in the society. Improvements in drugs management can have measurable financial and clinical impacts.
- A number of health care reform measures have been introduced, but progress has been slow due to political and financial factors. The new "Health Act" and DRGs, which were introduced in 1987, can affect drug therapy.
- The pharmaceutical system is characterized by generous subsidization. Excessive prescription drug use and irrational prescribing are reported, but data supporting these reports is lacking. Drug costs are rising at a rate of 35% per year, and drug companies are very active in marketing products.

RPM made an initial trip to Hungary in October 1997. The major objectives of this visit were:

- 1) to provide USAID Mission and other interested parties with information about areas of RPM technical assistance,
- 2) to obtain local perspectives on pharmaceutical sector problems, and
- 3) to plan next steps.

Based on the information collected prior to and during this initial trip, RPM and USAID Mission made the following observations about two major areas of concern in the pharmaceutical sector in Hungary:

Selection of Drugs

With the opening of the Hungarian market to the international pharmaceutical industry, the number of drugs in the country dramatically increased. It is reported that about 300-400 new drug products are introduced each year in Hungary. As a result, the number of registered drug products in the country increased fourfold between 1990 and 1997, including many "me-too" products and expensive imported drugs.

There are also concerns about the appropriateness of the selection criteria of drugs that are subsidized by the government under the current health care system. These drugs are classified by the level of reimbursement (i.e., 100%, 75%, 50%, etc.), and the lists cover a large number of drug items. For example, 652 products are fully subsidized. Inclusion of large numbers of expensive drugs, some of which may be unsafe, not only aggravates the erosion of increasingly scarce resources of the government for the health care services, but may also pose public health concerns to the population.

Use of Drugs

A number of parties interviewed by RPM during the first visit expressed that irrational use of drugs was a serious issue in Hungary although there is not enough adequate data available on prescription practices in the country. A dramatic increase in the number of drugs in the market as described above occurred often without an improvement in the access to unbiased information for the prescriber. Training in clinical pharmacology, which would assist health care providers in making rational prescription decisions, is not part of the regular curricula for physicians and pharmacists in Hungary. While recently developed Standard Treatment Guidelines for selected conditions will potentially be a stepping stone for promoting rational use of drugs, their impacts on prescribing practices are unknown.

Based on these initial observations and discussions with the USAID Mission, RPM agreed to determine feasibility and potential impacts of technical assistance in the following three areas as the probable focus of RPM Hungary Country Program (The next section discusses each of them more in detail.)

- 1 Rational drug use,
- 2 Drug Selection with focus on the review of subsidized drugs, and
- 3 Improvement in the use of pharmaceuticals in the Vac Hospital

B Plan

Overall Implementation Strategy

Building upon the findings from the initial visit in October 1997, and subsequent communication with the mission, RPM proposes to work in three technical areas. While dialog with the mission and other partners in Hungary continues to clarify the exact scope of activities, RPM proposes to work in the following areas: (1) promotion of rational drug use by working with a group of general practitioners, (2) conducting a review of drug selection focusing on the list of subsidized drugs, and (3) improvement of pharmaceutical services at the Vac Hospital with probable focus on drug use.

In addition, RPM plans to translate and adapt RPM-developed manuals on drug selection, and drug use review, for use in Hungary.

The following section presents an illustrative plan of the RPM Hungary Country Program for the period of January-September 1998, based on the latest information made available to us. During this period, RPM will concentrate its efforts on obtaining baseline assessment and beginning to implement technical assistance in each of these three technical areas.

Planned Activities

- 1 **Rational Drug Use** RPM proposes to work on improving the prescribing practices in Hungary
 - During this period, RPM will focus on making a diagnostic assessment of prescribing problems, and planning appropriate interventions. RPM will begin designing a prescription survey to be used at health facilities. The levels of health care systems and types of health care conditions to be investigated by the survey will be determined through discussions with local partners as discussed below. The survey intends to assess current prescribing practices in treating selected health conditions, which will assist in identifying types and the extent of irrational drug use.
 - Designing a program to promote the rational use of drugs requires having on-the-ground knowledge of the drug prescribing and use arena, as well as objective information that can be used to show where problems exist. Both of these factors argue for having a local partner to implement this activity. In this regard, RPM is looking into the possibility of working through one of associations in this technical area, including the Association of General Practitioners (AGP). General practitioners are responsible for the bulk of drug prescriptions in Hungary, and RPM recognizes the potential value of its collaboration with AGP in both the implementation of the program and sustaining the impacts of the interventions. It is most likely that RPM will work with the AGP through a subcontract.
 - During the first visit to Hungary in 1998, RPM will seek to finalize an agreement with an organization to conduct a prescription survey, and begin the training of data enumerators. RPM and the partner organization will jointly coordinate the data collection and analysis process. In collaboration with the partner organization, the USAID Mission and other parties concerned, RPM anticipates to review findings of the survey to develop a plan for intervention activities which will be implemented in the next period.
- 2 **Drug Selection** In the area of drug selection, RPM proposes to conduct an analysis of the list of drugs subsidized by the government to assess the appropriateness of the drug selection criteria
 - The analysis will minimally address cost, safety, effectiveness, duplication, clinical necessity of drugs included in the list, and their compatibility with Standard Treatment Guidelines. The first round of analysis of fully subsidized drugs will be conducted in the US by a clinical pharmacologist in the Drug Management Program of Management Sciences for Health (MSH). RPM will present the results of the analysis to the USAID Mission, the Government of Hungary (e.g. Ministry of Welfare, National Health Insurance Fund), and other parties in Hungary.
 - RPM and the USAID Mission will then determine whether a similar analysis of other categories of subsidized drug lists will be useful and feasible. If it seems prudent to proceed with the time and resources allocated to this activity, RPM will consider involving a pharmacologist in Hungary for the second stage of the analysis so as to maximize the potential of this part of program as a tool to build local capacity in this area.

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- 3 **Use of Pharmaceuticals in Vac Hospitals** RPM is also seeking to work at the Vac Hospital to improve its pharmaceutical services. While the exact scope of technical activities by RPM at the Hospital is still being explored and is yet to be determined pending further discussions with the Hospital and the Mission, it is likely that RPM's work will be done in drug selection and prescribing.

Development of Hungarian-language RPM tools In addition to the three major technical activities detailed above, during this period RPM will immediately begin adaptation and translation of two RPM-developed manuals, the *Manual for the Development and Maintenance of Hospital Drug Formulary Systems*, and the *Guidelines for Implementing Drug Utilization Review Programs*. RPM recognizes the great value in having Hungarian-language tools available at the outset of the country program to generate interest in these aspects of pharmaceutical management. Potential recipients of the manuals include MOW, Medinfo, medical and pharmaceutical universities, associations, health professionals, and hospitals. RPM can also use the first generation of the adapted RPM manuals for further adaptation of the documents, potentially with local collaborators, in order to produce Hungarian variants of the manuals.

Expected Outcomes

Upon successful implementation of the above planned activities, RPM expects the following outcomes:

- Information on types, the extent, and causes of irrational drug use will be generated and shared with USAID Mission and the Government of Hungary
- The most appropriate interventions to promote rational drug use will be identified
- A collaborative relationship with a local NGO will be developed to promote rational drug use
- A framework for rational drug selection will be introduced to the Government of Hungary and other parties concerned
- Clinical and financial information on drugs currently fully subsidized by the government, and potential cost savings will be available
- Policy dialog with MOW and other parties concerned will be started regarding improving the selection of subsidized drugs
- Baseline assessment of use of drugs at Vac Hospital will be conducted, and technical assistance will be started

RPM Support for Strategic Objectives

The planned activities contribute overall to the achievement of the Mission's program objectives as follows:

- Activities for the promotion of rational drug use will support one of the Mission's program objectives to increase participation of better informed citizens at the local level. Work with an NGO could also serve to establish an "institutional home" for RPM activities in Hungary, which the Mission expressed would be helpful.

- Review of subsidized drug list supports another program objective of the Mission, namely “fiscal reform including improved efficiency, and working towards sustainable budgets” With few exceptions, selection of the most cost effective drugs based on the pre-determined and locally appropriate criteria results in cost savings in the health care system
- It can also be argued that improving prescribing, as part of the rational drug use technical area, can result in cost savings, but USAID, RPM, and local actors will have to carefully consider whether cost savings, health improvement, or both, should be emphasized in this area
- RPM’s activities at Vac Hospital will support the Mission’s interest in collaborating with other USAID-funded projects, such as the American International Health Alliance (AIHA) Hospital Partnership Project and DRG Project The major work of the AIHA Partnership Project at Vac Hospital has been to improve the clinical management of selected conditions through strengthening the home care RPM will keep a running dialog going with AIHA and Vac Hospital to maximize the potential to build our work on the achievements already made by the Partnership Project

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is nine person months, at an approximate cost of \$182,584 This cost will be paid from RPM field support funds

Leverage of Other Funds and Resources It is likely that RPM will work with AIHA and, possibly, other USAID funded organizations in Hungary, as well as with a local NGO It is unclear at this time the extent to which collaboration will result in leverage of funds and resources

ILLUSTRATIVE RPM HUNGARY WORK PLAN MATRIX FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
A Coordination							
1 Home office technical coordination		TS	1	1 DC Boston			
2 Program management		TF	1	2 DC Boston			
3 Home office administrative coordination		CK	1 25				
B Manual Adaptation/Translation	Tranlated manuals	TF	0 25			Translator	
1 Adopt the content to Hungarian context	for Formulary Dev	JM	0 05				
2 Translate them into Hungarian	and DUR for Hungary						
3 Disseminant translated manuals							
C Review of Drug Selection		TS	0 05		MOW (GS)		
1 Obtain subsidised drug lists		TF	0 75	BOS Budap x 2		Interpreter	
2 Identify the scope of first round of review		DL	0 25	Tuc Budap x 2			
3 Conduct review in the US		AE	0 5				
4 Present results to USAID Mission MOW NHIF etc	Review Report						
5 Determines feasibility of further TA	Plan of Activity						
6 Begin TA							
D Pharmaceutical Services at Vac Hospital		TS	0 05		Vac Hospital		
1 Identify potential areas for TA		TF	0 75	BOS Budap x 2	AIHA		
2 Establish contacts at Vac Hospital	Trip Report	EA*	1	Tuc Budap x 2			
3 Determine TA activities		TBD	0 5				
4 Obtain baseline measurements							
5 Implement TA							
E Rational Drug Use		TS	0 05				
1 Determine the focus of prescribing survey and identify local collaboarators		TF	1 25	BOS Budap x 2	MOW (GS)		Computer
2 Prepare plan and budget for the survey		EA	1	TUC Budap x 2	AGP(?)		
3 Develop survey instruments		MM	0 25				
4 Train data enumaerators							
5 Coordinate data collection							
6 Conduct analysis and design interventions	Study Report						
			9 95				

Note EA* denotes Ed Armstrong

XIX CENTRAL ASIA INFECTIOUS DISEASES PROGRAM WORK PLAN

A Background

The Rational Pharmaceutical Management (RPM) began its activities in Central Asia in September 1996, in collaboration with the Basic Support for Institutionalizing Child Survival (BASICS) Project and the Centers for Disease Control and Prevention (CDC), to focus on the main contributors of child mortality, which are acute respiratory infections and diarrheal disease. One oblast in each of three countries was selected as focus for the infectious disease program: Zhambul oblast-Kazakhstan, Osh oblast-Kyrgyzstan, and Ferghana oblast-Uzbekistan.

The program began with an initial assessment of representative primary health care facilities in the target oblasts, conducted jointly with BASICS in November 1996. Also in November 1996, RPM conducted a simulated purchase survey of drug sellers in Kazakhstan to determine drug availability to the patient, cost of recommended treatment, and drug sellers' clinical knowledge of health problems. (See the BASICS Report, "Health Facilities Assessment, Zhambul-Kazakhstan, Osh-Kyrgyzstan, Ferghana-Uzbekistan, 1996," for findings and recommendations.) MOH personnel were utilized for data collection and received training on use of the survey instruments and sampling methodology.

Based on the findings of the initial assessment, BASICS and RPM identified training needs in each country, and training programs, which were planned jointly with MOH counterparts, began in March 1997. To date, in all three countries for ARI case management, 14 oblast and 27 rayon-level trainers were trained, who in turn trained 306 physicians and other primary health care prescribers (*Feldschers*). For diarrhea case management, 12 national and oblast level, and 40 rayon-level trainers were trained, who in turn trained 950 physicians, nurses and *Feldschers*. Simultaneous with the training needs assessment, BASICS and RPM in collaboration with MOH personnel, developed a supervisory tool from the assessment questionnaires. MOH supervisors have been trained in its use, and are field testing it in various health facilities in the target countries at this time.

RPM found drug availability to be a problem in all three countries. Because of these findings and the concern of RPM and BASICS that drugs would not be available for program implementation, UNICEF promised to supply essential drugs to the target oblasts during 1997 and 1998. RPM also attempted to introduce the use of stock management cards, one technique used to control inventory, since stock issues and receipts were not usually documented in the health facilities surveyed. The RPM recommendation was to train supervisors and trainers on the use of stock cards during the BASICS case management training sessions. However, timing was not right for acceptance by the MOH counterparts.

B Plan

Overall Implementation Strategy

RPM plans to work in the technical area of drug info/rational use, with activities to include, a health facilities assessment, and tools development through collaboration with BASICS. These activities will be accomplished through country visits by RPM staff.

Planned Activities

Drug info/rational use RPM plans to conduct a health facilities assessment jointly with BASICS in March and April 1998, in order to measure the effectiveness of the training interventions implemented during the first phase of the program, and to provide supervisory tools for in-service training and monitoring of case management in diarrhea and ARI by MOH personnel

Questionnaires Utilizing the questionnaires from the original assessment in November 1996, RPM will adapt questions and data collection tables to facilitate collection of drug management information from primary health care prescribers and families in the treatment of children's diarrheal disease and acute respiratory infection (ARI) for children under the age of five. The drug management topics to be covered in the questionnaires are drug availability in health clinics and hospitals, and prescribing patterns in health clinics and hospitals. The RPM questionnaires will be incorporated into the BASICS Facility Survey forms, which will be used by BASICS personnel to conduct the facility assessments.

Drug Prices Local drug prices in each target oblast will be collected by the BASICS technical officers, and sent electronically to RPM/Washington. RPM will calculate average drug costs based on the locally collected prices for use in data analysis software.

Data Analysis Data from the BASICS/RPM Facility Survey forms will be entered into EPI-INFO software by BASICS personnel. The EPI-INFO files containing drug prescribing information will be provided electronically to RPM/Washington for use in the Prescription Analysis Software System (PASS). Reports for drug prescribing analysis will be generated using PASS software. RPM will analyze drug data and prepare a final report.

Reports RPM will publish a report analyzing prescribing habits of *Feldschers* and physicians for treatment of diarrhea and ARI in children under the age of five in FAP (*Feldscher* health post), SVA (outpatient clinic), and SUB (rural hospital) health facilities of the three oblasts. The RPM report will be incorporated into the BASICS final report.

Supervisory Tools BASICS and RPM will adapt the supervisory tools developed during the first phase of the project currently being field tested, and findings from the 1998 facilities assessment, into tools for in-service training and supervision. The tools will be disseminated to MOH officials during subsequent training sessions. It is notable that these tools will be adaptable for use in monitoring prescribing patterns in the treatment of other diseases.

Expected Outcomes

If activities outlined in this plan are successful, then the following outcomes should be achieved:

- MOH personnel will understand drug prescribing patterns in the target oblasts for diarrhea and ARI, such as average cost of drug treatment, most expensive drugs prescribed, number and type of diagnoses per patient visit, percentage of drugs prescribed by generic name and by injection, quantification of drugs prescribed by therapeutic class, number of drugs prescribed per patient visit, percentage male and female patients, frequency and duration of treatment for prescribed drugs, and the prescribing pattern by type of facility.

- MOH personnel will be capacitated to utilize the assessment questionnaires and methodology in future surveys of health care facilities
- MOH personnel will be capacitated to utilize the BASICS/RPM supervisory tools for in-service training and monitoring of health care providers in case management of ARI and diarrhea

A possible outcome is the future adaptation of the supervisory tools by the MOH for use in monitoring prescribing patterns in the treatment of other diseases

RPM Support for Strategic Objectives

The planned activities contribute overall to the achievement of the mission's strategic objectives as follows

SO 4 0 Special Initiatives, Intermediate Result 1, Modern management techniques and clinical practices introduced

RPM survey questionnaires and methodologies will be available to MOH personnel for future assessment of health facilities in drug management practices of primary health care prescribers in the treatment of children's diarrheal disease and acute respiratory infection (ARI) for children under the age of five

BASICS/RPM tools for in-service training and supervision will be available to MOH personnel. The tools will allow for future monitoring of diarrhea and ARI case management by MOH personnel

RPM Evaluation Team Recommendations

The 1997 RPM evaluation team did not evaluate the CAIDP program

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is two person months, at an approximate cost of \$38,514. This cost will be paid from RPM field support funds

Leverage of Other Funds and Resources These have not been estimated for the project, but substantial economies have been made through joint collaboration with BASICS both in hiring of consultants and data collection

ILLUSTRATIVE RPM CAIDP WORK PLAN MATRIX (FY98)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
PREPARE SURVEY FORMS Draft RPM forms Combine with BASICS survey forms Test, revise and translate forms	Survey forms	TM, PI TM AK	0 25+0 25				
HOME OFFICE SUPPORT ACTIVITIES Backstop administrative activities Review final reports		CK MM, JM	0 25 0 05+0 05				
CONDUCT FACILITY SURVEY Train survey team Collect data Analyze/ discuss data		BST BST PI, BST	0 25+0	Port au Prince-AlmatyX1			
TABLULATE AND ANALYZE DATA Transfer Epi-Info files to RPM Washington Input into PASS software Use PASS software to generate reports Analyze data	PASS reports	PI TM TM TM, PI	0 25+0				
PREPARE FINAL REPORT Write RPM portion Incorporate with BASICS final report	Report	PI, TM PI, TM	0 25+0 25				

XX UKRAINE PROGRAM WORK PLAN

A Background

The Rational Pharmaceutical Management Project's (RPM) involvement in Ukraine began with an assessment conducted in November 1993, following a World Bank request to USAID/Kyiv. At that time, there were critical shortages of essential drugs in the community and hospital settings. With the dissolution of the Soviet Union, traditional centralized pharmaceutical systems, including manufacturing and distribution, were severely disrupted. In the early 1990's, USAID and other donors provided medical humanitarian assistance, but this was only a stopgap measure. Through necessity, decentralization of drug procurement began when pharmacies and pharmacy networks were unable to obtain necessary drugs and supplies through the publicly-owned system of wholesalers (Pharmatsiyas).

In addition, there was almost a complete vacuum of drug information. The system was undergoing radical change from one that was highly centralized to one that was decentralized, but without the necessary new market infrastructure and the management skills needed to operate under the new conditions.

Due to various local circumstances, the World Bank follow up activity was never launched. In 1996, there was renewed interest in developing a RPM program, resulting in a reconnaissance visit in November 1996. At that time, the ENI bureau selected Ukraine as the second NIS country for RPM involvement under the NIS-add on to the worldwide CA.

Today, the problems in drug management in Ukraine are somewhat different than in the early 1990's. Whereas in 1993 there were shortages of essential drugs, in 1997, drug availability has improved. Drugs are available on the pharmaceutical market, but they are not necessarily accessible to patients or institutions because of their high cost. A severe imbalance still exists between the budgetary needs for inpatient and outpatient pharmaceuticals and the ability of the government to provide sufficient funds.

Decision-making authority has devolved to the local level. Although the Ministry of Health is responsible for issuing overall regulations, many operational decisions are made at the oblast (regional) or hospital level. Hospital administrators and pharmacy directors must choose among therapeutic alternatives, and make decisions about cost and supplier performance, often without adequate objective information, while being subject to the influence of manufacturers' representatives.

Because the problems in the pharmaceutical sector in Ukraine were well known by the MOH and USAID/Kyiv, the Mission requested that RPM begin activities by attending a conference on health reform issues in Yalta from May 25-30, 1997, under the auspices of the Ukrainian Ministry of Health. The conference was attended by heads of Oblast Health Administration from almost all oblasts of Ukraine. Main session topics included health insurance implementation, challenges in health care finance, accreditation of health care facilities, and the drug supply. RPM was invited to orient the participants to the concepts of rational pharmaceutical management and RPM's practical experience in Russia and other countries.

Based on the initial reconnaissance visits, and participation in the May 1997 Conference on Health Care Reform in Yalta, RPM proposed to implement a program that included

- formulary system implementation workshops,
- lectures on clinical pharmacology,
- technical assistance to hospitals implementing formulary systems,
- distribution of RPM tools developed in Russia,
- curricular reform at the National Medical University of Ukraine, and
- technical assistance to community pharmacies in procurement

To-date, RPM has conducted, or participated in the following activities

- an assessment of the pharmaceutical sector in November/December 1993,
- a reconnaissance visit to Ukraine in November 1996,
- a meeting with U S health care professionals, Minister of Health Serdiuk and Ambassador Scherbak in Washington, DC, in January 1997,
- the MOH Conference on Health Care Reforms in Ukraine in May 1997 in Yalta, Ukraine,
- a technical assistance visit in September/October 1997 to Zhytomyr Oblast in Ukraine to develop a pilot program in hospital formulary system development and the rational use of drugs,
- a technical assistance visit in September/October 1997 to the Ukrainian Ministry of Health Accreditation Committee on standards that relate to drug selection, procurement, preparation, distribution and use, and
- a Hospital Formulary System Development Workshop in Zhytomyr Oblast in December 1997 for physicians, pharmacists and administrators from the oblast (regional) and rayon (district) level

The technical assistance visit to Zhytomyr Oblast resulted in an orientation of the key individuals responsible to drug selection and procurement in the Zhytomyr Oblast Clinical Hospital (the main referral hospital in the region) and Zhytomyr Oblast Children's Hospital. The RPM team visit also had an assessment component, as this was the first visit to the pilot site. The RPM project obtained strong support from both oblast and hospital administrations. The decision was made to simultaneously coordinate activities at the oblast level and develop formulary systems at several hospitals.

During the September/October 1997 technical assistance visit, the RPM team collaborated with the ZdravReform project in order to review and make recommendations for changes in the Proposed Standards for Accreditation of Ukrainian Health Care Institutions. RPM provided an orientation to US accreditation standards of the Joint Commission on Accreditation of Health-care Organizations (JCAHO), and illustrated, through examples, how documentation currently available in Ukrainian hospitals may be used to support an objective evaluation process. RPM worked with those standards related to the selection, procurement, storage, preparation, distribution and use of pharmaceuticals. All of the changes recommended by RPM have been incorporated into the standards.

Approximately 40 participants, representing city, district (rayon) and regional (oblast) hospitals and administration attended the RPM Hospital Formulary System Development Workshop in Zhytomyr Oblast, Ukraine, from December 15-19, 1997. The workshop agenda focused on the steps that are necessary to develop and implement a system for effective drug selection, procurement, and rational drug use in hospitals. Participants from the two oblast hospitals, where RPM provided technical assistance in September/October 1997, presented their findings on morbidity and drug consumption to their colleagues, as well as practical suggestions on how to accomplish this task most efficiently in Ukrainian hospitals.

B Plan

Overall Implementation Strategy

RPM plans to work in three technical areas: formulary development and management, drug information/rational use, and pharmaceutical policy/legislation. Activities will focus primarily on the oblast (regional) level, however, pharmaceutical policy/legislation activities will be primarily at the national level. Preparations will begin for roll out activities into other oblasts in FY99, if funding permits doing so. Activities will include technical assistance visits, workshops, adaptation of RPM materials to the Ukrainian language and health care system, and information dissemination. RPM will, if requested, continue technical assistance on development of accreditation standards for Ukrainian health care institutions. These activities will be accomplished by use of RPM staff, technical advisors and local outside services consultants. RPM intends to collaborate with the American International Health Alliance (AIHA), BASICS, PATH, and CDC on drug management issues, when appropriate. In FY99, if funding is available, RPM plans to expand RPM activities into roll out oblasts, and collect and analyze baseline and post implementation data on effectiveness of RPM interventions in improving the selection, prescribing and use of drugs.

Planned Activities

- 1 Formulary development and management** For the period of January through September 1998, the RPM Ukraine Program will include training and technical assistance in formulary systems development and management. RPM will conduct one technical assistance visit to Zhytomyr. During that visit, RPM and one US consultant will assist the Formulary and Therapeutics Committees of Zhytomyr Oblast Clinical Hospital and the Zhytomyr Oblast Children's Hospital to finalize their policies and procedures, establish a concrete timetable for their work, and begin therapeutic class reviews in order to develop formulary lists for their respective institutions.

RPM intends to work initially in two oblast level hospitals, the Zhytomyr Oblast Clinical Hospital and the Zhytomyr Oblast Children's Hospital, in order to establish formulary committees and develop their formularies. Once trained, it is anticipated that counterparts from these two facilities will train their colleagues from district level (rayon) hospitals in the oblast.

If feasible to do so, RPM proposes rolling out activities in formulary systems development to other oblasts in Ukraine. Roll out would initially involve conducting a formulary development workshop during the last quarter of this year.

- 2 Drug information/rational use** In order to make certain that decisions about selection and use of drugs are rational and based on current objective information, RPM will conduct a course on clinical pharmacology for physicians and pharmacists in Zhytomyr Oblast, in collaboration with the Institute for Continuing Education in Kyiv. This activity supports the desire of the oblast and hospital administrations to prepare their staffs to make decisions on drug selection on the basis of drug efficacy, safety and cost. It is anticipated that approximately 100 health professionals will update their knowledge, allowing them to undertake cost-effective drug selection activities.

Following the Clinical Pharmacology Seminar, RPM will also supply the two pilot sites with clinical information, as needed. It is anticipated that these efforts will result in the implementation of a formulary list and inclusion of those drugs into the standard treatment guidelines.

During the technical assistance visit (above), RPM intends to assist the Zhytomyr Oblast Coordinating Committee in its goal of harmonizing standard treatment guidelines among primary through tertiary care facilities in the oblast. The result of this activity will be the development of a coordinated approach to treatment in the oblast, providing continuity of care from ambulatory to inpatient care, and primary through tertiary care. This may take the form of a matrix of standard treatment guidelines, with appropriate reference to the formulary lists above.

RPM also intends to identify collaborators at the Ukrainian National Medical University or other institution in order to incorporate formulary concepts into the medical curricula. This work will be conducted in conjunction with RPM participation in the MOH Conference on Health Care Reform in Ukraine (below).

The Ministry of Health has invited RPM to participate in the Fourth Annual Conference on Health Care Reform in Ukraine. It is anticipated that Zhytomyr counterparts will take an active part in presenting information to their colleagues. In preparation for this conference and information dissemination activities about the RPM Program in Ukraine, RPM will adapt and translate the RPM manuals on formulary systems development, and drug utilization review (DUR).

- 3 Drug policy/legislation** RPM will continue to provide technical assistance to the Ukrainian Ministry of Health Committee on Accreditation and Licensing of Health Care Institutions. RPM has completed review of the accreditation standards related to drug selection, procurement, storage, and use, and has suggested revisions and additions to those standards. However, as the accreditation process is implemented there may be a need to further refine those standards, RPM is prepared to conduct further technical assistance, if requested.

RPM proposes to work with the Mission to identify roll out oblasts for RPM activities and assess the needs in those oblasts, should funding allow roll out. Once two oblasts are identified, Zhytomyr counterparts have indicated a willingness to take an active role in orienting and training their colleagues from roll out oblasts in formulary systems development in RPM conducted Formulary Development Workshops.

Expected Outcomes

It is anticipated that successful completion of the above program of activities will result in the following outcomes:

- a methodology will have been introduced and implemented for selection, procurement and use of drugs, based the following criteria
 - 1 actual data on morbidity and drug consumption patterns,
 - 2 current unbiased drug information, and
 - 3 drug safety, efficacy, and cost
- the safe use of drugs will be increased in the pilot site hospitals,
- limited financial resources will be redirected towards the needs for the most essential drugs in hospitals,
- physician acceptance of rational drug use concepts will have been established through their inclusion in the formulary and therapeutics committees,

- a process will be established among the various levels of health care institutions and health administration in the oblast in order to coordinate approaches to treatment in the oblast,
- an increased capacity of local counterparts to effectively participate in work on standard treatment guidelines on the national level with the Ministry of Health,
- training capacity in the technical areas of rational use of drugs and formulary development will have been developed, and
- a process will have been established to continually update physicians' knowledge of clinical pharmacology

RPM Evaluation Team Recommendations

The 1997 RPM evaluation team outlined several recommendations and future directions in its final report. The work plan addresses these in the following manner:

- *focus on current technical areas* Given the similarities of the Ukrainian health care system to the one in Russia, materials developed for use in Russia can be adapted with minimal effort to the situation in Ukraine. The work plan details how the formulary development process, so successful in Russia, will be developed in the pilot site.
- *collaboration with others* Although USAID-funded American International Health Alliance (AIHA) partnership hospitals were invited to participate in the workshop, unfortunately, this was not possible. The AIHA office in Kyiv has, however, indicated that it is interested in possible collaboration in the future. As requested by the Mission, RPM intends to collaborate with BASICS and PATH on common issues related to rational drug selection, procurement, and use. To the extent this is feasible and meets the objectives of RPM, BASICS and the Mission, RPM will participate in an upcoming BASICS workshop in Lviv, Ukraine on case definition and preventable infectious disease management.
- *curriculum reform* RPM had also planned collaboration with the Ukrainian National Medical University and inclusion of RPM concepts into their curriculum. Zhytomyr counterparts voiced a strong preference for working with the Institute for Continuing Education, since that institution already has a program for training clinical pharmacologists. RPM has respected the wishes of its counterparts and not pursued inclusion of the National Medical University into the plans for Zhytomyr Oblast at this time.
- *standard treatment guidelines (STG)* Consistent with the objectives of RPM counterparts in Zhytomyr Oblast, the proposed activities will include coordination at the oblast level and development and implementation at the facility level. Pilot site familiarity with STGs will facilitate their updating and inclusion of the formulary into their matrices.
- *drug use review* The concept of peer review is not practiced in Ukrainian health care institutions, however, the concept received an affirmative reception by physicians at the recent workshop on formulary systems development. Initiation of formulary/therapeutics committees may provide the necessary base from which to build a drug utilization review system.

- *opportunities to study prescribing patterns* Local counterparts, during technical assistance activities and the formulary development workshop, indicated that antibacterial resistance is a problem in the hospitals due, in large part, to irrational antibiotic use in the ambulatory, and primary and secondary hospital settings. Collecting baseline and EOP data provides an opportunity to demonstrate the impact of RPM activities in this area of concern to local counterparts.
- *cost-effective procurement in pharmacies (initial plan)* Because of the changing status of pharmacies in Ukraine, the Mission recommended that it was a better use of limited resources to concentrate RPM efforts on formulary development.

The FY99 work plan will focus on expanding current activities into roll out oblasts and participating in national activities to increase the number of stakeholders in rational drug selection and use processes.

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix.

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is ten person months, at an approximate cost of \$236,683. This cost will be paid from RPM add-on funds.

Leverage of Other Funds and Resources RPM is prepared to collaborate with other organizations on issues related to the rational use of drugs, including the American International Health Alliance (AIHA), BASICS and PATH.

ILLUSTRATIVE RPM UKRAINE WORK PLAN MATRIX (FY98)

TECHNICAL PLAN							
OBJECTIVES/ACTIVITIES	INDICATOR	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
GENERAL MANAGEMENT							
<i>1 COORDINATE COUNTRY PROGRAM</i>							
1 1 Home office technical coordination		OD TS EB	2 8 0 1 0 05				
1 2 Home office administrative support		VD	2				
I FORMULARY SYSTEMS DEVELOPMENT AND MANAGEMENT							
<i>2 INTRODUCE CONCEPTS OF FORMULARY AND DUR SYSTEMS DEVELOPMENT</i>							
2 1 Identify oblasts for RPM roll out activities		OD	0 5				
2 2 Assess information needs							
2 3 Identify participants lecturers venue						interpreting	
2 4 Plan agenda						translation	AV equip rental
2 5 Prepare materials							
2 6 Participate in other workshops	presentation	OD	0 5	DC Kyiv x2	BASICS/ PATH		
<i>3 CONDUCT TECHNICAL ASSISTANCE TO HOSPITALS</i>							
3 1 Follow up TA in Zhytomyr Oblast	formulary	EA	0 25	(already			
3 2 Determine technical assistance needs in additional hospitals and roll out oblasts		OD	0 5	in country)			
3 3 Identify consultants							
3 4 Conduct initial TA		EA					
3 5 Follow up TA	formulary	EA					
II DRUG INFORMATION/ RATIONAL USE							
<i>4 CONDUCT CLINICAL PHARMACOLOGY COURSE</i>							
4 1 Identify institutions for collaboration		OD	0 25		Institute of CE Kyiv	honoraria	
4 2 Identify lecturers and participants							
4 3 Plan agenda		AZ	0 25				
4 4 Prepare materials	Ukrainian lang					interpreting	
4 5 Conduct course	materials	OD	0 5	DC Kyiv X2			
4 6 Conduct post course survey		EA	0 25	Tucson Kyiv X2			
<i>5 INCORPORATE FORMULARY SYSTEMS CONCEPTS INTO MEDICAL CURRICULA</i>							
5 1 Identify collaborating programs and lecturers		OD	0 5	(already			
5 2 Include lecturers in workshops as participants				in country)			
5 3 Identify lecture topics							
5 4 Identify sources of current unbiased technical information and facilitate their access	database						computer software
5 5 Develop lectures materials and appropriate teaching approach	materials						materials
5 6 Include lectures in curriculum	course syllabus						
5 7 Conduct follow up survey							

TECHNICAL PLAN							
OBJECTIVES/ACTIVITIES	INDICATOR	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
6 DEVELOP UKRAINIAN LANGUAGE MATERIALS & DISSEMINATE INFORMATION							
6 1 Identify materials for dissemination		OD	0 25				
6 2 Identify channels of dissemination							
6 3 Adapt / translate materials	Ukrainian lang					translators	
6 4 Reproduce materials	printed materials						
6 5 Distribution		AZ	0 25				
6 6 Participate in workshops/ seminars	presentations	OD	0 5	DC Kyiv X2	MoH Zhytomyr	honoraria	
		TS	0 25	DC Kyiv X1		interpreters	
III DRUG POLICY/ LEGISLATION							
7 CONDUCT TECHNICAL ASSISTANCE TO MINISTRY OF HEALTH TO INCORPORATE RPM CONCEPTS INTO ACCREDITATION GUIDELINES							
7 1 Identify information needs		OD	0 25		MoH	interpreting	
7 2 Include MoH staff in workshops as participants							
7 3 Conduct follow up TA							
7 4 Provide final report to Health Minister	final report						

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XXI RUSSIA PROGRAM WORK PLAN

A Background

The Rational Pharmaceutical Management Project (RPM) began its activities in Russia in November 1993 with NIS add-on funds to the RPM-Worldwide Cooperative Agreement (CA). Given the large size of the country, it was initially decided that the project would begin in one Russian oblast, an administrative unit corresponding to a US state. After the selection of the demonstration site of Ryazan Oblast, an in-depth pharmaceutical sector assessment was conducted, requiring substantial adaptation of existing assessment tools, and orientation of local specialists to Western pharmaceutical concepts. The assessment process, as well as the "Policy Options Workshop" that followed, resulted in the creation of a large number of stakeholders.

Based on the outcomes of the Ryazan assessment, a CA specific to Russia was developed to respond to political, economic, and social changes occurring in Russia at that time. The CA scope of activities includes cost-effective drug selection/formulary system implementation, procurement and tender management, drug information development (in collaboration with the United States Pharmacopeia (USP)), community pharmacy management, rational drug use, and drug use review (DUR).

During 1995-1997, RPM prepared training materials and manuals, developed operational and educational tools, and conducted various activities in the six technical areas, including training of trainers workshops. Novgorod and Pskov oblasts were selected for roll out activities. To date, RPM has trained more than 400 Russian specialists in formulary management, rational use of drugs, procurement and community pharmacy management. To facilitate formulary system implementation, three tools were developed and widely disseminated: *Guidelines for implementing DUR Programs in Russian Hospitals*, *Manual for the Development and Maintenance of Hospital Drug Formulary Systems*, and in collaboration with WHO, an adaptation of the *WHO Guide to Good Prescribing*. RPM work in Ryazan, Novgorod and Pskov has been officially included as part of oblasts' health development strategies, including establishment of Formulary and DUR committees, and development of drug formulary lists in about 60 hospitals. In 1997 the first formulary manual in a Russian hospital was created in Ryazan Central Oblast Hospital.

In the area of community pharmacy management, RPM developed training materials and business plan tools, and conducted workshops, training of trainers sessions, and in-service sessions in Ryazan oblast. To date approximately 15 pharmacy managers have utilized information gained during RPM activities to implement basic pharmacy management concepts, and to develop business plans. Not only has this activity promoted viability of private sector pharmacies, but the Ryazan oblast pharmacy committee has included some elements of business plans in the licensing and accreditation processes. As a result of institutionalizing RPM concepts in government pharmacies in Ryazan, several community pharmacies that were in jeopardy of bankruptcy have turned their financial situations completely around.

In the area of procurement and tender management, RPM has provided limited technical assistance to all three oblasts. As a result of RPM assistance a mini-tender was conducted in Novgorod that reportedly resulted in a savings of US\$165,000.

RPM has succeeded in leveraging resources from its oblasts in conducting training activities. Beginning in 1997, oblast health administrators agreed to cover participant expenses whenever possible, with RPM providing trainers and consultants, and materials.

In the fall of 1997, on recommendation from the RPM evaluation team, tools were developed to measure impact of RPM activities in Russia. Using the tools, RPM has collected data from 32 major hospitals in the oblasts to date, and plans to analyze the data and report the findings during FY98 activities.

B Plan

Overall Implementation Strategy

The most significant change in the RPM Russia implementation strategy is the decision by MSH not to proceed with accreditation of a field office in Russia. In this case, Russian law prohibits the presence of a local, official representative of MSH (Andrei Zagorski), or the use of full-time outside service contractors. However, given the successes achieved by the project to date, and expectations of continuation by Russian counterparts and USAID, RPM proposes to continue of full program of activities, through short-term consultant visits.

Andrei Zagorski will relocate to the DMP office in Arlington, and assume the position of Russia Country Program Manager. RPM will continue to utilize the services of a logistics coordinator and physician, but this will be done through short-term contracts for specific pieces of work, rather than outside service contracts for full-time work. Although RPM will not have a Moscow office, it is assumed that visiting staff and consultants will be able to use office space and equipment at Pharmedinfo.

RPM plans to work in four areas during the time period addressed in this plan: project impact evaluation, procurement/logistics, drug info/rational use, and increased cooperation between oblasts.

RPM activities will take place at the Federal Ministries of Health and Economics, health administrations of Ryazan, Novgorod and Pskov oblasts, and respective oblast health facilities, with the perspective of rolling some activities out to Kaluga and Moscow oblasts, with support from Kaiser Permanente International (KPI) during FY99.

Activities will include direct technical assistance to oblast health administrations and health facilities, tools development, assessments, seminars, workshops, and Russia-wide conferences, which will be accomplished through wide involvement of Russian specialists from various levels of health systems, and a combination of outside services consultants, local advisors, and RPM staff.

RPM will continue a well established collaboration with the Russian Center for Pharmaceutical and Medical-Technical Information (PHARMEDINFO), and Medical Universities in Moscow, Ryazan and Saint Petersburg. Plans also include enhanced collaboration with Russian Federal level Ministries. During the final year of the project, collaboration is anticipated with other USAID funded projects (KPI, BU), and international donors, such as World Health Organization (WHO).

Planned Activities

- 1 **Project Evaluation** RPM plans to continue the ongoing activity of measuring, documenting, and disseminating, information on clinical and economic project impact and outcomes, as follows:
 - RPM staff, consultants and counterparts will analyze the data collected from 32 hospitals in Ryazan, Novgorod and Pskov oblasts, and draft a report containing information about hospitals' progress on implementation of formulary systems and drug use review programs, specific drugs deleted from use, and financial impact.

- Establish a work group who will produce a document based on evaluation findings during a two week session at MSH-DMP headquarters in Washington, DC. The group will likely be comprised of experts from the Ministry of Health and Ministry of Economics, Federal Mandatory Medical Insurance Fund, Pharmedinfo, health officials and prescribers from Ryazan, Novgorod and Pskov oblasts, academics from Medical Schools, and RPM-Russia staff. The report will be created in both English and Russian languages.
 - Conduct a Federal Level Meeting in Russia to disseminate findings from the impact review exercise. It is likely that the meeting will take place in Novgorod oblast, since the oblast was chosen by the Ministry of Health last year as a demonstration site for health care reform in the Russian Federation. The anticipated audience will be the Minister of Health, representatives from Ministry of Economics, Ministry of Finance, and Federal Mandatory Medical Insurance Fund. This activity is contingent on the availability of the above mentioned authorities.
 - Present findings from the RPM impact evaluation report mentioned above, at the Fifth All-Russia Man and Drug Congress, April 21-25, 1998. This is one of the most important annual conferences in Russia, dedicated to drug use management. RPM will have a three hour symposium, co-chaired by Anthony Savelli, RPM Director, and academician Vladimir Lepakhin, director of the clinical pharmacology department of Moscow Friendship University Medical School, and head of the Russian Center for Adverse Drug Reaction Studies. RPM will support participation of 25 participants from the three RPM oblasts, and St. Petersburg. Also during the Congress, heads of oblast Health Administrations and oblast practitioners will share their experiences in formulary system implementation.
- 2 **Procurement/logistics** RPM plans to conduct a workshop in tender management and pooled procurement in Pskov oblast. The workshop will be structured to allow for some direct technical assistance to participants. RPM consultants, local experts, Pskov Oblast Administration, Pharmacia, and the Regional Mandatory Medical Insurance Fund will look for opportunities for cost savings by improving procurement techniques. This activity will use teaching materials based on the MSH publication, *Managing Drug Supply*, widely used in other RPM countries. RPM has budgeted this activity assuming only a modest amount of financial support from the oblast, however, KPI has expressed interest in funding the translation and Russian adaptation of these materials, as well as expenses of 25 participants from Moscow and Kaluga oblasts.
- 3 **Drug info/rational use** RPM plans to review already established formulary and DUR programs in the target oblasts to determine cost-effectiveness and rationality of prescribed drugs, and provide technical assistance in establishing new programs. This activity will be conducted in cooperation with local drug information centers (DIC) established earlier by USP, and includes the following activities:
- RPM-Russia local outside service consultants will provide direct technical assistance in formulary development. The consultants, including academics from local Medical Universities, will provide training in clinical pharmacology to local prescribers. It is anticipated that the activity will improve therapeutic outcomes, and lead to further cost savings. In addition, this activity supports the health administration directives of the oblasts that all rayon hospitals implement formulary systems by the end of 1998.

- RPM will continue to provide technical assistance in implementing drug use review (DUR) programs. Assistance will be given to counterparts in adapting existing DUR materials to the Russian setting, emphasizing manageability of the drug evaluations. Presumably, this will result in the revision of the *Guidelines for Implementing DUR Programs in Russian Hospitals*, and the development of special tools to facilitate the DUR process in health facilities.
- RPM-Russia staff, in collaboration with Pharmedinfo and USP will provide assistance in producing formulary manuals for Novgorod and Pskov oblasts. Specifically, RPM assistance will include revision of both oblast formulary lists, developing drug monographs, and providing financial support for printing the manuals.
- RPM plans to disseminate its Russia experience in formulary development and DUR Russia-wide. To achieve this goal, RPM plans to
 - ▶ Maintain a RPM home page on *WWW.mednet.com*, the Internet site of the Russian Federation Ministry of Health. Currently, in collaboration with Pharmedinfo, RPM maintains on this site an RPM summary with project goals and description of technical areas, and the two RPM manuals *Guidelines for implementing DUR Programs in Russian Hospitals*, and *Manual for the Development and Maintenance of Hospital Drug Formulary Systems*. During this period, RPM plans to include the findings from the RPM impact evaluation report discussed above.
 - ▶ RPM-Russia staff and consultants will participate in international conferences on, "Health Reforms in Russia: outcomes and impacts" in Omsk (Siberia) and Moscow. RPM will deliver presentations on its experience in Russian oblasts. Funds to support these conferences are to be provided by KPI.

- 4 **Increase Cooperation between Oblasts** RPM plans to continue assistance to counterparts and all interested parties in Russia in developing an inter-regional communication strategy for dissemination of experiences in formulary development, DUR, and rational use of drugs. To achieve this, RPM will attempt to retain the work group established for the purpose of RPM impact evaluation reporting, as an active coordinating body, which will ensure consistency of Federal and regional efforts. One coordinating trip to each oblast is planned, as well as provision of RPM manuals for distribution.

Expected outcomes

The following outcomes are expected, contingent on successful completion of the planned activities:

- Information will be available to demonstrate the impact of RPM interventions in terms of improved resource management and health outcomes.
- Further institutionalization of rational pharmaceutical management concepts will be achieved at the regional level through development of additional formulary systems and DUR programs.
- Strategies for on-going formulary refinement and management will be developed.

- Methodology for evaluation of formulary systems implementation will be introduced to a wide audience of health providers
- Drug procurement management skills will be strengthened in oblast procurement agencies, resulting in lower procurement costs
- Financial waste will decrease by deleting ineffective drugs from hospital and oblast formulary lists
- Rational drug use will be improved through implementation of DUR programs in rayon hospitals
- Reliable, unbiased drug information will be made available for health providers through publication of two oblast formulary manuals
- RPM materials and techniques will be made available to a large audience of Russian health workers through the Internet and All-Russia conferences
- Coordination of rational drug use efforts between various levels of the health system will be achieved

RPM Support for Strategic Objectives

The RPM Russia project supports the mission's overall strategic objective (SO), *3 0 Respond to humanitarian crises and strengthen the capacity to manage the human dimension of the transition to democracy*, and contributes directly to the following intermediate objectives

SO 3 2 Improved effectiveness of selected social benefits and services

IR3 3 2 New approaches to service delivery adopted

RPM Evaluation Team Recommendations

The 1997 RPM evaluation team outlined several recommendations and future directions in its final report. The work plan addresses these as follows

- Technical assistance in tendering RPM plans to conduct a workshop and provide technical assistance in tender and purchasing group management to procurement agencies and health administrations of three oblasts
- Technical assistance and training in DUR RPM consultants are scheduled to provide assistance in DUR drug evaluations during technical visits to three Russian oblasts
- Documenting project outcomes as the first stage of documenting process RPM plans to develop impact evaluation report and present it the wide audience on both Federal and regional level
- Collaboration with other organizations RPM will continue to collaborate with Pharmedinfo, and USP, and anticipates working with KPI in the area of procurement

- Develop an inter-oblast communication strategy RPM plans to establish a work group of Russian federal and oblast level experts during the impact evaluation activity to carry on inter-oblast communication
- Training in clinical pharmacology RPM will include clinical pharmacology as a part of formulary and DUR training and technical assistance
- Promote collaboration and communication between the institutions and DICs RPM plans to work through oblast DICs in implementation of hospital drug use review programs
- Incorporating drug therapy into Standard Treatment Guidelines when feasible, RPM plans to harmonize drug formularies with standard treatment guidelines (STG), currently there is no consistency in STGs used in various hospitals due to the great number of medical schools of thought

RPM intends to address any remaining recommendations and future directions from the RPM evaluation team's report in the FY99 plan

C Work Plan Matrix

The planned activities for FY98 are summarized in the attached Work Plan Matrix Funds from both the RPM Russia Cooperative Agreement, and the NIS add-on to the RPM Worldwide CA will be used Separate matrices and budgets have been included Russia CA funds will be used for in-Russia costs, including salary and travel for local consultants, translation costs, and participants costs for the Man and Drugs Congress Add-on and OYB transfer funds will be used for Washington-based expenses and international travel, including the impact meeting that will take place in Washington

D Resource Inputs

RPM's Level of Effort and Funding The estimated level of RPM's effort for this activity this year is 12 person months, at an approximate cost of \$452,409 This cost will be paid from RPM-Russia CA funds, NIS Add-on funds, and OYB transfer funds The corresponding budgets are attached

Leverage of Other Funds and Resources The exact form of collaboration with Kaiser Permanente International is unclear at this time

RPM ADD-ON /OYB RUSSIA WORK PLAN MATRIX (Illustrative)

TECHNICAL AREA and ACTIVITIES	OUTPUT	LEVEL OF EFFORT		TRAVEL	COLLABORATORS	RESOURCES	
		PERSON	MONTHS			OUTSIDE	EQUIP
Home Office Support		AZ	2				
		VDP	1				
		TS	0.25				
		EB	0.05				
Legal Fees						Stephoe and Johnson fees of \$2 000	
I Development							
1 IEC Social Marketing Impact Evaluation					Pharmedinfo USP		
A Data Analysis	Access reports	AZ	0.5				
		VDP	0.15				
		TS	0.05				
		MM	0.25				
B Washington Meeting	Final Report	AZ	0.5	Mos DCX2			
		VDP	1	for 14 participants			
		TS	0.05	& 3 Moscow staff			
		MM	0.05				
		TM	0.1				
		OD	0.1				
		DL	0.05				
		JR	0.05				
C Federal Level Meeting in Novgorod	Proceedings	AZ	1	DC MosX2		100 copies of report	
		VDP	0.15				
		TS	0.5	DC MosX2			
D Man and Drugs Congress	Abstracts	AZ	1	DC MosX2			
		VDP	0.15				
		TS	0.5	DC MosX2			
II Procurement/logistics							
1 Training/Workshop	Proceedings	AZ	1	DC MosX2			
		VDP	0.15				
		TG	0.75	Alb MosX2			
III Drug Info/rational use	Trip Report	AZ	0.75	DC MosX22			
		VDP	0.15				
		TS	0.05				
1 Technical Intervention TA trips for formulary development							
2 Technical Intervention TA trips for DUR							
3 Technical Intervention Novgorod Formulary Manual production	Manual						
4 Technical Intervention Pskov Formulary Manual production	Manual						
5 IEC/Social Marketing RPM Mednet Homepage	Homepage						
6 IEC/Social Marketing Health Reform Conference							
IV Development							
Increased Cooperation between oblasts							
1 Technical Intervention Coordinating trip							
2 IEC/Social Marketing Provision of RPM manuals							