
2

Survey overview and pre-survey planning

2.1 SURVEY OVERVIEW

2.1.1 Survey objectives

The survey's objective is to generate reliable information on the price, availability and affordability of selected important medicines and price components in the supply chain, with the ultimate goal of improving access to affordable medicines for all.

The survey enables the following questions to be answered:

- What price do people pay for key medicines?
- Do the prices and availability of the same medicines vary in different sectors (public sector, private sector and other medicine outlets)?
- Do prices and availability vary in different parts of a country?
- What is the difference in prices and availability of originator brands and generically equivalent medicines?
- Do prices vary between product types (e.g. originator brands and generics) within the same sector?
- How do government procurement prices compare with patient prices in the public sector?
- How do national prices compare with international reference prices?
- What taxes and duties are levied on medicines and what is the level of various mark-ups that contribute to their retail and public sector prices?
- How affordable are medicines for ordinary people?

The medicine price and availability study focuses on a limited number of medicines and enables their prices and availability to be investigated across health-care sectors within individual countries and also between countries. It is designed to measure medicine prices and availability at a certain point in time, but can also be used to monitor them over a period of time. The methodology facilitates rapid and reliable data collection and is easily replicable. The survey measures real paid prices, i.e. what patients pay in retail medicine outlets, and the price the government procurement agency paid; it does not rely on list prices produced by wholesalers, manufacturers and insurers, etc. A medicine price and availability study using this methodology also enables the price of selected medicines to be followed from

the point at which it leaves the manufacturer to the time it reaches the consumer's hands.

The survey identifies issues related to procurement price efficiency, public and private sector availability and prices, price structure and mark-ups, and crucially, the affordability of treatments for people with lower incomes. It is a useful tool for policy-makers and others concerned about access to medicines, and serves as an important basis for more in-depth analysis of various issues that might be identified, policy considerations and interventions.

If you are considering a medicine price and availability survey, spend some time clarifying and drafting your specific objectives. Consider the expected results and how you will use them to achieve the objectives identified, including any advocacy strategies that may be needed. Be very clear about to whom you will direct the results and recommended actions, and who else could work with you as a team to achieve the survey objectives.



This survey has been designed to provide a comprehensive picture of the prices and availability of selected medicines in a country. It should be repeated periodically to assess the impact of policy and programmatic changes on the prices of medicines.

The survey has been developed for use by governments, civil society groups, international agencies, researchers and health professional organizations. A survey manager coordinates the survey management. The survey manager is the primary audience for this manual, though the commissioning organization should also be thoroughly familiar with the survey procedures. An advisory committee should always be established to provide support and expertise throughout the survey and to initiate policy discussions based on the findings. The inclusion of prominent and respected stakeholders will enhance the credibility of the study, report and recommendations.

LESSONS FROM THE FIELD

“Undertaking such a survey is beyond the scope of an individual, and requires the commitment of a group of people. We contacted people – consumer associations, academics, pharmacists, pharmacy and medical associations and NGOs to contribute in one way or another.”

Baber Z, Ibrahim M. Conducting a medicine pricing survey: experiences and challenges. *Essential Drugs Monitor*, 2005, Issue No. 34.

2.1.2 Key elements of the survey design

In the survey, data are collected on the availability and price of a selection of important medicines from a sample of medicine outlets in the public, private and other sectors (e.g. NGOs) in six regions of a country or – in the case of large countries – of a state or province. Data on medicine prices, but not availability, are also collected for government procurement; these data are usually collected at the central level (e.g. government procurement office). Most surveys are national, however in large countries it is recommended that the methodology be applied at the state or provincial level or that the number of regions surveyed be increased. Sampling is done in a systematic way to ensure that the findings are representative of the country or state/province in which the survey is being conducted.

The survey methodology also includes a process for collecting information on the add-on costs that contribute to the final price of medicines. This involves beginning with the final (patient) price of selected medicines and tracking these prices back through the distribution chain. Identifying price components is an essential part of the survey, both for understanding price results and for determining their policy implications.

It is usually not feasible to collect data from a large number of health facilities, pharmacies and other medicine outlets, so a small sample of facilities is selected in at least six geographical areas: a country's main urban centre and five other administrative areas (survey areas). In each survey area, a sample of medicine outlets are examined from each of the public sector, e.g. primary health-care centres and government hospitals, and the private sector, e.g. licensed pharmacies and licensed drug stores. Up to two 'other' sectors where medicines are commonly sold can also be surveyed, such as the mission sector and dispensing doctors. In each survey area, data are collected in at least five medicine outlets per sector, for a total of five outlets x six survey areas = 30 outlets per sector.

Up to 50 medicines are included in the survey. The list of survey medicines is generally composed of:

- 14 global core medicines;
- 16 regional core medicines; and
- 20 supplementary medicines.

- Data collection takes place in six areas of the country (survey areas)
- Medicine outlets from the public, private and up to two other sectors are surveyed. Prices are also collected for government procurement.
- Up to 50 medicines are surveyed, including core medicines that allow for global and regional comparisons, and supplementary medicines of local importance.
- Data on the price and availability of medicines in the public, private and other sectors are obtained by data collectors during visits to medicine outlets. Public procurement data are usually obtained centrally, e.g. from the office of the procurement officer or central medical stores.
- For each medicine, data are collected on the originator brand and the lowest-priced generic equivalent found at each medicine outlet.
- A second, important part of the methodology is the price components survey, where information is collected on the various charges applied to medicines as they proceed through the distribution chain.

The global and regional core medicine lists are part of the WHO/HAI standard methodology. By standardizing the medicines surveyed at the global and regional levels across surveys, countries can compare their findings with other countries and other international comparisons can be conducted. Supplementary medicines are selected at the country level for their national importance, or to collect data on a particular therapeutic class. For each medicine in the survey, data are collected for two products: the originator brand (previously called innovator brand), and the lowest-priced generic equivalent found at each medicine outlet.

In each survey area, data collection is managed by an area supervisor. Data collectors, who have received standardized training, including a data collection pilot

test, visit medicine outlets in pairs and record whether medicines are found, and if so, their price. When less than 50% of expected medicines are available at a given outlet, data collectors visit a back-up facility and repeat the data collection. This ensures that a sufficient number of medicine prices are collected to allow for robust analyses. However, the data from the original facility are also kept and used in the analysis to provide an accurate representation of medicine availability.

To ensure data quality, area supervisors check data collection forms at the end of each day of fieldwork and follow up on any incomplete, erroneous or illegible data. They also validate data collection by re-conducting the survey at 20% of the sample medicine outlets and comparing their results to those of data collectors. Once data collection is completed, verified data collection forms are sent to the survey manager at the central level. Data entry personnel enter the data into the computerized *WHO/HAI Medicine Price and Availability Workbook – Part I and Part II*, which is a customized application for Microsoft Excel®. To guard against errors, data are entered twice by separate personnel and cross-checked (double entry). The workbook's data-checker function is then used to highlight suspicious data that require verification. Ensuring the quality of the data entered into the workbook is critical to the accuracy of the survey results.

Data analysis is conducted using the electronic workbooks, which are pre-programmed to consolidate and summarize results. The availability of individual medicines is reported as the percentage (%) of medicine outlets in which the medicine was found on the day of data collection. To facilitate international comparisons, medicine prices found during the survey are expressed as ratios relative to a standard set of international reference prices, known as the median price ratio or MPR. The ratio is an expression of how much greater or less the median local medicine price is than the international reference price, e.g. an MPR of 2 would mean that the local medicine price is twice the international reference price. Management Sciences for Health (MSH) reference prices¹ are recommended as the most useful standard. These are prices offered by mostly not-for-profit suppliers to developing countries for multi-source products, and generally do not include insurance or transportation charges.

Affordability is estimated using the daily wage of the lowest-paid unskilled government worker by determining the number of days' wages required to purchase selected courses of treatment for common acute and chronic conditions.

Data collected on the components of medicine prices are analysed according to five common stages in the supply chain that all medicines go through as they move from manufacturer to patient:

Stage 1: manufacturer's selling price + insurance and freight

Stage 2: landed price

Stage 3: wholesale selling price (private sector) or
Central Medical Stores price (public sector)

Stage 4: retail price (private sector) or dispensary price (public sector)

Stage 5: dispensed price

This categorization allows comparisons both between health systems and between countries. Data on price components are also entered into the workbook, which automatically calculates the contribution of each stage of the supply chain to the

¹ <http://erc.msh.org/>

final price as well as the total contribution of price components to the final price of medicines.

2.1.3 The standard approach to measuring medicine prices and availability

The standard approach described in this manual involves a systematic survey to collect accurate data and reliable information on medicine prices and availability. It is characterized as follows:

- standard global and regional lists of medicines for international comparisons
- systematic sampling process
- use of international reference prices
- comparison of originator brand and generically equivalent medicines
- sector comparisons: public (patient and procurement prices), private and other sectors
- treatment affordability comparisons
- identification of price components, e.g. taxes and mark-ups, which contribute to the final patient price of medicines
- standard data entry and analysis methods using computerized workbooks
- standard report format



CAUTION

The standard methodology must be followed to ensure that the data are reliable and that international comparisons are possible.

2.1.4 Steps in the survey

Table 2.1 provides an overview of the survey's steps, the activities to be undertaken at each step and the chapter in the manual where detailed instructions are provided.

2.2 PRE-SURVEY PREPARATION

The following resources are provided to assist you in conducting the survey:

- Survey manual
- Survey templates, tools and supporting materials (on CD-ROM)
- Computerized workbooks for generation of survey instrument (data collection form), data entry and processing

Note that the workbook is in two parts:

Part I is used to enter the study medicines and international reference prices, generate the data collection form for the price and availability survey, enter unit prices collected in the public sector (procurement and patient prices), private sector and other sectors, analyse prices and availability, and assess affordability

Part II is for entering and analysing price component data

Table 2.1 Steps in the survey

Step	Survey activity	Chapter
Pre-survey preparation Estimated duration: two to three weeks	1. Establish an advisory committee and meet to clarify survey objectives, scope (national vs provincial survey, survey areas, sectors), medicines to be surveyed, source of procurement data, personnel and other resource needs, timelines, budget, potential donors (if needed). 2. Collect background information on the pharmaceutical sector. 3. Recruit survey personnel. 4. Secure technical and financial resources. 5. Seek endorsement for the survey. 6. Prepare a survey schedule.	2
Planning the survey Estimated duration: two to three weeks	1. Select the sample of medicine outlets. 2. Finalize list of medicines to be surveyed. 3. Develop draft survey protocol, submit to HAI or WHO for review. 4. Develop Medicine Price Data Collection form. 5. Plan and conduct training course, including data collection pilot test.	3 & 4
Preparation for data collection in the field Estimated duration: one week	1. Prepare Letter of Introduction. 2. Plan schedule of data collection visits and transport/accommodation in the field. 3. Prepare Medicine Price Data Collection forms for field visits. 4. Prepare information materials and tools for data collectors. 5. Arrange for regular communications during fieldwork.	5
Data collection in the field Estimated duration: two weeks (if three data collection teams, each surveying two areas, are used and sampling distances are adhered to)	1. Collect central government procurement data. 2. Assemble materials necessary for local data collection. 3. Confirm appointments with medicine outlets. 4. Visit medicine outlets and any regional government procurement units, collect data on medicine availability and price, and complete Medicine Price Data Collection form. 5. At the end of each day, check data collection forms and resolve missing/unreliable information. 6. Validate data collection by re-conducting survey at 20% of medicine outlets. 7. Copy and store data collection forms and, upon completion of data collection, transfer originals to survey manager for initial visual inspection.	6
Data entry, analysis and interpretation Estimated duration: three weeks	1. Enter data twice, using double-entry function and verify/correct any inconsistencies. 2. Run “data checker” and verify/correct any suspicious data. 3. Send data to HAI or WHO for a data quality review. 4. Conduct analyses of medicine availability, price and affordability, including international comparisons as appropriate. 5. Meet with advisory committee to analyse and interpret results, explore possible policy options and lines of action, and plan price components survey. The latter includes identifying key sources of information; determining priority price components to be surveyed; and selecting regions, medicine outlets and medicines for tracking medicines through the supply chain.	7, 8 & 10
Price components survey Estimated duration: three weeks	1. Recruit survey personnel as needed and conduct training. 2. Plan schedule of data collection visits and any transport/accommodation in the field. 3. Visit key informants and collect central level data on national policies related to price components. 4. Collect data on the actual charges applied to selected target medicines. Visit the dispensing point for each sector and track target medicines backwards along the supply chain to their point of origin, recording the charges incurred. 5. Enter data on the charges applied to target medicines in the workbook. 6. Conduct analysis of the contribution of price components to the final price of each target medicine, by stage and overall. 7. Prepare report on price components.	9

Table 2.1 *Continued*

Step	Survey activity	Chapter
Using the information collected	1. Meet with advisory committee to analyse and interpret price components results; consolidate all survey results; and finalize recommendations.	11, 12 & 13
Estimated duration: one to two weeks for survey report, with advocacy and communications ongoing	2. Draft survey report.	
	3. Share preliminary findings with key stakeholders and consult on next steps.	
	4. Plan and implement advocacy and communications activities.	

Before starting to plan the survey, read the manual in full and familiarize yourself with the resources included on the accompanying CD-ROM. Some survey managers have said the manual needs to be read two or three times for a thorough understanding of the methodology!



Careful planning and preparation are essential before data collection begins. Experience in the surveys conducted to date shows that most errors and missed opportunities could have been avoided by better pre-survey planning.

2.2.1 Establishing an advisory committee

An advisory committee should be assembled to help plan and support the survey and promote its findings. Advisers should be involved from an early stage to ensure their support of the validity of the survey results and their assistance in promoting pricing policy changes. Involving key stakeholders and opinion leaders will also strengthen the credibility of the survey findings.

The role of the advisory committee should include:

- clarifying the survey's objectives;
- assisting in obtaining endorsement for the survey;
- identifying possible sponsors (if needed);
- supporting the survey manager in planning, preparing and conducting the study, and identifying important policy issues that should inform the survey protocol (e.g. medicine selection);
- advising on any matters that arise during survey preparation, fieldwork and data analysis;
- assisting in planning and conducting the price components survey, including identifying and contacting key informants;
- assisting in interpreting data and developing policy recommendations;
- promoting the survey's findings and advocating for appropriate policy changes; and
- assisting in carrying out a follow-on, in-depth study or intervention study.

Holding regular meetings with the advisory committee, throughout the survey process, is important. You should hold at least one meeting to support the planning and preparation of the medicine prices and availability survey and one post-survey meeting for interpreting survey results and developing recommendations. The latter meeting should also be used to plan the price components survey if it is being conducted after the general pricing survey. You should hold a second post-survey meeting following the price components survey to discuss the results and their policy implications, consolidate all survey results and finalize recommendations.

Medicine price monitoring: lessons from the field

“In Kenya, the collaboration between the Ministry of Health (MoH) pharmacy division and the WHO National Professional Officer has been instrumental in facilitating the survey. The advisory group, composed of individuals from relevant Ministry departments and NGOs, has also been extremely important. The MoH is considering institutionalizing this work as part of monitoring and evaluation and the chief pharmacist uses the reports frequently. We now have a strong team of data collectors whose capacity has been built and who are undertaking other monitoring and evaluation activities in the area of medicines.”

Patrick Mubangizi, Survey Manager, Medicine Price Monitoring, Kenya

You should select the advisory committee membership carefully. It should complement the survey manager’s skills and include at least one medical doctor and pharmacist, a health economist (where possible) and stakeholders such as policy-makers, relevant professional associations, public-health institutions, academic institutions and civil society groups working on health issues (preferably access to medicine issues). At least one member should be knowledgeable about the medicines supply chain in various sectors to provide support to the price components survey. If there is a market survey company active in your community, such as Intercontinental Medical Statistics (IMS) Health, you may wish to involve them in the committee. It may also be wise to include an area supervisor with an understanding of local realities. The size of the advisory committee should be kept sufficiently small to enable regular meetings, however if this is not possible, working groups can be formed to address specific topics (e.g. methodology, price components, advocacy).

2.2.2 Clarifying the specific survey objectives

The broad objective of any medicines price and availability survey is to generate reliable information on the price, availability and affordability of selected important medicines with a view to ensuring access to affordable medicines for all. However, the specific research and policy objectives of each individual survey will vary. For example, a country may wish to investigate the impact of originator brand product use on medicine affordability as a means to support introducing a generic substitution policy. Another country might want to survey prices and availability of all medicines in a particular therapeutic group (e.g. antimalarials or palliative care medicines). The commissioning organization, advisory committee and survey manager should work together to clarify the survey’s research and policy objectives so that a survey design is developed according to these objectives. They should also consider whether any other research is needed to provide a broader perspective (e.g. assessing sales volume). Well-defined survey objectives will also help to guide data analysis and interpretation, as well as follow-on communication and advocacy activities.

2.2.3 Collecting information on the health system and pharmaceutical sector

A critical step in preparing for the medicines price survey is to collect background information on the pharmaceutical sector. This information is indispensable for survey planning, e.g. selection of sectors to study and medicines to survey. It will also be of critical importance in analysing the data and formulating policy recommendations.

The structure of the health-care system and the organization of the pharmaceutical sector vary widely between, and sometimes within, countries. Before beginning

the survey, it is important to have a clear understanding of how pharmaceutical services are organized, including the relative contribution of various sectors to the supply of medicines. Additionally, the main procurement and distribution channels for pharmaceuticals should be clearly identified. This will allow you to put medicine prices in a countrywide context and identify countries with similar pharmaceutical characteristics, thus enabling you to make useful comparisons. Specifically, these data will allow you to consider the relative importance of different market segments and different financing arrangements, such as social insurance, in making national and international price comparisons.

Data on the national pharmaceutical sector are collected using an abridged version of the WHO *Questionnaire on structures and processes of country pharmaceutical situations*.¹ This questionnaire measures structures and processes at the level of national governments, including policies, regulations, quality control measures, essential medicines list, supply system, financing, access, production, rational use and intellectual property rights legislation. It is a basic assessment tool that provides a rapid means of obtaining information on the existing infrastructure and key processes of each component of the pharmaceutical sector. Administered through the WHO Medicines Policy and Standards/Technical Cooperation for Essential Drugs and Traditional Medicine department, the questionnaire is distributed every four years to all Member States, most recently in 2007. WHO uses the results to assess the global pharmaceutical situation, evaluate progress achieved towards goals set in the WHO Medicines Strategy, make plans and set targets for WHO work for the next four years.

An abridged version of the questionnaire that includes only those questions relevant to medicine pricing, availability and affordability has been developed for use as part of the survey. A set of supplementary questions important to the medicine prices and availability survey has also been included.

The abridged version of WHO's *Questionnaire on structures and processes of country pharmaceutical situations*, available in Annex 1 and on the CD-ROM that accompanies this manual, should be completed before beginning to plan the survey. Survey managers should check with the WHO Department of Medicines Policy and Standards/Technical Cooperation for Essential Drugs and Traditional Medicine² to see if the full questionnaire has been administered recently.

In addition to completing the abridged questionnaire, survey managers should also collect as many other relevant materials as possible, such as the national medicines policy or other related policies; the essential medicines list; and the reports of medicine use studies where these have been conducted. It is useful to check with the MoH, national statistical office or WHO office to see whether any recent surveys have been undertaken as part of a national medicines or health-system policy review.



Collecting baseline information on the organization of the pharmaceutical sector is essential for appropriate survey planning and later for interpreting the survey findings and identifying policy options. Allocate sufficient time for collecting information and do not begin planning the survey until the abridged WHO *Questionnaire on structures and processes of country pharmaceutical situations* is completed.

¹ This questionnaire replaces the National Pharmaceutical Sector form used in the first edition of the survey methodology.

² Contact Dr Daisy Carandang at carandange@who.int

Descriptive information on your country's health-care system and pharmaceutical sector can be very valuable in explaining or interpreting the survey findings. **Data on the national pharmaceutical sector should therefore be summarized in the background section of your survey report (see Chapter 12).** Depending on the country situation and the survey results obtained, some aspects of WHO's *Questionnaire on structures and processes of country pharmaceutical situations* may benefit from further elaboration in the survey report, particularly where they are likely to have a substantial impact on medicine prices or availability. You may also want to add additional information to your summary on topics not included in the questionnaire to help readers understand the survey setting and results.

2.2.4 Selecting survey personnel

The survey will require the involvement of the following personnel:

- the survey manager, supported by an advisory committee;
- area supervisors;
- data collectors; and
- data entry personnel.

Survey manager

The survey manager plans and coordinates the survey at the central (national) level. This includes planning the survey's technical and logistical aspects, recruiting and training survey personnel, supervising data collection and data entry, conducting data quality assurance and data analysis, interpreting results and preparing a survey report. For NGOs, this role may also include fundraising to support the survey and related follow-up activities.

Wherever possible, the survey manager should be a pharmacist with experience in conducting surveys and familiarity with the health-care system. The survey manager should be familiar with Microsoft Excel spreadsheets, basic statistics (such as ratios, medians and percentiles) and interpreting data. Successful communication of the survey results also requires an understanding of the policy-making process and different advocacy strategies. Where the survey manager does not possess all of these qualities, he or she should select the advisory committee members to ensure that the survey management team includes the necessary pharmacy, surveying, statistics, policy and advocacy skills.

Area supervisors

Area supervisors are responsible for overseeing all aspects of data collection in the survey area(s) for which they are responsible. In a small country or in a survey that is conducted in a single region of a country, it may be possible for all field work to be undertaken by a single team. Experience has shown that in larger-scale studies, however, it is advisable to designate a supervisor, preferably a pharmacist, in each of the geographical areas that will be surveyed.

Area supervisors have a crucial role to play in ensuring data quality and consistency. They should be experienced in data collection and be familiar with pharmaceutical terminology. They will also be instrumental in gaining access to facilities; if any area supervisor is unfamiliar with their designated area, a local contact may be needed to assist in identifying medicine outlets. Area supervisors may also be responsible for choosing local data collectors when they are not sent from the central level.

Area supervisors have a crucial role to play in ensuring data quality in the field.**Data collectors**

Data collectors are responsible for visiting medicine outlets and recording information on medicine prices and availability with a high degree of accuracy. The survey methodology has been designed to minimize as far as possible the need for a high level of technical expertise. However, data collectors should, wherever possible, have the following skills and capabilities:

- a basic understanding of pharmaceuticals, including different formulations (strengths, dose forms, etc.) and pack sizes, in order to be able to extract the required information from both health professionals and from written material such as packs and order lists. (Ideally, data collectors should have some pharmaceutical training and/or experience since previous survey experience shows that the most effective data collectors are those with relevant knowledge and experience, e.g. pharmacists, pharmacy technicians, pharmacy students and nurses.)
- some understanding of the principles of sample surveys, ideally with some previous experience in conducting surveys;
- an appreciation of the logistical requirements for carrying out field studies;
- a minimum of post-secondary school education; and
- familiarity with the locality and local language/dialect.

Data collection can be tedious work and requires an aptitude for concentration and attention to detail. The best data collectors combine the discipline of collecting data in a standardized way with the ability to identify unusual situations that require advice from the area supervisor or survey manager.

The number of data collectors required depends on the sample size of the survey. Data collectors should work in pairs so that they can make systematic checks of entries into the Medicine Price Data Collection form. Each visit to a health facility or pharmacy is likely to require about one to two hours plus transport time. In practice, this means that a team of two data collectors can probably survey two to four facilities per day. Depending on the locations of the survey areas, travel conditions and number of medicine outlets to be surveyed, you will probably need 6–12 data collectors (1 pair per survey area or per 2 survey areas). It is better to have a smaller number of better qualified data collectors than to have a large team where some data collectors lack the necessary skills.

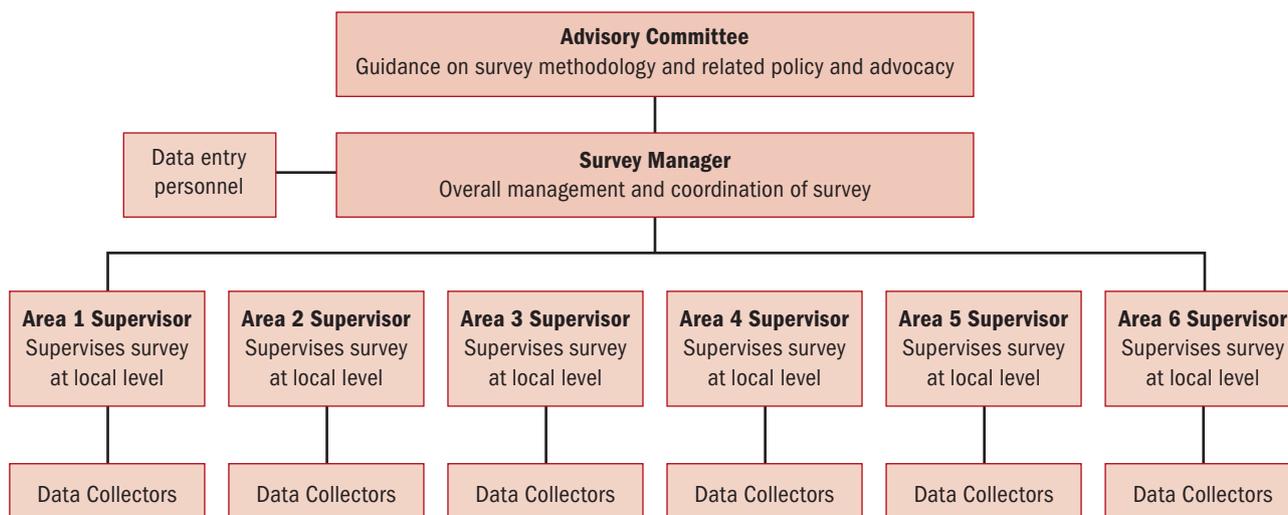
LESSONS FROM THE FIELD

In the 2002 survey in South Africa, regional pharmacists were recruited as data collectors because they were known to the pharmacists and doctors in the area and also knew the facilities in the area.

Kishuna A. Drug Pricing Survey in KwaZulu-Natal. *Essential Drugs Monitor*, No.32, 2003. (http://mednet2.who.int/edmonitor/32/32_2.pdf, accessed 13 December 2007)

Data entry personnel

Accurate data entry is vital to ensure the reliability of the results. Two data processing personnel with experience in using Microsoft Excel are required: one to enter the data and the other to re-enter the same data to check that the entries are

Fig 2.1 Organizational structure of the survey

Note: Some area supervisors and data collectors may survey more than one survey area; six separate teams are not always required.

correct. The computerized workbook has been designed to identify any discrepancies in data entry using this “double-entry” process. Double entry is essential to ensuring the accuracy of the data entry process. In some cases, it may be possible to use the same personnel for both data collection and data entry, provided they have the necessary expertise to undertake both functions.

Fig. 2.1 illustrates the survey’s organizational structure.

2.2.5 Securing the technical and financial resources required

Technical resources

The computerized workbook used for data entry and analysis is a specially designed software application for Microsoft Excel. To use it, a computer that meets the following minimum requirements will be needed:

- a personal computer (PC) with a Pentium 3 or higher processor;
- Windows operating environment;
- 48 megabytes of system memory;
- Microsoft Excel Office 97 or later version;
- a CD drive or Internet access, so that the workbook can be loaded from the CD-ROM supplied with the manual or downloaded from the HAI web site.

Very few other resources are needed to conduct the survey. Area supervisors and data collectors should be supplied with a simple calculator to determine unit prices. Paper will be needed for data collection forms. Transport will also be needed to take the data collection teams to the medicine outlet visits. If the teams are not from the local survey area, transport to and from the survey area, as well as accommodation, will also be required.

Data collection includes validation at 20% of medicine outlets, as well as potential visits to back-up facilities. These activities are integral parts of the survey methodology that should be built into the survey budget and timeline.

Financial resources

The survey methodology has been designed to be feasible and carried out easily with minimal technical and financial resources. However, when planning the survey, it is essential to ensure that there is an adequate budget for the following items:

- personnel:
 - survey manager
 - area supervisors
 - data collectors
 - data entry personnel
- training:
 - training venue
 - daily allowance and accommodation
 - transport
 - materials
 - expenses related to pilot test
- data collection and validation, including price components:
 - daily field allowance and accommodation for data collectors
 - transport
 - materials: paper, pens, calculators
 - photocopying
 - communication (e.g. telephone charges)
- meetings of the advisory committee
- report production and dissemination – layout, printing, postage
- advocacy and communications
- overhead
- contingency, including data collection at back-up facilities

A budget template is provided as part of the Survey Protocol template that should be completed and sent to HAI¹ or WHO² for review prior to the initiation of data collection. The Survey Protocol template is available on the CD-ROM that accompanies this manual.

¹ Contact info@haiweb.org

² Contact medicineprices@who.int

2.2.6 Seeking endorsement for the survey

A signed, official letter from the MoH or national pharmacy association endorsing the survey can be of great help when seeking funding and when collecting data in the field. If the survey manager approaches the relevant bodies with an example of the kind of letter that is sought, it may be easier for them to provide such an endorsement. A sample letter of endorsement, shown in Annex 2, is included as a Word file on the CD-ROM for modification as appropriate. WHO will also provide a letter of endorsement on request.¹

An official letter of endorsement from the ministry of health and/or the national pharmacy association will facilitate data collection.

2.2.7 Preparing a survey schedule

The complete survey should generally take about 14 weeks to complete, including preparation, data collection, data entry and analysis and report writing. Further time should be allotted for advocacy and follow-on activities.

Given that medicine prices are subject to change based on exchange rates, market influences and other factors, it is important that data collection be conducted rapidly and the report generated within one month of completing the survey. In countries with fluctuating inflation rates, it is particularly important that the survey be completed in as short a time frame as possible.

A survey schedule should be developed and consulted regularly to ensure that activities are proceeding according to plan. A sample survey schedule is provided as part of the Survey Protocol template that should be completed and sent to HAI² or WHO³ for review before initiating data collection.



The complete survey should take about 14 weeks to complete, including data collection, data entry, data analysis and report writing. Given that price data can quickly become out-of-date, it is important that the survey report be generated within one month of completing data collection.

¹ Contact your local WHO country office or WHO headquarters at medicineprices@who.int.

² Contact info@haiweb.org

³ Contact medicineprices@who.int