

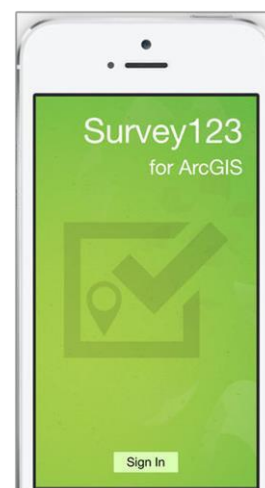
I. Background

The WHO Medicines Price & Availability Monitoring Pilot: Phase III 2017 has two main objectives:

- To assess the current availability and price of antibiotics in low- and middle-income countries; the medicines surveyed are a sample of essential medicines in the WHO Model List of Essential Medicines 2017 that have been identified as key antibiotics that should be widely available, affordable, and quality-assured or as targets for antibiotic stewardship at local, national, and global levels in order to reduce antimicrobial resistance;
- To test a smart-phone/tablet based survey mechanism for collecting price and availability data of medicines in countries.

Survey123 is a free mobile application that can be downloaded to your smart phone or tablet. The WHO Essential Medicines and Health Products Department (EMP) has developed a survey on this application with questions on availability and pricing of the following categories of medicines:

- Penicillins
- Cephalosporins
- Carbapenems
- Aminoglycosides
- Macrolides
- Imidazole Derivatives
- Amphenicols
- Fluoroquinolones
- Sulfonamides and Trimethoprim
- Glycopeptides
- Tetracyclines
- Other Antibiotics



The survey application can be used on- or offline. The GPS coordinates for each facility where data are collected will be captured in both cases. When you are finished collecting data and are online, you may upload the survey immediately. If you are offline, you may save the completed survey and upload it when you are linked to the internet. Instructions on submitting surveys, both on- and offline, are listed below.

Paper-based versions of the survey will also be provided, but should be used only if technical issues arise.

II. Data Collection Guidelines

Introduction

This survey is designed to collect information about availability and prices of a list of medicines in public and private sector facilities. The data will be presented for each country, so approval from the Ministry of Health should be obtained for publication of results.

Data collectors

Wherever possible, data collectors should have previous experience of conducting surveys, have some pharmaceutical training, and be familiar with the localities.

Sectors covered in the survey

The survey will measure the availability of antibiotics in the public sector, private sector, and where applicable, the NGO/Faith-based sector. The public sector facilities to be surveyed are: central medical stores, a teaching/tertiary hospital, a regional hospital, a district hospital and primary health care centres. The private sector facilities to be surveyed are: pharmacies. The NGO/Faith-based facilities to be surveyed are: central medical stores and primary health care centres.

In order to obtain a nationally-representative sample, data collectors are advised to select at least six different areas to survey - the capital city and an additional five administrative areas around the country. Geographical distribution of the population should be considered in selecting survey areas to ensure that both urban and rural areas are surveyed. Additionally, socio-economic status of the survey areas may be considered to sample price and availability for low-, medium-, or high-income groups in the country

Selecting public sector facilities (n=6+ per survey area)

Generally, lists of public health facilities will be available at central level, so these facilities can be selected centrally.

- 1) Identify the Central Medical Stores (CMS). One national CMS must be surveyed per country. If applicable, survey a regional CMS in each administrative area.
- 2) Select the main teaching (or tertiary) hospital in the capital.
- 3) If applicable, select **one** regional hospital in the survey area from the list of hospitals:
 - Where there is more than one, choose one **at random**.
- 4) Select **one** district hospital in the survey area from the list of hospitals:
 - Where there is more than one, choose one **at random**.
- 5) Select **three** primary health care centres in the survey area.
 - Choose three facilities **at random** from the central list of primary health care facilities, in geographically separate parts of the survey area.

Selecting private sector facilities (n=5 per survey area)

A survey of **five** pharmacies per survey area is suggested. Once the public health facilities have been selected, choose the pharmacy that is closest to each facility, i.e. one pharmacy closest to the teaching hospital, district hospital and each of the three primary health care centres. This will result in **five pharmacies** per survey area participating in the survey.

Selecting NGO/Faith-based sector facilities (n=5 per survey area)

As medicines may be procured and dispensed from the NGO/Faith-based sector, a survey of this sector may be applicable for some countries. If possible, choose **one** NGO/Faith-based **procurement centre** and **four (max) NGO/Faith-based primary health care centres** per survey area. Where there is more than one facility in a category, choose one **at random**. If there are less than 5 NGO/Faith-based facilities in the survey, select all of them.

For questions about or customization of this methodology – please email iyengarswa@who.int

Method for collecting data

Please use the survey application that has been developed for smart phones. A paper-based survey tool can be provided on request as a back-up form of data collection only.

- For use of the survey app – see the instructions in Part II.
- For paper-based backup – email iyengarswa@who.int

Facility Characteristics

Province/Region indicates an administrative region that is larger than **City** to allow users to provide more additional information about a facility's location and catchment area. For example, the city of Matola is located in the province of Maputo in the country of Mozambique.

Availability of Antibiotics

Available: means "Is this product on the shelves and able to be supplied today?"

If the product is **unavailable**, indicate if the length of time that the product has been unavailable is known. If known, provide the duration (in days) that the product has been unavailable. If the product has never been available or has not been registered in the country, choose "product not registered in country" at the CMS level or "product not offered at facility."

Enter data for the **INN** (if applicable), **dosage form and strength** and **how many units** are in the pack sold to a patient.

Number of units in pack sold to patient: means the number of tablets, capsules, or other units sold in the package to the consumer/patient

Pricing of Antibiotics

This survey form requests information on the *price to the patient* of the medicine, **based on the cheapest product**. Record the amount of money the patient will be asked to pay to receive this medicine. Record the price of the *cheapest* available version of this medicine for the patient. This may be the originator branded product or a generic version of the medicine.

In the case of central medical stores, list the "catalogue price" or price at which the cheapest available version of this product is sold to facilities.