A Guide for Implementing the Monitoring-Training-Planning (MTP) Approach to Build Skills for Pharmaceutical Management







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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

AIDS	acquired immunodeficiency syndrome
ART	antiretroviral therapy
ARV	antiretroviral [medicines]
CPS	capacity building, planning, and supervision [approach]
FBO	faith-based organization
HIV	human immunodeficiency virus
ICIUM	International Conference on Improving the Use of Medicines
MSH	Management Sciences for Health
МТР	Monitoring-Training-Planning [approach]
NACP	National AIDS Control Program [Uganda]
NGO	nongovernmental organization
PDR	People's Democratic Republic [Lao]
РТС	Pharmacy and Therapeutics Committee
RPM	Rational Pharmaceutical Management [Project]
RPM Plus	Rational Pharmaceutical Management Plus [Program]
SOP	standard operating procedure
SPS	Strengthening Pharmaceutical Systems [Program]
USAID	U. S. Agency for International Development
WHO	World Health Organization

GLOSSARY

Centralized supervision model for Monitoring, Training-Planning (MTP) implementation	In this implementation approach, the Ministry of Health initiates and "drives" the MTP process at the central level. Supervisors are usually drawn from the provincial or district level of the Ministry of Health to guide MTP implementation. This approach has also been used by nongovernmental (NGOs) and faith-based organizations (FBOs) that have a centralized management system.
Decentralized supervision model for MTP implementation	The MTP process is initiated and "driven" at regional level in this model. Supervisors from different regions, either geographically or administratively of the Ministry of Health, or from NGOs and FBOs that operate in decentralized systems, guide MTP implementation.
Facility-level model for MTP implementation	In the facility-level implementation approach, the MTP process is "driven" by the MTP group operating at each facility. MTP implementation may be initiated either locally or at the central or regional level.
Monitoring	The first segment of an MTP session in which participants monitor current practices and systems, measure the magnitude of their problems, and report on activities since the previous session and/or share information to set the stage for the next session.
MTP group	The group of participants who participate in the MTP process and apply the approach in their place of work.
MTP materials	The written materials used to conduct an MTP session. The materials may include the agenda and objectives for the session, report of the last meeting, data collection tools, information on the topic, information on solutions, exercises for practicing skills, indicators, and a template for developing an action plan.

MTP series	The set of MTP sessions needed to achieve the objectives of a specific training program or problem-solving exercise.
MTP session	The group-work meeting in which an initiative is presented for implementation or a problem for solving using the MTP approach.
Participants	Individuals who participate in the MTP process and apply the approach in their place of work.
Planning	The third segment of an MTP session in which participants set goals for applying the skills learned to implement a new initiative or address a problem and assign tasks for achieving results.
Session coordinator	Person responsible for organizing an MTP session and assigning roles to the other participants and facilitators. The coordinator may be permanent or assigned ad hoc, depending on the group and on the coordinator's knowledge of the topic at hand.
Session facilitator	Individuals who facilitate or present at an MTP session. Multiple presenters may be needed if several issues are to be covered in the session.
Supervision	A central element of MTP methodology, where supervisors drawn from different levels or regions of the Ministry of Health or of NGOs or FBOs guide MTP implementation and monitor results. In the facility level model, group supervision, the practice where all participants review each other's progress and completion of tasks, is used to promote accountability.
Training	The second segment of an MTP session in which participants learn about a new initiative or identify the underlying causes for a problem, and obtain information and develop skills to implement the initiative or address the problem.

CHAPTER 1: INTRODUCTION

Why MTP?

For decades, Management Sciences for Health (MSH) has been instrumental in developing and conducting pharmaceutical management training in developing countries all over the world. Traditional training approaches often transfer much information in lengthy, intensive sessions and can remove participants from their place of work for a week or more. In addition, evidence from research has shown that traditional training methods alone do not always lead to improvement in practice. In the mid-1980s, recognizing the limitations of traditional training and that the knowledge and skills acquired are not necessarily applied back in the workplace, MSH developed the Monitoring-Training-Planning (MTP) approach to assist the Ecuadorian Ministry of Health to implement its Child Survival Program. Subsequently in 1997, MSH's Rational Pharmaceutical Management (RPM) Project received funding from the U.S. Agency for International Development (USAID) to adapt MTP to assist the Ecuadorian Ministry of Health to decentralize its pharmaceutical management functions.¹

What Is the MTP Approach?

MTP is an ongoing performance improvement approach to skills building that places training, tools, and responsibility for implementing the pharmaceutical management practices learned in the hands of local staff.

¹ Nelson, D. P., and I. C. Adams. 2000. *A Guide to Improving Drug Management in Decentralized Health Systems: The Monitoring-Training-Planning Guide for Program Implementation*. Published for the U.S. Agency for International Development by the Rational Pharmaceutical Management Project. Arlington, VA: Management Sciences for Health.

The approach includes—



Using indicators to analyze the current situation and/or measure the magnitude of the problem

Discussing current practices and the underlying factors for identified problems and how to improve the situation or implement a new initiative



Setting the target for improvement or implementation of the initiative

Using the MTP approach, staff members learn to mobilize their own resources and to improve, incrementally, the management of medicines and other pharmaceuticals at their own facility. MTP differs from traditional training approaches in that MTP sessions are held within the

"MTP differs from traditional training approaches in that MTP sessions are held within the participants' place of work or local environment." participants' place of work or local environment. Because MTP is a self-learning activity involving many providers in health facilities, its effect is more likely to be sustainable.

In 2006, MSH's RPM Plus Program, the follow-

on to the RPM Project, developed comprehensive training materials to build the skills and knowledge of facility-level health care staff for pharmaceutical management and particularly their abilities to tackle constraints and evolving problems to scaling up initiatives such as antiretroviral therapy (ART) programs. These materials are designed to be used in a training program that combines an initial basic training with an ongoing series of MTP sessions to capacitate and support participants to introduce and sustain improvements in their workplace. Since 2006, RPM Plus and MSH's Strengthening Pharmaceutical Systems (SPS) Program, the follow-on to the RPM Plus Program, have worked with ministries of health and institutions in Afghanistan, Ethiopia, Kenya, Liberia, Malawi, Rwanda, South Africa, southern Sudan, Tanzania, and Uganda to train or develop plans for training health care workers on the application of MTP for pharmaceutical management to support HIV, malaria, and other health care programs.

The Purpose of This MTP Guide

This MTP guide is intended to assist managers, planners, technical advisors, and health care workers in applying the MTP approach to improve pharmaceutical management skills for their health programs. This document complements the existing training materials produced by RPM Plus and builds on experiences of the RPM Plus and SPS Programs in applying the MTP methodology in a variety of training programs over the last few years. Trainers and planners can also use this guide as a standalone document to assist them to incorporate the MTP approach into training programs using their existing training materials.

The guide's objectives are to describe—



- The theoretical and practical aspects of the MTP methodology
- How MTP differs from traditional training methods
- The procedure for designing and planning a training program that incorporates the MTP approach
- The implementation process, including guidance on how to conduct an MTP session
- How to prepare the materials for an MTP session

How MTP Can Support Global Initiatives to Improve Access to Pharmaceuticals

Over the past few years, countries, international agencies, and donors have focused their efforts to rapidly scale up HIV/AIDS, tuberculosis, and malaria programs. To achieve the intended impact, these programs will require consistent availability and access to diagnostics, medicines, and other pharmaceuticals at the point of service. The availability of medicines and laboratory supplies at all levels and in all sectors of the health service depends on the leadership, general planning, and management capabilities of pharmacy and laboratory workers as well as their skills to forecast, order, distribute, and monitor pharmaceuticals efficiently and effectively.

Furthermore, as the availability of pharmaceuticals and, particularly, new and expensive technologies increases, the capabilities of the health care team to develop and implement effective strategies to promote the proper use of these products will be critical to the success of these programs. The expected benefits of new treatment options and

"The expected benefits of new treatment options and technologies...may not be realized if products such as diagnostics are not used correctly."

technologies—for example, improved case detection rates for tuberculosis—may not be realized if products such as diagnostics are not used correctly. Irrational prescribing, dispensing, and use of

medicines for all three diseases—AIDS, tuberculosis, and malaria—can lead to treatment failure in individual patients as well as accelerate the emergence of antimicrobial resistance. Second-line treatments, if available, are significantly more expensive than first-line therapies and often result in increased incidence of adverse drug reactions, further contributing to poor patient adherence.

To support these new initiatives, donors and national program managers have concentrated their efforts on developing and rolling out diseasefocused trainings to strengthen the pharmaceutical management skills of pharmacy and laboratory staff. However, in many facilities, particularly at district and primary health care levels, the individuals responsible for managing supplies are few, staff turnover is often high, and it is simply not feasible for the facility to keep releasing employees for lengthy, disease-focused trainings. Furthermore, although these trainings may be effective in improving knowledge, they may not necessarily help the pharmacy or laboratory staff resolve existing problems or tackle new challenges, for example, as initiatives such as ART programs expand operations for going to scale, or when antimalarial programs introduce new medicines, such as artemisinin-based combination therapies. MTP can be highly useful to program managers and facility staff as an approach to complement traditional training courses or as an alternative methodology in situations where chronic staff shortages prevail. An ongoing series of short, periodic MTP sessions delivered at or close to the facility that targets training to address the specific pharmaceutical management issues experienced by facility staff can build the overall problem-solving skills of the health care team and ultimately allow participants to support the scale-up of public health initiatives in the long term.

Increasingly, experts in public health and pharmaceutical management are expressing concerns that a narrow focus on disease-specific programs is diverting attention and resources from efforts to strengthen general health care systems, including pharmaceutical management systems. Traditional training approaches that teach an individual from a facility how to manage medicines for a disease-specific program may do little to improve pharmaceutical management for other programs, particularly where vertical supply and dispensing systems prevail. However, experience has shown that where the MTP approach is used to build the aptitudes of a health facility team of providers and managers to support a specific program, the team will very often apply their problem-solving skills and adapt successful interventions to address pharmaceutical management problems for their other health programs.

Who Is This MTP Guide For?



This guide has been specifically developed to assist managers, planners, technical advisors, and health care workers to apply the MTP approach to build pharmaceutical management skills to support their health programs.

Potential users of this guide will generally fall into three categories—

 National or program managers, or technical advisors interested in designing and planning a pharmaceutical management training program that incorporates the MTP approach

- Groups such as academic institutions, or individuals responsible for MTP implementation, including authors of MTP session materials and coordinators and facilitators who will organize and present at the MTP meetings
- Supervisors or facility-level teams seeking a hands-on practical approach to improve pharmaceutical management practices and resolve constraints to health program implementation and scaleup at the sites where they supervise or work

Organizations or individuals responsible for planning and implementing other types of training programs in the health sector may also find this guide a useful resource.

What Is in This MTP Guide?



The guide is organized into four chapters.

Chapter 1: Introduction

This chapter describes how MSH came to develop the MTP approach and explains how MTP can support global initiatives to improve access to pharmaceuticals. The purpose and objectives for this guide are set out, and potential audiences and users are identified.

Chapter 2: Overview of MTP

The second chapter describes the MTP approach, introduces its theoretical basis, and explains how MTP differs from traditional training methods. The various applications of MTP are discussed, and experiences in implementing MTP for improving pharmaceutical management practices are described. The structure of an MTP session is outlined, and the steps in each segment explained.

Chapter 3: Implementing MTP

The process for designing, planning, and implementing training and performance improvement strategies that incorporate the MTP approach is outlined in a series of steps. The different approaches to MTP implementation are described, and country, program, and facility-level experiences are used to illustrate the adaptability of the MTP methodology. Lessons learned from RPM Plus's and, more recently, SPS's experience in supporting programs to apply the MTP approach and insights from MTP implementers are also shared.

Chapter 4: Developing MTP Session Materials

Chapter 4 reviews the written materials needed to conduct a session and provides guidance on how to put them together.

Further readings and resources are included under Additional Resources.

The annexes contain—

- An illustrative plan for implementing a program using the MTP approach
- A template for developing an MTP action plan
- A template for supervisory follow-up of MTP action plans

The accompanying CD contains—

- Checklists for facilitators
- A template for writing an MTP session
- Three MTP sessions developed by RPM Plus to build pharmaceutical management skills to support an ART program
- An example of a baseline and evaluation tool developed to evaluate the impact of implementing an HIV/AIDS pharmaceutical management training program using the MTP approach

- An illustrative agenda for an MTP Planning Workshop
- Three sample PowerPoint presentations for an MTP Planning Workshop—*Root Cause Analysis, Selecting Interventions,* and *Target Setting and Monitoring*

Looking Ahead



Chapter 2 describes the MTP approach, introduces its theoretical basis, and explains how MTP differs from traditional training methods.

CHAPTER 2: OVERVIEW OF MTP

What Is MTP?

The Theory of MTP

Abundant evidence indicates that traditional training methods alone do not necessarily lead to improvements in practice. Traditional trainings are often given only once, contain much theory, and are delivered in lengthy classroom sessions. Although a great deal of information is transferred in these intensive trainings, in many cases trainees are overwhelmed by information and do not have the opportunity to apply the new practices and methodologies in their daily work. Training events are usually costly because they can last several days or more and are often held at distant locations, requiring travel and

per diem payments. Moreover, trainings that remove participants from their place of work for a week or longer can greatly affect dayto-day operations of facilities, especially in situations of chronic staff shortages.

MTP provides an innovative approach to improve practice through an adult-learning and problem-based intervention.

Adult learning theory informs us that adults

learn best through experiential learning and use of interactive methodologies. "Experiential learning," that is, learning based on experience and observation, has been shown to be an effective method for acquiring knowledge and changing behavior. An ancient proverb tells us: *Tell me and I will forget / Show me and I may remember / Involve me and I will understand* (Confucius 450 B.C.). Training methodologies that "involve" participants in an active way and incorporate their own experiences in the learning process can allow trainees to begin to develop their skills during the training and receive immediate feedback.

MTP uses experiential learning and participatory processes. It avoids some of the drawbacks of traditional training by breaking the training program into short, periodic group-work sessions. The methodology also incorporates problem-based learning, an approach in which knowledge is developed during the process of studying problems or real-life situations. The training provided in the MTP session is highly relevant to the participant because it is associated with a specific work-based challenge or a particular institutional need. And because of this real-life focus, participants are empowered to solve their own problems.

Another key component of the MTP methodology is self-monitoring. Members of the MTP group monitor their own performance using a set of indicators. In Indonesia, self-monitoring at rural clinics using a few simple medicine use indicators was found to be highly effective as a strategy to improve medicine use practices.²

In summary, MTP offers a training and program implementation alternative that improves practice through an adult-learning and problem-based intervention. Self-evaluation and independent decision

making are coupled with supervision to promote accountability.

The MTP Approach

MTP is a performance improvement strategy that includes—



20 minde

Using indicators to analyze the current situation and/or measure the magnitude of the problem



Discussing current practices and the underlying factors for identified problems and how to improve the situation or implement a new initiative



Setting the target for improvement or implementation of the initiative

http://mednet3.who.int/icium/icium1997/posters/2D3_TXT.html.

² Sunartono, D., et al. 1997. *Impact Evaluation of Self Monitoring of Drug Use Indicators in Health Facilities. Experiences from Gunungkidul, Indonesia*. Poster presented at the First International Conference in Improving the Use of Medicines, April 1–4, Chiang Mai, Thailand. Available at



The MTP approach incorporates monitoring, training, and planning into each individual monthly or periodic session to achieve real results.

Each MTP session is devoted to a single topic or problem. On a monthly or other regular basis, participants first review achievements from the previous session, and then move on to the new topic or problem. They begin by analyzing information about their own situation, study how to take action, and then plan short-term activities and set goals for improvement. Training is limited to providing information and building skills needed to carry out the tasks assigned. The meeting ends with participants taking on specific tasks or responsibilities that generally will achieve results before the next session. However, some goals may take several sessions to achieve, for example, those that involve changing behavior to address irrational medicine use. **MTP is a continuous and cyclical process**—the planning segment of one session cycles into the monitoring segment of the next. Each session draws from the previous one and builds skills to contribute to the success of the next.

MTP activities are self-initiated, self-executed, and self-evaluated.

Consequently, recognizing the achievements of participants to encourage them to sustain their efforts is an important principle of MTP implementation. The self-creation of activities allows sensitive issues to

Key elements of the MTP methodology—

- A series of periodic sessions, each session dealing with one topic or problem, is used to implement the methodology.
- Specific goals are set for each meeting.
- Builds skills to achieve goals through experiential learning and participatory processes rather than didactic methods.
- Is problem based, so training is limited to the knowledge and skills needed to carry out the assigned tasks.
- Activities are self-initiated and self-executed.
- Is self-evaluated using indicators.
- Supervision is used to promote accountability.

be discussed and solved honestly and effectively. MTP is not externally imposed; it is something participants choose to do. Because it is self-applied, MTP does not require experts and central-level managers to be successful. However, support from managers at all levels can help make MTP more sustainable and participatory.

MTP is a process, and for many participants and some managers, it may represent a different way of thinking and

working. Participants may struggle initially and lack the confidence or the initiative to begin. Managers and facilitators can play an important role in guiding and encouraging individuals and the group to work through the process and sustain the meetings. Very often, central- and regional-level managers accompany and monitor the staff as they implement the MTP process. The managers can themselves use the information generated in the MTP process to design new interventions to further improve their programs or services.

As mentioned earlier, MTP differs from traditional training approaches in that it does not remove participants from their places of work to attend training. MTP sessions are held within the participants' place of work or local environment.

Applications of the MTP Approach

The MTP approach is flexible and can easily be adapted to different local settings and needs. Although overlap is considerable, experience in MTP implementation for pharmaceutical management over the last few years has shown that the applications of MTP fall into three broad categories—

- As a training alternative to build skills for pharmaceutical management through an adult-learning and problem-based intervention. The MTP approach encourages participants to apply the skills and knowledge learned at their place of work to achieve results. The materials for the MTP sessions are very often developed centrally and adapted locally.
- As a problem-solving technique—for example, to design and implement interventions to improve the proper use of antiretroviral (ARV) medicines at a facility. Training is generally limited to finding out how others have dealt with a specific problem and the effectiveness of their interventions.
- To support implementation of new programs, strategies, or technologies—for example, to support the introduction of ART programs, decentralization of pharmacy functions, or the introduction of new diagnostic tools for tuberculosis. Both training (to provide information on the new program, strategy, or technology and build skills for implementation) and problem solving (to address evolving problems as the new initiative rolls out) are needed.

Experience has shown that considering the specific needs of the program and the local setting is important so that the MTP materials and approach can be adapted accordingly. For example, the training segment of an MTP session for an audience of pharmacists on quantifying needs of essential medicines may be very different from the training segment designed for nurses or pharmacy assistants.

Does MTP Work?

Experiences in Using MTP for Pharmaceutical Management

As mentioned earlier, RPM first used the MTP methodology for pharmaceutical management in Ecuador in 1997. RPM assisted the Ministry of Health to develop a series of MTP sessions that was designed to build the skills of staff at local health facilities to support decentralization of pharmaceutical management functions from the central level. Six MTP sessions were developed and applied simultaneously in 100 health districts, and in less than a year, health facilities had achieved measurable results. These achievements included setting up Pharmacy and Therapeutics Committees (PTCs), developing formularies to guide the purchase of medicines and standard treatment guidelines for 20 conditions, and establishing secure local warehouses and operational medicines sales outlets.³

In the late 1990s and early 2000s, RPM successfully applied the MTP methodology in Bangladesh, Mozambique, Peru, and the Philippines.⁴ In each country, MTP sessions were developed to fit the specific needs and issues of the pharmaceutical management system, and the content was adapted to make it suitable for the audience and setting.

- In Bangladesh, the MTP process was applied by 46 NGOs to organize and operate revolving drug funds in 340 clinics.
- In Mozambique, RPM modified the MTP methodology for the country's context in 1998, when most of the staff managing and dispensing medicines had little or no formal training. The capacity

³ Nelson, D. P, and I. C. Adams. 2000. *A Guide to Improving Drug Management in Decentralized Health Systems: The Monitoring-Training-Planning Guide for Program Implementation.* Published for the U.S. Agency for International Development by the Rational Pharmaceutical Management Project. Arlington, VA: Management Sciences for Health. ⁴ Ibid.

building, planning, and supervision (CPS) approach differs slightly from MTP in that monitoring comes last and is conducted by supervisors instead of being self-monitored. Five CPS sessions on basic techniques in managing medicines were used in six provinces to support the decentralization of Mozambique's pharmaceutical sector. Two years later, indicators tracked on a regular basis by facilities and supervisors showed that overall the value of medicines expiring had substantially decreased, stockouts were occurring less frequently, and more stock cards were up to date.

- In Peru, MTP was used to support three different initiatives: to implement the national medicines policy, to improve pharmaceutical management in 21 regional hospitals, and to introduce the Ministry of Health's new budget and planning system nationwide.
- In the Philippines, MTP sessions were developed to support hospitals in two provinces to establish and sustain PTCs, to create quality assurance committees that addressed various health care delivery bottlenecks, and to support the move to hospital autonomy.

Since 2006, RPM Plus has been working with academic institutions and ministries of health in **Uganda, Kenya, and Tanzania** to implement HIV/AIDS pharmaceutical management training programs using the MTP approach to improve access to and rational use of ARVs and other ART-related pharmaceuticals. With assistance from RPM Plus and more recently SPS, these countries, together with Malawi, Rwanda, and South Africa, have trained more than 200 health care workers managing HIV/AIDS commodities using the MTP process. In Tanzania, SPS, together with the Elizabeth Glaser Pediatric AIDS Foundation, assisted more than 30 facilities that provide ART services to improve their pharmaceutical management capacity. Moreover, in Uganda, MSH's SPS Program has worked with the Northern Regions of Uganda to improve management of malaria commodities using the MTP approach. As of early 2009, groups in several areas, including **Afghanistan, Ethiopia, Kenya, Liberia, Malawi**,

Rwanda, South Africa, southern Sudan, Tanzania, and Uganda, have trained personnel or plan to train health care workers on the application of MTP for pharmaceutical management.

Although MTP has been demonstrated to be a successful problem-solving approach for improving rational medicine use (see below), RPM did not evaluate the effectiveness of MTP as a skills-building approach in its early programs. Therefore, in 2006, RPM Plus with assistance from academic institutions in Uganda, Tanzania, and Kenya incorporated MTP into HIV/AIDS pharmaceutical management training programs with the objective of evaluating the effectiveness of MTP as a skills-building strategy. Incorporating MTP into training programs has produced tangible results in many of these programs.

In Uganda, for example, incorporating MTP in HIV/AIDS training in 12 facilities reduced ARV stock-outs by 15 percent, reduced medicine expiries by 27 percent, increased the stock counts that matched physical counts by 80 percent, increased the number of up-to-date stock cards by 60 percent, and increased the number of facilities using standard operating procedures (SOPs) by 50 percent.⁵ From these experiences, MTP appears to be a cost-effective and sustainable intervention to build local human resources capacity. In addition, the MTP approach provided public facility staff the technique and motivation to prioritize problems and improve their health commodity management practices.

In 1999, the World Health Organization (WHO) Collaborating Center for Research and Training on Rational Drug Use in Yogyakarta, Indonesia, began investigating the effectiveness of using the MTP approach to implement interventions on medicine use. The methodology was fieldtested by WHO in Cambodia, Indonesia, and the Lao People's Democratic Republic (PDR). Evaluations demonstrated that MTP was effective in

⁵ Matowe, L. 2007. Trip Report of Visit to Uganda to Give Technical Assistance to Makerere University and NACP to Pilot MTP as a Skills Building Approach for HIV/AIDS Pharmaceutical Supply Management: December 2–7, 2006.

improving medicine practices and led to significantly reduced overuse and misuse of antibiotics and injections.⁶

Based on these findings, the 2004 Second International Conference on Improving Use of Medicines (ICIUM) held in Chiang Mai, Thailand,

recommended that the MTP strategy be scaled up and replicated in other countries. In 2006, WHO began introducing MTP to address irrational medicine use in other countries in the Western Pacific and South-East Asia regions, including the Philippines and China, while continuing to scale up

"Evaluations demonstrated that MTP was effective in improving medicine practices and led to significantly reduced overuse and misuse of antibiotics and injections."

MTP in countries where it had been implemented.

In the **Chinese province of Guangdong**, a pilot project launched in 2006 by the Zhuhai Health Bureau was expanded to five additional hospitals following the initial success of MTP activities in promoting rational medicine use.⁷ Considerable reductions in antimicrobial and injection use for upper respiratory infections in outpatients have been reported in all five hospitals. In 2008, under the Promoting Rational Medicines Use in Zhuhai Communities project, the use of MTP to improve community medicines use for the treatment of childhood simple diarrhea was explored.⁸ Although initial results were promising, sustaining the intervention may be challenging because the health centers serving the community reportedly rely on income generated by the sale of medicines.

A pilot study conducted in 10 primary health care hospitals in Bangladesh in 2007 demonstrated that the MTP approach was effective in reducing

⁷ Jing, S. 2008. Promoting rational antimicrobial and injection use with the MTP approach in Zhuhai City. *INRUD News* 18(2):10–12. Available at

⁶ Suryawati, S., and B. Santoso. 2004. *MTP Approach Is Effective in Reducing Inappropriate Medicines Use in Hospitals.* Poster and PowerPoint presentation at the Second International Conference on Improving Use of Medicines, March 30–April 2, Chiang Mai, Thailand. Available at

http://archives.who.int/icium/icium2004/poster5a7b.html.

http://www.inrud.org/documents/upload/INRUD-News-Vol-18-Iss-2-July-2008-FINAL.pdf.

⁸ Zhuhai Subgroup, INRUD/China Core Group. 2008. WHO Project on Promoting Rational Medicines Use. *INRUD News* 18(3):6–8. Available at

http://www.inrud.org/documents/upload/December-2008_Final-for-posting_v2.pdf.

the use of avoidable injections.⁹ Evaluations of the impact of MTP in improving medicine use practices in other countries are expected to be ongoing throughout the rollout.

Structure of an MTP Session

MTP sessions are the group-work meetings in which a pharmaceutical management topic or problem is presented and discussed. In general, MTP sessions should be held on the same day and in the same place (for example, in the hospital conference room at 2:00 p.m. on the first Tuesday of each month). Holding the first few sessions regularly is very important to establish a routine and create expectations that the meetings will continue.



Each MTP session is divided into three main segments; first is the monitoring segment, then training, and, finally, the planning segment. The time needed for the MTP session and each segment may vary according to the complexity of the topic or problem and the amount of discussion it stimulates in the group. However, efforts should be made to ensure that the proceedings remain focused to enable the session to finish on time.

⁹ Chowdhury, A.K.A., M.S. Rahman, and A.B.M. Faroque. 2007. *Studying and Implementing the Monitoring-Training-Planning Strategy to Ensure the Rational Use of Injections in the Hospitals of the Upazila Health Complexes of Bangladesh*. Presented at the 2007 Global Injection Safety and Infection Control Meeting, October 23–25, Geneva, Switzerland. Available at http://www.who.int/injection_safety/sign/meetings/SIGN2007MeetRep-22Jan08.pdf.

What Happens at an MTP Session?





3. Train and problem solve on the topic of today's session.



- 4. Develop action plan and assign responsibilities.
- 5. Select indicators and set targets for the improvement.
- 6. Identify information to collect for the next MTP session.

Introduction to the Session

At the first meeting, the MTP group members get to know each other, appoint a coordinator if needed, and agree on the goals that they want to achieve by using the MTP process. The coordinator or facilitator explains the MTP process in detail to the participants and presents the tools they need to apply the methodology.

In follow-on sessions, the MTP coordinator opens the session by distributing the report of the previous session for review by the group and sets out the objectives and topics to be covered in that day's session.

Monitoring—Problem Identification and Measurement

Each MTP session begins with the monitoring segment. We are often asked why monitoring comes first. There are two reasons: First, the monitoring segment sets the stage for the topic or problem to be addressed in that day's session. Second, when MTP has been running, discussion on the topic or problem addressed in the previous MTP



session is "completed" when the MTP group reviews progress made since the last meeting to ensure that the tasks assigned have been accomplished and results have been achieved.

The First Meeting

At the first meeting of the MTP group, there is nothing to follow up on from the previous session, so the outline is somewhat different from ongoing meetings. In the monitoring segment of the first session, the participants—

- 1. Discuss the current situation and/or identify and present specific problems for solving. Participants discuss existing practices and systems before implementing a new initiative or identify specific problems that they perceive to be important. Problems may also be identified from the findings of an assessment or supervisory visit. A general introduction to a new initiative, for example, establishing a PTC, or to a specific disease, such as malaria before introducing artemisinin-based combination therapy at a facility, could also be given at this time. This step is discussed further in the next chapter.
- 2. **Select a priority problem.** The MTP group prioritizes their problems and selects a problem or topic to tackle at the next meeting. The participants identify indicators and data sources that they can use to measure the size of the problem and monitor progress made when their solutions are implemented. If time allows, problem solving can also begin at this first meeting, particularly if baseline results of an assessment or supervisory visit are available to indicate the magnitude of the selected problem at their workplace.

Participants or assessment findings might identify many problems. However, participants cannot address all the problems at once, so prioritizing is a critical step. Two criteria that can be used to prioritize problems are—

- How important is the problem? What is the impact of the problem? If it is solved, will things be marginally better or vastly better? If the problem is left unsolved, could it potentially lead to the collapse of the program?
- **Does the problem have a feasible solution?** Can the participants themselves do something about it? For example, the problem might be that the salary is low. That problem may be big, but will the participant be able to do something about that in his or her facility? Probably not, because salary decisions are made at a higher level.

Participants may find selecting a problem to tackle at this first meeting difficult. So the coordinator or facilitator can play a valuable role in stimulating group discussion and encouraging the group to select a relatively simple issue first, to build confidence in the MTP process.

Ongoing Meetings

After MTP is running, the first task in the monitoring segment of ongoing meetings is to review the previous MTP session to remind participants what was planned and what they had committed to undertake. The participants—

- 1. **Follow up on commitments.** The participants report on the tasks and responsibilities to which they had committed at the last session. The supervisor and/or the group review each participant's progress in carrying out these commitments. This follow-up is part of supervision, a key element of the MTP methodology.
- 2. **Evaluate intervention results.** Participants discuss accomplishments since the last MTP session. Did they achieve

their goals? If they had problems, were they solved? How were they solved?

- 3. **Recognize the achievements made.** Complimenting people for their efforts in completing tasks and achieving targets is an important principle of MTP. Very often, people will be using their own time to attend the session, carry out interventions, or collect data, especially in facilities that are understaffed.
- 4. **Revise the plan if necessary.** For tasks that were not completed, participants discuss the problems and arrive at a consensus on how to finalize them.

The group now moves on to discuss the topic or problem for the current session. The participants—

- 5. **Present the current situation.** Participants present data and indicators to describe the current situation at their facility for today's session.
- 6. **Identify specific gaps and priority problems.** The results are reviewed and analyzed by the group to understand the implications of the findings. Does the situation represent a problem? Can or should it be improved?

Training—Problem Solving



The second part of the MTP session is training. This description can be misleading, however, because sometimes this segment may contain very little traditional training. It can also be called problem solving. This segment of MTP may take more than one session.

In this segment, participants—

1. **Discuss the specific problem or implementation of the new initiative.** The group reviews and analyzes information collected over the last month. Participants should discuss the implications of the findings. Why is it happening? What are the underlying factors? A critical step is to identify the underlying practices and causes and to go deep into the root causes. *Root causes* are the real causes of the problem and lie at the base of all the lesser causes. If the root causes are not identified, the intervention designed will not be effective.

- 2. **Collect supporting information.** After identifying the session's problem, participants might decide that they need to collect supporting information to better understand the causes of the problem. For example, they might interview colleagues who are working in the area dealing with the problem.
- 3. **Obtain information and build skills to implement the new initiative or solve the problem.** Participants can collect information on implementing the new initiative or how to solve the problem. Generally, the problems that they identify are not unique; other people have dealt with such a problem. They can ask other facilities how they addressed those problems. What worked for those facilities that could be useful for them? If training is provided as part of the session, it should be directly related to the topic being addressed and focus on providing the information and skills needed to enable participants to implement the new initiative or address the problem.
- 4. Decide how to implement the new initiative or solve the problem. Once participants have analyzed all the information, identified the underlying causes, benefited from a training, and/or collected information on how other people have rolled out the new initiative or dealt with the problem, they decide together how they will implement the initiative or solve the problem. Typically, the process involves developing some kind of action plan and allocation of responsibilities, which form the next segment in the MTP session.

Planning—Setting the Target for Improvement

In the final segment of the session, the participants—

1. **Develop a plan to introduce the new initiative or solve the problem.** Participants select and document activities to introduce the initiative or address the problem.



2. Set a measurable target for improvement. Participants select one or more indicators to measure progress made and set the target to be achieved. Targets should be feasible to achieve, meaningful, and based on evidence.

For example, suppose the staff of a district store decides to address the problem that the losses because of medicines expiring at their store are twice those reported by other district stores in the province. The participants identify the cause as overordering, and overordering is in turn a result of poor record keeping. The results presented during this session showed that 80 percent of records were inaccurate.

The participants could prepare the following plan-

- They will train on good record keeping.
- They will write SOPs on how the records should be filled in correctly.
- They will train on the SOPs.
- They will set up an audit committee to check the record keeping every three months.
- Finally, they set a target of 70 percent improvement in record keeping. Setting an achievable target that will show some kind of success and encourage the group to continue is an important part of the process.

- 3. Assign responsibilities for executing the plan. Participants may also need to identify a group of people they will work with to introduce the initiative or address the problem. For example, some management input may be needed to resolve the problem. Supervisors and managers supporting the MTP process can help participants carry out the tasks.
- 4. Set the date for the next MTP session.
- 5. Assign someone to collect data and present it at the next MTP session. Participants will need to collect data to report on the results of applying their newly learned skills to implement the new initiative or address this session's problem. In addition, participants are asked to collect information or data specific to the topic for the next session. Any information that is to be brought to the next session is explained. If needed, data collection forms are handed out.

Upon completing the planning segment, participants should know what they will do over the next month and before the next session. The results of the planned activities are reported and analyzed during the monitoring segment of the following MTP session. In this way, the planning segment of the current session cycles directly into the monitoring segment of the next session.

Evaluation

An evaluation completes the MTP session. Evaluation forms are valuable if training is a major component of the MTP session, especially if there are multiple presenters. Alternatively, the MTP group members can give their feedback and record their comments in the meeting or training report.
Looking Ahead



Chapter 3 outlines the process for designing, planning, and implementing training and performance improvement strategies that incorporate the MTP approach. This chapter describes the different approaches to MTP implementation

and uses country, program, and facility-level experiences to illustrate the adaptability of the MTP methodology.

CHAPTER 3: IMPLEMENTING MTP

This chapter outlines the process for designing, planning, and implementing training and performance improvement strategies that incorporate the MTP approach.

In this chapter, we will—

- **Describe** the different approaches to MTP implementation
- Use case studies of country-, program-, and facility-level experiences to illustrate the adaptability of the MTP methodology
- Outline implementation considerations for each step of the process
- **Share** lessons learned from years of experience using the MTP approach for pharmaceutical management

Approaches to MTP

One of the most useful aspects of MTP is its **flexibility**—the methodology can be adapted to different local contexts and needs. The MTP approach has been used successfully at different levels of the health care system, in both the public and the private not-for-profit sectors, and as discussed in the previous chapter, for a variety of applications.

The **approaches** for designing, planning, and implementing a program that incorporates the MTP methodology can vary considerably, depending on the level of the health care system that is managing or "driving" MTP implementation.



Although some overlap occurs, implementation approaches can be classified into three broad categories—



Centralized supervision model—The Ministry of Health initiates and "drives" the MTP process at the central level. Supervisors are usually drawn from the provincial or district level of the Ministry of Health to guide MTP implementation. This implementation approach has also been used by NGOs and FBOs that have a centralized management system.



Decentralized supervision model—MTP process is initiated and "driven" at regional level. Supervisors from different regions of the Ministry of Health, either geographically or administratively, or from NGOs and FBOs that operate in decentralized systems, guide MTP implementation.



Facility-level model—The MTP process is "driven" by the MTP group operating at each facility. Implementation may be initiated either locally or at the central or regional level.

Purpose of MTP



MTP can be used as—

- A training approach
- A problem-solving technique
- An implementation methodology for new programs, strategies, or technologies

The **purpose** for which the MTP methodology is to be used also influences program design and planning. Where MTP is being used as a training approach and, at least initially, as an implementation methodology, developing training materials will be an important component. Consequently, the **process** for developing, reviewing, and where relevant, field-testing and publishing the MTP materials will need to be considered when planning, budgeting, and generating timelines for MTP implementation. See chapter 4 for a discussion on the steps in developing MTP session materials and considerations for determining the structure and content of each session based on the objectives to be achieved.

Principles of MTP Implementation

Although the MTP implementation **process** may vary related to the purposes discussed above, the general **principles** apply in all cases.



MTP implementers should—

- Adapt MTP to local settings and needs
- Implement MTP at the place of work or at least locally to minimize travel costs
- Plan and execute activities in an organized manner
- Encourage tasks to be shared among members of the MTP group to enhance ownership and minimize responsibility overload
- Recognize the achievements of participants to encourage sustained effort



Key Steps of MTP Implementation

Because programs and performance improvement activities that use MTP are designed to be ongoing, **management support** and **funding** will be required to sustain implementation in the medium to long term. In addition, both implementers and participants need **motivation** to sustain their efforts to achieve and maintain improvements. And because each MTP session draws from the previous one and builds skills to contribute to the success of the next, the skills-building component of the program needs to be carefully designed.

Unlike many traditional training workshops that focus primarily on short-term knowledge gains, each MTP session draws from the previous one, building skills to contribute to the next session. Therefore, an MTP implementation strategy needs to be carefully designed and planned to achieve long-term goals as well as participatory and inclusive to build ownership and motivation.

This process consists of three phases, which are discussed in the following section—

Building Advocacy and Support Designing and Planning an Implementation Strategy

Implementing MTP

Building Advocacy and Support

Experience has shown that **investing time upfront** in building advocacy and support for MTP is important for all three implementation models. Even where the MTP process is initiated and managed at the facility level, the MTP group will very often require the support of the management team to convene the group, and particularly to implement and, where necessary, fund interventions to improve their programs or systems.

The steps in this phase are as follows—



Program planners will need to identify and address constraints or lack of capacity to implement MTP effectively. Some of the specific considerations for each of the three implementation models are discussed later in this chapter. Experience has highlighted one important constraint to effective MTP implementation. We observed earlier that MTP activities are self-initiated, self-executed, and self-evaluated. Indeed, to be successful, MTP requires an environment that enables MTP participants or groups to make decisions and take action to improve their programs or services, within recognized limits. Therefore, in health care systems where decision making is highly centralized and where participants have little or no autonomy to act independently, the MTP methodology is unlikely to be effective.

Step 2: Identify and Engage Stakeholders

The number of different stakeholders that need to be engaged will vary by the implementation model selected and according to the goals and objectives that are to be achieved through applying MTP. In general, the stakeholders will fall into two categories: those who will play a role in MTP implementation and those whose endorsement or support is needed for the MTP initiative to be successful. Clearly, the centralized supervision model will require many more different groups to be engaged in MTP design, planning, and implementation than the facility-level model.

"Engaging the participants themselves and, where appropriate, their professional bodies early in the process to build motivation and ownership is key to successful implementation."

Where MTP is to be used as a training approach or to support implementation of new programs, strategies, or technologies, academic

institutes or teaching bodies may need to be involved together with the technical or clinical teams that are spearheading the introduction of the new initiative. MTP problem-solving initiatives will often require the participation of multidisciplinary groups and management teams to be successful. Engaging the participants themselves and, where appropriate, their professional bodies early in the process to build motivation and ownership is key to successful implementation.

Step 3: Explain the Benefits of MTP for the Individual and for the System

Managers and stakeholders will need to be convinced of the benefits of adopting MTP to stimulate and maintain commitment, particularly among those who could potentially play a role in implementing or funding MTP. A stakeholder meeting or workshop can be convened for this purpose. Sharing this manual with key stakeholders can be the first stage. Presenting data from supervisory visits or pharmaceutical assessments can help convince decision makers of the limitations of previous traditional trainings in improving practices at the workplace and the need to consider a different approach.

MTP implementers from other sites, programs, or countries can be requested to present their results and lessons learned to managers and

key stakeholder groups. Arranging a visit to observe an MTP session and discussing achievements with the MTP group members can be especially helpful for implementers of the facilitylevel model. Managers and funders will be particularly interested in the cost implications for implementing MTP. Potential MTP participants will want to

"Presenting data from supervisory visits or pharmaceutical assessments can help convince decision makers of the limitations of previous traditional trainings in improving practices at the workplace and the need to consider a different approach."

understand the benefits for the facility and also for themselves as individuals. The financial and other resource considerations for each implementation model are listed later in this chapter.

Designing and Planning an Implementation Strategy

The complexity of this phase depends on the implementation approach selected. When MTP implementation is initiated and managed at the facility level, several of the steps may not be required. The steps outlined here are described for each of the three implementation models later in this chapter.

- 1. Convene an MTP Strategic Planning Meeting.
- 2. Decide on the goals and objectives for the program or initiative.
- 3. Define the scope of the program or initiative, and design the implementation strategy.
- 4. Quantify resource needs.
- 5. Establish roles and responsibilities for implementation.
- 6. Develop a timeline for implementation.

Step 1: Convene an MTP Strategic Planning Meeting

Ensure that the stakeholders who will have a role in MTP implementation are invited and able to attend and that sufficient time is allocated to complete the tasks (steps 2 to 6).

Step 2: Decide on the Goals and Objectives for the Program or Initiative

The first task to be completed in the MTP Strategic Planning Meeting is to clearly identify the program or initiative that is to be implemented using

the MTP approach and to agree on the goals and objectives that are to be achieved.

Step 3: Define the Scope of the Program or Initiative, and Design the Implementation Strategy

This step is particularly relevant when designing and planning the implementation strategy for centralized supervision and decentralized supervision models.

Define the scope of the program or the initiative		
Geographical	Will the program or initiative be implemented in all geographical regions? If implementation will be restricted to selected regions, what will be the criteria for inclusion or exclusion?	
Level of the health care system	Will all types of facilities be included, or will implementation be targeted at a particular level?	
Cadre or specialty	Will the initiative or program target certain cadres of health care workers or staff working in a particular specialty or department? If attendance will be restricted, how will participants be selected?	
Agree on the implementation strategy		
Roll out or phase in	Will the program or initiative be rolled out to all target geographical regions, facilities, levels, and/or cadres of staff at the same time, or will it be phased in? If implementation will be phased, what will be the order and timeline?	
With or without basic training	Will an initial basic training course be combined with the ongoing series of MTP sessions?	
With or without an MTP planning workshop	Will MTP implementation be launched with an MTP planning workshop to introduce supervisors and/or participants to MTP concepts and tools? If yes, will all members of each facility- based MTP group attend or only selected representatives?	

Central or facility-based MTP sessions	Will ongoing MTP meetings be held centrally or at the facility level? If centrally, will all members of the facility- based MTP group attend, or will the MTP group be composed of participants from multiple facilities?	
Finite series or ongoing	Will the MTP series be made up of a fixed number of sessions or run for a fixed length of time? Or will MTP be ongoing?	
Single model or combination	Will one model be used throughout, or will implementation transition to another approach over time? For example, an initiative to introduce an ART program using a centralized supervision model could transition into a facility "driven" MTP implementation approach to address evolving problems as the ART service scales up.	
Select the process for collecting the baseline data to describe the current situation and to identify the magnitude of problems		
Baseline assessment	Will an assessment of the pharmacy services at the facilities be conducted to inform the MTP implementation process, or can the results of any recently conducted assessment be used?	
Training needs assessment	Will a training needs assessment be needed where MTP is being used to support implementation of a new program, intervention, or technology or as a training alternative?	
External or self-assessment	Will the baseline data be collected by the MTP participants themselves or by staff external to the facility?	
Agree on the process for developing the materials (This step is discussed in detail in chapter 4.)		
Some important questions to ask to inform budgets and implementation timelines	Will the materials be formally reviewed? Will the sessions be field-tested and, if so, at how many sites? Will the materials be edited and published?	

Step 4: Quantify Resource Needs

An important task for the MTP Strategic Planning Meeting is to analyze the resource implications and particularly financial needs for implementing the program or strategy.

- Start-up considerations may include costs for—
 - Collecting and analyzing baseline data
 - □ MTP planning workshop
 - Developing, testing, and printing the MTP session materials
 - □ Initial basic training course
- Consider ongoing costs and resources for—
 - □ Adapting and printing MTP session materials
 - Collecting and photocopying country or program tools, forms, and other resources for MTP sessions
 - Collection of data by participants for the monitoring segment of the MTP session
 - □ Holding MTP sessions
 - □ Conducting supervisory visits
 - □ Evaluating the impact

Step 5: Establish Roles and Responsibilities for Implementation

Tasks and responsibilities for implementation will vary according to the implementation model and may include—

- Technical and managerial oversight for MTP implementation
- Developing and justifying budgets; securing funding
- Collecting and analyzing baseline data
- Organizing the MTP planning workshop
- Developing MTP session materials
- Organizing and coordinating MTP meetings
- Collecting data for the monitoring segment of the MTP session
- Supervising/monitoring implementation
- Evaluating the impact

Step 6: Develop a Timeline for Implementation

Having a timeline for implementation is especially important for the centralized supervision and decentralized supervision model where there may be many players to coordinate and multiple tasks to synchronize. The development of the MTP session materials will very often determine the launch date for MTP implementation. An illustrative plan for MTP implementation is included as Annex 1.



Again, some of the steps listed below may not be required where MTP implementation is initiated and managed at the facility level. The steps outlined here are described for each of the three implementation models later in this chapter.

- 1. Identify the MTP participants/form the MTP group.
- 2. Collect and analyze baseline data.
- 3. Conduct the basic training workshop.
- 4. Conduct the MTP planning workshop or hold the first meeting.
- 5. Develop/adapt MTP session materials.
- 6. Conduct the MTP sessions.
- 7. Supervise/monitor MTP implementation.
- 8. Evaluate the impact.

Step 1: Identify the MTP Participants/Form the MTP Group

An early step in the implementation process is to **identify** the MTP participants and/or form the MTP group(s). This selection process may occur before the baseline assessment so that the MTP participants are able to contribute to the assessment. Alternatively, the MTP group may be formed after the assessment is completed based on the problem areas that are to be addressed. The individuals selected should be motivated and committed to making improvements at their facilities. Ideally, they will be "self-starters." These individuals are expected to become

"champions" of MTP and ultimately contribute to sustaining MTP implementation as a facility "driven" initiative.

Step 2: Collect and Analyze Baseline Data

Conduct an initial evaluation of the pharmaceutical system, program, or service. Ideally, **carry out** the evaluation in the facilities where MTP is to be introduced, using standard indicators. When an assessment of the pharmaceutical sector has recently been conducted, use those findings where possible. **Analyze** the data to identify strengths and weaknesses, and estimate the magnitude of the problems that need to be addressed. It will be important to know whether problems are widespread or confined to certain geographical regions, cadres of staff, specialties or departments, or levels of the health care system. A training needs assessment may be helpful where MTP is being used to support implementation of a new program, intervention, or technology or as a training alternative.

In building ownership of the process, experience has shown that involving the MTP participants in the data collection process is

helpful. Where external staff are used to collect the data, at a minimum, ask the facility MTP group to review the data collection tool for appropriateness. The MTP participants can self-evaluate their own facilities using a standard tool, or ideally, conduct the assessment as part of a team to enable other team members to offer an outside perspective in recognizing strengths and weaknesses. Prepare a summary of findings for the MTP planning workshop or first meeting; these findings can also be used to convince key stakeholders of the need for the program or initiative or for using the MTP approach. An example of a baseline and evaluation tool developed to evaluate the impact of implementing an HIV/AIDS pharmaceutical management training program using the MTP approach is included on the accompanying CD.

Step 3: Conduct the Basic Training Workshop

If a basic training workshop is held, very often the MTP planning workshop can be incorporated as the last day of the workshop to keep costs down. The length of time allocated for the MTP workshop can vary, depending on nature of the interventions and the type of cadres targeted for skills building.

Step 4: Conduct the MTP Planning Workshop or First Meeting

The MTP planning workshop is particularly important for centralized supervision and decentralized supervision implementation models because the workshop introduces supervisors and/or participants to the concepts of MTP and the tools they need to apply MTP successfully.

The topics covered may include—

- Presentation of the baseline assessment results
- Introduction to MTP concepts
- MTP action planning, including problem listing and prioritization, which can be used to establish the order of the MTP topics and inform the process for developing the MTP session materials
- Tools and techniques for MTP
 - □ Root cause analysis of problems
 - D Planning interventions and activities, and developing timelines
 - □ Selecting indicators and setting targets
 - □ Supervising/monitoring MTP implementation
 - □ Evaluating MTP

- Selection of MTP group members at facilities
- Logistics and ground rules

As mentioned earlier, MTP may be a different way of thinking and working for many participants, and the group may struggle with their first group task—problem listing and prioritization. The coordinator and the supervisors can play an important role in facilitating group decision making and encouraging the group to select a relatively simple issue to work on first to build their confidence in the MTP process.

An example of an agenda for an MTP planning workshop together with three PowerPoint presentations titled *Root Cause Analysis, Selecting Interventions,* and *Target Setting and Monitoring* are included on the accompanying CD.

Step 5: Develop/Adapt MTP Session Materials

The next step is the **development** or **adaptation** of MTP session materials. Chapter 4 reviews the written materials needed to conduct a session and provides guidance on how to put them together.

Step 6: Conduct the MTP Sessions

As mentioned earlier, MTP sessions should be held regularly, ideally at the same time and in the same place. Holding the first few sessions regularly is very important to establish a routine and create expectations that the meetings will continue. The session coordinator is responsible for organizing an MTP session and assigning roles to the other participants and facilitators. The coordinator may be permanent or assigned ad hoc depending on the group and on the coordinator's knowledge of the topic at hand. In models where MTP is managed at the facility level, the role of coordinator is very often rotated through the group. The responsibilities of the coordinator may include the following tasks—



Before the Session

- Agree on a time and place for the MTP meeting. Reserve the meeting room and audiovisual equipment. Invite participants and guests.
- Read the MTP session materials, and work through the examples, activities, and exercises. Review the guidance on preparing for the session, paying particular attention to instructions for adapting the materials, collecting tools and resources, and preparing data collection tools and formats.
- Identify facilitators and assign responsibilities for preparing for and presenting at the session. Multiple facilitators may be needed if several issues are to be covered in the session. Ensure that the presenters understand their responsibilities and are fully familiar with the MTP concepts and the principles of implementation as discussed at the beginning of this chapter.
- One week before the MTP session, follow up with facilitators, guests, and participants to ensure they are prepared. Confirm the room and equipment, arrange refreshments and seating, and prepare copies of the materials.
- The accompanying CD has an illustrative Session Coordinator's To-Do Checklist and Equipment and Supplies Checklist that can be adapted for your use.



On the Day of the Session

- Check the room, equipment, and materials.
- Begin the session promptly. Open the meeting, review the agenda, and indicate the time available for each presentation.

- Ensure that the MTP principles laid out at the beginning of this chapter are adhered to. In particular, control the time of each segment to ensure the session finishes on time, recognize achievements, and encourage participation.
- Administer the session evaluations.
- Summarize commitments, recognize everybody's efforts, and close the meeting.



After the Session

- Tabulate the evaluation results and prepare the report of the meeting.
- Provide a copy of the report to the coordinator of the next session.

Step 7: Supervise/Monitor MTP Implementation

Because MTP is a novel approach for many health care staff and systems, monitoring MTP implementation is important so that problems can be identified and addressed promptly. As the names imply, both the centralized supervision and the decentralized supervision models use supervisors to guide MTP implementation at the facility level. The supervisors' responsibilities may include—

- Selecting MTP participants/forming groups
- Ensuring that materials arrive at the implementation sites and are available to the coordinators
- Assisting teams to conduct the sessions
- Helping participants to apply MTP tools and techniques and to engage in a new way of working

- Organizing financing for sessions that are held centrally or negotiating with local management teams to identify resources to cover local operational costs
- Assisting MTP groups to obtain management recognition and support to implement MTP, for example, to convene, collect data from hospital records, and implement solutions
- Monitoring and assisting the MTP participants in fulfilling their commitments and achieving their goals.

The template for supervisory follow-up of planned activities, included as Annex 3, can be adapted for your use. For the facility-level model, the facility manager or supervisor could fulfill the monitoring/supervisory tasks that are relevant for this implementation approach.

A key tenet of MTP is that it is not externally imposed, but something participants choose to do. In fact, the self-creation of activities by the participants allows aspects of the services or programs that are not going so well to be discussed openly and honestly. Consequently, it is important that the supervisors have the appropriate skills and attitude to provide supportive rather than authoritarian supervision of the MTP process.

Step 8: Evaluate the Impact

The final and most important step is to **evaluate** the program or initiative to assess whether the goals and objectives have been achieved. Program managers and funders will want to know whether their investment has achieved results. Other facilities, regions, programs, or countries may want to evaluate the impact and cost-benefit ratio to decide whether to incorporate the MTP approach for their programs.

If the MTP series was designed as a fixed number of sessions or to run for a fixed length of time, the evaluation will usually be conducted at the end of the series. The evaluation may reveal a need for further MTP sessions or perhaps for some to be repeated. For ongoing MTP implementation, the MTP group or managers set their own timetable for evaluation. The standard indicators that were used for the baseline assessment should be used for the evaluation.

Case Studies on MTP Implementation

The following three case studies illustrate the three approaches to MTP implementation outlined earlier in this chapter. These case studies are not intended to be used as a blueprint for implementation; rather, they illustrate the flexibility of the MTP approach and how each group of implementers adapted the implementation strategy to fit their own specific context and local constraints.

Centralized Supervision Model: Using MTP to Implement HIV/AIDS Pharmaceutical Supply Management Training Programs in Uganda

Background: In Uganda, the majority of health care workers who manage and dispense ARVs are not pharmacists. To ensure that these health workers have the skills necessary to do this important job, Makerere University, with technical support from the RPM Plus Program, partnered with the National AIDS Control Program (NACP) to pilot the MTP process as a skills-building strategy in six ART facilities.

Methods: The MTP evaluation team conducted an indicator-based assessment of the pharmaceutical management practices in these sites. A summary of key findings was sent to the Medical Superintendent of each facility, together with an explanation of how Makerere University could contribute to building the skills of staff handling ARVs. The MTP evaluation team then invited two staff members from each facility to a workshop at the university. During the workshop, which was cofunded by NACP, MTP concepts were presented to participants, the results of the assessments were discussed, problem areas for solving were prioritized, and training was given to improve areas of weakness. Participants then developed action plans for their facilities. This planning included identifying the root causes for problems, prioritizing problems for solving, setting targets for improvement, delegating responsibilities for implementation, and establishing timelines for implementation. Additional training included how to routinely monitor and evaluate their own progress using the set of indicators agreed on during the work planning process.

Results: The trained health care workers returned to their facilities to lead the MTP implementation process. They presented their action plans to their facility in-charge and met with other colleagues involved in handling ARVs to discuss the priority problems identified. Each facility set up an MTP team (ranging from three to seven people) and agreed on strategies and timelines at an on-site MTP Planning Meeting. Ongoing MTP sessions were integrated into supervisory visits to avoid having to send pharmacy staff—who were in short supply—off site. Supervisors from NACP/Makerere University visited each facility every eight weeks for six months to monitor progress during the pilot phase. During each visit, the on-site MTP team presented progress made, evaluated results, and worked with the supervisor to plan further activities to solve priority problems and set targets for the next eight weeks. In between the supervisory visits, the MTP team held periodic meetings to follow up on commitments, assess progress made, and plan future activities. The resources required for ongoing MTP were minimal because most activities were part of the health care workers' routine duties. The facilities provided the resources required for interventions, such as printing SOPs. Holding the ongoing MTP sessions at the site not only reduced travel costs but also began providing the entire on-site MTP team with the skills for the future transition to managing and driving the MTP process themselves.

Outcomes: The six-month evaluation demonstrated that MTP had significantly improved ART pharmaceutical management practices. As reported in chapter 2, MTP reduced ARV stock-outs and medicine expiries and increased the stock counts that matched physical counts, the number of up-to-date stock cards, and the number of facilities using SOPs. Involving the facility manager was critical to the success and the sustainability of the initiative. Challenges faced by the MTP evaluation team included staff shortages that made forming on-site MTP teams difficult because one person was often responsible for all pharmaceutical management activities. Supervising facilities located in remote areas of the country was also problematic.

Source: Matowe, L. 2007. Trip Report of Visit to Uganda to Give Technical Assistance to Makerere University and NACP to Pilot MTP as a Skills Building Approach for HIV/AIDS Pharmaceutical Supply Management: December 2–7, 2006.

2

Decentralized Supervision Model: Using MTP to Help Health Workers Apply Pharmaceutical Management Skills and Knowledge to Support ART Rollout in South Africa

Background: In South Africa, the USAID-funded RPM Plus Program is assisting National and Provincial HIV and AIDS directorates to strengthen pharmaceutical management supply and use of ART at all levels in the health care system. Building the skills and knowledge of staff to effectively manage and dispense ARVs is a key component of this support. In South Africa, training courses that meet quality standards set by the South African Qualification Authority can be accredited. The requirements for accreditation include following a training course with an assessment to demonstrate that the trainee has gained skills. RPM Plus has applied the MTP approach to implement the assessment phase of the HIV/AIDS Pharmaceutical Management Training offered by the Provincial HIV and AIDS directorates.

Methods: As a first step, RPM Plus presented the MTP approach and explained the benefits as a follow-on strategy to the training course at planning meetings with the provincial staff. Since 2006, the HIV/AIDS Pharmaceutical Management Training Course has been rolled out in several provinces using materials developed by RPM Plus. The course is implemented in two phases. The first phase incorporates three days of training in pharmaceutical management plus an additional day when participants are introduced to the concepts of MTP and given an assignment to complete and present at a site visit (second phase) held four weeks later. The assignment includes four sections; the first consists of multiple-choice and true/false questions, and the second and third outline a set of tasks that are to be completed and assessed—for example, creating an SOP. In the fourth section of the assignment, participants apply the MTP approach to develop one or more interventions to improve ART pharmaceutical services at their facilities. To complete this section, each participant is required to conduct an assessment of ART pharmaceutical services at his or her facility using a standard tool, identify the strengths and weaknesses of the service offered, and analyze and explain the underlying reasons for any deficiencies found. Each participant develops a facility-specific plan of action outlining the steps that could be taken to address one of the deficiencies found. The plan must include a set of indicators that can be used to monitor progress.

Results: If participants have begun implementing their plan by the phasetwo visit, they are also encouraged to report on results. The assignments are evaluated by RPM Plus staff registered as assessors with the South African Pharmacy Council. An accredited moderator reviews 5 percent of submissions. Participants who attend the first phase of the training receive a certificate of attendance; on completing the assignment successfully, they obtain a certificate stating they have completed the course. In addition, during the phase-two site visit, participants from other sites use the skills and knowledge gained on the course and during the assignment to assess the performance of the visited site and deliver a short presentation of their findings and recommendations for improving services. The presentation is used to compile a report, which is shared with the visited site and, with the approval of the visited site, is submitted to the provincial head of pharmacy services for review.

Outcomes: The course was accredited by the South African Pharmacy Council in November 2007. Incorporating MTP into the follow-on assessment and site visit has encouraged participants to initiate the MTP process at their facilities and enabled RPM Plus staff to follow up on MTP implementation. However, follow-up on MTP implementation beyond phase two has been limited. Other constraints include staff fears of being identified as a poor performer and the limitation of training only one or two members of staff from each facility in MTP. Inviting the Head of Pharmacy Services in the province or a representative to join the final day of the phase-one workshop has been valuable as a mechanism for informing provincial management-level staff of the challenges that pharmaceutical services face in providing quality ART services.

Source: RPM Plus/SPS staff in South Africa.



The Facility-Level Model: Using MTP to Reduce Inappropriate Use of Medicines in Hospitals in the Lao People's Democratic Republic

Background: Hospitals in the Lao People's Democratic Republic (PDR) have been using the MTP approach to tackle inappropriate prescribing practices since 2001. The evaluations of the initial phase of MTP rollout, presented at the 2004 Second ICIUM held in Chiang Mai, Thailand, showed the MTP approach to be effective in addressing medicine use problems in small settings such as district hospitals and departments of provincial and central hospitals. Significant reductions in the overuse and misuse of antibiotics, injections, and intravenous fluids were reported, and based on these findings, policy makers decided to roll out MTP to all hospitals in the country.

Methods: The WHO Collaborating Center for Research and Training on Rational Drug Use in Yogyakarta, Indonesia, began investigating the effectiveness of using the MTP approach to implement medicines use interventions in 1999. The lack of success of Pharmacy and Therapeutics Committees (PTCs) and routine monitoring and feedback interventions alone in addressing certain hospital medicine use problems in Lao PDR and the promising results from Indonesia encouraged policy makers and researchers to set up a study to evaluate MTP locally in the departments of two central and two provincial hospitals. WHO-supported overseas training in Indonesia at the start of the study enabled participants to learn about MTP concepts and see how the process worked on the ground and the results achieved.

Results: With assistance from WHO, one national and three provincial workshops held in 2001 introduced hospital nurses and doctors from 11 provinces and 23 districts to the MTP approach. In 2002, again with WHO support, staff from two central and two provincial hospitals were trained in and began implementing the MTP approach to complement PTC activities in reducing inappropriate prescribing practices. Two of the central hospitals shared experiences in implementing MTP at a workshop held in February 2003, and later that year a total of nine hospitals were regularly using MTP as part of their rational medicines use strategy. The MTP teams were designed to operate as part of the PTCs, and hospitals set up one or two MTP teams, depending on the number of staff and the priority problems to be addressed. Each team consisted of one decision maker, usually a member of the hospital board, who acted as the team leader, the chief or deputy chief of the hospital pharmacy, all prescribers

working in the focus area, and a secretariat. The design also incorporated regular supervision from the central level to provincial and district hospitals, and from the provincial level to district hospitals to monitor and ultimately evaluate the MTP process after the initial study stage. The MTP teams held monthly meetings, selecting problems, identifying interventions, and setting targets for improvements based on their own local priorities and context. The study findings achieved were shared with policy makers, senior managers, and technical staff. Based on the results achieved and feasibility assessments, the MTP approach was rolled out to 23 districts and was scheduled for implementation in all hospitals in the country by ICIUM in 2004.

Outcomes: High-level support and commitment from the Ministry of Health; the provincial and district health offices; and at the facility, the hospital board, senior medical physicians, and chief of pharmacy were identified as key to the success. Financial and technical resources were important to initiate the process at the central level, but once running, the MTP process was not reported to be costly at the facility level, providing that the MTP process was incorporated into existing committees and procedures. The MTP approach helped PTCs solve difficult problems and allowed some sensitive issues to be discussed openly. Staff turnover was a key constraint to sustaining MTP activities. Key lessons learned were that, to be effective, the MTP team should be part of the PTC, and to be sustainable, MTP activities must be integrated into the hospital routine at every level. Refresher training and workshops to exchange experiences were particularly valuable for motivating MTP teams and for sustaining the MTP process but required additional resources and support.

Source: WHO Regional Office for the Western Pacific. Rational Use of Medicines in the Lao People's Republic MTP Strategy. *Essential Drugs and Medicines Policy* Issue II(2), November 2003.

Sisounthone, B., et al. 2004. *Using Monitoring-Training-Planning (MTP) to Reduce Irrational Use of Drugs in Hospitals in Lao PDR*. Poster and PowerPoint presentation at the Second International Conference in Improving the Use of Medicines, March 30–April 2, Chiang Mai, Thailand. Available at http://archives.who.int/icium/icium2004/poster5a7b.html.

Chanthapadith, K. 2005. *MTP Implementation in the Lao PDR: Lessons Learnt*. Presentation given at the WHO Biregional Workshop on MTP Intervention for Improving Rational Use of Medicines, December 14–16, Yogyakarta, Indonesia.

Lessons Learned from MTP Implementers

Here are some lessons learned from RPM Plus's and SPS's experience in supporting programs using the MTP approach.

 Empowers health facility staff to solve their own problems



"MTP has given me a lot of confidence. Now I can join the ART team with a feeling that I have something to contribute." (MTP team leader, Uganda 2007)

 Can encourage PTCs (also called Drug and Therapeutics Committees) to initiate activities and assist them in solving difficult and sensitive medicines use problems

"MTP is effective; we have seen it here. It can encourage committees such as the DTC [Drug and Therapeutics Committee] to be proactive, to initiate activities." (Dr. Paul Waako, Department of Clinical Pharmacology, Makerere University)

• Can help clarify issues at facilities

"They thought they needed more personnel, but what the process revealed was that what they really needed was a better organization of the work flow." (MTP leader, Kenya 2006)

Provides a forum for addressing cross-cutting activities

"People have to come together and are discussing things on the basis of the common ground of ART.... In the past, departments operated in silos, and dealing with problems that cut across different departments was difficult." (MTP participant, Kenya 2006)

Can be implemented effectively in both sector public and private sectors

Helpful hints for implementing MTP—

- Include all stakeholders—Ensure that the MTP process is inclusive of all stakeholders. Some issues can be addressed within the pharmacy, but most require management and/or multidisciplinary action to be successful.
 - The MTP group will usually need management recognition and support to implement MTP, particularly to access data and implement solutions.
 - A multidisciplinary team approach is needed to design and implement effective interventions, especially to improve rational medicine use. Ownership of the MTP process is critical to success, and all stakeholders that work in the target area should take part in the MTP session and contribute to the design of solutions and decisions on targets to be achieved.
- Build advocacy and support—This step is key to success. Very often high-level commitment is needed at the facility level and, depending on the implementation model used, also at the central level.
 - The involvement of senior management, clinical leaders, and opinion leaders, such as the chairman of the PTC, can help initiate and sustain the MTP process.
 - Ongoing MTP implementation relies on local funding for data collection, preparing sessions, researching solutions, photocopying, holding meetings, and implementing solutions.
- Avoid creating new and separate structures for MTP—To be sustainable, MTP should be integrated into existing structures and routine activities. Use existing committees, for example, the PTC or the ART Committee, to introduce and implement MTP—these committees can be an effective mechanism to implement, coordinate, and drive the MTP process.

- Select feasible interventions and keep standards achievable.
- Budget and plan for ongoing support—Key considerations include training, mechanisms to share experiences and effective interventions, and supportive supervision for all three implementation models. Participants often need ongoing technical assistance and support for MTP implementation, particularly in identifying underlying causes and evidence-based solutions, especially for "difficult" problems. Selecting appropriate indicators and setting achievable yet meaningful targets can be particularly problematic for new MTP implementers.

Some challenges and approaches for dealing with them-

Finding time for MTP
activities is always an
issue. One site in Kenya
already had a system in
place for regular
pharmacy meetings; the
meetings were held even if
the pharmacy had to close
for half an hour. Working
MTP into meetings that
have already been
scheduled has worked well.



- MTP is a process, and for many participants and for some managers, it may represent a different way of thinking and working. Participants may struggle initially and may, for example, find selecting a problem to address difficult, especially at the first meeting. By encouraging the group to select a relatively simple issue to tackle first, the facilitator and supervisors can help build the group's confidence in the MTP process and their motivation to take on more complex issues.
- Data collection for MTP can be lengthy and may fail where poor record-keeping practices prevail; it may not be possible to

measure the size of the problem or impact of solutions. Where this occurs, the MTP group can make improving record keeping their first intervention and build future sessions on achievements made.

 Because of staff shortages, training the whole "MTP group" at the facility may not be possible at the MTP planning workshop. The facilitator should encourage trained participants to share their skills when they return to their facilities and provide follow-up training in MTP concepts and processes during supervisory visits.

Looking Ahead



Chapter 4 discusses the steps in developing MTP session materials and considerations for determining the structure and content of each session based on the objectives to be achieved.

CHAPTER 4: DEVELOPING MTP SESSION MATERIALS

This chapter reviews the written materials needed to conduct a session and provides guidance on how to put them together. Experiences in implementing the MTP approach have taught us that the materials needed and the process for preparing them can vary considerably depending on the objectives for the MTP series or the individual session, and the setting where the materials are to be used.

Program managers that are planning for nationwide rollout of a training program that incorporates the MTP approach to support, for example, the scale-up of pediatric ART services, will typically develop highly structured and detailed MTP session materials. The materials may have a technical review, be field-tested, edited, and finally, officially disseminated. In contrast, the session materials for an MTP group of trained and experienced participants working to address specific problems at their facilities may be considerably less detailed and the process for developing them less rigorous.

The following information on the **structure**, **content** of an individual MTP session, and **development process** is therefore being provided only as guidance for groups or individuals responsible for MTP implementation to adapt to their own settings and audiences.

However, there are some rules to follow; these include—

Use the same content, structure, and style for all MTP session materials. As the coordinator, facilitators, and participants become familiar with the session structure and the style of the materials, they will feel more comfortable with the MTP process and be better able to follow the flow of activities from session to session. The meeting not only will proceed more smoothly, but steps are also less likely to be inadvertently omitted. Keep presentations and text short and clear so that facilitators can quickly familiarize themselves with the materials before presenting the session.



- Develop standard forms, and planning and reporting formats, and incorporate these into the MTP session template.
 Participants will be better able to develop their plans and collect and report their data if the same formats are used from meeting to meeting.
- Specify clear goals and, if relevant, products for every session to keep expectations clear. Define the objectives for the session, and relate them back to the overall goals of the training program or MTP process.
- Allocate plenty of time for discussion and group work.
 Participants can solve their problems only if they are given time to analyze their data to identify problems, understand the underlying causes, and develop sound solutions. Allow participants time to tell their story—it will make the topic relevant and personal to them.
- Training should be directly related to the topic being addressed and focus on providing the information and skills needed to enable participants to implement the new initiative or address the problem. The temptation to overload the materials with a thorough grounding in basic principles can be considerable but must be resisted. The use of examples, group work, and practical exercises is strongly recommended.
- Provide copies of supporting materials rather than references. Bibliographic references and Internet links are rarely useful in field sites remote from a well-stocked library or a computer with regular access to the Internet. Be selective to keep the effort and costs of photocopying the materials reasonable.
- Organize the content carefully to ensure that each session finishes on time. Set time limits for each segment and activity so the session can be completed in the allotted time.

What to Include in the MTP Session Materials

In chapter 2, we outlined the structure of the MTP session and described the steps for the three main segments of an MTP session. The content of the written session materials needed to support each section of an MTP session may include the following—

Session Segment	Content
Introduction	 Session guide or agenda for the meeting. Lists the order and timing of each segment, the topics to be covered, and the presenters.
	 Overview of the session—sets out the objectives of the meeting and specifies any special instructions for the coordinator.
	 Report of the previous session.
• Monitoring	 Guidelines for the coordinator/facilitator on following up on the previous session, including facilitating "group supervision" of commitments made, and discussion on how to tackle unresolved problems and finalize incomplete tasks.
	 For the topic of the current session, guidelines for assisting the reporting and analysis of the data and information collected by participants. Instructions for facilitators on aggregating and presenting findings for the group and facilitating discussion.

Training	 Instructions for facilitating the learning and problem-solving segment for the topic of the current session.
	 Information about the new initiative, topic, or causes of problems, for example, theory, epidemiology, pharmacology, or information collected in interviews with persons working with or experiencing the problem.
	 Information about solutions, for example, standard practice, evidence-based research, experiences, and tools.
	 Skills practice, for example, activities, exercises, role plays, and case studies.
	 Guidelines for facilitating group discussion to identify underlying causes of problems at facilities and potential solutions.
	 Instructions for assigning responsibilities and planning for the next meeting.
	 For the current topic, instructions for planning interventions, agreeing to commitments, and setting goals and timelines. Illustrative indicators for monitoring progress and guidelines for reporting results at the next meeting.
	 For the next session, instructions on using data collection tools and formats for reporting data on the new topic or problem. Illustrative indicators for "measuring" the current situation or magnitude of the problem.

Evaluation	 Evaluation forms for assessing the MTP process after each session.
Annexes	 Instructions and tools for data collection. Reference materials, information, and recommended readings, for example, good procurement practices, SOPs, reporting and recording forms.
	 Tools, for example, job aids for dispensing medicines, charts for monitoring temperatures in storage areas.
	 Detailed instructions and materials for activities, exercises, and role plays.
	 Templates for planning activities and illustrative indicators for monitoring progress made.
	 Standard formats for reporting and presenting results.

Steps for Developing the MTP Materials

Although the process may vary somewhat for the reasons described at the beginning of this chapter, the steps for developing the MTP materials will essentially consist of the following—

- 1. **Agree** on the process for developing the materials.
- 2. **Decide** the structure, style, and level of detail.
- 3. **Determine** the information and skills needed by participants to achieve the goals for each MTP session.
- 4. **Allocate** responsibilities, and **develop** a timeline for preparing the materials.
- 5. **Prepare** the materials.
- 6. **Perform** a review for technical content and user-friendliness.

The next steps will be relevant to authors developing materials that will be extensively distributed or widely applied, for example, to support a nationwide training program.

- 7. **Field-test** the materials.
- 8. **Finalize** and **disseminate** the materials.

Step 1: Agree on the Process for Developing the Materials

Planners and authors should make this decision early because the outcome will affect timelines and budgets. Will the materials need to be formally reviewed? If yes, how many reviews will be needed? Will the sessions be field-tested and, if so, at how many sites? Will the materials be edited and published?

It is worth remembering that participants often share the MTP session materials with their colleagues and other facilities. Therefore, consider **incorporating a technical review**, even if the materials are intended to be used locally at a few facilities. And given the emphasis on finishing the session on time, plan to have a colleague review the content to verify that the time allocations are appropriate.

Step 2: Decide the Structure, Style, and Level of Detail

As discussed earlier, using the same content structure and style for all MTP session materials is helpful so that the coordinator, facilitators, and participants can easily follow the flow of activities from session to session and **ensure that no important steps are forgotten**.

The template for the MTP session materials included on the accompanying CD and the table in the previous section of this chapter can be used as a starting point for deciding the content structure and style of your materials. The template contains standard MTP titles such as *Session Guide, Monitoring, Training, Planning,* and *Evaluation* and sample titles and instructions for the facilitators. The three MTP sessions on the CD demonstrate how the template has been used to develop a set of MTP sessions to support an *HIV/AIDS Pharmaceutical Management* training program.

Ensure that the content structure, and the instructions and guidance for the coordinator and facilitators are sufficiently detailed and complete for the context in which the materials are to be used. For example, the MTP sessions included on the CD were developed by RPM Plus to meet the needs of a diverse audience and to be implemented by others. As a result, the instructions and guidance for the facilitators are very detailed. Furthermore, the written materials are comprehensive and include all the possible components listed in the table in the previous section of this chapter. In contrast, if the author will also be the facilitator of the MTP session, then extensive instructions and guidance are probably not needed.

The instructions to the facilitator may include some or all of the following—

- **Tips on making the presentation**, for example, what visual aids to use, when to ask questions, and when to hold group discussion
- **Sample questions** to ask to guide the discussion
- **Techniques** to facilitate group supervision
- How to organize the group work and allocate assignments
- **Clear explanation and instructions** for exercises and activities

Remember to keep presentations and text short and clear so the presenters can quickly familiarize themselves with the materials before

the session. The content structure, style, and level of detail may need to be revised based on experiences and feedback from the facilitators of the first few MTP sessions.

Step 3: Determine the Information and Skills Needed by Participants to Achieve the Goals for Each MTP Session

The process for determining the topics for the MTP sessions and the order in which they will be carried out has been described in chapter 3. As mentioned earlier, the sequencing of the MTP sessions should enable each session to draw from the previous one and build skills to contribute to the success of the next.

Review the goals and objectives and, where relevant, the products that have been assigned for each MTP session. Next, **list** the tasks that the participants will need to perform to attain their goals and achieve the product. **Determine** the information and skills that the participants will need to complete the necessary tasks successfully. This list will form the basis for developing the materials for the training segment. Finally, review the previous MTP sessions and be sure to build on the skills learned in them, and avoid repetition.

An example follows for improving good record-keeping practices. In this example, the participants have already addressed developing SOPs and training staff in SOP use in a previous session, so the MTP author decides to omit the elements in *italics* in the training segment for this session.

Goal	Tasks to Achieve Goal	Skills and Information Needed
To improve record keeping at	Train on good record-keeping practices	 Information on good record- keeping practices Presentation skills
the storeroom	Write SOPs for filling in records correctly	 Copies of records and instructions for filling them in Format for preparing SOPs
Train on SOPs		 Information on the process for developing SOPs SOP writing skills
		 Information on testing SOPs
	Train on SOPs	 Information on the benefits of SOPs
		 Presentation skills Facilitation skills for exercises
co rec pra	Set up an audit committee to check record-keeping practices every three months	 Information on setting up audit committees
		 Copies of standard auditing tools
		 Supervisory skills
		 Skills for motivating staff to change behavior

Step 4: Allocate Responsibilities, and Develop a Timeline for Preparing the Materials

The next step is to assign responsibilities among the authors for developing and reviewing the materials. **A timeline can help keep the writing and reviewing process on track.** Check whether the materials have to be ready for a specific launch date, and adjust the timeline accordingly.

Step 5: Prepare the Materials

The authors can now move ahead with developing the MTP session materials following the content structure and style agreed on in Step 2.

The template is included on the CD at the front of this manual. As mentioned earlier, the template provided can be used as is or as a starting point for developing the structure for your own MTP materials. The template contains the standard MTP titles, and the sample headings and instructions for the author are indicated in the template using *italics in blue.* Remember to replace the *italics* with normal font when you insert information in the template and to remove the instructions for the author. The template also contains some standard formats in the annexes that you can adapt for your own use, for example, for the planning segment.

As explained previously, if this is the first session, the session will usually be organized differently.

Session Guide

Complete the title page and fill in the session guide. **The session guide is the agenda for the meeting and the table of contents for the materials.** It lists the order and timing of each segment and the topics to be covered. The timing of each segment and page numbers can be specified when the materials are complete. The names of the presenters can be filled in now or later by the session coordinator.

Preparing for the Session

This section is intended to assist the coordinator and presenters to prepare the materials for the session. Use this section to insert guidance and instructions on—

- Adapting the session for a shorter or longer time frame.
- For the monitoring segment, preparing the data collection tools and formats for reporting findings and selecting indicators.
- For the training segment, adapting and preparing for exercises, role plays, and activities. Indicate any slides or visual aids that need completing with local information or adapting in this section. List documents, forms, or records, such as SOPs, forms, stock cards, and policies such as standard treatment guidelines that need to be assembled for distribution at the session.
- For the planning segment, preparing planning templates and preparing lists of illustrative indicators.
- Resources needed, such as flipcharts, pens, and paper for the session.

Introduction, Outline, and Objectives

Fill in the outline for the session and the objectives for the day's session. Use this section to explain why the topic to be covered that day is important and how it fits into the overall goals of the training program or MTP process. Specify clear goals for the session, including products that are to be developed where relevant.

The report of the previous MTP session is distributed and reviewed by the MTP group at this point. The report should include the results of the evaluations completed by the participants for the previous session.

Monitoring

For follow-up monitoring from the last session, fill in the topic and objectives of the session. **Give instructions for reviewing the**

information, techniques, and skills learned in the last session.

The coordinator can either use the report of the previous MTP session for this purpose or ask one of the participants to report back. Remind the coordinator to discuss any problems revealed in the session evaluations.

Include guidance for reviewing the activities and tasks assigned during the planning segment of the last session, collecting feedback on progress made and results achieved, and managing the group supervision process. Ensure that sufficient time is allocated to allow the group to recognize achievements, discuss how to tackle unresolved issues and finalize incomplete tasks, and update their action plans accordingly.

For the topic of the current session, provide guidelines for facilitating the reporting and analysis of the data collected by

participants. Give the coordinator instructions for the format he or she should use to present aggregated findings to the group and techniques to facilitate the group discussion. Sample formats for reporting data and aggregating results should be included in the annexes. Remind the facilitator to congratulate the participants on the things that are going well.

The data collection tools, indicators and instructions on calculating them, and reporting formats will be issued in the previous MTP session and should therefore be included in the annexes for that session.

Training

The training segment requires considerable attention because it will provide the information and skills development that the participants will use after the meeting to achieve the goals for the MTP session.

For most topics, several resources may be available that you can use to prepare this segment. Over the years, many training materials have been developed for pharmaceutical management, both generic and disease-specific and for a variety of audiences. Some of the training materials that you can use as resources for this section are listed at the end of this document under Additional Resources. Very often, training materials have been designed for a didactic approach and with the objective of providing a comprehensive grounding in basic principles for each topic. The challenge is to limit the information to that needed by the participants to achieve the specific goals for the session. Step 3 will help you to be selective in what you include.

As mentioned earlier, ensure that you introduce examples that are relevant to the participants' place of work and allow adequate time for group discussions. You can review the MTP sessions included on the CD to see how discussion slides have been introduced after each theoretical section to facilitate discussion. Including group work, practical exercises, and activities such as role plays that can allow participants to practice the skills learned and to make the session fun is also important.

The key elements to include in the written materials for this section are outlined below.

- Explain why the topic is important, and the consequence of problems for health outcomes or for the operations of organizations and facilities. Relate the topics and problems directly to the participants and their place of work. Use examples that are relevant to participants.
- Discuss how this topic links to the previous and the following sessions, if relevant.
- Present information relevant to the topic or the problem that is to be addressed in today's session. For disease-focused sessions, you may include information on etiology, epidemiology, pharmacology, and standard treatment guidelines. You might review relevant laws and regulations, policies, standards, and good practices. For problem-based MTP sessions, you might include information on the causes of problems reported in the literature or collected by participants, for example, from interviews with persons working with or experiencing the problem. Allow time for discussion and reflection on the existing practice or situation at the participants' place of work.

- Describe interventions and experiences for improving practices or solving problems relevant to today's session. For example, these may include information from evidence-based research, local or national experiences, tools, and job aids.
- Thoroughly explain and provide adequate time for skills practice using activities, exercises, role plays, and case studies. Allow participants time to familiarize themselves with and practice using tools such as data collection forms and reporting forms.
- Include clear and detailed instructions for facilitating the learning and problem-solving segment for today's topic. Provide questions to stimulate discussion and include instructions for visual aids.
- Finally, develop the visual aids to support the session and include reference materials, tools, and materials for the activities and exercises in the annexes.

Planning

As mentioned earlier, ensure that adequate time is allocated to the planning segment. The participants' success in achieving the goals for the MTP session will depend in large part on their having sufficient time to discuss and set goals, develop activities, and assign tasks. Because this part of the session is the least structured, include comprehensive and detailed instructions for the coordinator and facilitator. Include the planning template, illustrative indicators, and data collection tools in the annexes, and explain them thoroughly in the text. The template for developing an action plan, included as Annex 2, can be adapted for your own use.

Summarize the information presented on interventions and experiences in improving practices and addressing problems for the current session in the written materials. Provide guidance on facilitating the group discussion to identify underlying causes of problems, and develop and assign activities to improve practices and address problems. Include detailed instructions for the facilitator on assisting participants to develop targets that are feasible, meaningful, and based on evidence. **Allocate** time for the participants to practice calculating the indicators. Detail the reporting tools and format to be used to report progress at the next MTP session and include a sample feedback flipchart or presentation for guidance in the annex.

Provide information on the topic of the next session. Describe the activities that are required to prepare for the next session, and relate the activities to the goal of the session. Prepare the data collection forms, checklists, and indicators, and include them in the annexes. Explain them thoroughly in the text, and allocate time for the participants to practice calculating the indicators. Detail the reporting tools and format to be used to report the current situation for the next topic, and include a sample flipchart or presentation for guidance in the annex.

Evaluation

Include the evaluation form in the annexes, and remind the coordinator to set a date for the next meeting.

Visual Aids and Annexes

Prepare the visual aids. **Ensure that the technology is appropriate for the setting in which the visual aids are to be used.**

Cross-reference all the materials in the annexes in the relevant section of the written materials. Every data collection and analysis task should be accompanied by a form with clear and complete instructions. Include presentation formats to help participants share and analyze data during the monitoring segment of the next session. The instructions and tools for skills practice should also be incorporated into the annexes.

Step 6: Perform a Review for Technical Content and User-Friendliness

As mentioned earlier, participants often share the MTP session materials with their colleagues and other facilities. So even if the materials are intended to be used locally at a few facilities, consider whether a technical review might be appropriate. **Ideally, MTP session materials should have two reviews: one for technical content and a second for user-friendliness**. A nontechnical colleague could be asked to look specifically at user-friendliness of the materials. The reviewers should ensure the following—

- The goals and objectives identified for the session will be achieved.
- Sufficient and accurate technical and programmatic detail is provided.
- The flow is logical and practical.
- Instructions are clear, and the language is appropriate.
- The materials follow the standard MTP structure and format, and all sections are present and complete.
- The materials follow the "rules" listed at the beginning of this chapter.

Step 7: Field-Test the Materials

For materials that are to be widely disseminated for use by others, field-testing can be helpful to identify gaps and improve the materials. Ideally, all the MTP sessions should be tested at the same field-test sites. Some of the considerations for the evaluation include—

- For the monitoring segment: Were the instructions adequate to find, collect, and process the data? Were data accessible and in a collectible form? Were the data collection forms usable? Were the formats appropriate and instructions for presenting the results adequate? Were the indicators appropriate, and could the participants correctly calculate them?
- For the coordinator and facilitator: Were they able to follow the instructions and use the materials? Was the level of detail too much or too little? Did they have problems preparing for the session?

- **From observation:** Were there problems with the times allocated for each segment? Did discussions last longer than expected? Were there any sections that the participants did not understand or that the facilitator used incorrectly?
- For participants: Was the intended goal of the session achieved? If not, what were the reasons? Did the participants have sufficient information and skills practice in the session? Did they have sufficient time in the planning segment to discuss and set goals, develop activities, and assign tasks?

Step 8: Finalize and Disseminate the Materials

The final step is to have the materials edited, printed, and disseminated. As with all training materials, loose-leaf binders are preferred.

ADDITIONAL RESOURCES



The training materials for pharmaceutical management listed below have been specifically designed to be used in a training program that combines an initial basic training with an ongoing series of MTP sessions.

HIV/AIDS Pharmaceutical Management Training.
 Finalized by RPM Plus in 2006, the course comprises four modules and 18 sessions and is designed to train pharmacy staff involved in the supply, management, and dispensing of ARVs and other medicines required for ART. Module 4 introduces the MTP methodology and is intended to launch the ongoing series of MTP sessions. Available from

http://www.msh.org/projects/rpmplus/Resources/TrainingInitia tives/HIV-AIDS-Training-Course.cfm

 HIV/AIDS Laboratory Commodity Management—Improving Current Practices at Health Facilities: A Capacity-Building Program for Health Facility Teams (draft materials). This program was developed by RPM Plus to build the capacity of health facility staff in laboratory commodity management with an emphasis on ensuring laboratory support for comprehensive HIV/AIDS management, including ART, in resource-limited settings. The program is divided into three phases: phase 1 is the engagement process; phase 2 incorporates a three-day workshop and action planning process; and phase 3 launches the ongoing series of MTP. Contact sps@msh.org for more information.

ANNEX 1: MTP IMPLEMENTATION: ILLUSTRATIVE PLAN OF ACTIVITIES

Activity	Description	Timeline
Strategic planning meeting	 The meeting will discuss— The objectives and goals of the activity The assessment approach Feasibility, validity, and reliability of suggested indicators Cost and time implications Assigning responsibilities, including delegating the lead person for the activity Timelines Selection of participants from intervention and control sites 	
Communication with sites selected for the activity	Written or verbal communication with the selected sites on the activity (<i>important to bring out the activity as a quality improvement activity</i>).	
Meeting with leading persons from each of the sites selected for the activity	 The purpose of this meeting is to— Brief the facilities of the objective of the activity Discuss the data collection process Present facilities with the tools to resume data collection 	
HIV/AIDS Pharmaceutical Management Training	 Perform baseline site assessment Conduct MTP planning workshop for trainers and selected site participants Work through MTP implementation plans with selected participants from the MTP facilities The MTP session will include— Identifying and prioritizing ART pharmaceutical management problems at 	

Activity	Description	Timeline		
	 their facilities Measuring the magnitude of the problem Deciding how to solve the problem (N.B. Participants should be asked to bring results of their facility pharmaceutical management assessments.) 			
First supervisory visit	 This activity will include— Monitoring progress at each of the MTP sites Reviewing content and process Analyzing data collected and evaluating progress Identifying gaps On-site training/problem solving if required Report and document activities 			
Second supervisory visit	Activities as for first supervisory visit			
Third supervisory visit	Activities as for first supervisory visit			
Program evaluation	 Evaluate the impact of the MTP approach— Carry out a comprehensive assessment in MTP sites Review the implementation process Prepare a report on findings 			
Dissemination of findings	 Final assessment and workshop Consultative meeting with selected stakeholders, program managers, and trained staff involved in ARV management from the MTP sites, ministry of health, FBOs, and other stakeholders Convene a two-day regional workshop to share findings and plan MTP scale-up with other countries in the region 			

ANNEX 2: TEMPLATE FOR MTP ACTION PLAN

State the Problem	Describe the Problem	Prioritize the Problem

PROBLEM SELECTED:

Probable Root Causes	Interventions	Activities	Who	How	Resources Needed	Timeline	Indicators	Target	Monitoring Strategy

ANNEX 3: TEMPLATE FOR SUPERVISORY FOLLOW-UP ON MTP ACTION PLANS

Name of Facility:	Contact Person:	Phone Number:	Date:
Gap/Problem	Intervention	Who/How	Progress to Date

ANNEX 4: CONTENTS OF ACCOMPANYING CD

Document	Type of	
Number	Document	Document Title
		Session Coordinator's To-Do Checklist
1	Word	 Equipment and Supplies Checklist
2	Word	MTP Session Template
		MTP Module: Dispensing Antiretroviral
		Medicines
3	PDF	Facilitator's Guide
		MTP Module: Dispensing ARVs
4	PDF	Annexes
		MTP Module: Receiving, Issuing, and
		Inventory Control of Antiretroviral
		Medicines
5	PDF	Facilitator's Guide
		MTP Module: Inventory Management:
		Receiving, Issuing, and Inventory Control of
		ARVs
6	PDF	Annexes
		MTP Module: Storing Antiretroviral
		Medicines at the Facility
7	PDF	Facilitator's Guide
		MTP Module: Storing Antiretroviral
		Medicines at the Facility
8	PDF	Annexes
9	Word	MTP Baseline and Evaluating Tool
10	Word	Agenda for MTP Planning Workshop
11	PowerPoint	Root Cause Analysis
12	PowerPoint	Selecting Interventions
13	PowerPoint	Target Setting and Monitoring