

TECHNICAL BRIEF

Electronic Dispensing Tool (EDT)



USAID
FROM THE AMERICAN PEOPLE

SIAPS
Systems for Improved Access
to Pharmaceuticals and Services



ACCURATELY DISPENSING MEDICINES THROUGH IMPROVED INFORMATION MANAGEMENT

The EDT is a computer-based medicines dispensing and tracking tool which helps pharmacists improve data management and provide high-quality pharmaceutical services so that patients get the right medicines, at the right time, in the right amount.



CHALLENGE

Ensuring that patients receive the correct medicines, in the correct amounts, and are carefully monitored for adherence and possible side effects are critical functions of a pharmacy clinic. These functions are particularly important for patients on medicines like antiretrovirals (ARVs) because ARVs are potent, expensive, and need to be monitored closely for how well the medicines perform in complex, life-long treatment regimens.

Pharmaceutical service providers and program managers in many developing countries are often faced with a lack of appropriate information when providing new or expanded patient services. Generally, a patient's medical record is seldom maintained and the records that are kept are not readily available to the pharmacist or health care worker who dispenses medicine to the patient, making it especially difficult to monitor patient care, compile service statistics, and support medicines management decisions.



A SOLUTION

The Electronic Dispensing Tool (EDT, formerly known as the ART Dispensing Tool) helps maintain basic patient profile information, medicine history, and other data that are essential in dispensing medicines and providing quality pharmaceutical services. This tool also generates information required to calculate pharmaceutical needs and to make other management decisions. The EDT captures a variety of information, including data on:

Medicine Management

- Inventory of ARVs, antimalarials, and medicines to treat opportunistic infections (OI)
- Product consumption rates per month and per year for malaria-only, OI-only, ART-only, or all products

Dispensing

- Medication history by disease category or across all conditions
- Number of new patients per regimen
- Number of visits per month and per year for each regimen

Patient Management

- Basic patient profile with contact information and current status (active, lost to follow-up, etc.)
- Patient schedule
- List of patients (supported by different donors)
- Number of active patients by regimen
- Age, weight, and sex distribution
- Patient enrollment trends

The EDT is designed to track information and support informed decision making. The EDT cannot however be used as a comprehensive clinical tool because the data is limited to pharmaceutical services and contains limited inventory functions. However, it can be used in conjunction with other existing software applications.



FEATURES

- Helps pharmacists and health care workers dispense medication for any disease pattern, including HIV/AIDS, malaria, and OIs
- Tracks batch/lot and expiry dates for the medicines and supplies being dispensed
- Dispenses medicines using the first expiry, first-out method
- Can export data from peripheral sites to a central location to provide an aggregated view of that territory's dispensing habits
- Tracks patient adherence and clinic performance using tested indicators
- Allows for use of English, Ethiopian, or Nepalese calendars
- Built using Microsoft Access program (no additional licenses are required)
- Equipped with standard reporting templates to support management decisions
- Available in French and English, and can be readily converted to other languages



The EDT is currently being used at more than 700 sites, supporting over 700,000 patients in Ethiopia, Guyana, Haiti, Kenya, Namibia, Rwanda, Tanzania, and Zambia.



IMPLEMENTATION

The primary users of the EDT are healthcare workers and pharmacists who dispense medication, in particular ARV medications.

EDT users are required to have basic computer skills, experience using Microsoft Access, knowledge on treatment protocols and good dispensing practices, and a basic understanding of stock management.

Installation and training (4 days)

With assistance from SIAPS staff, it should take about two days to install the tool and train users, plus another two days to configure the program and import existing data.

Training on maintenance (1 day)

As part of the installation process, one user needs to be trained on the use, design features, and maintenance of the software. This function should be assigned to persons with experience with Microsoft Access.

Equipment

Component	Minimum Requirement
Computer CPU	Pentium-based processor
Memory	512 MB of RAM (minimum)
Hard Disk Space	500 MB of free disk space
Additional Drive	CD-ROM drive (R/W if backup is to be done on CD); External hard drive (minimum 1 GB)
Operating System & Accessories Configuration	<ul style="list-style-type: none"> • Windows XP or later • MS Access 2003 or higher
Network	As necessary to connect the computers
Printer	Any Windows compatible printer—laser printer is preferred to ink jets
Power Backup	UPS minimum 500 VA

SIAPS TECHNICAL BRIEF SERIES | This document is part of a series describing the technical approaches and tools used to implement SIAPS work in Pharmaceutical Systems, Pharmaceutical Services, and Supply Chain Management. The information provided does not reflect or represent the position or views of the US Agency for International Development or the US Government.

ABOUT SIAPS | The Systems for Improved Access to Pharmaceuticals and Services (SIAPS) program works to assure access to quality pharmaceutical products and effective pharmaceutical services through systems-strengthening approaches to achieve positive and lasting health outcomes. SIAPS is funded by the US Agency for International Development (USAID) and is implemented by Management Sciences for Health. For more information, visit www.SIAPSprogram.org.

