

## **Measuring medicine prices and availability in the non-formal health sector**

### **Defining the “sectors” delivering health care and medicines**

In broad terms, the health care economy is made up by “providers” (the supply side) and “consumers” who are either ill or healthy (the demand side). The various actors can also be categorized as part of the formal or informal (unregulated) sectors. The public sector’s health care delivery system may be defined as comprising all providers who exist inside the public sector, and who receive some kind of remuneration for their health-related work from the government. The private health sector comprises all providers who exist outside the public sector, whether their aim is philanthropic (not-for-profit) or commercial (for-profit), and whose aim is to treat illness or prevent disease.

Different countries have very different levels of development of the private sector, e.g. the formal private sector may be almost absent outside the main urban areas in some countries. In the last few decades, the number of personnel with health-related skills, who are willing to offer services for payment, has increased sharply. They include large and small commercial companies, groups of professionals such as doctors, national and international non-governmental organizations, and individual providers and shopkeepers. The services they provide include hospitals, nursing and maternity homes, clinics run by doctors, nurses, midwives and paramedical workers, diagnostic facilities, and the sale of drugs from pharmacies and unqualified static and mobile drug sellers, including general stores. In most developing countries, nongovernmental organizations (NGOs), community based organizations (CBOs) and faith based organizations have become increasingly important players both in sector provision. The boundaries between public and private sectors may be somewhat blurred and there may be leakage from the public to the private sector. Public hospitals may operate their own private wards and manage the income from them. As well as the flow of legitimate licensed medicines, there will likely be flows of unlicensed and counterfeit medications.

“Medicine sellers” may stock and display their wares for common problems such as malaria, cough, and pains in a highly visible way. Less visible are the medicines that are outside the scope of their licenses such as antibiotics and may be kept “under-the-counter”. Medicine supplies are obtained through both formal and informal channels, including large retail and wholesale pharmacies in major cities and pharmaceutical companies or their representatives.

The Workbook that accompanies the WHO/HAI medicine prices and availability manual accommodates four different “sectors” for patient prices and availability, including automatic comparisons between the sectors. Extending the number of sectors beyond four is possible using more than one workbook; however this magnifies the workload and also limits the automatic comparisons between the sectors.

### **Considerations related to the selection of sectors for a medicine price and availability survey (survey design)**

Chapter 3 of the WHO/HAI medicine prices manual describes the preparation needed to undertake a survey, beginning with determining the scope of the survey which includes defining whether the survey will be conducted nationally or in a province or state; identifying the sectors to be surveyed; identifying the survey areas; and developing the list of medicines to be surveyed.

One key issue for the study design is to decide which and how many sectors to include in the survey. Each sector represents a conceptually different source of medicine prices and/or availability to be assessed and compared. Hence in determining which sectors to survey it is important to consider both the structure of the health system and the relative importance of various sectors in supplying medicines. In defining the sectors, it is important to think ahead to the expected results and the possible policy recommendations related to differences between and within sectors and whether to divide a sector into sub-components to enable more refined recommendations to be made.

Most surveys undertaken using the WHO/HAI methodology examine patient prices and availability in the public sector, licensed retail pharmacies and drug stores, and another sector such as health facilities run by NGOs, private hospitals, or dispensing doctors. Additionally public sector procurement

prices are usually measured. Private pharmacies in public hospitals; pharmacies in public facilities with “private” counters, and public sector vertical health programmes would be all considered as separate “other” sectors.

As described above, “Medicine Sellers” can often be a source of medicines. In terms of volume, medicine sellers can be for some medical conditions in some countries a significant or even the major route of supply. Medicine sellers can operate from permanent structures which may or may not be licensed in terms of being a general business (as opposed to being licensed as a medicine supplier); or can be operating from a non-permanent structure such as a market stall, or operating as a mobile vendor or hawker. Any of these sellers may or may not be permitted to sell certain medicines and may, in addition to selling medicines they are permitted to sell, may also be selling medicines which they are not permitted to sell. As well, there can be differences in the scope of what they are allowed to sell depending upon whether they operate from a permanent structure or not. Defining and clearly describing what is a licensed/unlicensed seller, and formal/informal, needs careful consideration to clearly define the conceptually different source of medicines, both in terms of analysis/findings and importantly in terms of consistent identification and categorization by the data collectors. These distinctions may also determine whether or not to split medicine sellers into more than one subdivision as the recommendations emanating from the findings may need to be able to differentiate between them in that some may be permitted to sell some medicines and others not; or you may consider making a recommendation to expand or limit the activities of one subdivision compared with another.

### **Sampling outlets for a medicine prices and availability survey**

Section 3.1.3 of the WHO/HAI manual describes how to select the survey areas and section 3.2 describes the selection of medicine outlets. As is described in section 3.2, for convenience the selection of outlets is anchored on public medicine outlets - with other types of medicine outlets chosen by their proximity to these facilities. As is described for the private and “other” sector outlets, the medicine sellers would be selected as being the closest to each public medicine outlet and a limit as to how far to travel from that outlet is set (which is 10Km in the standard methodology for licensed private pharmacies/drug shops and “other” outlets).

However, unlike those licensed health care outlets selling medicines, it is unlikely that any list of medicine sellers will exist hence they will need to be located by the data collectors during the data collection - by asking questions of people in the immediate vicinity of the public medicine outlet to locate the nearest medicine seller. If medicine sellers are sub-divided into those selling from permanent structures and those operating from non-permanent structures, then the closest of each need to be identified. It is also important during this scoping of the closest medicine sellers to identify the next closest 1-2 sellers as back-ups should you fail to gain access to price and availability information from the closest seller.

A small number of surveys undertaken using the WHO/HAI methodology have measured the prices and availability by medicine sellers with mixed results; some data collectors relatively easily collected price and availability information and others failed to do so. Key to success is to gain the confidence of the seller, that the data collector and data collection is not part of any inspection activities, and that the identity of the seller will be kept anonymous. In early pilot testing, the medicine sellers often closed up their “shops” and ran away. However, this was largely overcome by approaching the sellers through a respected person in the community. For example a local leader, someone from the local authorities or the health workers from the close-by health facility who could provide the necessary reassurance of anonymity.

### **Collecting medicine prices and availability information**

In general terms, the collection of medicine price and availability information is the same as for a public health facility or private pharmacy. However, it is more likely that the data collectors may encounter unlabelled or inadequately labelled containers, or bags of tablets, or even syrup - making data collection and analysis impossible. Data collectors will need to be instructed not to collect data in these situations.