



The Monitoring Access to Insulin (MAIn) Tool



Monitoring the availability and prices of insulin, delivery devices and blood glucose self-monitoring in households and facilities

Health Action International (HAI)'s ACCISS Study has developed the Monitoring Access to Insulin (MAIn) tool to regularly monitor (or conduct one-off surveys) the availability and prices of insulin, delivery devices, blood glucose self-monitoring devices and more in facilities and households.

In 2021, the tool was piloted in Mali by Santé Diabète, and is now used for regular monitoring in the ACCISS Study's four partner countries: Kyrgyzstan, Peru and Tanzania and Mali.

What is MAIn?

MAIn is an app-based survey platform that supports the collection of data via telephone interviews. The tool includes training manuals, two apps for data entry (that can be downloaded onto phones or tablets), and access to an online platform that provides dashboards showing the analysed data (one set for facility data; one set for household data).

HAI provides in-person or online training, support during data collection, and data quality assurance.

To aid sustainability, data is collected via telephone interviews, with in-person data validation in a selection of facilities and households. For regular monitoring, data should be collected at least once a year.

The Importance of Monitoring

- People using insulin must have continuous supplies, in times of stability and conflict.
- Surveys have repeatedly shown poor availability and/or high unaffordable prices. But data may be out-of-date.
- Monitoring facility provide an underlying picture of access issues, but monitoring households provide a broader and indepth picture of how insulin and supplies are received and used.
- Ongoing monitoring helps to identify supply chain issues and track trends overtime.

How does it work?

In each country, working with ACCISS, a national partner will develop the protocol, obtain Ministry of Health endorsement and ethical clearance, identify the sample sites, select data collectors, oversee data collection, review and finalise the data (with input from ACCISS) and disseminate the results.

Data is collected from sentinel public sector facilities (dispensing to outpatients), private pharmacies and other relevant sectors in various regions of the country based on the World Health Organization/HAI sampling frame. In addition, sentinel households with a person using insulin will be selected (a mix of people living with type 1 diabetes and type 2 diabetes).



Following training, data will be collected by phone at least annually (in some countries the first round may require in-person data collection in facilities to get their support). The data will be reviewed by the national partner and ACCISS. When finalised it will be loaded by ACCISS into the dashboards and online public database. The partner will disseminate and discuss the findings nationally to key stakeholders.

Facility Data

In most countries, public sector dispensaries (outpatients) and private pharmacies will be sampled, although additional sectors can be included. Data is collected from the capital and at least five other regions (mix of urban, peri-urban and rural). A minimum of five facilities is sampled per region. Four comparator noncommunicable disease medicines (including two oral diabetes medicines) are included to compare availability and price trends with insulin.

The dashboard shows availability and prices per sector for each data collection, plus trends over time, for the following:

- insulin
- insulin syringes and pen needles
- blood glucose meters and test stripscontinuous glucose monitoring devices (CGMs)
- facility testing using a meter/strip and HbA1c testing



Examples of dashboard interface - facility and household

Household data

Sampling includes at least 120 people with type 1 diabetes, and 120 people with type 2 diabetes using insulin, randomly chosen across the survey areas, with a mix of children and adults. Sampling is again sentinel, although over time additional households may be needed to cover drop-outs or deaths.

The dashboard shows trends over time, monthly expenditure by income quintile, plus the following data for each data collection period:

- insulin availability and prices (including reasons for non-availability, where obtained and the number of facilities visited to get supplies)
- rationing, including type 1 vs type 2 diabetes, and most reported reasons
- availability and prices of insulin syringes and pen needles
- primary device for self-monitoring, type 1 vs type 2 diabetes
- availability and prices of blood glucose meters and test strips
- CGM use and prices by component
- number of self-tests undertaken, whether or not more tests are desired, and the reasons for not undertaking more tests

If you are interested in learning more about the MAIn tool, email acciss3@haiweb.org OR **visit MAIn online.**