

**Scaling up
Antimicrobial
Resistance, Drug
and Therapeutics
Committees, and
Rational Drug Use
Activities in
Ethiopia - A
Collaborative
Strategy for
Success, February
2007:**

Course Report

Management Sciences for Health
is a nonprofit organization
strengthening health programs worldwide.



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April 2007

Scaling up Antimicrobial Resistance, Drug and Therapeutics Committees, and Rational Drug Use Activities in Ethiopia - A Collaborative Strategy for Success, February 2007: Course Report

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About RPM Plus

RPM Plus works in more than 20 developing and transitional countries to provide technical assistance to strengthen drug and health commodity management systems. The program offers technical guidance and assists in strategy development and program implementation both in improving the availability of health commodities—pharmaceuticals, vaccines, supplies, and basic medical equipment—of assured quality for maternal and child health, HIV/AIDS, infectious diseases, and family planning and in promoting the appropriate use of health commodities in the public and private sectors.

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ACRONYMS

AMR	Antimicrobial Resistance
ARV	Antiretroviral [medicines]
DACA	Drug Administration and Control Authority
DTC	Drug and Therapeutics Committee
DUE	Drug Use Evaluation
EHNRI	Ethiopia Health and Nutrition Research Institute
INRUD	International Network for Rational Use of Drugs
MOH	Ministry of Health
MSH	Management Sciences for Health
RDU	Rational Drug Use
RFCC	Request for Country Clearance
RHB	Regional Health Bureau
RPM Plus	Rational Pharmaceutical Management Plus [MSH]
STG	Standard Treatment Guideline
TOT	Training of Trainers
USAID	U.S. Agency for International Development
WHO	World Health Organization

BACKGROUND

The Drug Administration and Control Authority of Ethiopia (DACA) in collaboration with Rational Pharmaceutical Management Plus (RPM Plus) program of Management Sciences for Health (MSH) and support from United States Agency for International Development (USAID) successfully initiated a country level advocacy for antimicrobial resistance (AMR) in Ethiopia and the process is gaining momentum. The first AMR stakeholders' meeting was held on 2nd March, 2006 followed by a "Call-To-Action National Workshop on AMR Containment" from November 16-18, 2006.^{1,2} There were more than 60 participants from hospitals, Ethiopia Health and Nutrition Research Institute (EHNRI), academia, research, professional associations, media, and government institutions who are keen to see this initiative succeed. There is need to provide continued technical support to implement the action plan for the national AMR program that was drafted by relevant stakeholders.

DACA in collaboration with RPM Plus/MSH and support from USAID also organized a national Drug and Therapeutics Committee (DTC) and Training of Trainers (TOT) course from August 16 to September 2, 2006.³ Forty medical doctors and pharmacists participated from twenty hospitals from all over the country to establish DTCs in health facilities. There is need to provide continued technical support and encouragement to the trainees in order to enable them to establish functional DTCs and implement related DTC activities.

RPM Plus has pharmacy associates geographically positioned in all the regions of Ethiopia to provide technical assistance and mentorship to health facilities in their catchment area. However, there is a need to build the technical and operational skills of these staff in the areas of AMR, DTC, and Rational Drug Use (RDU) so that they can provide active follow-on support. As part of the sustainability plan and joint effort, there is also need to build the technical and operational skills of Regional Health Bureau (RHB) pharmacy staff to provide follow-up support to health facilities in these activities. Hence it was proposed that a training program on AMR, DTC and RDU activities be organized jointly by DACA and RPM Plus to meet these needs.

¹ Joshi, M., and M. Miralles. 2006. *Antimicrobial Resistance Advocacy and Containment in Ethiopia: Report of Initial Activities in February–March 2006*. Submitted to the U.S. Agency for International Development by the Rational Pharmaceutical Management Plus Program. Arlington, VA: Management Sciences for Health.

² Goredema, W, O. Hazemba, N Nelson, M. Sanchez and A. Sosa. 2006. *A Call-to-Action National Workshop on Antimicrobial Resistance Containment; Adama, Ethiopia, November 16-18, 2006: Trip Report*. Developed in collaboration with the Alliance for the Prudent Use of Antibiotics and Links Media. Submitted to the U.S. Agency for International Development by the Rational Pharmaceutical Management Plus Program. Arlington, VA: Management Sciences for Health.

³ Green, T., Konduri, N., Ofori-Adjei, D., *National Training Course on Drug and Therapeutics Committee and Training of Trainers, Addis Ababa, Ethiopia, August 21 to September 2, 2006: Course Report*. Published for the U.S. Agency for International Development by the Rational Pharmaceutical Management Plus Program. Arlington, VA: Management Sciences for Health.

Purpose of Trip

Gabriel Daniel, Terry Green and Niranjan Konduri travelled to Addis Ababa, Ethiopia to assist in the technical and facilitation aspects of the training course “Scaling up AMR, DTC, and Rational Drug Use Activities in Ethiopia: A Collaborative Strategy for Success” that was held from February 5 to February 10, 2007.

Scope of Work

Scope of work for Gabriel Daniel

- Assist in the orientation of new staff
- Participate in the planning of RPM Plus/MSH support to DACA in line with the national drug program and joint activities during 2007
- Participate in the planning and implementation of the DTC/AMR/RDU workshop during 5-10 February 2007 for RPM Plus field staff and RHB pharmacists
- Review progress of work at the country office with focus on ARVs management at different levels, renovation activities, QC assistance, initiatives with school of pharmacy and EPA
- Brief and debrief USAID on current trip as requested

Scope of work for Terry Green

- Facilitator for DTC, AMR, Rational Drug Use sessions in the orientation program
- Review preparations and logistics before the orientation program
- Assist the organizers in technical aspects of the orientation program and planning for the practical activities
- Assist in developing follow-up strategies for staff through workplans for implementation of DTCs in their facilities
- Brief and debrief USAID if requested

Scope of work for Niranjan Konduri

- Facilitator for DTC and Rational Drug Use sessions in the orientation program
- Review preparations and logistics before the orientation program
- Assist the organizers in technical aspects of the orientation program and planning for the practical activities
- Assist in developing follow-up strategies for staff through workplans for implementation of DTCs in their facilities
- Meet with selected DTC trainees from September 2006 course in their hospitals to provide technical assistance for DTC development

The Request for Country Clearance (RFCC) detailing the scope of work, anticipated contacts, travel and lodging information, and funding source can be found in Annex 1.

ACTIVITIES

Preparation before the Orientation Program

Priority topics were selected by RPM Plus team in Washington for the orientation program after a series of brainstorming discussions. In order to make the orientation program as practical as possible, two half day practicums on rational drug use and drug information sources were organized. The draft schedule was presented to DACA and with their inputs, the schedule was finalized (Annex 2).

Each RPM Plus pharmacy associate was requested to bring specific data elements from each hospital who had sent their staff for the national DTC-TOT training in August-September 2006. The list of hospitals with contact names of the hospital staff and RPM Plus pharmacy associate is in Annex 3. The letter that was sent to obtain specific data is in Annex 4. The purpose of requesting specific data elements was to obtain information on drug procurement and drug use at hospitals in Ethiopia that could be used in activities during the DTC practicum. This exercise was also important to enable the RPM Plus pharmacy associates to appreciate the efforts and the process required to obtain any sort of data required to perform RDU studies.

Orientation Program

The trainees included a mix of staff from the Ethiopian RHBs, DACA and RPM Plus pharmacy associates who are based at various regions of the country. The trainee list along with their contact information is in Annex 5.

Mr. Haile Selassie Bihon, the Director General of DACA could not arrive on the opening day as planned. Therefore, Mr. Abraham Kahsay, the head of planning and drug information department at DACA made the opening speech on behalf of Mr. Bihon (Annex 6). Dr. Negussu Mekonnen, Chief of Party, MSH/RPM Plus Ethiopia thanked DACA and RHB for the effective collaboration and welcomed the trainees. Thereafter, Mr. Abraham Kahsay conducted several sessions on the first day. He described DACA's efforts in promoting DTC and AMR initiatives in partnership with MSH/RPM Plus and a variety of agencies in the country.

The facilitators Terry Green, Niranjan Konduri, Gabriel Daniel, Negussu Mekonnen and Abraham Kahsay conducted a variety of sessions and ensured that all sessions were interactive and sought trainees active participation. Individuals sessions that were facilitated are as follows :

Terry Green

- DTC Overview
- Drug Safety Issues
- Drug Information Resources
- Strategies to Improve Drug Use
- Role of the DTC in AMR
- DTC/RDU Practicum

Niranjan Konduri

- Formulary Management
- Assessing Drug Efficacy
- Drug Information Resources Practicum
- Identifying Drug Use Problems, Part 1
- Identifying Drug Use Problems, Part 2
- DTC/RDU Practicum

Gabriel Daniel

- Introduction
- Drug Management aspects of RDU
- DTC/RDU Practicum
- Workplan Development

Negussu Mekonnen

- DTC Role in AIDS, TB and Malaria

Abraham Kahsay

- Introduction
- National Guidance and Instruments for the Promotion of RDU
- Implementation of RDU strategies in the Ethiopian context

Training Activities – Drug Information Practicum

For the drug information practicum, a thirty minute demonstration was provided specifically on finding relevant peer-reviewed journal articles from PubMed and Cochrane. This was to enable the trainees to appreciate the value of drug/clinical information from journal articles through indexing services. Thereafter, an afternoon session was dedicated on the practicum. In consultation with staff from RPM Plus/Ethiopia, the practicum activity was developed to reflect local needs (Annex 7).

The trainees were split into seven groups and each group was provided with an internet connected computer and drug information reference text books (Martindale, American Hospital Formulary Service and United States Pharmacopoeia Drug Information). The purpose of the drug information practicum was to enable the trainees to perform a variety of tasks :-

- 1) Compare drug information from package insert with that of drug reference texts
- 2) Based on a case study of a serious reaction to a drug, find relevant information to support new safety alert from various internet sources
- 3) Identifying relevant and quality websites for Antiretroviral (ARV) drug information, adverse effects and side effects. Justify why the particular website is unbiased and is an authoritative source of information
- 4) Identify journal articles from either PubMed or Cochrane which document evidence for rational drug treatment for surgical prophylaxis

After each group completed their drug information practicum, a discussion was facilitated to share each group's experiences. It was concluded that one cannot rely on information from package inserts alone and one has to carefully review other authoritative sources of drug information. The trainees appreciated the importance of critically reviewing websites for relevant drug information, especially for ARVs. Discussion on how to search for journal articles to obtain information on drug efficacy and clinical evidence led the trainees to learn about indexing services such as PubMed and Cochrane.

Activities were distributed among the groups with the option of doing three of the five listed. Although some of these activities were relatively difficult to perform in the short time period allotted, at least one of the groups successfully completed all the activities.

Training Activities – Prescription Review

For the RDU practicum, the trainees were split into seven groups. Each group was given data from two hospitals for performing outpatient prescribing indicators study and for ARV prescription review. The instruction sheet along with summary templates that were distributed to the trainees for the WHO/INRUD outpatient prescribing indicators and ARV prescription review are in annexes eight and nine, respectively. The entire afternoon session was dedicated for the RDU practicum. Each group was also given an Excel spreadsheet of sample procurement data from a blinded, local hospital. This was to give them a practical experience of performing the ABC analysis.

The next morning, each group presented a summary of their data analysis for the outpatient prescribing indicators and for the ARV prescription review. An active discussion of the findings, especially for ARV prescriptions enabled all trainees to critically think about the implications of the findings. For example, most ARV prescriptions did not have the name of the physician or dispenser written as required. Most of the prescription reviewed showed that hospitals were following the treatment guidelines for ARVs as published by DACA. There was one hospital with less than optimal results including the use of second line ARVs and incorrect dosing in a small number of patients. RPM Plus associates will follow-up with that hospital to review more closely their ARV prescribing.

Model process for establishing DTCs in Ethiopia

Staff from Jimma University Specialized Hospital, Jimma and Federal Police Referral Hospital, Addis Ababa were both trained in the national DTC-TOT course held in August-September, 2006. These hospitals have demonstrated good progress in establishing a functional DTC. In order to provide the trainees with real examples of functional DTCs, the staff from both these hospitals were invited to make a presentation and share their experiences. Jimma University Specialized Hospital had made remarkable progress and their presentation describing their DTC activities and challenges is available in Annex 10.

Course Evaluations

An evaluation form was distributed to the participants at the end of the training course. The summary of the evaluations can be seen in Annex 11. An average score of 8.5 was received for the course. The following sessions were rated by the trainees as most relevant to their work 1) Identifying Drug Use Problems 2) Drug & Therapeutics Committee Overview and 3) Drug Management & RDU. The sessions least relevant were found to be 1) Formulary Management 2) Assessing Drug Efficacy

Workplans

The objectives of developing regional workplans and expected outcomes were described to all the trainees by Abraham Kahsay and Gabriel Daniel. It was decided to focus the workplan in four major areas :-

1. Establish/Strengthen DTCs in hospitals/RHBs
2. DTC and RDU related activities
3. Pharmaceutical Management Systems (storage and handling)
4. Pharmaceutical Information Systems (record keeping)

A team of staff from RHB, DACA and RPM Plus from each region of Ethiopia was formed to develop their workplans. A sample workplan can be seen in Annex 12. It was expected that the RHB staff would take ownership of the workplans and staff from DACA and RPM Plus would collaborate and provide support. The RHB has autonomy on decisions made on interventions for the hospitals and it is vital to ensure their buy-in at the workplan development stage.

Closing Ceremony

Mr. Laike G. Tewoldemedhin, Deputy to Chief of Party, RPM Plus/Ethiopia coordinated the closing ceremony. He welcomed the guest of honour Mrs. Melissa Jones HIV/AIDS Team Leader, USAID, Mr. Haileselassie Bihon, Director General DACA, Dr. Omer Mohammed, Program Officer, USAID and summarized the activities that took place during the orientation program.

The Director-General of DACA, Mr. Haile Selassie Bihon gave the closing speech on the importance of the orientation program in ensuring rational drug use, essential drug use and antimicrobial resistance containment. He also highlighted the effort being undertaken by the government including activities to ensure quality pharmaceutical services to the people of Ethiopia. He encouraged the trainees to maintain the momentum and spirit created during the orientation program. Mr. Bihon urged that the trainees continue working in their respective regions with the knowledge gained and implement the workplans jointly developed by RHB, DACA and RPM Plus.

NEXT STEPS

Immediate Follow-up Activities

RPM Plus staff reviewed the workplans and provided suggestions and feedback. This will be forwarded to RPM Plus pharmacy associates as they refine their workplans. Each RPM Plus pharmacy associate will send bi-monthly reports to the RPM Plus office in Addis Ababa regarding their progress on implementation of workplans.

Immediate focus will be on the 18 hospitals that were trained in last year's National DTC-TOT training course. As feasible, more hospitals will be added to the program of technical assistance and support.

RPM Plus staff from Washington will provide technical assistance to RPM Plus program in Ethiopia as necessary to implement workplans and activities related to DTC, RDU, and AMR.

RPM Plus Ethiopia will conduct an assessment of DTC and drug information related activities at each supported hospital. From this assessment, more focused technical assistance will be provided.

RPM Plus staff from the Washington office will send relevant technical materials as needed for the RPM Plus pharmacy associates in Ethiopia.

Recommendations

RPM Plus Ethiopia will work with Ethiopian Regional Health Bureaus and DACA to provide supervision and technical assistance to the trainees to implement workplans and to provide follow-up on DTC related activities from this training and from the August-September 2006 DTC training course.

RPM Plus Washington will work collaboratively with RPM Plus Ethiopia on implementation of DTC, RDU, and AMR activities. Training materials, technical assistance and advice will be provided as necessary.

ANNEX 1. RFCCs

Request for Country Clearance

TO: Dr. Omer Ahmed, USAID/Ethiopia
Ms. Melissa Jones/USAID Ethiopia
Mr. Fikru Bekele, USAID/Ethiopia

FROM: Management Sciences for Health (MSH)/Rational Pharmaceutical Management Plus (RPM Plus) Program,

SUBJECT: Request for Country Clearance for travel to Addis Ababa, Ethiopia for Aklile G. Giorgis (aka: Gabriel Daniel), Senior Program Associate MSH/RPM Plus

COPY: Anthony Boni/USAID/GH/HIDN/HS, CTO for RPM Plus
Jamie Browden/USAID Ethiopia
Douglas Keene, Director, MSH/RPM Plus
Michael Gabra, Program Manager for E. Africa, MSH/RPM Plus
Aklile G. Giorgis (Gabriel), Senior Program Associate, MSH/RPM Plus
Negussu Mekonnen, Senior Program Associate, MSH.RPM Plus/Ethiopia

The RPM Plus Project wishes to request country clearance for proposed travel to Addis Ababa, Ethiopia by Aklile G. Giorgis [aka: Gabriel Daniel] (January 17 to February 17, 2007).

1. Background

Rational Pharmaceutical Management Plus (RPM Plus) Program/Management Sciences for Health (MSH) is collaborating with USAID/Ethiopia in the provision of technical assistance in pharmaceutical, laboratory and related commodities management for Ethiopia's Mother to Child HIV Prevention Initiative and The President's Emergency Plan.

RPM Plus is working with other USAID-funded partners in this program to develop national, regional, district, and health facility-level capacity for delivery and management of PMTCT/ART products.

Under this effort, RPM Plus will assist in ensuring access to, and rational use of basic PMTCT/ART and related products through various interventions including training, development of standard operating procedures, upgrading of infrastructure and promoting improved commodities procurement, management and inventory control systems.

2. Purpose of Proposed Visit

Gabriel will assist in the orientation of additional new staff employed by MSH/Eth. Gabriel will also work with DACA in planning of follow-up activities in DTC, AMR, RDU, adherence, DICs and training and scale-up. Gabriel will help in the planning and implementation of a DTC/AMR workshop planned to be conducted in collaboration with DACA from February 5 to 10, 2007. The workshop is planned for RHB pharmacists and RPM Plus field staff to provide them with the operational and theoretical skills to support the promotion of RDU, AMR and establishment of DTCs and DICs.

3. Scope of work for Gabriel Daniel:

- Assist in the orientation of new staff
- Participate in the planning of RPM Plus/MSH support to DACA in line with the national drug program and joint activities during 2007
- Participate in the planning and implementation of the DTC/AMR/RDU workshop to be conducted during 5-10 February 2007 for RPM Plus field staff and RHB pharmacists
- Review progress of work at the country office with focus on ARVs management at different levels, renovation activities, QC assistance, initiatives with school of pharmacy and EPA
- Brief and debrief USAID on current trip as requested

4. Anticipated Contacts:

USAID, CDC, MOH, DACA, RHBs, EPA, School of Pharmacy, SCMS

5. Logistics: Gabriel Daniel will arrive in Addis o/a January 17 and depart February 17, 2007 on Northwest/KLM.

Gabriel will stay at the Hilton when in Addis.

6. Funding: The work will be paid with USAID/Ethiopia Emergency Plan funds.

7. Action: Please inform the RPM Plus Program whether country clearance is granted for the activity to take place as proposed. Please reply via e-mail to the attention of Anthony Boni, USAID/GH/HIDN/HS, e-mail address: aboni@usaid.gov, tel (202) 712-4789, fax (202) 216-3702. Please send carbon copies to Douglas Keene at dkeene@msh.org, Michael Gabra at mgabra@msh.org, David Smallwood at dsmallwood@msh.org and Gabriel Daniel at gdaniel@msh.org,

Thank you for Mission cooperation.

Request for Country Clearance

TO: Dr. Omer Ahmed, USAID/Ethiopia
Melissa Jones/USAID Ethiopia
Fikru Bekele, USAID/Ethiopia

FROM: Management Sciences for Health (MSH)/Rational Pharmaceutical Management Plus (RPM Plus) Program

SUBJECT: Request for Country Clearance for travel to Ethiopia for: Terry Green and Niranjan Konduri (RPM Plus staff)

COPY: Anthony Boni/USAID/GH/HIDN/HS, CTO for RPM Plus
Jennifer Murphy, Pharmaceutical Management Advisor, USAID/GH/HIDN/HS
Douglas Keene, Director, MSH/RPM Plus
Maria Miralles, Deputy Director, MSH/RPM Plus
Michael Gabra, Regional Technical Coordinator, MSH/RPM Plus
Mohan Joshi, Program Manager for AMR, MSH/RPM Plus
Gabriel Daniel, Senior Program Associate, MSH/RPM Plus
Negussu Mekonnen, Senior Program Associate, MSH/RPM Plus/Ethiopia

The RPM Plus Program wishes to request country clearance for proposed travel to Addis Ababa, Ethiopia for: Mr. Terry Green, Senior Program Associate for RPM Plus and Mr. Niranjan Konduri, Program Associate for RPM Plus, for the period February 1 to 12, 2007.

1. Background:

The Ethiopia Drug Administration and Control Authority (DACA) in collaboration with USAID-supported RPM Plus/MSH has initiated a country level advocacy for antimicrobial resistance (AMR) in Ethiopia and the process is gaining momentum. The first AMR stakeholders' meeting was held on 2nd March, 2006 followed by a "Call-To-Action National Workshop on AMR Containment" in November 16-18, 2006. There were more than 60 participants from hospitals, EHNRI, academia, research, professional associations, media, and government institutions who are keen to see this initiative succeed. There is need to provide technical support to implement the action plan for the national AMR program that was drafted by relevant stakeholders. DACA in collaboration with RPM Plus/MSH also organized a national Drug and Therapeutics Committee (DTC) and Training of Trainers (TOT) course from August 16 to September 2, 2006. Forty medical doctors and pharmacists participated from twenty hospitals as the first group to be trained in DTC concepts. Two hospitals have established new DTCs and two hospitals have strengthened their existing DTCs. There is need to provide continued technical support and encouragement to the trained participants in order to enable them to establish functional DTCs and implement related DTC activities.

RPM Plus has pharmacy associates geographically positioned in all the regions of Ethiopia to provide technical assistance and mentorship to regions and health facilities in their catchment

area. There is a need to build the technical and operational skills of these staff in AMR, DTC, drug information and rational drug use activities so that they can provide active follow-on support to hospitals and health facilities.

As part of the sustainability plan and joint effort, there is also a need to build the technical and operational skills of the Ethiopian Regional Health Bureau pharmacy staff to provide follow-up support to health facilities in these activities.

Hence it is proposed that an orientation and training program be organized jointly by DACA and RPM Plus to meet the need of building capacity of Regional Health Bureaus (RHB) personnel and field staff of RPM Plus/Ethiopia in AMR, DTC and rational drug use (RDU) principles and practice.

2. Purpose:

The purpose of the visit for Terry Green and Niranjana Konduri is to assist in the technical and facilitation aspects of the training course "Scaling up AMR, DTC, and Rational Drug Use Activities in Ethiopia: A Collaborative Strategy for Success " to take place in Addis Ababa from February 5 to February 10, 2006.

3. Scope of Work:

Scope of work for Terry Green

- Facilitator for DTC, AMR, Rational Drug Use sessions in the orientation program
- Review preparations and logistics before the orientation program
- Assist the organizers in technical aspects of the orientation program and planning for the practical activities
- Assist in developing follow-up strategies for staff through workplans for implementation of DTCs in their facilities
- Brief and debrief USAID if requested

Scope of work for Niranjana Konduri

- Facilitator for DTC and Rational Drug Use sessions in the orientation program
- Review preparations and logistics before the orientation program
- Assist the organizers in technical aspects of the orientation program and planning for the practical activities
- Assist in developing follow-up strategies for staff through workplans for implementation of DTCs in their facilities
- Meet with selected DTC trainees from September 2006 course in their hospitals to provide technical assistance for DTC development.

4. Anticipated Contacts:

- DACA and MOH officials
- USAID Ethiopia
- RPM Plus/Ethiopia technical staff

5. Logistics:

Terry Green and Niranjan Konduri will be arriving in Addis Ababa, Ethiopia on/about February 2 and will depart on/about around February 12. While in Addis Ababa, they will be staying at the Hilton Hotel. No further Mission assistance is requested.

6. Funding:

Expenses for Mr. Green and Mr. Konduri's visit will be paid for with RPM Plus Ethiopia and SO5/AMR funds.

7. Action:

Please inform the RPM Plus Program whether country clearance is granted for the activity to take place as proposed. Please reply via e-mail to the attention of Anthony Boni, USAID/GH/HIDN/HS, e-mail address: aboni@usaid.gov and Jennifer Murphy at jmurphy@usaid.gov, tel (202) 712-4789, fax (202) 216-3702. Please send carbon copies to, Douglas Keene at dkeene@msh.org, Maria Miralles at mmiralles@msh.org, Mohan Joshi at mjoshi@msh.org, Michael Gabra at mgabra@msh.org, Gabriel Daniel at gdaniel@msh.org and Lindsay Gibbs at lgibbs@msh.org.

ANNEX 2. SCHEDULE OF PRESENTATIONS AND ACTIVITIES

Scaling up AMR, DTC, and Rational Drug Use Activities in Ethiopia: A Collaborative Strategy for Success

Monday, February 5, 2007

Time	Topic	Facilitator
8:30-9:00	Registration	
9:00-9:05	Welcome Address	RPM +/MSH
9:05-9:20	Keynote address	DACA and USAID
9:20-9:30	Objective and modalities of the Training/workshop	RPM +/MSH
9:30-10:30	National Guidance and Instruments for the Promotion of RDU <ul style="list-style-type: none"> ➤ Ethiopian National Drug Policy ➤ DAC Proclamations ➤ Various Guidelines(DTC/DIC/GDP/GPP/ ➤ Studies and Surveys 	Mr Abraham G/giorgis
10:30-10:50	Coffee Break	
10:50- 12:30	Understanding the health facility environment – constraints and solutions* (<i>open session</i>)	FMoH/Laike/Gabriel
12:30-2:00	Lunch	
2:00-2:30	Understandingcont	
2:30-3:00	Discussion	
3:00-3:20	Break	
3:20-4:30	Implementation of RDU strategies in the Ethiopian context <ul style="list-style-type: none"> ➤ Out puts of RDU Indicator Study ➤ DTC Guidelines and its Implementation ➤ DIC Guidelines and its Implementation ➤ Overview of AMR workshop ➤ The Role of the trainees in the promotion of RDU Strategies 	Mr Abraham G/giorgis
4:30-4:50	Coffee Break	
4:50-5:30	Discussion and selection of team for recap	

Tuesday, February 6, 2007

Time	Topic	Facilitator
8:30-9:00	Recap of Day 1	
9 :00-9 :45	DTC Overview	Terry
9:45- 10:30	DTC - Formulary Management	Niranjan
10:30-10:50	Break	
10:50-11:45	DTC - Assessing Drug Efficacy	Niranjan
11:45- 12:30	Drug Safety Issues	Terry
12:30-1:30	Lunch	
1:30-4:30	DICs and Drug Information Resources	Terry/Niranjan

Wednesday, February 7, 2007

Time	Topic	Facilitator
8:30-9:00	Recap of Day 2	Terry
9:00-10:00	Identifying drug use problems, Part 1	Niranjan
10:00-10:30	Identifying Drug Use problems, Part 2	Niranjan
10:30-11:00	Break	
11:00-12:00	Identifying drug use problems, Part 2 (cont)	Niranjan
12:00-1:00	Lunch	
1:00-3:00	Strategies to improve drug use	Terry
3:00-3:30	Break	
3:30-4:30	Drug Management aspects of RDU	Gabriel

Thursday, February 8, 2007

Time	Topic	Facilitator
8:30-9:00	Recap of Day 3	Niranjan
9:00-10:00	DTC role in HIV/TB/Malaria	Negussu
10:00-10:30	Break	
10:30-11:30	DTC role in AMR	Terry
11:30-12:00	DTC/RDU Practicum	Terry/Niranjan
12:00-1:00	Lunch	
1:00-4:30	DTC/RDU Practicum	Terry/Niranjan

Friday, February 9, 2007

Time	Topic	Facilitator
8:30-9:00	Recap of Day 4	Terry
9:00-11:00	DTC/RDU Practicum (cont)	Terry/Niranjan
11:00-11:30	Break	
11:30-12:30	Group Presentations	Gabriel
12:30-1:30	Lunch	
1:30-3:30	Examples of a model DTC – Jimma University Specialized Hospital and Police hospital	Tsinuel/Fikru/Kebebew
3:30-3:45	Break	

Saturday, February 10

Time	Topic	Facilitator
8:30-9:00	Develop Operational Action Plan for 11 regions	Abraham/Gabriel
9:00-10:00	Present/Discuss Operational Action Plan	Laike/Niranjan/Terry
10:00-10:30	Break	
10:30-11:30	Plenary on current and future developments in the pharmaceutical sector	Abraham/Laike
11:30-12:30	Closing speech	DACA/Negussu/USAID
12:30-1:30	Lunch	

Notes

*** Understanding the health facility environment – constraints and solutions**

To augment this session, challenges and solutions matrix from the Ethiopia DTC training course will be distributed to all of the participants.

**ANNEX 3. LIST OF HOSPITALS TRAINED IN AUG-SEP 2006
NATIONAL DTC-TOT TRAINING**

No.	Hospitals	City, Region	Name of RPM Plus Staff in charge of region	Pharmacist/ Druggist in hospital
1	Gondar University Hospital	Gonder, Amhara (north)	Tesfaye Godana	Pharmacist Elias Geremew
2	Feleg Hiwot Hospital	Bahir Dar, Amhara (north)	Tesfaye Godana	Pharmacist Tariku Mohamed
3	Mekelle Hospital	Mekelle, Tigray Region(North)	Mulu Legesse	Pharmacist Aster berhan
4	Axum Hospital	Axum, Tigray Region(North)	Mul Legesse	Druggist Zeru G/tsadik
5	Hiwot-Fana Hospital	Harar, Hararie (East)	Daniel Tadesse	Druggist Tilahun Zemedkun
6	Dilchora hospital	Diredawa (city administration)	Daniel Tadesse	Druggist Gemechu Degaga
7	Yirgalem hospital	Yirgalem, Southern region	Mulugetta Asfaw	Pharmacist Dawit haunkra
8	Arbaminch Hospital	Arbaminch, Southern Region	Debebe Dartumo	Druggist Habteyes Chbaru
9	Adama Hospital	Adama, Oromia region	Amano Nure	Pharmacist Alemayehu Daba
10	Jimma University Hospital	Jimma, Oromia	Addisu Girmaye	Pharmacist Fikru worku
11	Dubti hospital	Dubti, Afar region	Samuel Getachew	Druggist Momina yayo
12	Black Lion Genera Specialized Hospital	Addis Ababa (Region 14)	Yilma Desta	Pharmacist Dinkineh Bikila
13	Amanuel Mental specialized Hospital	Addis Ababa (Region 14)	Yilma Desta	Pharmacist Tadesse Teklu
14	Yekatit 12 Hospital	Addis Ababa (Region 14)	Yilma Desta	Pharmacist Tigist Sharew
15	Menilik II Hospital	Addis Ababa (Region 14)	Yilma Desta	Druggist Saladin Seid
16	Army hospital	Addis Ababa (Region 14)	Yilma Desta	Pharmacist Roman Mekonnen
17	Federal police referral Hospital	Addis Ababa (Region 14)	Yilma Desta	Pharmacist Kibebew Belay
18	St .Paul Specialized Referral Hospital	Addis Ababa (Region 14)	Yilma Desta	Pharmacist Dereje ileshi

ANNEX 4. LETTER SENT TO RPM PLUS PHARMACY ASSOCIATES REQUESTING HOSPITAL SPECIFIC DATA TO BE BROUGHT BEFORE THE TRAINING COURSE

Scaling up AMR, DTC, and Rational Drug Use Activities in Ethiopia: A Collaborative Strategy for Success

A. Hospital drug procurement

Prepare a list containing quantity and unit price (per tab/caps/bottle...) of the following drug categories consumed in the past six months.

- a. Third generation Cephalosporins eg. Ceftriaxone, Cefotaxime...etc
- b. Antihypertensives eg. Methldopa, Nifedipine...etc.
- c. Non-steroidal anti-inflammatory drugs (NSAID) eg. Ibuprofen, Diclofenac....etc

Total drug expenditure in the last six months (purchases and donations)

(Hospital procurement information will be used for demonstrating the use of ABC analysis and using this information to identify potential drug use problems at the hospital)

B. Outpatient Prescriptions

Make photocopies of 50 randomly collected outpatient prescriptions for the day and also make copies of the treatment records that correspond to the prescriptions.

C. ARV drugs dispensing study

Make copies of 25 outpatient prescriptions and the corresponding treatment record for the patient receiving ART in the health facility. Make sure the data contains the following

- a) ARV drugs prescribed by the physician
- b) Diagnosis (initial or continuing treatment, treatment failure)
- c) Weight before the commencement of treatment

This information will be used to review ARV usage in the hospital and to determine compliance to treatment guidelines..

D. Information related to DTC

Ask the staff members who have participated in the training workshop on DTC-TOT that was held on Aug. 16-Sept. 02/2007 the following questions and prepare a brief report.

Was DTC established in the hospital? **If Yes**

- a) When was it established and who are the members? (List profession and title only)
- b) What activities are planned to be undertaken by the DTC?
- c) How often does the DTC meet?
- d) What were the challenges to establish and run the DTC?
- e) What kind of support does the DTC expect from DACA and MSH/RPM PLUS ?

If there is no DTC, then ask

- a) What is/are the major problem(s) that prevented the hospital from establishing DTC?
- b) What is the plan for the future?
- c) What kind of support does the hospital expect from DACA and MSH/RPM Plus?

N.B Inform the hospital pharmacist that data collected is for training purposes and the results of the data analysis will be shared at the end of the program.

ANNEX 5. LIST OF TRAINEES

**Scaling up AMR, DTC, and Rational Drug Use Activities in Ethiopia:
A Collaborative Strategy for Success
February 5 - 10, 2007**

Sr No.	Name of Participant	Place of Work	Profession	Current Position	Tele.	E-mail address
1	Addisu Girmaye	MSH/RPM Plus - Jimma	Pharmacist	RPMA	0911-406459 047-1111415	agirmaye@msh.org
2	Addisu Liben	PHARMID	Pharmacist	RPMA	0911-138810	addisulbn@yahoo.com
3	Afework H/mariam	MoH	Physician		0911-486686	afeworkh@yahoo.com
4	Alazar Workineh	DACA/Dire Dawa	Pharmacist	Head	0915-735151	
5	Amano Nure	MSH/RPM Plus, Addis Ababa	Pharmacist	RPMA	0911-814903	anure@msh.org
6	Asfaw Amenu	DACA	Druggist		0916-823651	
7	Ayalew Adinew	MSH/RPM Plus, ALERT	Pharmacist	Pharmacy Co-ordinator	0911-687758	fmanuelzek@yahoo.com
8	Daniel Tadesse	MSH/RPM Plus - Dire Dawa	Pharmacist	RPMA	025-1124934 0911-429089	dtadesse@msh.org
9	Dawit Safoye	St Paul Hospital	Pharmacist	Head of Apt.	0911-650865	?
10	Debebe Dartumo	MSH/RPM Plus	Pharmacist	RPMA	0911-311297	ddartumo@msh.org
11	Edmealem Ejigu	MSH/RPM Plus, PSD	Pharmacist		0911-633558	eejigu@msh.org

Scaling up Antimicrobial Resistance, Drug and Therapeutics Committees, and Rational Drug Use Activities in Ethiopia - A Collaborative Strategy for Success, February 2007: Course Report

12	Ezra Muluneh	RHB, Addis Ababa	Pharmacist			
13	Fikru Worku	Jimma University	Pharamcist	Head of Pharmacy	0917-802302	fikrez2002@yahoo.com
14	Fowzi Salih	Harari RHB	Druggist			
15	Gashaw Zegeye	Benishangul HB	E.H.T	HMIS Expert	0911-704471	gashaw_zegeye@yahoo.com
16	Getahun Sisay	MSH/RPM Plus	Pharmacist	RPMA	0918-782295	getaneh51@yahoo.com
17	Girma Eshetu	Awassa	Pharmacist		0911-112360	
18	Habtamu Berhe	Tigray	Pharamcist		0934-703320	b_habtish@yahoo.com
19	Hailu Tadeg	MSH/RPM Plus	Pharmacist	RPMA		-
20	Kebebew Belay	Police Hospital	Pharmacist	Chief	0911-755888	kibebelay@yahoo.com
21	Mengistu Tadesse	DADA, Addis Ababa	Pharmacist	Drug Information Expert	0911-668723	mengted@yahoo.com
22	Mesay Tadesse	DACA, Dire Dawa	Pharmacist	Expert	0911-838146	
23	Miheret Tamir	PHARMID	Pharmacist		0911-128385	miheretamir@yahoo.com
24	Mohammed Kusu		Druggist		0915-749517	-
25	Mulu Legesse	MSH/RPM Plus, Tigray	Pharmacist	RPMA	0914-701525	mlegesse@msh.org
26	Mulugeta Asfaw	MSH/RPM Plus - Awassa	Pharamcist	RPMA	0916-826061	masfaw@msh.org

27	Mulusew Lijalem	RHB, Addis Ababa	Druggist, Health Science Professions	Head RHB Phar.	0918-763248	Lijmulusew@msh.org
28	Oman Ogula	Gambella RHB	Nurse		0911-913751	-
29	Raey Yohannes	DACA, Addis Ababa	Pharmacist		0911-175131	raeyoha@yahoo.com
30	Ribka Mekonnen	DACA, Addis Ababa	Pharmacist	Drug Information Expert	0911-128809	ribkamg@yahoo.com
31	Samuel Getachew	MSH/RPM Plus, Dessie	Pharmacist	RPMA	0914-710229	sgetachew@msh.org
32	Tesfaye Godana	MSH/RPM Plus, Bahir Dar	Pharmacist	RPMA	0911-962654	tgodana@mh.org
33	Theodros Asrat	MSH/RPM Plus	Pharmacist	RPMA	0911-613980	ted_asrat@yahoo.com
34	Tigist Mekonnen	Oromiya RHB	Pharmacist	Expert	0911-483819	
35	Tsinuel Girma	Jimma University	MD		0917-802734	tsinuel@yahoo.com
36	Wellelaw Necho	DACA	Pharmacist	Expert	0911-737210	wellela12@yahoo.com
37	Wodwossen Assefa	DACA	Druggist		011-5524122	goldwater@ethionet.et
38	Yaregal Adamu	MSH/RPM Plus, Addis Ababa	Pharmacist	RPMA	0911-657001	yadamu@msh.org
39	Yibeltalyesu Gizaw	DACA - South B.	Pharmacist		0911-566573	Yesuyibe@yahoo.com
40	Yilma Desta	MSH/RPM Plus	Pharmacist		0911-460906	ydesta@msh.org
41	Zenash Tessema	PHARMID	Pharmacist		0911-212606	goldwater@ethionet.et

**ANNEX 6. OPENING SPEECH BY MR. HAILE SELASSIE BIHON,
DIRECTOR GENERAL, DACA, ETHIOPIA**

**Dear Mrs. Melissa Jones
HIV/AIDS Team Leader,
USAID**

**Mr. Gabriel Daniel
Senior program Associate, RPM Plus/MSH**

**Dr. Negussu Mekonnen
Senior Technical Advisor, RPM Plus Ethiopia Office**

**Facilitators
Ladies and Gentlemen:**

I am pleased and have the honor in addressing this training-workshop aiming at “Scaling- up AMR, DTC and Rational Drug Use promotion activities in the Ethiopian health system.”

The course has been organized in this moment of time when we are intensifying our efforts to expand the ongoing activities to establish and strengthening Drug and Therapeutic Committees in all hospitals and amid the finalization of the national pharmaceutical sector Master plan.

Provision of basic health services including essential drugs has been among the social services, which the government of the Federal Democratic Republic of Ethiopia has given priority as a demonstration to its commitment to improve the social well being of the Ethiopian public. And this has been witnessed by the tremendous increase in the number of health institutions, pharmaceutical firms, health professionals, availability and improved access to essential drugs. To cope with the development in the pharmaceutical sector and ensure that the drugs that the health sector utilizes are safe, effective, quality, and are rationally used, my authority is from time to time building its execution capacity and expanding its scope of activities to live-up-to the expectations of the government and the Ethiopian public.

Ladies and Gentlemen:

The course is designed to scale up the process already going on in the establishment and strengthening of Drugs and therapeutics committees in hospitals.

Organization of DTCs is not a choice from our perspective rather it is a must. It is the best strategy to improve the drug use situation in the country. Though not many, the small number of DTCs that are functional at the moment have proved that the strategy is appropriate and few have become examples of best practice to others. However, I believe that we are just starting the race and hence a long way is ahead of us. In this respect health facilities need to be supported and assisted to be in the forefront to achieve our common goal. Your participation in this training course is mainly aiming at giving you necessary knowledge and tools to facilitate the process and

help the health facilities establish new or strengthen and revitalize existing DTCs and related activities.

In this endeavor the role of development partners has been crucial. I would like to warmly acknowledge that the United States Agency for International Development (USAID) and MSH/RPM plus have been key partners in this project and the result so far achieved would not have been a reality without their support and involvement.

The financial and technical support provided from your organizations has made invaluable contribution in making progress in the field of the promotion of rational use of drugs. Therefore, I would again like to thank all for the support and call upon you to continue your assistance.

**Dear Participants
Ladies and Gentlemen:**

From my previous experience I am aware that the course is highly educational and the facilitators are also highly qualified in the field. However you should not forget that your participation is a critical instrument for the success of the course.

At the end of this course every one should commit his/her self to apply the essences of the course, which should emanate from professional and national responsibilities to improve the service we provide and DACA should take this opportunity to re-emphasize that we with the support of our partners we shall provide all the necessary support towards establishing effective DTCs in your regions.

I have also special appreciation to the facilitators who came all the way from the United States for the second time to support our efforts and call upon them to continue their involvement.

Finally, I would like to reiterate that DACA in collaboration with MSH/RPM plus will closely follow up your activities and provide assistance and support to effectively implement your work plans in promoting the national efforts to ensure rational drug use in the health system of our country.

My appreciation also to the organizers, for the job well done.

Thank you

Ato. Haile Selassie Bihon
Director General
Drug Administration & Control Authority of Ethiopia

ANNEX 7. DRUG INFORMATION PRACTICUM

Norfloxacin and Ciprofloxacin

Each group is given a copy of package inserts from a pharmaceutical company for Norfloxacin and Ciprofloxacin.

- 1) Compare information from the package insert for Norfloxacin and Ciprofloxacin with the monograph from either Martindale or the American Hospital Formulary Service.
 - 2) Is the information similar? Is it different? What do you find in your comparison?
 - 3) Make a list of differences you find in your comparison exercise
-

Antihypertensive medications and pregnant women

A woman delivered her first baby who unfortunately developed physical/neurological defects. Dr. Tesfaye knew that the woman was on antihypertensive medications but did not know the cause of the neurological defects. He shares this story over coffee with his friends Dr. Cherkos and Dr. Hankara.

Dr. Cherkos was surprised and said that she treated three patients who were also on antihypertensive medications but had healthy babies. Dr. Hankara, the senior physician who practiced for many years recalled about five patients who were on antihypertensive medications and delivered babies who had neurological defects. Dr. Tesfaye mentioned that his patient was on ACE inhibitors.

Dr. Hankara discusses this situation with his pharmacist, Sergut Selassie. Both of them decide to investigate whether pregnant women who are on antihypertensive medications have a risk of delivering newborn babies with physical/neurological defects.

- 1) Perform a search for this situation. What information sources will you use?
 - 2) Analyze the available information and decide whether it is important to share with health practitioners
 - 3) Compile available information in a short written paragraph with reference sources. What are the drugs of concern?
 - 4) How would you classify this information? i.e Is it an adverse reaction, side effect, contraindication, safety alert, etc?
-

Starting ART therapy in a patient with tuberculosis

You have a patient with TB being treated isoniazid, rifampicin, ethambutol, and pyrizinamide. The patient is well controlled, asymptomatic and compliant with therapy. A routine HIV test has come back today as positive. The patients' physician is asking for information about when to start ARV treatment and what would be the best combination of ARV drugs for this patient.

Search your drug information sources for this case and determine the following

- a. What drug information sources would be most useful for this case study?
 - b. What would you recommend as the starting point for treatment with ARVs?
 - c. What ART combination would you recommend for this patient?
-

Surgical Prophylaxis

The pharmacy department has documented that antimicrobials are being used excessively and randomly in the hospital for surgical prophylaxis, especially for C-section prophylaxis. Treatment guidelines are not available to guide practitioners. Practitioners have no agreement on how best to administer antimicrobials to patients in this regard and many actually use “treatment” rather than prophylaxis.

The pharmacy has been asked by the DTC to review evidence from the literature regarding the use of antimicrobials in C-section prophylaxis and make recommendations for appropriate use.

Review drug information sources that you have available including Cochrane and PubMed. Write a brief drug information report as follows:

- Recommendations for most appropriate drug (s) that should be used based on the available evidence
- Dose and intervals
- Timing of administration

Cite your reference sources when you compile your report

ARV Drug Interactions & Adverse Effects

Anti-retroviral therapy has been rolled out throughout Ethiopia and healthcare professionals are managing this important life-saving therapy. However, there is need for updated drug information specific to ARV medications. Additionally, opportunistic infections (OI) are common and it can be hard for physicians to be updated with the latest information related to ARV medications and OI drugs.

- 1) Perform a general internet search to identify useful websites on ARV drug interactions, adverse effects, toxicity, etc. Decide on which websites are reliable and identify how they are updated.
- 2) List at least four information sources in the following format and justify whether they are a reliable source of information. Create your own table in the computer given to you.
- 3) From your identified websites, compile useful drug information for select ARVs related to drug interactions, adverse effects, etc in a two page document. Cite the source of information.

URL – Internet Address and owner of website	Is this website a reliable information source? Why?

ANNEX 8. WHO/INRUD PRESCRIBING INDICATORS

Each group is given about 50 outpatient prescriptions from either one or two hospitals. Analyze the prescriptions, enter the data in the table provided to you and perform your calculations.

For your presentation, you could use the following template provided below.

Total sample = _____ (number of prescriptions)

Total number of drugs = _____

Indicator	Total	%
Average number of drugs per encounter	N/A	
% of drugs prescribed by generic name		
% of encounters with an antibiotic prescribed		
% of encounters with an injection prescribed		
% of drugs prescribed which are from the EDL or formulary list		

Prescribing Indicator Form

Location:

Investigator:

Date:

Seq. #	No. of Drugs	No. of Generics	Antibiotics 0/1 *	Injections 0/1 *	# on EDL	Diagnosis (Optional)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

* 0=No 1 =Yes

ANNEX 9. ARV PRESCRIPTION REVIEW DTC/RDU PRACTICUM

PART A: Review of ARV treatment protocols for adults and adolescents

You will be provided 25 prescriptions for ARV medications from different hospitals in Ethiopia. Please review each prescription carefully and enter data in the template provided to you on Pages 2, 3 and 4. After you perform your calculations, enter summary data in the electronic template provided to you in your computer (sample electronic template is on page 5)

- Number and % of patients on correct first line drug combinations (first line treatment plus first line treatment alternatives)
- Number and % of patients on second line therapy
- Number and % of patients on cotrimoxazole prophylaxis
- Number and % of patients with correct doses for ARV drugs

PART B: Properly Completed Prescriptions

Assess each prescription to check if the following details were properly entered on the prescription. Use the template provided on page 6. Enter the summary data in the electronic template provided to you in your computer (sample is on page 7)

- Name of Health Institution
- Patient's Name
- Address
- Date
- Card Number
- Sex
- Age, weight
- Inpatient/Outpatient
- Diagnosis
- Name of drug or abbreviation (correctly spelled)
- Strength
- Dosage form
- Dose and duration
- Prescriber name and qualification
- Signature of physician
- Dispenser name and qualification
- Signature of dispenser

Charts for tabulating the information are attached to this activity. After completing the review, summarize your data into a brief report and be prepared to present to the training class on Friday morning.

Use of ARVs according to guidelines; Adults and Adolescents

Hospital Name:

Check (✓) the following if it meets the criteria

Rx Number	Number of antiretrovirals	First Line Treatment (correct)	First Line Treatment, Alternate (correct)	Second Line Treatment (list drugs used in comments)	Prophylaxis with Cotrimoxazole	Correct Doses Yes or No	Comments (list incorrect doses in comments)
		d4T/3TC/NVP ZDV/3TC/NVP	d4T/3TC/EFV ZDV/3TC/EFV				
1							
2							
3							
4							
5							
6							
7							

8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							

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19							
20							
21							
22							
23							
24							
25							
Total							
% Percent							

Use of ARVs according to guidelines, Adults and Adolescents

Hospital Name:

SUMMARY TEMPLATE

Number of prescriptions reviewed: _____

Indicator	Number	% percent
Number and % of patients on correct first line drug combinations (first line treatment plus first line treatment alternatives)		
Number and % of patients on second line therapy		
Number and % of patients on cotrimoxazole prophylaxis		
Number and % of patients with correct doses for ARV drugs		

PART B: Properly completed Prescriptions

Hospital Name: _____

Check (✓) all fields that are completed on the prescriptions

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL Complete
Name of Health Institution																										
Patient's Name																										
Address																										
Date																										
Card Number																										
Sex																										
Age																										
Weight																										
Inpatient/Outpatient																										
Diagnosis																										
Name of drug or abbreviation (correctly spelled)																										
Dosage form																										
Dose																										
Duration																										
Prescriber name																										
Prescriber qualification																										
Signature of Physician																										
Dispenser name																										
Dispenser qualification																										
Signature of dispenser																										

SUMMARY TEMPLATE

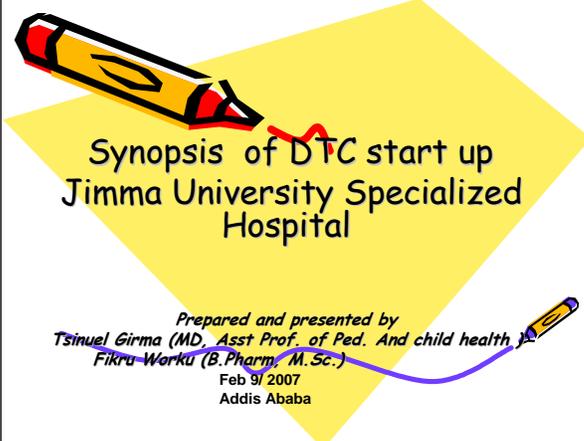
PART B: Properly completed Prescriptions

Hospital Name: _____

Number of prescriptions reviewed: _____

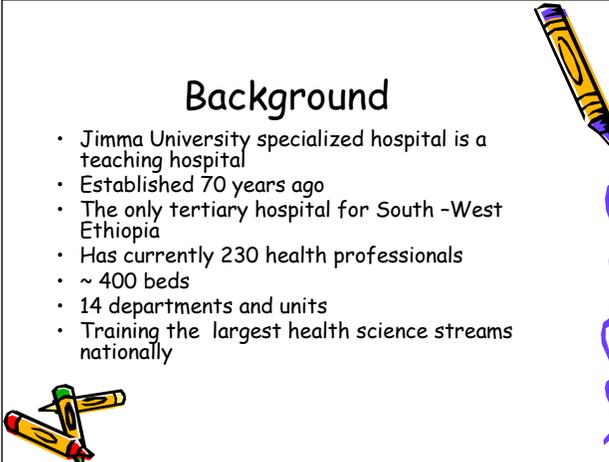
Item	Number of prescriptions with item completed	% Percent
Name of Health Institution		
Patient's Name		
Address		
Date		
Card Number		
Sex		
Age		
Weight		
Inpatient/Outpatient		
Diagnosis		
Name of drug or abbreviation (correctly spelled)		
Dosage form		
Dose		
Duration		
Prescriber name		
Prescriber qualification		
Signature of Physician		
Dispenser name		
Dispenser qualification		
Signature of dispenser		

ANNEX 10. PRESENTATION ON MODEL PROCESS FOR ESTABLISHING DTCS IN ETHIOPIA



Synopsis of DTC start up
Jimma University Specialized
Hospital

Prepared and presented by
Tsinuel Girma (MD, Asst Prof. of Ped. And child health)
Fikru Worku (B.Pharm, M.Sc.)
Feb 9/ 2007
Addis Ababa



Background

- Jimma University specialized hospital is a teaching hospital
- Established 70 years ago
- The only tertiary hospital for South -West Ethiopia
- Has currently 230 health professionals
- ~ 400 beds
- 14 departments and units
- Training the largest health science streams nationally

Challenges of DSM

- No agreed upon and approved drug list
- Selection and quantification was done by pharmacy section only
- No ADR monitoring and reporting system
- Frequent shortage of essential drugs despite relatively adequate budget
- Poor stock management and large stock of expired drugs
- Receipt of unplanned and unwanted drugs



RESPONSE

- Link the hospital with the school of pharmacy mainly for technical assistance
- Attempted to establish DTC after three staffs received training in Addis in 2004
- Computer was " put" in the pharmacy
- Expansion of the existing store



Why ?

Principally the approach
was not systematic and
scientific



Steps of DTC Establishment

- Two staff members attended National training on DTC (august -sept/2006)
- Submitted POA at the end of the training
- Proposal for DTC training (DACA)



Steps ...

- **Organized 3-days in-house DTC training (Oct.4-6, 2006)**
 - 18 selected staffs from different departments of the hospital
 - Theoretical (2 days)
 - Field study (1 day)
- **DTC Established (October 6, 2006)**



Members of the DTC

- | | |
|---------------------------|-----------------|
| • Medical director | ---- Chairman |
| • Chief Pharmacist | --- Secretary |
| • Gynecologist | ---- Member |
| • Dermatologist | ---- Member |
| • Pediatrician | ---- Member |
| • Internist | ---- Member |
| • Ophthalmology, resident | ---- Member |
| • Hospital Adm & Fin. | ---- Ex. Member |
| • Lab. Technologist | ---- Member |
| • Anesth. Nurse | ---- Member |
| • ICU head nurse | ---- Member |
| • Pharmacist | ---- Member |
| • Nurse, Matron Office | ---- Member |
| • Surgery | ? |



Subsequent activities of DTC

- Official letter to all members from Med. Director Office
- List of members submitted to DACA and MSH



1st DTC Meeting (Oct. 18)

Agendum:-

- *Preparation of Annual POA of the DTC*
Identifying and Prioritizing of activities
 - TOR
 - Preparation of Drug list, formulary and STGs
 - Establishing ADR Reporting System
 - Baseline Survey on DSM of the Hospital
 - Establish DIC

E-mail contact for ease of communication



2nd Meeting (Nov. 3)

• Agenda:-

- *Finalizing POA*
- *Finalizing TOR*
- *Comment on baseline survey tool preparation*
- *Comment on selection, quantification and procurement guideline preparation*



3rd Meeting (Nov. 22)

Agenda:-

- *Finalizing the baseline survey tools*
- *Finalizing the selection, quantification and procurement guideline*
- *Establishing ADR Reporting System*
- *Establishing DIC*



4th - 6th Meetings (Dec. 7, 18, and 25)

Agenda:- *How to conduct the baseline survey
(Scientific, Useful and publishable type)*

- All meetings were minuted, signed by all members and documented (Archive of the Hospital as well as Secretary of the DTC)
- **Assistant secretary** assigned among the secretaries of the hospital to take minutes during DTC meetings



Jobs done so far

1. Established ADR Reporting System

- ADR sub-committee
- Advocacy - prescribers, head nurses, Pharmacy personnel
- ADR format collection box ready in 3 sites



check list for ADR reporting

Advocacy

JUSH, November 2006

1. Definition
2. Rationale of ADR Reporting
3. Recognition of ADR
4. What to report
5. When to report
6. How to report
7. How to complete the ADR reporting form
8. Procedure for reporting



Jobs...

2. Preparation of list of drugs for the hospital

- Selection and quantification **guideline developed**
- Official letter and necessary documents (LIDE, STG, EDL) submitted to departments from Med. Director Office
- some departments have submitted their list so far



Jobs...

3. Baseline Survey on DSM system of the Hospital (on progress)

study types

- Indicator studies (Rx indicators, Pt. care indicators, facility indicators)
- Structured Observation (external observers are assigned)
- Interview
- ABC analysis



Methodology

- WHO manual
- Study coordinator
- Sub-team and team leaders



Jobs...

4. Establish DIC

In collaboration with the school of pharmacy

- Appropriate and adequate space is secured
- Now waiting for materials and training of staffs



Challenges

- Department of surgery is not yet part of the DTC members due to shortage of staffs
- No reference list for medical supplies and lab. reagents
- Declining participation of members of DTC



Pre-service "integration"

- Chapter on DTC added to Pharmacy students on the course DSM
- Advise two final year pharmacy students' project on DUE
- Attempt to prepare STG in the department of Pediatrics and Child health



Future Plan

- Finalize the Survey and dissemination of result
- Compilation of the Drug List
- Implementation of the Drug List
- Assist the various departments to develop their own STGs
- Prepare Formularies
- Functionalizing the DIC



Plan ...

- Strengthen and Maintain the ADR reporting system
- Establish AMR sub-committee
- Link-up with IP and ART committees of the hospital
- Evaluate Performance of the DTC



Favorable conditions

- Manpower Development
 - Staffs of School of Pharmacy, Nursing and Laboratory going to involve in hospital activities
 - Resident programs expanding
 - New organizational structure on process



Pre-service training

- Establish DTC in Training Health Centers of JU (7 Health Centers) to strengthen the pre-service training of health stream students of
- Advocate and work for the revision of existing curriculum of health science students at national level



Acknowledgements

- JUSH Management
- DACA
- MSH/RPM Plus -Ethiopia
- Mr. Terry Green and Mr. Niranjan Konduri



THANK YOU!



ANNEX 11. COURSE EVALUATIONS

Course Evaluation Result (n = 33)

Course Title: Scaling up AMR, DTC, and Rational Drug Use Activities in Ethiopia - A Collaborative Strategy for Success

Evaluation Parameters		Total Commented	Total Score	Average	Percentage
1. Content: [Score scale = 1-9 ~ Strongly disagree to Strongly agree]		33			
	The objectives were clearly defined at the beginning of the training course		284	8.61	NA
	The defined objectives were achieved by the end of the training course		284	8.61	NA
	The amount of material covered during the 5 days was appropriate		275	8.33	NA
	The depth of coverage of the material in the training course was appropriate		269	8.15	NA
	The information in this course will be helpful in my work		287	8.70	NA
	Overall I would say the difficulty level of the training Course was:	33			
	Too easy		6	NA	18.18
	Just right		26	NA	78.79
	Too hard		0	NA	0.00
	Did not Comment		1	NA	3.03
2. Sessions Most Relevant to Participants Work:		33			
	Drug and Therapeutics Committee Overview		15	NA	45.45
	Formulary Management		3	NA	9.09
	Assessing Drug Efficacy		1	NA	3.03
	Assessing and Managing Drug Safety		2	NA	6.06
	Promoting Pharmacovigilance in the Heath Facility		3	NA	9.09
	Identifying Drug Use Problems		16	NA	48.48
	Strategies to Improve Drug Use – Overview		12	NA	36.36
	The Role of the DTC in AMR		4	NA	12.12
	The Role of the DTC in HIV/TB/Malaria		2	NA	6.06
	Drug Management and RDU		14	NA	42.42
	DIC Practicum		5	NA	15.15
	DTC/RDU practicum		10	NA	30.30
	All		4	NA	12.12
3. Sessions Least Relevant to Participants Work:		24			
	Drug and Therapeutics Committee Overview		4	NA	16.67
	Formulary Management		11	NA	45.83
	Assessing Drug Efficacy		11	NA	45.83
	Assessing and Managing Drug Safety		7	NA	29.17
	Promoting Pharmacovigilance in the Heath Facility		6	NA	25.00
	Identifying Drug Use Problems		0	NA	0.00

Scaling up Antimicrobial Resistance, Drug and Therapeutics Committees, and Rational Drug Use Activities in Ethiopia - A Collaborative Strategy for Success, February 2007: Course Report

Strategies to Improve Drug Use – Overview		0	NA	0.00
The Role of the DTC in AMR		1	NA	4.17
The Role of the DTC in HIV/TB/Malaria		1	NA	4.17
Drug Management and RDU		2	NA	8.33
DIC Practicum		2	NA	8.33
DTC/RDU practicum		1	NA	4.17
None		8	NA	33.33
Did not comment		9	NA	37.50

ANNEX 12 : SAMPLE WORKPLAN

Scaling up DTC, RDU and AMR activities in Ethiopia: A Collaborative Strategy for Success

WORKPLANS

Part A: Establishing/Strengthening DTCs in hospitals/RHBs

Part B: DTC and RDU related activities

Part C: Pharmaceutical Management Systems (storage & handling)

Part D: Pharmaceutical Information Systems (record keeping)

Region: Tigray

Team: E

Names: Habtmu Berhe, Raey Yohannes, Mulu Legesse, Addisu Liben, Wondwossen Assefa, Getahun, Asfaw Amanu

Goal: Preparing an action plan for establishing and strengthening DTCs in Hospital and RHBs

How many hospitals will you select for the workplan? 14

List the names of the hospitals here

- Mekele Hospital
- Quiha Hospital
- Wukro Hospital
- Adigrat Hospital
- Maichew Hospital
- Alamata Hospital
- Abi- Adi Hospital
- Axum (Kidist Mariam) Hospital
- Adwa Hospital
- Shire Hospital
- Humera Hospital
- Dansha Hospital
- Mekele army Hospital
- Adi Kokeb army Hospital

Part A: Workplan for establishing DTCs in hospitals/RHBs

Activity 1: Training to the respective hospitals			
List steps or actions that you will take to accomplish this activity	Timeline	Completed? Yes/No	Notes; Person responsible
Sensitization on DTCs to Bureau Heads and respective departments	Feb 19-23/2007		TRHB
Select trainers and trainees from the aforementioned Hospital	Feb 26-March 2		TRHB
Prepare training manuals by adapting other DTC training manual and select the venue at which this training is going to be held	March 5-31		Organizers
Conduct the training	April 9-11/12		Organizers
Development of action plans by the trainees on the establishment of DTCs	April 11/12		Participants

Part A: Workplan for establishing DTCs in hospitals/RHBs

Activity 2: Follow Up and Support			
List steps or actions that you will take to accomplish this activity	Timeline	Completed? Yes/No	Notes; Person responsible
Write formal letters to the respective hospital to establish DTC	April 16-30		TRHB
Make follow-up using different means of communication	Beginning from May		TRHB/MSH RPM plus
Undertake supportive supervision on regular basis	Beginning from May		TRHB/MSH RPM plus
Provide recognition and some incentives like certificates, guidelines etc.	Bi annually		DACA/TRHB/MSH RPM plus

Part A: Workplan for establishing DTCs in hospitals/RHBs

Activity 3:Monitoring and Evaluating DTCs			
List steps or actions that you will take to accomplish this activity	Timeline	Completed? Yes/No	Notes; Person responsible
Monitor how the DTCs are undergoing their activities based on their action plan	Beginning from June		TRHB
Conduct review meetings	Beginning from September and continuing it bi annually		DACA/MSH RPM plus and TRHB

Part B: Workplan for DTC and RDU related activities

Activity 1: RDU indicator studies			
List steps or actions that you will take to accomplish this activity	Timeline	Completed? Yes/No	Notes; Person responsible
Baseline assessment of RDU indicators	May 1-31		<u>Hospital and TRHB</u>
Identify RDU problems and disseminate them	June 1-15		Hospital and TRHB
Implement Intervention	July onwards		Hospital, TRHB, DACA and MSH RPM Plus

Part B: Workplan for DTC and RDU related activities

Activity 2: Preparation of list of drugs and formularies for the Hospital			
List steps or actions that you will take to accomplish this activity	Timeline	Completed? Yes/No	Notes; Person responsible
Obtain the drug list from different departments of the Hospital	July 1-15		Hospitals
Prepare drug list and carryout discussion with the respective department Heads	July 16-30		Hospitals
Obtain comments from stakeholders	Up to August 31		DACA and TRHB
Prepare Formulary	Sep – Nov 2007		Hospitals DACA and TRHB
Printing and disseminating	Dec 1-31		Hospitals

Part C: Pharmaceutical Management Systems (storage & handling)

Activity 1: Improving storage and handling			
List steps or actions that you will take to accomplish this activity	Timeline	Completed? Yes/No	Notes; Person responsible
Assess problems of the region with regard to pharmaceutical storage conditions	March –Apr 2007		TRHB/stakeholders
Implement intervention by starting from the lowest point	May onwards		TRHB/stakeholders

Part C: Pharmaceutical Management Systems (storage & handling)

Activity 2:			
List steps or actions that you will take to accomplish this activity	Timeline	Completed? Yes/No	Notes; Person responsible

Part D: Pharmaceutical Information Systems (record keeping)

Activity 1: Improving record keeping and reporting			
List steps or actions that you will take to accomplish this activity	Timeline	Completed? Yes/No	Notes; Person responsible
Distribute standard formats like Bin cards and Stock cards....	During the training		TRHB/stakeholders
Write hospital stakeholders a letter to ensure use of the distributed bin cards and stock cards and other standard formats	April 16-30		TRHB
Introduce computerized record keeping and reporting system	May 1-December/2007		TRHB/stakeholders
Follow up	May onwards		TRHB/stakeholders

Part D: Pharmaceutical Information Systems (record keeping)

Activity 2:			
List steps or actions that you will take to accomplish this activity	Timeline	Completed? Yes/No	Notes; Person responsible