**Training of Trainers of the Electronic Dispensing Tool  
10 – 13 March 2014**

**March 2014**

**TRAINING OF Trainers Of THE Electronic Dispensing Tool**

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**Key Words**

EDT, ART, EDT Mobile, Data Quality

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# Acronyms and Abbreviations

|  |  |
| --- | --- |
| ART | Antiretroviral Therapy |
| ARV | Antiretroviral medicine |
| CDC | Centers for Disease Control and Prevention |
| DSP | Directorate of Special Programs in the MoHSS |
| EDT | Electronic Dispensing Tool |
| EPMS | Electronic Patient Management System |
| IMAI | Integrated Management of Adults and Adolescents Illnesses |
| MIS | Management Information Systems |
| MoHSS | Ministry of Health and Social Services |
| MSH | Management Sciences for Health |
| SIAPS | Systems for Improved Access to Pharmaceuticals and Services |
| USAID | U.S. Agency for International Development |
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# INTRODUCTION

The Electronic Dispensing Tool (EDT) has been in use in the public sector antiretroviral therapy (ART) pharmacies of Namibia since August 2005. The database application helps pharmacy staff to efficiently manage patients and antiretroviral medicines (ARVs). This includes monitoring of patients’ adherence to ART, retention in care, dispensing history, regimen and status changes, appointments keeping and maintaining a good inventory of ARVs.

There are currently about 50 EDT sites in Namibia including hospitals, health centers and clinics. These sites currently report over 100,000 patients on ART treatment, of which approximately 10 percent are pediatric. Conversely, it still remains a challenge to efficiently manage ARVs and patients receiving treatment at Primary Health Care (PHC) level i.e. health centers and clinics. To alleviate this challenge, rapid decentralization of ART services to PHC level should be accompanied by appropriate data collection systems to support monitoring and planning activities of the ART program in ensuring access to and availability of ARVs and patient wellbeing.

In March 2014, the Ministry of Health and Social Services (MoHSS)/Directorate of Special Programs (DSP) was jointly supported by the USAID-funded Systems for Improved Access to Pharmaceuticals and Services (SIAPS) program and the Centers for Disease Control and Prevention (CDC) in Namibia to provide a training of trainers of the Electronic Dispensing Tool (EDT). The objective of the training was to equip regional pharmacists, pharmacists and pharmacy assistants with knowledge and skills required to manage ART pharmacy data and to train other pharmacy and nursing staff in their regions to efficiently collect data using the EDT and EDT mobile dispensing tools.

The SIAPS program, implemented by Management Sciences for Health (MSH), provided technical assistance in steering the training and CDC-Namibia provided financial support to the MoHSS/DSP directorate to organize the workshop. The workshop took place in Okahandja, from 10 - 13 March 2014, and was attended by 25 healthcare workers including regional pharmacists, pharmacists and pharmacy assistants. The training focused on standardizing processes through which the EDT and EDT mobile are used to improve the efficiency of ART service delivery at health facilities while ensuring electronic data collection for the ART program.

# EDT TRAINING PROCEEDINGS

## Training Approach

The following general approach was used for each training session:

1. Description of session objectives
2. Description of the ART pharmacy processes involved and how the EDT/EDT mobile fits in
3. Summary of the session
4. Practical examples by trainees where applicable

Participants were seated in pairs and each team was provided with an EDT computer and an EDT mobile device. To make the learning experience more memorable, participants were provided with case studies which involved hands-on simulations using the EDT and/or EDT mobile.

The EDT training was subdivided into four major sections illustrated below:

Figure 1 Uses of the EDT

## Evaluation

On a daily basis participants had a pre-test in the morning and a post-test at the end of the day’s training program. As part of the morning review of the previous day, test results were shared, answers explained and matters arising were discussed before the program for that day could start. Each test took about 15 minutes.

## Day One: Patient and Stock Management at Main Site Using the EDT

After registrations, welcoming remarks by Mr. Emmanuel Ugburo, introduction, and setting of ground rules was done, overall training objectives were revised. A pre-test to assess knowledge and skills of participants with regards to the use of the EDT was administered.

The main focus of day one was on the use of the EDT at the main site. Topics taught included:

* Patient Management at Main Site
  + Entering Patients into the System
  + Stopping Patient Management on the EDT
  + Managing Patient Details on the EDT
  + Dispensing to Patients & Reversing Transactions
* Stock Management at Main Site
  + Receiving and Issuing of stock from the EDT
  + Recording stock take details
  + Using the quantification module to determine order quantities

A post-test to assess knowledge and skills of participants was provided at the end of the day’s program.

## Day Two: Patient Management at Referral Site Using the EDT Mobile

A morning review of the previous day and sharing of test results was done, answers were explained. A pre-test to assess knowledge and skills of participants with regards to the use of the EDT mobile was administered.

The main focus of day two was on the use of the EDT mobile at IMAI/Satellite sites. Topics shared included:

* Facility Process Flow of ART Patients at IMAI Sites
* IMAI-related ART Processes
  + Pre-IMAI site visits ART processes
    - Generating the monthly appointment lists
    - Determining stock requirements for the month
    - Uploading patient data to the EDT mobile
  + IMAI Site ART processes:
    - Dispensing to ART Patients-Case studies
    - New patients (initiating ART at the site)
    - Continuing Patients (In-Transit): already on the EDT mobile (i.e. under the same main site but different IMAI site)
      * Has enough ARVs to last until next month
      * Does not have enough ARVs to last until next month
    - Transferring In Patients: Records not on the EDT mobile (i.e. from a different site)
      * Has enough ARVs to last until next month
      * Does not have enough ARVs to last until next month
    - Patients transferring out to another facility
    - Patient changing ART regimen
  + Issuing of >1month supply of ARVs
  + Post-IMAI site visits ART processes
    - Downloading data to the EDT at main site
    - Adding continuing or new patients based on the ART recruitment form
* Introduction to the EDT Mobile
* Maintenance of the EDT mobile
* Manual data transfer from outreach site to main site

A post-test to assess knowledge and skills of participants was provided at the end of the day’s program.

## Day Three: ART Reporting and Data Quality using EDT reports

A morning review of the previous day and sharing of test results was done, answers were explained. A pre-test to assess knowledge and skills of participants with regards to the use of the EDT reports was administered.

The main focus of day three was on the use of the EDT reports. Topics shared included:

* Participants implementation plans by region
  + Challenges and next steps
* Generating and Using EDT Reports
  + Outputs of the EDT
  + Reports (Patient Statuses)
  + Reports (Adherence by pill count, on-time pick up)
  + Completing the ART monthly report
  + Copying data to excel and performing additional analyses
* Data quality, management and use

## Day Four: EDT Common User Queries and Solutions

A morning review of the previous day and sharing of test results was done, answers were explained. A presentation of common EDT user queries and how to resolve them was provided.

**What worked well?**

* Facilitation by trainers was well received by participants
* All EDT computers and EDT mobiles worked well throughout the duration of the training

**What did not work well?**

* The duration of the training was too short as participants had more questions to ask than in previous trainings

**Way forward**

Participants will provide feedback to their regions, access the need and conduct EDT training as required. Challenges raised that were beyond the scope of the training will be channeled through the regions, for example, human resource issues. Other activities planned include the following:

* Consultative meeting with the Districts and identification of challenges
* Training of identified staff in the Region on EDT Mobile and data collection
* Implementation of the TOTs programmes, mentoring
* Monitoring and evaluation and review of activities

# ANNEXES

## Annex A: Selected Photographs from the EDT Training of Trainers at Okahandja Country Hotel, Namibia



Training participants including regional pharmacists, pharmacists and pharmacy assistants pose for a group photo at the end of the EDT training of trainers workshop in March 2014. Photo by MSH staff.

## Annex B: EDT Training of Trainers Participants List, March 2014, Okahanadja, Namibia

**Facilitators**

1. Neo Marytha: Senior Health Program Administrator, MoHSS, Division: HIV Case Management
2. Emmanuel Ugburo: ART Logistics Pharmacist, MoHSS, Division: Pharmaceutical Services
3. Abraham Blom: Systems Administrator, MoHSS, Directorate of Special Programs
4. Greatjoy Mazibuko: Senior Technical Advisor: Pharmaceutical Services, MSH/SIAPS
5. Samson Mwinga: MIS Senior Technical Advisor, MSH/SIAPS

**List of Trainees**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Name & Surname** | **Designation** | **Gender** | **Facility** | **Region** |
| 1 | Olabanji Nelson | Regional Pharmacist | Male | RMT | Erongo |
| 2 | SRH Shah | Pharmacist | Male | Swakopmund State Hospital | Erongo |
| 3 | Helen Mukeya | Regional Pharmacist | Female | RMT | Karas |
| 4 | Pedjaije Kandji | Pharmacist Assisntant | Female | Luderitz State Hospital | Karas |
| 5 | Vincent Mate | Pharmacist | Male | IH Rundu | Kavango |
| 6 | Felician Balele | Pharmacist | Male | Nankudu State Hospital | Kavango |
| 7 | Madelaine Almanores | Pharmacist | Female | Mariental State Hospital | Hardap |
| 8 | Geraldt Kanovengi | Pharmacist Assisntant | Male | Aranos Health Centre | Hardap |
| 9 | Augustine Odo | Regional Pharmacist | Male | RMT | Omusati |
| 10 | Albertina Kashele | Pharmacist Assisntant | Female | Outapi State Hospital | Omusati |
| 11 | Dijeh Obianuju | Pharmacist | Female | Outapi State Hospital | Omusati |
| 12 | Juliet Bulemela | Regional Pharmacist | Female | RMT | Ohangwena |
| 13 | Miller Nyanwiya | Pharmacist | Male | Engela Sate Hospital | Ohangwena |
| 14 | Alex Anaba | Pharmacist | Female | Eenhana State Hospital | Ohangwena |
| 15 | Kayofa Jonas | Pharmacist Assisntant | Male | Okongo State Hospital | Ohangwena |
| 16 | Vistorina Shifotoka | Pharmacist Assisntant | Female | Omunthiya Hospital | Oshikoto |
| 17 | Ahmed Zamaan | Regional Pharmacist | Male | RMT | Kunene |
| 18 | K Kaveta | Pharmacist Assisntant | Female | Opuwo State Hosp. | Kunene |
| 19 | Ndapandula Shaakumeni | Pharmacist Assisntant | Female | Onandjokwe | Oshikoto |
| 20 | Msafiri Kweba | Regional Pharmacist | Male | RMT | Oshana |
| 21 | Emmanuel Mangesa | Pharmacist | Male | Ogwediva HC | Oshana |
| 22 | Felician Balele | Pharmacist | Male | RMT | Otjozondjupa |
| 23 | Paulus Kabindji | Pharmacist Assisntant | Male | Otjiwarongo State Hosp. | Otjozondjupa |
| 24 | Merylyn Kaundje | Pharmacist Assisntant | Female | Okakarara State Hosp. | Otjozondjupa |
| 25 | A Muti | Pharmacist Assisntant | Female | Okahandja State Hosp. | Otjozondjupa |

## Annex C: Training Program for the EDT Training, March 2014, Okahanadja, Namibia

|  | **Topic** | **Start** | **Stop** | **Session** | **Topics** | **Facilitator** |
| --- | --- | --- | --- | --- | --- | --- |
| 0 | Registration |  |  | **DAY ONE** | |  |
| 8h00 | 8h30 | Registration | | DSP |
| 8h30 | 8h45 | Welcoming Remarks; Self Introductions; Setting Norms | | DSP |
| 8h45 | 9h00 | Training objectives | | Emmanuel Ugburo |
| 9h00 | 9h45 | **0.0 Pre test** | | Emmanuel Ugburo |
| 1 | EDT for Patient Management at Main Sites | 9h45 | 10h15 | **1.0 Introductory session**  Getting Started | | Abraham Blom |
| 10h15 | 10h45 | * 1. **Entering Patients Into the System**   New Patients (incl. PMTCT Option B+)  Continuing Patients (Transfer In & In Transit) | | GreatJoy Mazibuko |
| 10h45 | 11h00 | * 1. **Stopping Patient Management on the EDT**   Deceased, Transfer out, Stopped by Physician  Re-starting Patients on the EDT | | GreatJoy Mazibuko |
| *11h00* | *11h15* | *Coffee break* | |  |
| 11h15 | 11h45 | * 1. **Managing Patient Details on the EDT**   Updating the patient’s regimen & other details of the patient  Updating the outreach/IMAI site of a patient | | Abraham Blom |
| 11h45 | 13h00 | * 1. **Dispensing to Patients & Reversing a Transaction**   Dispensing to all patients other than in-transit patients  Dispensing to in-transit patients  Reversing a dispensing transaction (correcting a script)  Determining a patient’s adherence during dispensing | | Abraham Blom |
| *13h00* | *14h00* | *Lunch* | |  |
| 2 | EDT for Stock Mx at Main Sites | 14h00 | 15h15 | 1. **The EDT Stock Management Module**   Receiving and Issuing of stock from the EDT  Recording stock take details | | Emmanuel Ugburo |
| *15h45* | *16h00* | *Coffee break* | |  |
| 16h00 | 16h30 | 1. **The EDT Stock Management Module (cont)**   Using the quantification module to determine correct order quantities | | Emmanuel Ugburo |
|  |  | 16h30 | 17h00 | 1. **Post test** | | Emmanuel Ugburo |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 3 |  |  |  | **DAY TWO** |  |
|  | 8h00 | 8h30 | 1. **Review of Previous Day (Pre-Post-tests)** | Emmanuel Ugburo |
| Use of EDT Mobile at Satellite Sites | 8h00 | 09h30 | 1. **Facility Process Flow of ART Patients at IMAI Sites**   ART decentralisation and pharmaceutical services  Current flow  Recommended flow | Sam Mwinga |
| 09h30 | 10h30 | * 1. **IMAI-related ART Processes**   ***Pre-IMAI site visit ART processes at Main Site***: Generating the monthly appointment lists; Determining stock requirements for the month; Uploading patient data to the EDT mobile | Sam Mwinga |
| *10h30* | *10h45* | *Coffee break* |  |
| 10h45 | 11h45 | ***ART Processes at IMAI Site:***  New patients (initiating ART at the site)  Continuing Patients: already on the EDT mobile (i.e. under the same main site but different IMAI site)   * Has enough ARVs to last until next month * Does not have enough ARVs to last until next month   Transferring In Patients: Records not on the EDT mobile (i.e. from a different main site)   * Has enough ARVs to last until next month * Does not have enough ARVs to last until next month   Patients transferring out to another facility  Issuing of >1 month supply of ARVs  Patient changing ART regimen  **Post-IMAI site visit ART processes at Main Site**:  Downloading data to the EDT at main site;  Adding continuing or new patients based on the ART recruitment form | Sam Mwinga  Abraham Blom/Sam Mwinga |
| 11h45 | 13h00 | **Introduction to the EDT Mobile**  Maintenance of the EDT mobile  Trouble shooting EDT/EDT mobile | Abraham Blom |
| *13h00* | *14h00* | *Lunch* |  |
| 14h00 | 15h15 | **Introduction to the EDT Mobile (Continued)** | Abraham Blom |
| 15h15 | 15h30 | *Coffee Break* |  |
| 15h30 | 16h30 | **Manual data transfer from outreach site to main site** | Abraham Blom |
| 16h30 | 17h00 | **Post test** | Emmanuel Ugburo |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 4 |  |  |  | **DAY THREE** |  |
|  | 08h00 | 08h30 | 1. **Review of Previous Day (Pre-Post-tests)** | Emmanuel Ugburo |
| EDT Outputs and ART Data Quality | 08h30 | 10h00 | 1. **Generating & Using EDT Reports**   Outputs of the EDT  Reports (Patient Statuses)  Reports (Adherence by pill count, on-time pick up) | Emmanuel Ugburo |
| 10h00 | 10h15 | *Coffee break* |  |
| 10h15 | 11h30 | * 1. Operational principles of EPMS | Michael Gawanab |
| 11h30 | 13h00 | * 1. Data management and Data use | Emmanuel Ugburo/Michael Gawanab |
| *13h00* | *14h00* | *Lunch break* |  |
| 14h00 | 14h30 | Post Test | All |
| 14h30 | 15h30 | Formulation of post-training implementation plans | All |
| 15h30 | 16h30 | Presentation of plans to plenary (selected regions) | All |
| 16h30 | 17h00 | Closing remarks | DSP |

## Annex C: Proposed updates to the EDT and Reporting Module

The following updates were proposed in order to improve the quality of data entered into the EDT system, etc.:

1. Include re-started patients to the list of patients dispensing can be done using the EDT mobile
2. Include additional data validations upon upload from dispensing data from the EDT mobile to the EDT computer:
   1. Quantity dispensed vs. Number of days dispensed
   2. Regimen dispensed vs. Patient’s regimen
3. Create functional user roles to restrict view of users on the EDT reports (Admin->Manage visible reports)
4. Create aggregated all active patients report (Active+Transfer In+Restarted)
5. Add a feature to enable auto-generation of ARTID for patients transferred from private sector
6. Add a feature to enable auto-generation of ARTID for patients for whom no ARTID is traceable
7. Add “Private Sector” to the list of facilities to enable transfer from private sector
8. Update the appointments function to be able to display appointments due at 90 days
9. Update the monthly ART reporting template
10. Update the list of referral sites to distinguish between IMAI and outreach sites