

# **NATIONAL AIDS PROGRAMME MANAGEMENT**

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## **MODULE 9 STRATEGIC INFORMATION**



**World Health  
Organization**

Regional Office for South-East Asia

# National AIDS Programme Management

## A Training Course

### Module 9

## Strategic information



**World Health  
Organization**  
Regional Office for South-East Asia

**2007**

WHO Library Cataloguing-in-Publication data

World Health Organization, Regional Office for South-East Asia.  
National AIDS programme management: a set of training modules.

1. HIV infections – prevention and control – transmission. 2. Acquired Immunodeficiency Syndrome – prevention and control – transmission. 3. Training programmes. 4. Teaching material. 5. Health status – indicators. 6. Policy-making. 7. Outcome and process assessment (health care) – methods. 8. Substance abuse, intravenous. 9. Counselling. 10. Breastfeeding – adverse effects. 11. Manuals.

ISBN 978-92-9022-302-3

(NLM classification: 503.6)

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Module 6 – Implementation of HIV prevention, care and treatment strategies

Module 7 – Managing the AIDS programme

Module 8 – Management systems for the AIDS programme

This publication is available on the Internet at <http://www.searo.who.int/hiv-aids> publications

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Editorial support, layout and typesetting: Byword Editorial Consultants

Cover designs: Netra Shyam

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Printed in India

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# Strategic information

### LEARNING OBJECTIVES

After completing this module, participants will be able:

1. To describe the elements of strategic information that contributes to guiding the national response.
2. To describe the components of second-generation surveillance and the process of developing a national HIV, AIDS and sexually transmitted infection (STI) surveillance plan.
3. To formulate a monitoring and evaluation framework to support the national response to AIDS.
4. To describe the role of the national programme in setting and coordinating a national research agenda for guiding the programme.

### INTRODUCTION

This module covers the elements of strategic information necessary for developing a clear understanding of the exact nature of the AIDS epidemic and the response to the epidemic in a particular place: the surveillance systems that provide information on HIV prevalence and changing patterns of risk and vulnerability; the monitoring and evaluation framework that provides information about the process, outcome and impact of the interventions; and the strategic research agenda that can fill in gaps in information and provide guidance for reviewing interventions and strategies.

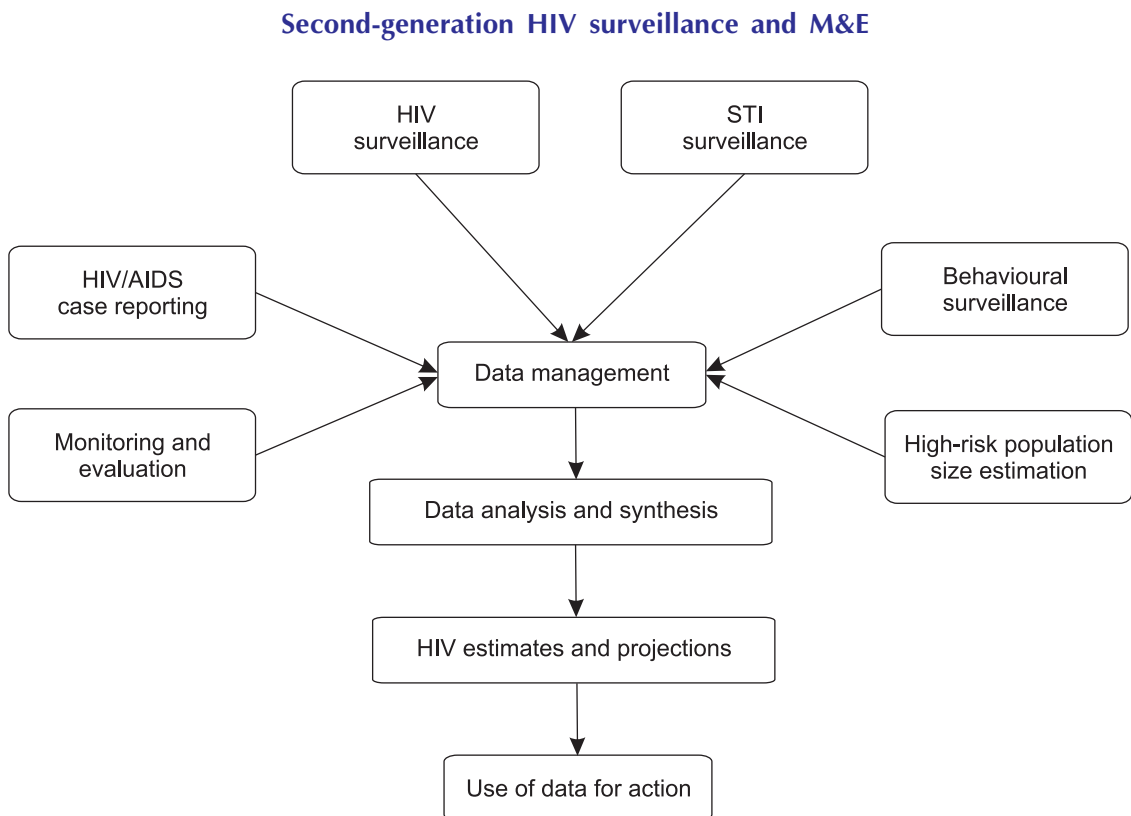
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## OBJECTIVE 1: To describe the elements of strategic information that contributes to guiding the national response

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### THE STRATEGIC INFORMATION FRAMEWORK

Strategic information to guide the national AIDS response is based on several sources and key strategies. These are indicated in the framework below:



Bringing these elements together is essential for effective programme planning and review. Although these are presented in the last module of the training, they complete the cycle and are directly linked to Module 1 – Situation analysis. They contribute to the processes in the flowchart – determining policy, setting priorities, targets and indicators, deciding on interventions and establishing systems for management. Remember that strategic information is essential for guiding the programme in both prevention and care.

As outlined in Module 8, the national programme needs to set aside specific resources, human and financial, to manage the collection, collation and analysis of these data. Each of these elements is covered in more detail in the next three objectives.

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## **OBJECTIVE 2: To describe the components of second-generation surveillance and the process of developing a national HIV, AIDS and STI surveillance plan**

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In the early years of the epidemic, HIV sentinel surveillance and AIDS case reporting were the main sources of data and information to guide policy and programmes. Many countries also used short- and long-term behavioural surveys to construct a clearer picture, and although these studies provided important information to guide prevention interventions, they rarely included behavioural surveillance in their regular surveillance systems.

The following data collection methods were used singly, or in combination, to provide information about the epidemic:

### 1. Biological surveillance

- Sentinel HIV serosurveillance in defined subpopulations
- Regular HIV screening of donated blood
- Regular HIV screening of occupational cohorts or other subpopulations
- Surveillance of drug resistance

### 2. Behavioural surveillance

- Repeat cross-sectional surveys in the general population
- Repeat cross-sectional surveys in defined subpopulations

### 3. Other sources of information

- HIV and AIDS case surveillance
- Voluntary counselling and testing
- Registration of deaths
- STI and tuberculosis (TB) surveillance
- HIV testing of specimens taken for other purposes, e.g. in general population surveys

Second-generation surveillance focuses on lesser-used methods, particularly behavioural surveillance to provide a comprehensive picture of changing patterns in the epidemic.

The principles that define second-generation surveillance are:

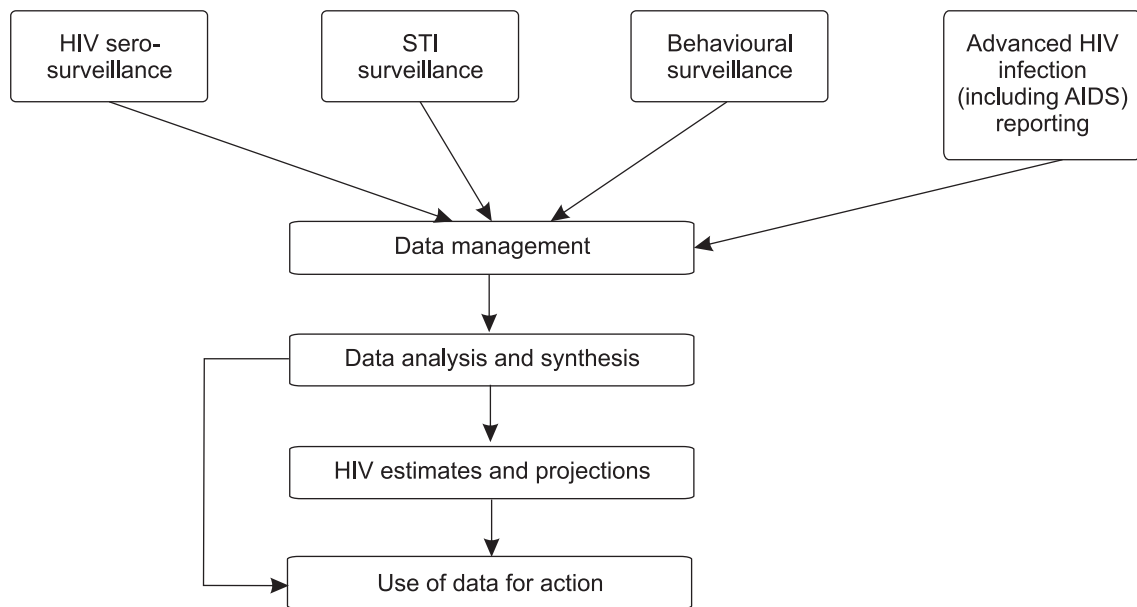
- better understanding of trends over time;



- better understanding of the behaviours that drive the epidemic in the country;
- surveillance on subpopulations at highest risk for infection;
- flexible surveillance that adjusts with the needs and the state of the epidemic;
- better use of data to increase understanding and to plan prevention and care.

Second-generation surveillance will not provide all the information required to guide AIDS programmes, but they will add significantly to the information generated through earlier surveillance methods.

### The components of second-generation surveillance



The major variables used in second-generation HIV surveillance are listed below:

#### Biological variables

- HIV prevalence
- STI incidence and prevalence
- TB prevalence
- Number of adult cases with advanced HIV infection (including AIDS)
- Number of paediatric AIDS cases

#### Behavioural variables

- Sex with a non-regular partner in the past 12 months
- Condom use at last sex with a non-regular partner
- Age at first sex

- Use of unclean injecting equipment reported by drug injectors
- Number of clients in the past week reported by sex workers

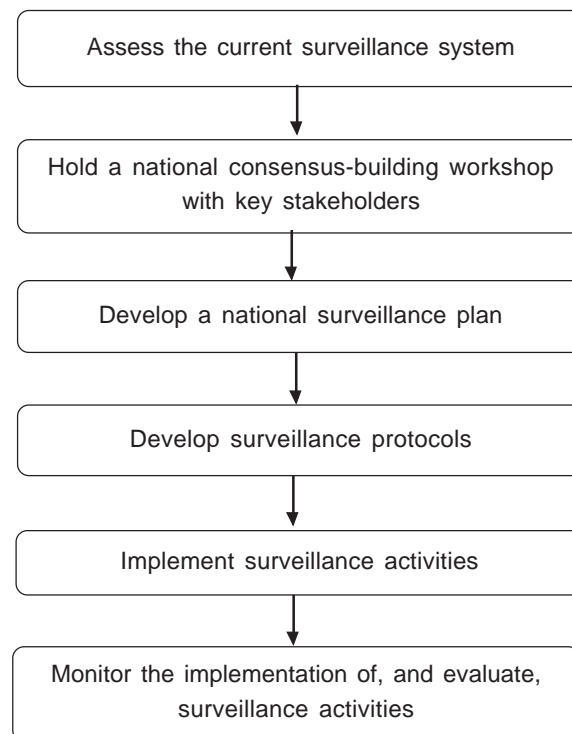
#### Sociodemographic variables

- Age
- Sex
- Socioeconomic or educational status (may include occupation)
- Residency or migration status
- Parity (for antenatal sites)
- Marital status

The WHO Regional Office for South-East Asia has recently developed training materials covering HIV, STI and behavioural surveillance.

### DEVELOPING A SECOND-GENERATION SURVEILLANCE STRATEGY

WHO has proposed the following framework for implementing second-generation surveillance.



Rapid assessment protocols are available to assess HIV, STI and behavioural surveillance systems. The assessment can be done by questionnaire, document review and key informant interview. The main components to be considered for review are:

- HIV/AIDS/STI surveillance framework
- HIV/AIDS case reporting
- Sentinel surveillance for HIV
- Laboratory practices and quality assurance
- Behavioural studies
- Management and information systems
- Resources
- Use of the surveillance information
- Other relevant HIV research studies.

The national consensus workshop should identify the monitoring and evaluation (M&E) indicators required for measuring progress against the objectives of the national strategy. The surveillance strategy should include the methods and indicators to be used for surveillance, the action plan for implementation and the surveillance tools to be used during the process.

The surveillance plan needs to cover the following.

- Identification of the structure of the surveillance unit, coordination, and resource mobilization and dissemination
- Priority areas of the National Strategy, including the link between the surveillance plan and the national strategy
- General strategy for HIV surveillance
- Main objectives and expected results
- Identification of populations, locations and time-frames
- Surveillance of HIV and other STIs, sexual behaviour
- Schedule of activities
- Resources needed
- M&E of the surveillance system

<b>EXERCISE A</b>
-------------------

***(Country group work followed by country group discussion)***

In country groups, identify the elements of second-generation surveillance that currently contribute to your country's strategic information framework.

<b>Element</b>	<b>Current situation (regularity, sites, groups included)</b>	<b>Gaps and opportunities for strengthening</b>
HIV serosurveillance		
STI surveillance		
Behavioural surveillance		
Advanced HIV infection (including AIDS) reporting*		

\* to be used carefully – these data are usually not representative and must be used with caution.

<b>Inform your facilitator when you are ready for country group discussions.</b>
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## **OBJECTIVE 3: To formulate a monitoring and evaluation framework to support the national response to AIDS**

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Monitoring and evaluation is required at a macro level (across the whole programme) and at a micro level (within projects, services and other initiatives). AIDS programme managers have to develop an interest in M&E across the entire programme. An extensive amount of information is usually collected throughout the projects, services and initiatives of the programme. The programme manager needs to coordinate a process for deciding how to manage this information and determining the indicators that are to be used to report on the programme as a whole.

### **DEFINITIONS**

*Monitoring* is the routine tracking of the key elements of programme/project performance (usually inputs and outputs) through record-keeping, regular reporting and surveillance systems, as well as health facility observations and surveys. Monitoring helps programme or project managers to determine which areas require more effort and identify areas that might contribute to an improved response. In a well-designed M&E system, monitoring contributes greatly towards evaluation. Indicators selected for monitoring will be different from those for evaluation, depending on the reporting level within the health system. It is very important to select a limited number of indicators that will actually be used by programme implementers and managers. There is a tendency to collect information on many indicators and report this information to levels where it will not and cannot be used for effective decision-making. In addition, monitoring is used for measuring trends over time; thus the methods used need to be consistent and rigorous to ensure an appropriate comparison. More information is needed at project management level than at national or international levels. The number of indicators reported on should decrease substantially from the subnational to the national and international levels.

*Evaluation* is the episodic assessment of the change in targeted results related to the programme or project intervention. In other words, evaluation attempts to link a particular output or outcome directly to an intervention after the passage of a period of time. Evaluation thus helps programme or project managers to determine the value or worth of a specific programme or project. Cost-effectiveness and cost-benefit evaluations are useful in determining the added value of a particular programme or project. In addition, evaluation should also relate the outputs of a project/programme to wider national trends in behaviour and health outcomes. This type of evaluation is important

even if the project/programme is only one part of a collective effort to impact the disease.

Monitoring and evaluation have different objectives and the methodology used for each is different. In general, evaluations are more difficult in view of the methodological rigour needed: without such rigour, wrong conclusions can be drawn on the value of a programme or project. They are also more costly, especially outcome and impact evaluations, which often require population-based surveys or other rigorous research designs. However, evaluation should leverage data and surveys that are nationally available and regularly undertaken, e.g. demographic and health surveys, vital registration or sentinel site disease data.

## FEATURES OF A GOOD M&E SYSTEM

Examine the points given in the table and think about how they relate to your current M&E system.

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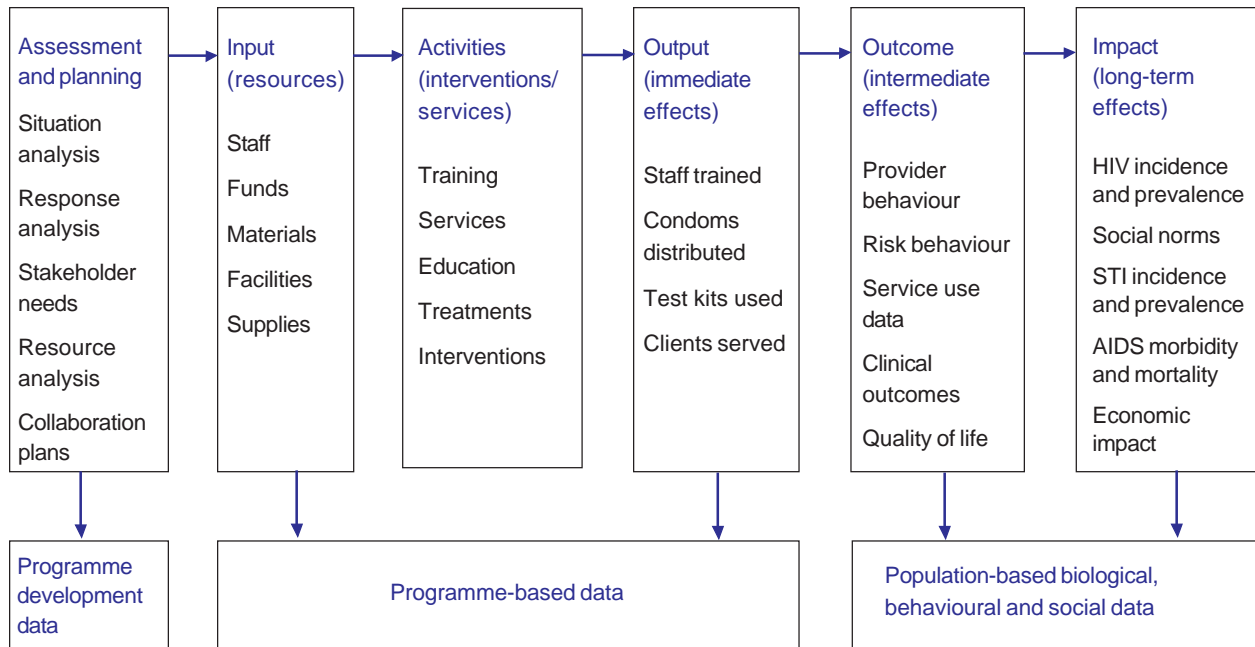
M&E unit	<ul style="list-style-type: none"> <li>• An established M&amp;E unit within the national AIDS programme, with experienced technical and data management staff. This unit should be integrated with the broader statistical services of the country.</li> <li>• Guidelines and guidance for M&amp;E to subnational districts, regions and provinces</li> <li>• Guidelines for linking M&amp;E to other sectors such as education, labour, and the military</li> <li>• A budget for M&amp;E that is between 5% and 10% of the national HIV/AIDS budget from all sources. On average, 7% should be used as the reference.</li> <li>• A significant national contribution to the national M&amp;E budget (not total reliance on external funding resources)</li> <li>• A formalized M&amp;E link, particularly with appropriate line ministries, nongovernmental organizations (NGOs) and donors, and national research institutions aimed at enhancing operations research efforts</li> <li>• A multisectoral working group to provide input and achieve consensus on indicator selection and various aspects of M&amp;E design and implementation</li> <li>• Expertise in the M&amp;E or an affiliated unit to cover: epidemiology, behavioural/social sciences, data processing and statistics, data dissemination, resource-tracking (both commodity and financial resources)</li> </ul>
Clear goals	<ul style="list-style-type: none"> <li>• Well-defined national programme or project plans with clear goals, targets and operational plans. National M&amp;E plans should be revised every 3–5 years, and M&amp;E operational plans updated yearly.</li> <li>• Regular reviews/evaluations of the progress of implementation of the national programme or project plans against targets</li> <li>• Coordination of national and donor M&amp;E needs</li> </ul>

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Indicators	<ul style="list-style-type: none"> <li>• A set of priority indicators and additional indicators at different levels of M&amp;E</li> <li>• Consistent indicators that are comparable over time and have clear targets</li> <li>• Selection of a number of key indicators that are comparable with those of other countries</li> </ul>
Data collection and analysis	<ul style="list-style-type: none"> <li>• An overall national-level data collection and analysis plan, including data quality assurance</li> <li>• A plan to collect data and periodically analyse indicators and associated datasets at different jurisdictional levels of M&amp;E (including geographical)</li> <li>• Second-generation surveillance, where behavioural data are linked to disease-surveillance data</li> </ul>
Data dissemination	<ul style="list-style-type: none"> <li>• An overall national-level data dissemination plan, with basic data sets freely and transparently available in a timely manner. Transparency is essential for real accountability.</li> <li>• A well-disseminated, informative annual report</li> <li>• Annual meetings to disseminate and discuss M&amp;E and research with policy-makers, planners and implementers</li> <li>• A clearinghouse for generation and dissemination of findings</li> <li>• A centralized database or library for all HIV/AIDS data collection, including ongoing research which is transparently and publicly available</li> <li>• Coordination of national and donor M&amp;E needs</li> </ul>
Special studies	<ul style="list-style-type: none"> <li>• Select priority outcome/evaluation studies</li> <li>• Include qualitative studies as needed</li> <li>• Include operational research studies</li> </ul>

## ESTABLISHING AN M&E FRAMEWORK

The “input–activities–output–outcome–impact” framework is generally used to select indicators for inclusion in M&E. The following framework provides a logical order for collecting and analysing information.



## KEY STRATEGIES IN M&E

This section highlights some of the key strategies used in M&E, setting out the range of methods available under each strategy and the main questions that can be answered using these strategies.

### PROCESS M&E

Process monitoring involves gathering data on how implementation is progressing. It provides important information on the sequence of events, the factors that assisted or prevented implementation and important feedback from recipients of services about what they found effective. Many of the activities of a programme are captured in process monitoring. Data for process M&E can be collected from project records, service activity records, client feedback questionnaires or focus group discussions, interviews with project or service staff, observation of services, facility audits, interviews with referral agencies and interviews with people from target populations who did not access or use the offered services.

### Uptake and coverage monitoring

Monitoring the coverage and use of services and programmes provides vital information on reach into target populations. This can be done by monitoring geographical coverage (using mapping techniques) and by keeping a track of the coverage of individuals over time. Project or service records can provide the data for this monitoring, along with surveys of at-risk populations to ascertain that they have used the services and programmes.



## Outcome evaluation for discrete interventions

It is important to be able to measure the outcomes of a particular intervention to monitor effectiveness, tailor the intervention better to the needs of the recipients and also determine how the intervention model can be replicated for other populations or areas. This generally involves the design of a study that combines qualitative and quantitative research methods. It is important to conduct outcome evaluation after the inception of an intervention. It is important, however, to start the evaluation only after the intervention has had sufficient time to have an effect.

Some key steps for outcome evaluation involve:

- establishing common goals and evaluation questions
- developing a methodology that suits the population being evaluated
- establishing a collaborative relationship with key stakeholders
- establishing regular feedback mechanisms to assist in programme modification
- ensuring that the evaluation is used to strengthen the programme.

## Choosing indicators for M&E of the national programme

A vast array of indicators is available for monitoring and evaluating national programmes. These are summarized in the resources at the end of the module.

The following guiding principles can be used in the selection of indicators.

- Keep the number of indicators to the minimum needed, with specific reference to the level of the system that requires and will use indicators to make programming and management decisions.
- Use a conceptual framework for M&E for proper interpretation of the results.
- Ensure that the indicators are linked to the goals and objectives, and that they are able to measure changes over the time period of the programme.
- Ensure that the standard indicators are used to the extent possible for comparability over time or between population groups.
- Ensure that indicators relate to defined services which are delivered by the programme. Attempt to define the standard package of services provided by the programme and the groups targeted.
- Consider the cost and feasibility of data collection and analysis.
- Take into account the stage of the AIDS epidemic.

**EXERCISE B**

***(Country group work followed by intercountry group discussion)***

A separate handout contains a summary of indicators for national HIV prevention and care.

In country groups, select key programme indicators with attention to your priority populations. Identify whether these are input, activity, output, outcome or impact indicators. Remember to reflect on the main aims of the programme: reducing HIV transmission and reducing the impact of HIV on people living with HIV/AIDS (PLHA) and people affected by HIV.

When you have made your selection, discuss whether your current information management system collects information that would allow you to accurately report on these indicators.

**Discuss the reasons for your selection of indicators with the intercountry group.**

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## **OBJECTIVE 4: To describe the role of the national programme in setting and coordinating a national research agenda for guiding the programme**

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Surveillance and M&E systems provide only part of the information necessary to shape a national AIDS programme. Biological and behavioural data can indicate the extent of the epidemic and the risk behaviours present, but these give little information about the context of risk. Service use data can record only the number of people accessing services, but is not indicative of the people ignoring services and the reasons for this.

Social, cultural and operational research provides important details about exactly what shapes people's behaviour and what affects their ability to access services and programmes.

While the national AIDS programme may not be in a position to carry out research, it has a key role to play in ensuring that the research carried out answers the questions of main concern to the programme. This can be done by:

- setting up a research subcommittee of the national AIDS committee, which develops a proactive research agenda, priority questions for research and a plan for encouraging institutions to take on these research questions;
- ensuring that donors include research that is of interest to the programme in any bilateral projects;
- facilitating communication and collaboration between researchers and practitioners, particularly in the area of community and nongovernmental organization interventions, to ensure that research is practice-based and that practitioners develop their capacity to contribute to the research;
- establishing an AIDS research policy that includes national ethical principles and guidelines for AIDS research;
- facilitating meetings and conferences to bring researchers, practitioners and policy-makers together;
- encouraging key social and cultural researchers, and research institutions in the country to contribute to the design and implementation of AIDS research.

## RESOURCES

1. *Guidelines for second-generation HIV surveillance*. Geneva, WHO, 2000.
2. *WHO/SEARO Surveillance training modules*. WHO, 2006.
3. *Initiating second-generation surveillance – practical guidelines*. Geneva, WHO, 2002.
4. *Monitoring and evaluation toolkit*. Geneva, The Global Fund, WHO, January 2006.
5. *M&E of HIV prevention programmes for most-at-risk populations*. Geneva, UNAIDS, July 2006.
6. *National AIDS programmes – a guide to indicators for monitoring and evaluating national antiretroviral programmes*. Geneva, UNAIDS, 2005.
7. *Training toolkit, HIV care and antiretroviral treatment recording and reporting system*. New Delhi, WHO-SEARO, 2006.
8. *Monitoring the declaration of commitment on HIV/AIDS: guidelines on construction of core indicators*. Geneva, UNAIDS, July 2005.



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ISBN 92-9022-302-3



9 789290 223023