

NATIONAL AIDS PROGRAMME MANAGEMENT

MODULE 5 SETTING COVERAGE TARGETS AND CHOOSING KEY OUTCOME INDICATORS



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A Training Course

Module 5

Setting coverage targets and choosing key outcome indicators

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Module 5

Setting coverage targets and choosing key outcome indicators

LEARNING OBJECTIVES

After completing this module, participants will be able:

1. To set coverage targets for priority populations identified in Module 3.
2. To review methods for estimating the size of priority populations.
3. To select key outcome indicators and related targets for priority populations.

INTRODUCTION

In Modules 3 and 4, we worked on setting priorities for interventions with populations most affected by HIV. In this module, we will build on that work and set some initial targets for programmes.

OBJECTIVE 1: To set coverage targets for priority populations identified in Module 3

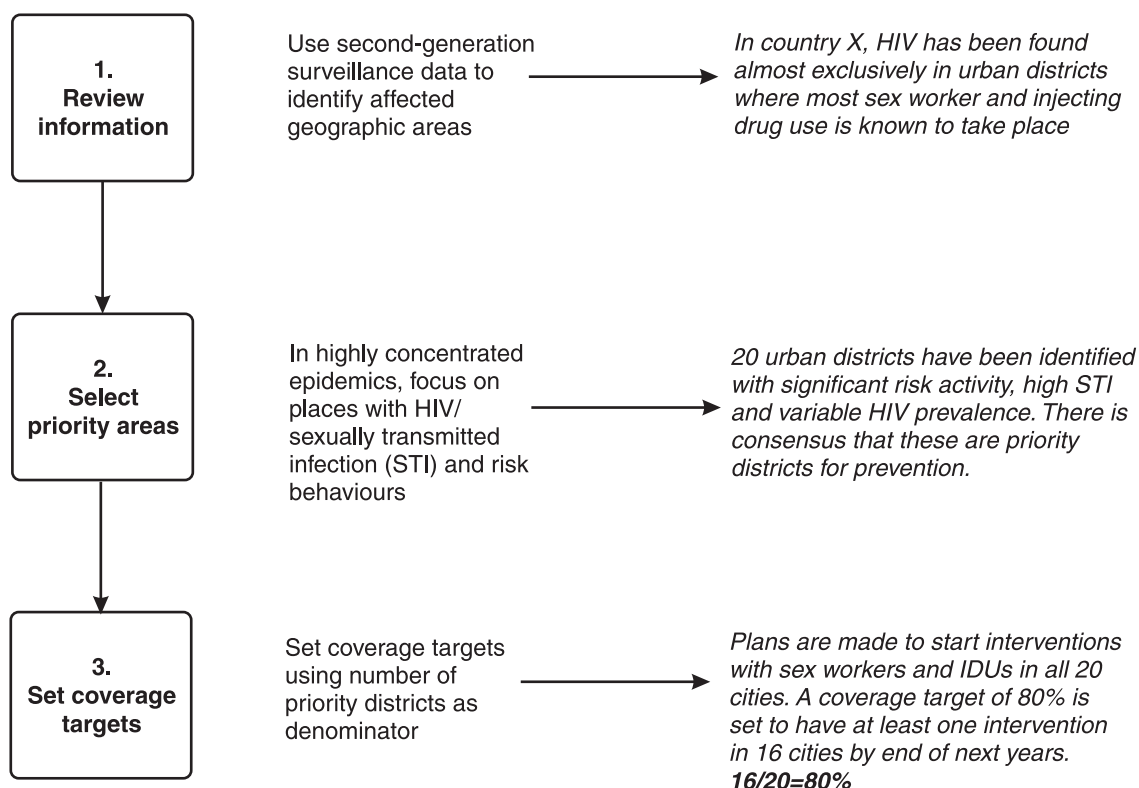
With regard to targeted interventions, coverage refers to their availability to, and utilization by, the populations concerned. There are many examples of model projects, innovative pilots and “best practices” that provide good services but reach only a small fraction of the population in need. In the South-East Asia (SEA) Region as a whole, for example, only 20% of sex workers, 3% of injecting drug users (IDUs) and 2% of men who have sex with men (MSM) are estimated to have access to even basic HIV prevention services. Even the best interventions will have little public health impact if they are implemented on a limited scale.

Programme managers should try to estimate needs and set targets to increase the coverage of priority interventions. This task requires some information about existing services, geographical distribution and the size of the populations in need (see Module 1). With this information, programme managers can set coverage targets that can be used to guide programme activities and monitor progress. Depending on the information available, targets can be set and coverage monitored in several ways:

- by geographical distribution, such as on the basis of administrative units (district, province, etc.);
- by individuals, based on population estimates;
- by combining the two methods for a more complete picture.

Estimates of coverage by geographical distribution are simpler because they do not require accurate estimates of population sizes. They do, however, require some analysis to decide which geographical units to include as the denominator. For example, a country with a low-level epidemic may decide that risk is concentrated in only 20% of districts with large urban populations and along borders. It would be reasonable to use these districts as the denominator for coverage targets. Similarly, when setting an 80% target for interventions among sex workers within two years, it would not make sense to use all districts as the denominator; rather, one would aim to establish interventions in 80% of targeted districts. Review the steps below and think about how this method of setting targets might work in your country.

example...



Estimates of coverage by individuals require more data on the size of populations (denominator) and plans for periodically measuring the number of people reached by interventions or services. While estimating coverage, priority should be given to populations most at risk, such as sex workers, MSM and IDUs. It may also be useful to set a time frame for the coverage target, for example in the short, medium and long term. A target from the country depicted above may be to reach 80% of sex workers in priority districts by the end of two years. This would require a system for recording new contacts with sex workers to track the cumulative number reached (numerator data).

Examples of these two approaches are given in the exercises below. In both cases, targets can be expressed as absolute numbers (for example, at least 16 out of 20 districts) or as percentages (at least 80%).

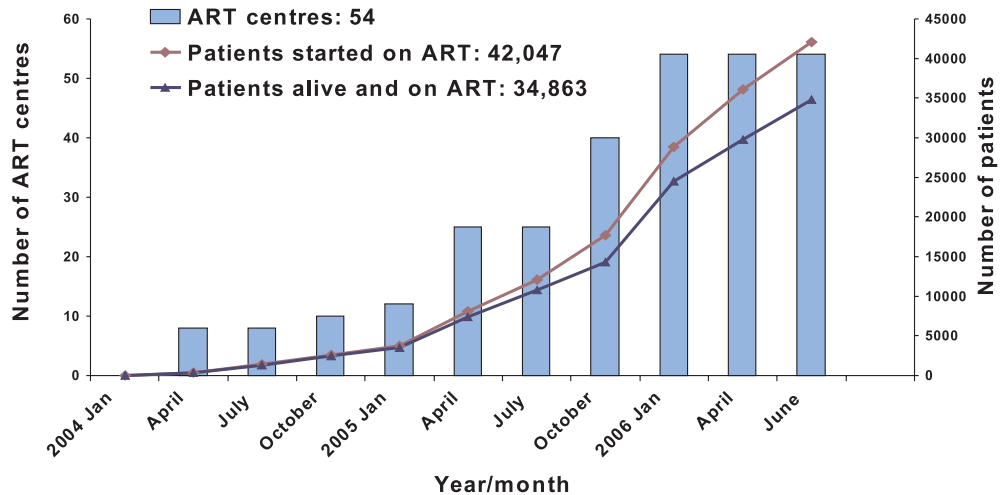
The basic steps in setting targets and monitoring progress include

1. Assessing available data and deciding whether to set targets based on geographical units or individual coverage.
2. Considering feasibility with regard to health system capacity, available resources, etc. This should include consultation with a range of partners.
3. Estimating denominators as appropriate to the method chosen in Step 1.
4. Monitoring numerator data (new districts added or new contacts) over time.

EXERCISE A

(Individual work followed by country group discussion)

Study the figure below and answer the following questions about coverage targets.



1. A country began scaling up antiretroviral therapy (ART) in early 2004. What do the data tell us about coverage? What more would you want to know?

2. Choose one intervention from Module 5 and set a realistic coverage target. Be sure to specify the unit of measurement and time period for the target. Discuss what data you will collect for the numerator and denominator and how you will collect it.

Inform your facilitator when you are ready for country group discussions.

OBJECTIVE 2: To review methods for estimating the size of priority populations

To measure reach and coverage, it is helpful to estimate the size of target populations for each intervention. The choice of method for estimating population size will depend on the characteristics of the population, how the information will be used, the types of information and resources available. Given below is a summary of the methods that are most frequently employed.

CENSUS/ENUMERATION METHODS

Synopsis: These are efforts to count all members of the target population or a sample of the target population.

Main features: In a census, all members of a population are counted. With enumeration methods, a sampling frame (i.e. a list of brothels or shooting galleries) is developed, and members of the population at the selected venues are counted. This figure is then adjusted to obtain an overall estimate of the population size.

Assumptions: These methods assume that most-at-risk populations can be reached at identified venues and then counted; however, members of most-at-risk populations can be hidden. A census can sometimes be impractical, as it is expensive and logistically difficult to conduct, particularly when members of the population move between venues.

MULTIPLIER METHODS

Synopsis: Use data from two overlapping sources.

Main features: The first set of data usually comes from a service that the population uses or an institution with which individuals come into contact. This may include, for example, the number of sex workers treated at the STI clinic or the number of IDUs arrested. The second set of data usually comes from a survey of the target population, where members are asked about their contact with the service or institution. The number served or contacted is then multiplied by the inverse proportion of the percentage of the target population that reports contact or that is covered by the service. For example, if the number served was 500 and 10% of the target population had reported contact, the estimated population size would be 5000 ($500 \times 100/10$).

Assumptions: While multiplier methods are relatively straightforward, care must be taken to ensure that the populations from both data sources correspond, so that members of the population survey have a chance to be included in the service or institutional dataset.

POPULATION-BASED SURVEYS

Synopsis: The prevalence of HIV-related risk behaviour is estimated from surveys of the general population or a subset of the general population.

Main features: Respondents from a survey of the general population or from a survey of a subset of the general population (e.g. military, youth, etc.) are asked whether or not they have practised HIV-related risk behaviours. The percentage practising a particular behaviour is then applied to census data or size estimates of the whole population to arrive at an estimate of the total number practising this behaviour.

Assumptions: These surveys are generally designed as household surveys and provide robust estimates of relatively common behaviours. As many of the behaviours that define most-at-risk populations are not common in the general population, these may be missed or estimates may not be very robust. Household-based surveys will not include those in brothels, in the street, or otherwise not at home. These surveys are most useful for estimating the number of men who engage in paid sex with a sex worker and less useful for less common, and more highly stigmatizing, behaviours.

CAPTURE-RECAPTURE

Synopsis: Uses two or more independent and overlapping samples to calculate the population size.

Main features: Researchers “mark” a random sample of members of the target population through either an interview or other means. They then take a second sample and determine the proportion also caught or “marked” in the first sample. A third random sample can also be used and the number marked—once, twice, or not at all—is used to estimate the total population size.

Assumptions: This method assumes a closed population, which means members will not move in and out of the population between rounds of the survey. It also assumes that all members of the population have an equal probability of being marked.

Other methods that have been used with varying degrees of success include the Delphi method – where a group of known experts is asked about the number of group members there are – and nomination methods – where members of a population are asked to provide other contacts from the same population. Respondent-driven sampling is a promising and innovative nomination method that has been used to estimate the size of IDUs and other populations in the United States of America.

OBJECTIVE 3: To select key outcome indicators and related targets for priority populations

While it is important to set targets and monitor progress related to programme coverage, programmes should also set targets and monitor indicators of key outcomes that they are trying to bring about.

For example, a programme may aim to reach 50% of IDUs with harm-reduction interventions in the next two years. It may also set a key outcome target of increasing the proportion of IDUs who report safe injection practices from 50% to 70% in that period. Review the figure in Exercise A. Identify indicators for coverage and outcomes. How are these different types of indicators important to programmes?

Outcome indicators are defined for most programme areas. Some examples

- Condom use during last sex (sex workers, MSM)
- Use of sterile injecting equipment (IDU)
- ART outcomes at follow-up (people living with HIV/AIDS [PLHA] on ART)

Outcome indicators should be easy to measure. For example, data collected from clinics as part of routine services are usually compiled on a regular basis (weekly or monthly). Indicators based on this kind of routine reporting permit close monitoring of trends over time.

Other outcome indicators may require special surveys. For example, most MSM are healthy and have little contact with health-care services. The programme is focusing on scaling up outreach and condom promotion in areas where MSM meet. It is possible to conduct surveys every year or two to ask about condom use, risk behaviours and STIs. If a local clinic provides services to many MSM, similar data can be collected more frequently between surveys from MSM patients. Together, routinely collected data and data from surveys provide a more complete picture.

Indicators should also be clearly defined. Review the table below and think about how the information could be obtained, how often, in what places, etc.

Different indicators can be compared or *triangulated* to give a better idea of the progress made. Key impact indicators (from second-generation surveillance, for example) should be tracked with outcomes to see if observed trends make sense. For example, increasing

rates of condom use reported by sex workers would be an indicator that prevention programmes are achieving success. If rates of STI among sex workers and clients were falling at the same time, this would be even more encouraging. Finally, declining HIV prevalence among these groups over the longer term would provide a very strong evidence that interventions were changing behaviour and having an impact on sexual transmission. The more sources of data that can be triangulated, the more confidence you will have in the indicators. Review the following indicators and think about how they can be triangulated with UNGASS/MDG indicators to monitor programme outcomes.

Risk behaviours

Indicator	Definition
Sex worker risk behaviour*	% of sex workers reporting condom use with their most recent client, in the last month
Sex work clients risk behaviour*	% of men reporting condom use in sex work contact during the last 12 months
IDU injecting risk behaviour*	% of IDUs reporting non-sharing of injecting equipment during the last 12 months
IDU sexual risk behaviour*	% of IDUs reporting condom use last time they had sex
MSM risk behaviour*	% of MSM reporting condom use in last sexual contact of risk, in the last 12 months

STI/HIV/AIDS prevalence

Indicator	Definition
STI trends (several STIs)**	% (N°) of reported STI cases over the years
HIV/AIDS prevalence rates in young adults*	% of estimated HIV-positive, estimated number of AIDS cases and deaths

For care and treatment, outcome indicators are equally important.

Indicator	Definition
Number of ART patients*	Number (%) of HIV-infected persons and those with advanced HIV infection receiving ART
Survival of ART patients	% of new ART patients alive, after 6 and 12 months of initiation of treatment

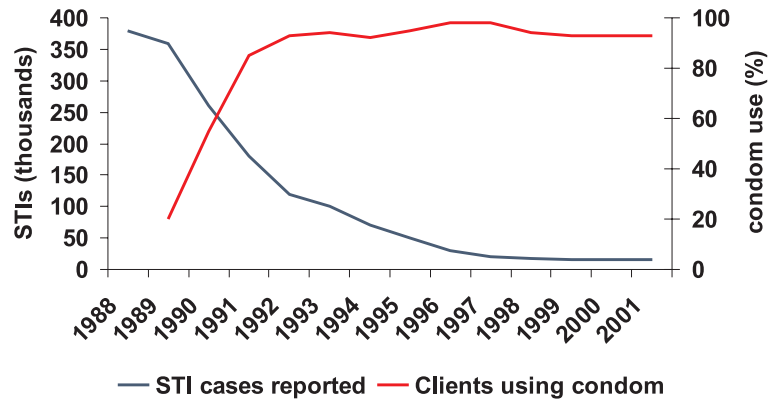
* UNGASS/MDG indicators

** STI indicators may vary from country to country but include syphilis seroprevalence as well as incidence of common syndromes (genital ulcer disease in men and women, urethral discharge in men).

EXERCISE B

(Country group work followed by intercountry group discussion)

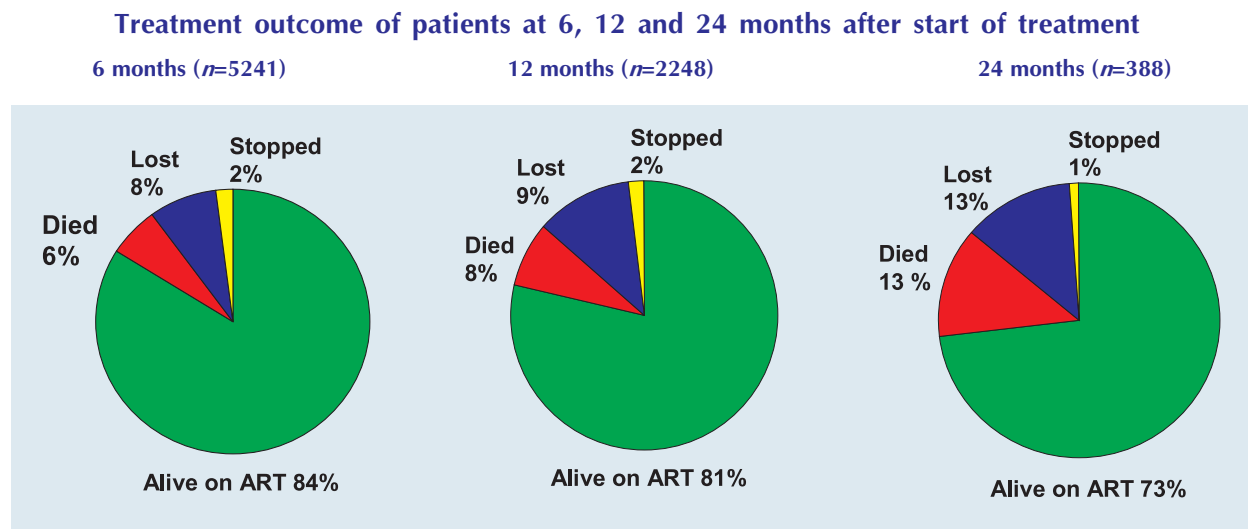
1. Thai condom use and STI data among female sex workers (or other triangulation exercise).



- (a) Discuss the trends and implications for programme managers.

- (b) How can different types of data (monitoring data, second-generation surveillance, etc.) best be used to monitor outcomes?

2. We have seen earlier that there was a rapid increase in the coverage of ART. What more can we say about the ART programme from the figure below?



(a) What are the main outcomes for PLHA who have started treatment?

(b) How do you interpret the information on outcomes in the three graphs? Based on these data, what should the programme look into?

Inform your facilitator when you are ready for intercountry group discussions.

EXERCISE C

(Country group work followed by intercountry group discussions)

Review the outcome indicators presented on page 13 in this module.

1. Rank the indicators in terms of their importance to the epidemic in your country.

2. Consider feasibility: what factors would you consider in selecting these indicators?

3. Discuss how several indicators can be triangulated to validate data.

Inform your facilitator when you are ready for intercountry group discussions.

RESOURCES

1. M&E of HIV prevention programme for most-at-risk population, UNAIDS, July 2006.
2. *Training toolkit – HIV care and ART recording and reporting system*. New Delhi, WHO Regional Office for South-East Asia, 2005.



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