# National Guidelines on Monitoring and Evaluation of HIV Response in Nepal, 2012

Ministry of Health and Population
National Centre for AIDS and STD Control
Teku, Kathmandu

(Updated in November 2013)

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## FOREWORD

I am pleased to present the updated version of **National Guidelines on Monitoring and Evaluation of HIV Response in Nepal 2012 (updated in November 2013)** which was developed during the consultative process among wide range of stakeholders that include the government, technical experts, networks related to Human Immuno-deficiency Virus (HIV)/Sexually Transmitted Infections (STIs) in Nepal alongside implementing partners in HIV response, external development partners and people living with HIV donor organizations. These guidelines provide standards of overall monitoring and evaluation (M&E) of overall national response to HIV as well as specific interventions, including M&E framework, recording and reporting tools, flow of routine data, M&E standards at national and specific service site, M&E roles of key partners, and estimated budget.

Despite success in curving the level of epidemic, HIV is still a major public health problem and globally affecting socioeconomic life of poor people, including Nepal. In Nepal, HIV is characterized as a concentrated epidemic with HIV prevalence of 0.28 percent among adult aged 15–49 years in 2012. There are approximately 48,600 people who are estimated to be living with HIV in 2012, where four out of every five persons get sexual transmission of the infection. People who inject drugs, men who have sex with men (MSM) and female sex workers (FSWs) are the key populations who are at a higher risk of acquiring HIV. Male labour migrants (particularly in areas where there is high HIV prevalence in India where they often visit FSWs) and clients of sex workers in Nepal are likely to be transmit infections to low-risk general populations.

Since the first case of HIV in 1988, the country has been responding through various policy and structural arrangements, programmatic approaches while creating supporting enablers to reducing spread of HIV. The national response to current HIV epidemic situation is guided by "National Policy on HIV and STI (2011)" and "National HIV/AIDS Strategy (2011–2016)" that apply the principles of universal access using the rights-based approach, and encompassing a multi-sectoral approach to combat the epidemic.

Adoption of appropriate monitoring and evaluation systems, tools and approaches is an essential core of the response to the epidemic, which helps to understand the status of epidemic, track the resources; measure performance, justify results, identify gaps, prioritize areas of improvement, mobilize and allocate resources, improve implementation efforts, formulate new policies and strategies, make informed decisions, and understand the value for money. A clearly defined national guidelines monitoring and evaluation is critical in order to address these needs of having a strong accountability framework among stakeholders.

I am very thankful to all the individuals and institutions who contributed in preparing the guidelines through the consultative process. These guidelines are expected to be updated regularly and I strongly recommend all the stakeholders working to combat HIV in Nepal to use and follow these guidelines to monitor, review and evaluate our interventions of national response as outlined in the guidelines in order to achieve the impacts as defined in the national strategy for HIV and AIDS in Nepal.

Dr Naresh Pratap KC
Director

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- Members of the HIV - Strategic Information Technical Working Group (SITWG)
- Participants of the M&E experts group meeting and the stakeholders' workshop
- Staff member of strategic information and other programme units of NCASC
- All those individuals and institutions who directly or indirectly contributed their part

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**National Centre for AIDS and STD Control**
Teku, Kathmandu

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# LIST OF ABBREVIATIONS

| | |
|---|---|
| AIDS | Acquired Immunodeficiency Syndrome |
| ANC | Antenatal Clinic |
| APR | Annual Progress Review |
| ART | Antiretroviral Therapy |
| BSS | Behavioural Surveillance Survey |
| CCC | Community Care Centres |
| CHBC | Community and Home Based Care |
| DACC | District AIDS Co-ordination Committee |
| DHO | District Health Office |
| DoHS | Department of Health Services |
| DPHO | District Public Health Office |
| EDP | External Development Partners |
| FSW | Female Sex Workers |
| GIS | Geographical information system |
| HBV | Hepatitis B Virus |
| HIV | Human Immuno-deficiency Virus |
| HMIS | Health Management Information System |
| HSCB | HIV and STI Control Board |
| HSS | HIV Sentinel Surveillance |
| HTC | HIV Testing and Counseling |
| IBBS | Integrated Biological and Behavioural Surveillance |
| IOM | Institute of Medicine |
| M&E | Monitoring and Evaluation |
| MESS | Monitoring and Evaluation System Strengthening |
| MoHP | Ministry of Health and Population |
| MSM | Men who have Sex with Men |
| MTR | Mid Term Review |
| NAC | National AIDS Council |
| NCASC | National Centre for AIDS and STD Control |
| NDHS | Nepal Demographic Health Survey |
| NGO | Nongovernmental Organization |
| NHRC | Nepal Health Research Council |
| NPHL | National Public Health Laboratory |
| NRCS | Nepal Red Cross Society |
| NSP | National Strategic Plan |
| OI | Opportunity Infection |
| PMTCT | Prevention of Mother-to-Child Transmission of HIV |
| PWIDs | People Who Inject Drugs |
| RBME | Result Based Monitoring and Evaluation |
| RDS | Respondent-Driven Sampling |
| RHD | Regional Health Directorate |
| SI-TWG | Strategic Information Technical Working Group |
| STD | Sexually Transmitted Disease |
| STI | Sexually Transmitted Infection |
| TB | Tuberculosis |
| TG | Third Gender |
| TLCS | Time-Location Cluster Sampling |
| UA | Universal Access (to HIV prevention, treatment, care and support services) |
| UNAIDS | Joint United Nations Programme of HIV/AIDS |
| UNGASS | United Nations General Assembly Special Session on AIDS |
| USAID | United States Agency for International Development |
| VACC | Village AIDS Co-ordination Committee |
| WHO | World Health Organization |

# Chapter 1 INTRODUCTION



## 1.1 HIV Epidemic Situation in Nepal

In Nepal, the first-ever case ofHIV was reported in 1988. Ever since, the nature of the HIV epidemic in the country has gradually evolved from being a "low-prevalence" to "concentrated" epidemic. Over 80 per cent of the HIV infections are transmitted through heterosexual transmission (Figure 1). People who inject drugs (PWIDs), men who have sex with men (MSM) and female sex workers (FSWs) are the key populations at higher risks ofspreading this epidemic. Male labour migrants (who particularly migrate to high HIV prevalence areas in India where they often visit FSWs) and clients of FSWs in Nepal are playing the role of bridging population groups that transmit infections from the key populations at higher risk to the low-risk general population. As the epidemic is maturing—approximately 24 years have elapsed since the first HIV case was reported in 1988 – increasingnumber of infections are being recorded among the low-risk general population. However, the spread of the epidemic is primarily driven by the infections among key populations at higher risks and their sexual partners, rather than by heterosexual transmission among the general population in Nepal (Figure 1).

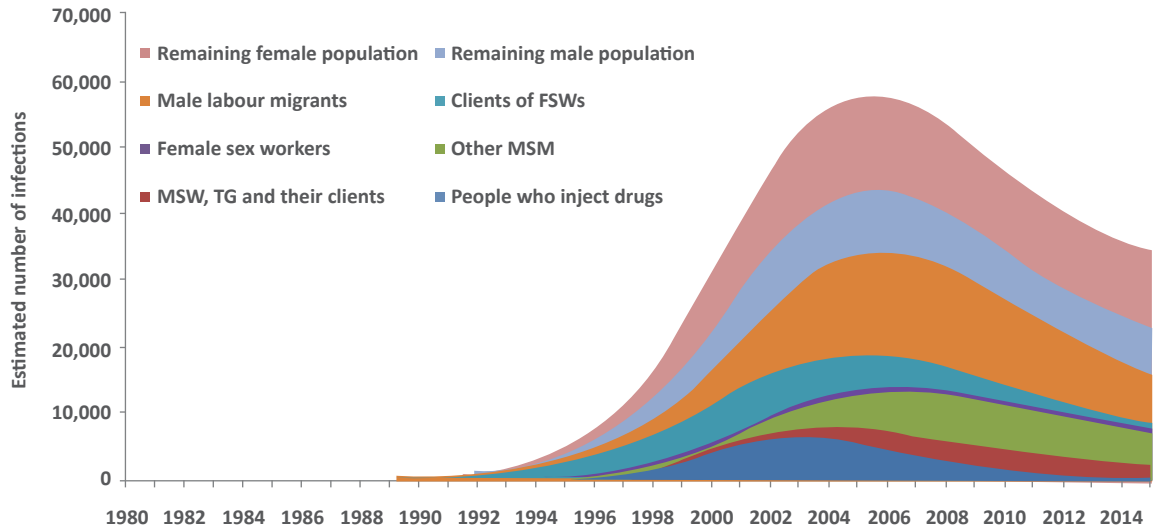



*Figure 1: Distribution of estimated HIV infections among risk population groups aged 15–49 years: 1980–2015*

As of 2011, there were approximately 50,200 adults and children living with HIV in Nepal with an estimated overall prevalence of 0.30 per cent among the adult (15–49 years)[1] population.

In 2011, about three out of every five infections were among the key populations at higher risk (PWIDs, MSM, FSWs, male labour migrants and clients of FSWs), while the rest (two of every five infections of all HIV infections were among low-risk general male and female adults (Figure 1). The prevalence of HIV infection was estimated to be the highest among the adult segment aged 25–49 years who are economically productive

1 NCASC (2012) National Estimates of HIV Infections in Nepal, 2011. March 2012.

and sexually active. The prevalence of HIV infection among the youngest stratum of the population, that is, below the age of 15 years, was the lowest; a majority of the HIV infections among children in this age group were owing to mother-to-child transmission (MTCT).

Nepal has produced evidence[2] that targeted prevention interventions are effective in restraining the spread of HIV, particularly among key populations at higher risk such as PWIDs, FSWs and their clients (Figure 2). Overall, HIV prevalence among adults (15–49 years) had begun declining gradually from around 2006 (Figure 3).

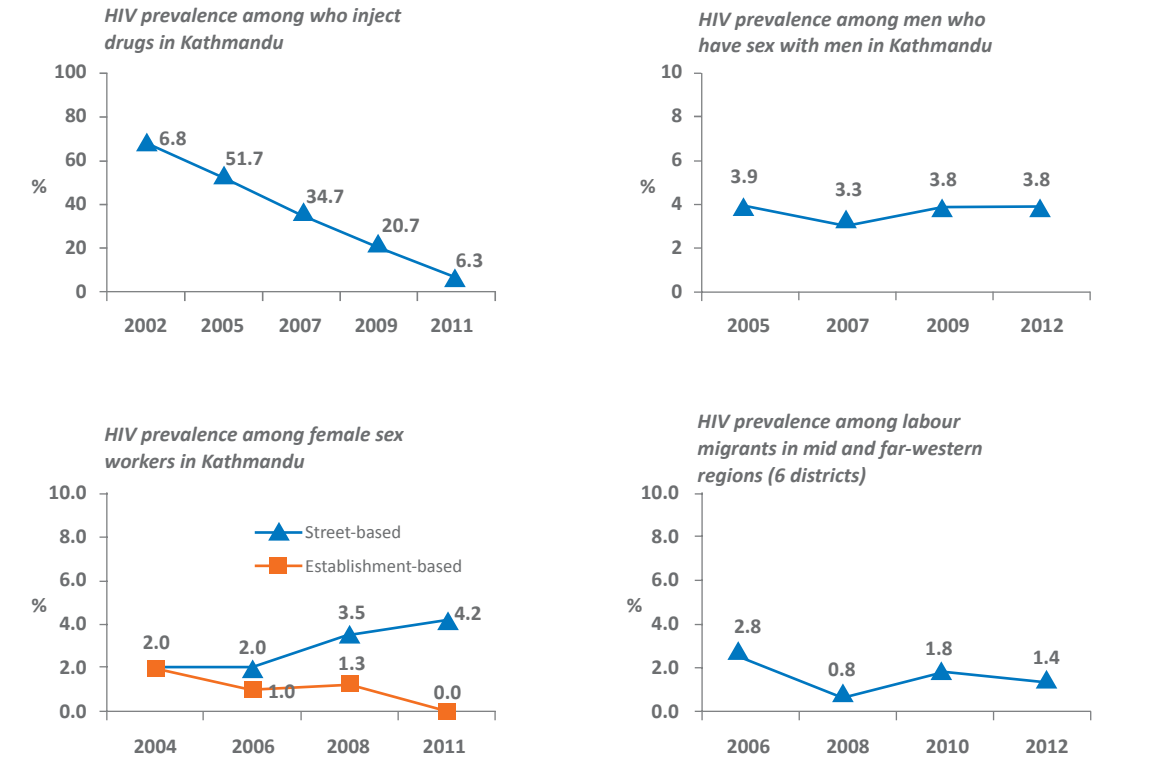



*Figure 2: Changes in HIV prevalence among key populations at higher risk in Nepal, 2001–2012*

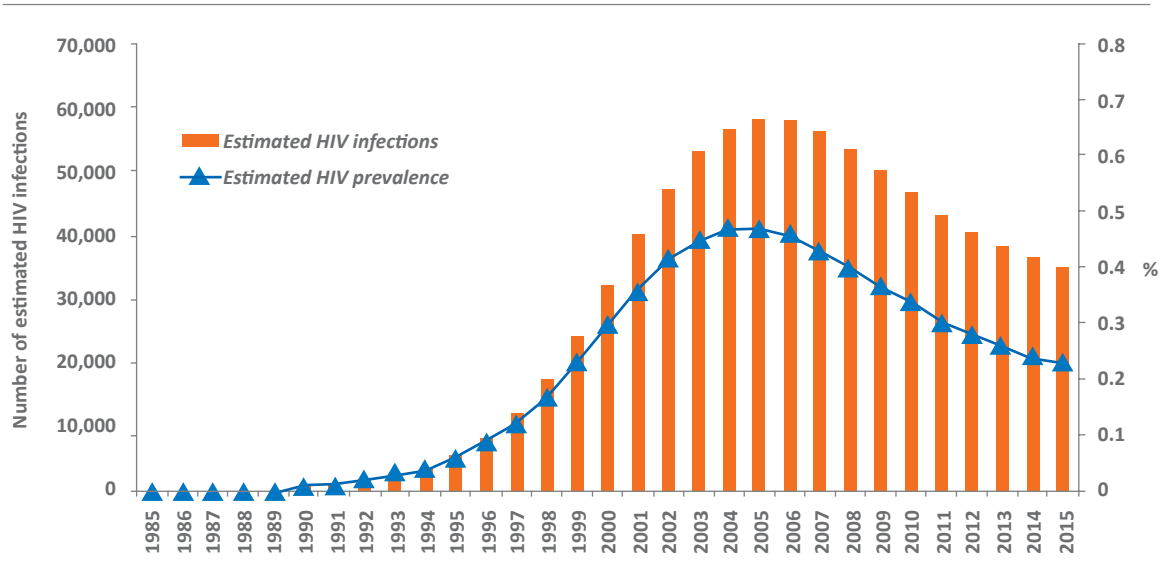



*Figure 3: Declining HIV prevalence among the adult (15–49) population group in Nepal: 1985–2015*

2 NCASC (2011) National HIV/AIDS Strategy, 2011–2016, December 2011.

## 1.2 National Response to HIV and Structure

Upon tracking of the first case of HIV in 1988, the country has been responding throughvarious policy and structural arrangements, programmatic approaches and creating supporting enablers (Figure 4) to contain the spread of HIV.

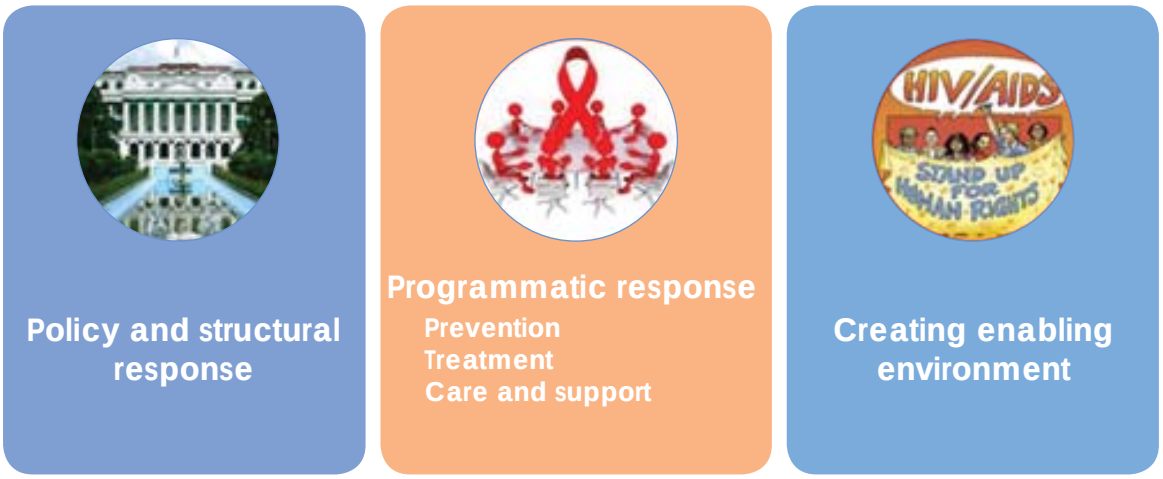



*Figure 4: Strengthening of National Response to HIV epidemic in Nepal*

### Policy and Structural Response

The national response to HIV is guided by "National Policy on HIV and STI, 2011" and "National HIV/AIDS Strategy 2011–2016", which use the principles of universal access, that is, using a rights-based approach and encompassing a multi-sectoral approach to combat the epidemic.Since tracking of HIVin 1988, the government has come up with policy guidelines starting from the first national AIDS prevention and control program in 1988 to the fourth rounds of National HIV/AIDS Strategy, 2011-2016 (Table-1). The principle policy guidance is to respond to the epidemic in comprehensive aspects through integrated approach by all relevant stakeholders including the government, non-government organizations, donors, and infected and affected communities with the common objective.

At the apex level, National AIDS Council (NAC) chaired by the Rt. Honourable Prime Minister is leading the overall national response to the HIV epidemic in the country[3] . The Ministry of Health and Population (MoHP) is responsible for the overall health sector response policy guidance, planning, and monitoring of

*Table 1: Chronology of National Response to HIV epidemic in Nepal*

| Years | Response efforts |
|---|---|
| 1988 | First national AIDS prevention and control programme |
| 1990-1992 | First medium term plan |
| 1993 | National policy on blood safety |
| 1993-1997 | Second medium term plan |
| 1995 | National policy of HIV and AIDS |
| 1997-2001 | Strategic plan for HIV and AIDS prevention |
| 2002-2006 | National HIV/AIDS Strategy |
| 2006-2011 | National HIV/AIDS Strategy |
| 2011 | National Policy on HIV and STI, 2011 |
| 2011-2016 | National HIV/AIDS Strategy |
| 2014-2016 | Nepal HIV Investment Plan |

3 *Ministry of Health and Population (2011) National Policy on HIV and STI, 2011*

the epidemic at the national level. Currently, the national response is passing through the NepalHealth Sector Programme II (NHSP–II, 2010-2015). Within MoHP, National Centre for AIDS and STD Control (NCASC) is leading the overall planning, providing implementation guidance, implementation (of prevention, treatment, care and support interventions) andmonitoring of HIV response. HIV/AIDS and STI Control Board (HSCB) has envisioned acting as a secretariat of NAC, where the greater policy guidance to the various ministries for multi-sectoral response to the epidemic and monitoring of national response has been designed. District AIDS Coordination Committees (DACCs) has structured to lead the overall HIV response at the local level (district and below), where District Health Offices/ District Public Health Offices will be acting as secretariat of DACCs (Figure 5).

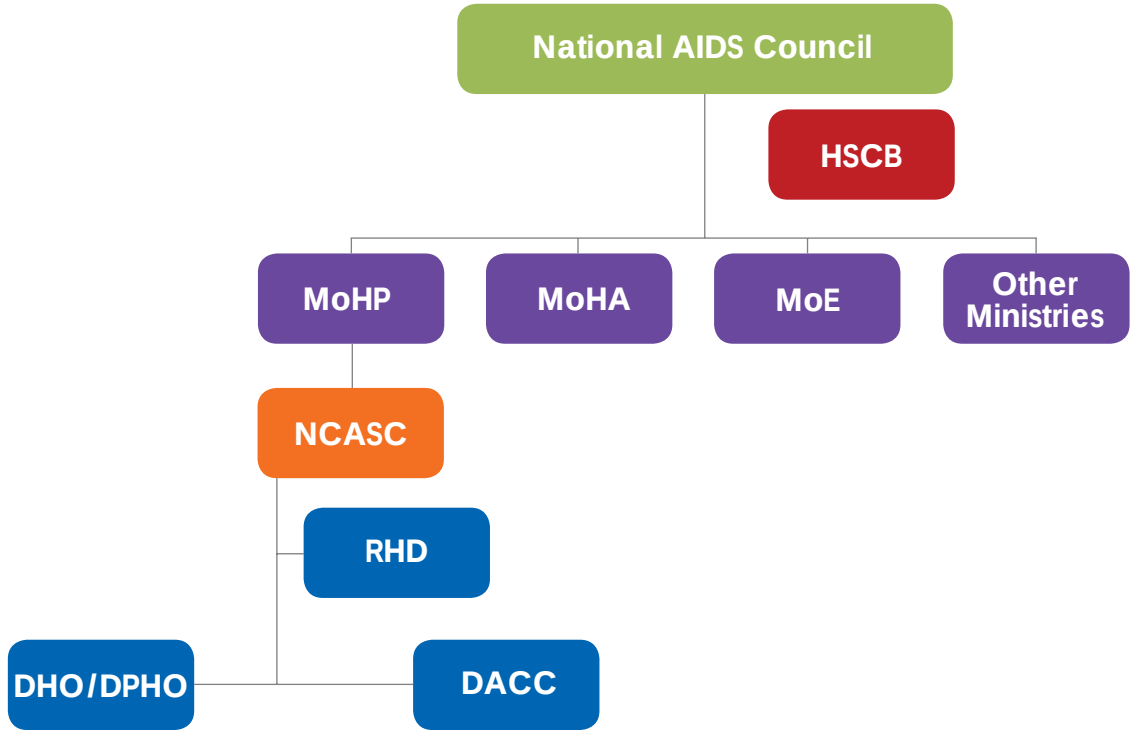



*Figure 5: Structural response to HIV epidemic in Nepal*

## Programmatic Response

National HIV/AIDS Strategy (2011-2016), has prioritized national response in three programmatic areas:

- Prevention of HIV: reduce new HIV infections by 50% by 2016 (including virtual elimination of paediatric HIV infections), compared to 2010;
- Treatment with high quality life extending antiretroviral drugs: reduce HIV-related deaths by 25% by 2016, compared to 2010 baseline; and
- Care and support services for infected and affected individuals and communities: provide comprehensive and linked services at all levels of the health care delivery system, from primary andsecondary to tertiary care andcommunity and home-based care.

The programmatic response will be delivered in a comprehensive packagethat integrate and/or establish strong linkages of HIV services with tuberculosis (TB), sexual & reproductive health, family planning, antenatal care, childbirth, newborn and postpartum care. The service delivery will be ensured to cover the total continuum of prevention to treatment, care and support services(Figure-6).

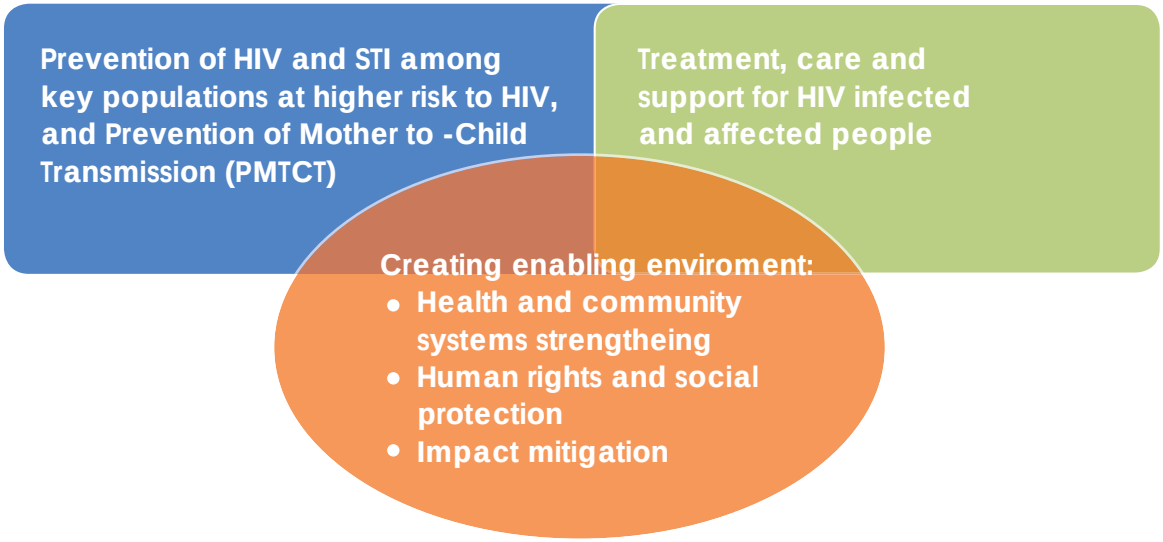



*Figure 6: Continuum of Prevention to Treatment, Care and Support*

### Enabling environment

To sustain the efforts made so far and to improve the access and coverage of prevention, treatment, care and support services, the national strategy has taken a wide range of approaches for creating enablers for strengthening of the national response such as health system, community system , human rights, social protection, legal reforms and impact mitigation[4].

## 1.3 Why to Monitor National Response?

Monitoring and evaluation of national response is a critical management tool to understand the status of epidemic, track the resources, measure performance, justify results (especially outcomes and impacts), identify gaps, prioritize areas of improvement, mobilize and allocate resources, improve implementation efforts, formulate new policies and strategies,make informed decisions, and understand the value for money. Adoption of appropriate monitoring and evaluation systems tools and approachesis an essential core of the response that helpscomprehend the following dimensionsto the epidemic:

- Understand the nature and status of the epidemic
- Progress against interventions set
- Effect of having those interventions
- Programme improvement through policy and programming reforms
- Meet national and international reporting commitments
- Ensuring the right to money (efficiency of money spent)
- Express the accountability of the response to people, government and donors(demonstrate transparency)

There is a need of a clearly defined national monitoring and evaluation guidelines for all those associated to HIV response in order to ensure the adequacy and high quality of strategic information products following the standard policy frameworks, processes, procedures, and institutionalized mechanisms.

## 1.4 Objectives of the National Monitoring and Evaluation Guidelines

The national M&E guideline is aimed to:

- set as standard of the national M&E systems, tool and approaches at all levels for all bycomplying to established policies and ensuring quality of the SI products generated for evidence and informed policy reforms and advocacy;
- provide guidance to all relevant stakeholders on M&E roles and functions while supporting the national response to HIV in Nepal;

4 *NCASC (2011) National HIV/AIDS Strategy, 2011–2016, December 2011.*



- guide users on data flow, data sources, data collection, analysis, reporting, strategic information products, and use of information for measuring the performance and improving the interventions;
- guide to address the key questions of the national response:
  - Are we doing the right things (Quality)?
  - Are we doing them right (Effectiveness)?
  - Are we doing them on a scale that is large enough (Coverage)
  - Are we making a difference (Outcome/Impact)?

## 1.5 Users of the Guidelines

The users of this guideline are all stakeholders that are engaged in HIV and STI related interventions in the country at local, district, regional and national levels. They include

- Programme managers and implementers in the government, non-government organizations, and private sectors
- Policy makers and programme designers
- Researchers and evaluators
- External development partners (EDPs)

Chapter

2

# STRATEGIC INFORMATION PRINCIPLES



## 2.1 National Monitoring and Evaluation Policies

The National Guidelines on M&E of HIV response is guided by the key M&E policies and by the requirements of the government of Nepal which is led by the National Planning Commission (NPC) that has outlined and adopted the results-based monitoring and evaluation (RBME) system with log-frame, M&E plan and the result-based evaluation approaches. The National Planning Commission also delineated that the evaluation should be conducted independently and preferably by the third party to get unbiased findings and recommendations for further improvement[5]. Likewise, NHSP -II (2010-2015)has duly recognized and directed the use the Health Management Information System (HMIS) and tools particularly for routine programme monitoring. NHSP II has guided to dothe Trimester Reviews and Joint Annual Review (JAR) using log frame and indicator matrix (NHSP-II) for the monitoring and evaluation of health programmes in Nepal[6].

## 2.2 Fundamental Principles of Monitoring and Evaluation

These are basic principles of monitoring and evaluation which can be said to bethe foundation stone of the programme monitoring and evaluation in all three focus areas of HIV response i.e. prevention, treatment, care and support. These principles are simple and basic to understand and its application significantly adds value to national response programmes. The fundamental principles of M&E include (www.stepstoolkit.org):

- Learning approach
- M&E as an integral part of overall programme planning cycle
- Partnership and stakeholders'engagement
- Quantitative and qualitative approaches
- Time-bound approach

## 2.3 Three Ones Principles

The "Three Ones Principle" and its practicality in Nepal's response to HIV epidemic include:

- One national AIDS coordinating authority, with a broad-based multi-sectoral mandate – HIV/AIDS, STI Control Board. One agreed AIDS action framework that provides the basis for coordinating the work of all partners – National HIV/AIS Strategy, 2011-2016.
- One agreed country-level monitoring and evaluation system – National Guidelines on Monitoring and Evaluation of HIV Response in Nepal, 2012.

The M&E Guideline 2012 clearly defines M&E systems, tools and rules that guide data flow of HIV response. One M&E framework is important to collect, analyze and apply M&E data rather than to use multiple parallel systems thatreduces the burden of reporting.Therefore, the monitoring and evaluation of HIV interventions has adopted the ONE national M&E Framework in Nepal.

5 *National Planning Commission (2010) Results Based Monitoring and Evaluation Guidelines, 2067 (2010)*
6 *Ministry of Health and Population (2012) M&E Framework Nepal Health Sector Programme II, 2010-2015, Ministry of Health and Population, Kathmandu, Nepal, April 2012*

## 2.4 Principle of Accountability

The M&E Guidelines also recognizes the principle of accountability with following considerations:

- M&E as the basis of expressing overall accountability of national response
- Following the Paris Declaration on Aid effectiveness, and ACCRAAgenda for Action
- Performance-based programming (particular to the Global Fund)

## 2.5 Functional M&E Systems Principle

This is a holistic approach of a functional M&E system that has been segmented into 12 components[7]. The national M&E systems in Nepal isguided by the principles of a functional M&E system comprised of the 12 components: (1) organisational structures with HIV M&E functions, (2) human resources capacity for HIV M&E, (3) partnerships to plan, coordinate and manage the HIV M&E system, (4) national multi-sectoral HIV M&E plan, (5) annual cost of national HIV M&E work plan, (6) advocacy, communications, culture for HIV M&E, (7) routine HIV programme monitoring, (8) surveys and surveillance, (9) national and sub-national HIV databases, (10) supportive supervision and data auditing, (11) HIV evaluation and research, and (12) data dissemination and use (Figure-7).

UNAIDS suggests that a fully functional M&E system which is an integration of 12 components following the three tiers of "people,partnership and planning", "collecting, verifying and analysing data", and "using data for decision making" as it is depicted in Figure 7 below.

This guideline has used this principle throughout mainly more precisely in M&E costing and M&E capacity development framework as described in the succeeding chapters.

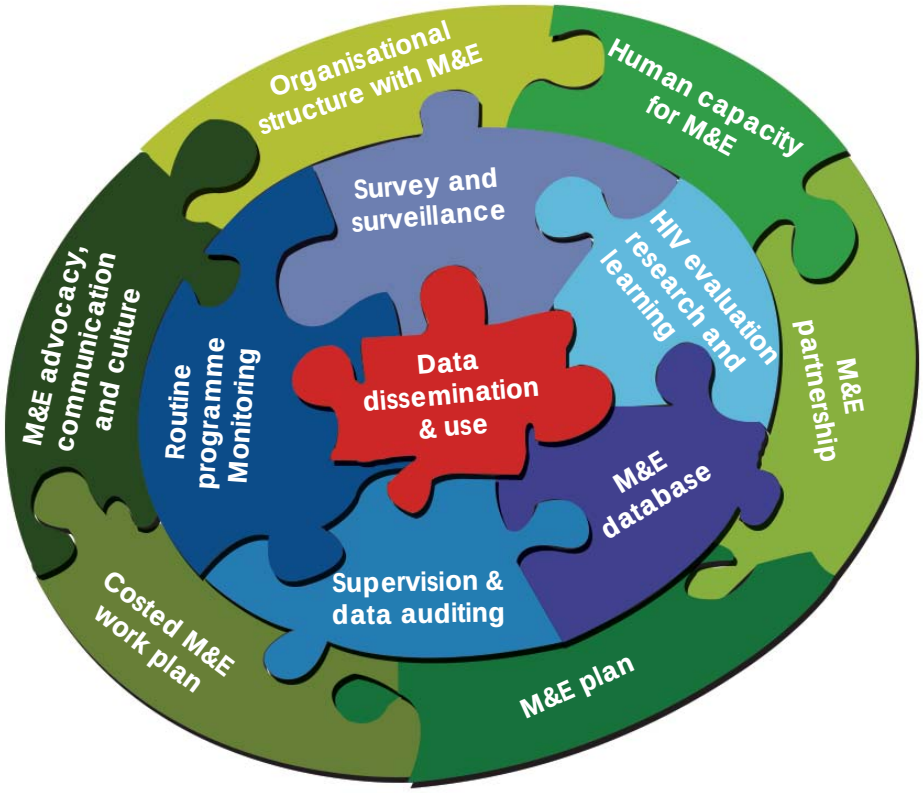



*Figure 7: Principles of Functional M&E System (The 12 Component Approach)*

7 *UNAIDS (2008)Organizing Framework for a Functional National HIV Monitoring andEvaluation System. Geneva: UNAIDS. Available at: http://www.unaids.org/en/media/unaids/contentassets/documents/document/2010/1_MERG_Assessment_12_Components_ME_System.pdf [Accessed on 27 May 2012]*

# Chapter 3 NATIONAL MONITORING AND EVALUATION FRAMEWORK



## 3.1 Synergy with National HIV/AIDS Strategy and Health System Strengthening

Within the overall health sector goals envisioned by the NHSP-II, the National HIV/AIDS Strategy, 2011-2016 has defined goals and objectives for national response to HIV in the country following the national strategic goalsthe national M&E guidelines have formulated. Hierarchical linkage of HIV M&E systems with national and global frameworks is displayed in Figure 8 below.

<table>
<tr><td colspan="4">National Development Plan of the Government of Nepal</td></tr>
<tr><td rowspan="2">• Reduce Poverty<br>• Achieve Millennium Development Goals</td><td colspan="3">Nepal Health Sector Programme –II</td></tr>
<tr><td rowspan="2">• Achieve Millennium Development Goals<br>• Universal coverage to Essential Heath Care Services free against catastrophic health expenditure</td><td colspan="2">National HIV/AIDS Strategy 2011-2016</td></tr>
<tr><td>• Reduce new HIV infections</td><td>• Reduce AIDS related deaths</td></tr>
</table>

*Source: NSP 2011-2016*

***Figure 8: Linkage of National HIV/AIDS Strategy(2011-2016), with overall National Development Plans***

The linkage between the National HIV/AIDS Strategic results and national M&E framework (hybrid of logical framework and results framework) is delineated and shown inFigure 9 below.

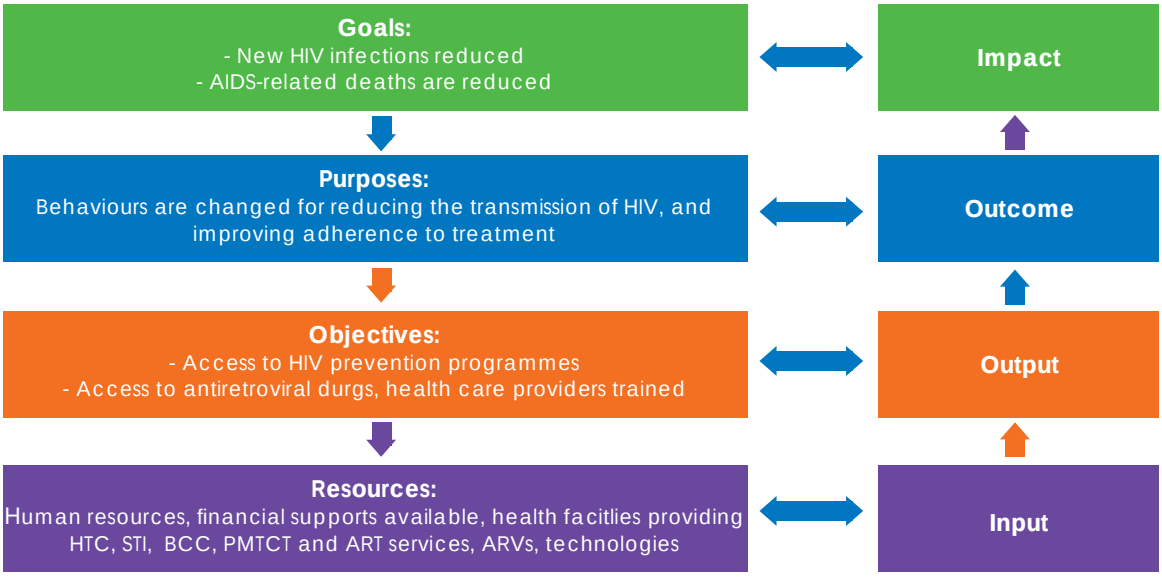



***Figure 9: Linkage between HIV/AIDS Strategic results and M&E framework***

## 3.2 Integrated Monitoring and Evaluation Framework of National Response to in Nepal

An integrated M&E framework is outlined to measure the strategic results of National HIV/AIDS Strategy (2011-2016), in line with the priority goals of the NHSP-II. The strategic results framework envisioned by the strategy are well accounted in preparing the national M&E guidelines in congruence with the log frame approach of NPC RBME.The basis of selecting indicators presented in this log frameis the key element of a national response monitoring system. However, these indicators provide only essential information about potentially very complex interventions and issues associated with HIV response.

For effective programme management additional sources of information using a variety of methods are also required at programme level besides special surveys, research and respective programme evaluations for which this guideline sets a basis.

Main basis of selecting the national indicators is to track progress against national strategic goals and objectives; secondly, to make it representational across the programmatic areas (prevention, treatment, care and support); thirdly, to measure progress, change along RBME log frame.

To meet the first national strategic goal, a total of 20indicators are selected. Similarly for goal two, 17 indicators are chosen. Likewise, to measure the achievement of cross-cutting strategies 8key indicators have been included in the Integrated M&E framework. The indicators are summarized below in Table 2:

*Table 2: Indicators by programme strategies, health system components and level of results*

| Indicators by level of results | Indicators by programme strategies | Indicators by health system components |
|---|---|---|
| • Impact: 4<br>• Outcome: 6<br>• Output: 27<br>• Process: 2<br>• Input: 2 | • Prevention: 20<br>• Treatment care and support: 15<br>• Health system strengthening: 6 | • Governance and leadership: 2<br>• Financing: 1<br>• Health information: 1<br>• Human resource for health: 1<br>• HIV supply and commodities: 1<br>• Service delivery:35 |

In the same manner, status of the epidemic and the national response to contain the spread of HIV will be measured at various levels of the result-based monitoring and evaluation log frame. There are 4 impact indicators included in the M&E framework, 6 indicators for outcomes, 27 indicators for outputs, 2 indicators for process, and 2 indicators for inputs as show in the Table 2 and Table-3.

- Impact IM
- Outcome OC
- Output OP
- Process PR
- Input IP

*Table 3: Integrated National Monitoring and Evaluation Framework of National Response to HIV Epidemic in Nepal, 2011-2016*

| Results chain | Indicator no | Indicator type | Indicators | Methods of data collection | Responsible for collecting data | Frequency of collecting data |
|---|---|---|---|---|---|---|
| Vision: | Nepal will become a place where new HIV infection are rare and when they do occur, every person will have access to high quality, life extending care without any form of discrimination | | | | | |
| Overall Goal: | To achieve universal access to HIV prevention, treatment, care and support | | | | | |
| Goal 1: | The incidence of HIV is halved by 2016 compared to 2010(Target 1 of National HIV/AIDS Strategic Result Framework) | | | | | |
| | 1 | Impact | HIV prevalence in the population aged 15-24 | EPP/Spectrum modeling | NCASC | Annually |
| Purpose 1.1: | Reduction of sexual transmission of HIV | | | | | |
| | 2 | Impact | Percentage of key populations at higher risk (sex workers, men who have sex with men and male labour migrants) who are HIV-infected | IBBS surveys | NCASC | 2-3 years |
| | 5 | Outcome | Percentage of men reporting the use of condom the last time they had anal sex with a male partner | IBBS surveys | NCASC | 2 years |
| | 6 | Outcome | Percentage of female and male sex workers reporting the use of a condom with their most recent client | IBBS surveys | NCASC | 2-3 years |
| | 7 | Outcome | Percentage of migrants aged 15-49 reporting the use of condom the last time they had sex with non-regular sexual partner | IBBS surveys | NCASC | 2-3 years |
| | 11 | Output | Percentage of key populations at higher risk(sex workers, men who have sex with men and male labour migrants) who received HIV test in the last 12 months and who know their results | Routine programme data& IBBS surveys | SDP, NCASC | Monthly/ Trimester, 2-3 years |
| | 12 | Output | Percentage of key populations at higher risk (sex workers, men who have sex with men, male labour migrants) reached with HIV prevention programme | IBBS surveys | NCASC | 2-3 years |
| | 12 | Output | Percentage of key populations at higher risk (sex workers, men who have sex with men, male labour migrants) reached with HIV prevention programme | Routine programme data | SDPs, NCASC | Monthly/ Trimester |
| | 13 | Output | Percentage of key populations at higher risk (sex workers, men who have sex with men and male labour migrants)who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission | IBBS surveys | NCASC | 2-3 years |
| | 14 | Output | Number of sexually transmitted infections diagnosed and treated (by age, sex and key population at higher risk to HIV) | Routine programme data | SDPs, NCASC | Monthly/trimester |
| | 15 | Output | Number (and percentage) of women accessing antenatal care (ANC) services who were screened for syphilis and treated | Routine programme data | SDPs, FHD, NCASC | Monthly/ Trimester |

| Results chain | Indicator no | Indicator type | Indicators | Methods of data collection | Responsible for collecting data | Frequency of collecting data |
|---|---|---|---|---|---|---|
| Purpose 1.2: | Reduction of HIV through injecting drugs | | | | | |
| | 2 | Impact | Percentage of people who inject drug are HIV-infected | IBBS Surveys | NCASC | 2 years |
| | 8 | Outcome | Percentage of people who inject drugs reporting the use of sterile injecting equipment the last time they injected | IBBS Surveys | NCASC | 2 years |
| | 9 | Outcome | Percentage of people who inject drugs who report the use of condom at last sexual intercourse | IBBS Surveys | NCASC | 2 years |
| | 12 | Output | Number (and percentage) of people who inject drug reached with HIV prevention programme | Routine programme data | SDPs, NCASC | Trimester |
| | 13 | Output | Percentage of injecting drug users who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission | IBBS Surveys | NCASC | 2 years |
| | 11 | Output | Number (and percentage) of injecting drug users who received an HIV test in the last 12 months and who know their results | Routine programme data & IBBS surveys | SDP, NCASC | 2 years |
| | 16 | Output | Number(and percentage) of people who inject drugs currently on Opioid Substitution Therapy (who have been on OST continuously for the past 12 months as well as PWIDs newly enrolled in OST programme for the last 4 months) | Routine programme data | SDPs, NCASC | Monthly |
| Purpose 1.3: | Reduction of vertical (mother-to-child) transmission of HIV | | | | | |
| | 3 | Impact | Percentage of infants born to HIV infected mothers who are infected | EPP/Spectrum modeling | NCASC | Annually |
| | 17 | output | Percentage of HIV+ve pregnant women who received a complete course of antiretroviral l to reduce the risk of mother-to-child transmission of HIV | Routine programme monitoring data | SDPs, NCASC | Monthly/ Trimester |
| | 18 | output | Number (and percentage) of infants born to HIV-infected women receiving a virological test for HIV within 2 months of birth | Routine programme monitoring data | SDPs, NCASC | Monthly/ Trimester |
| | 19 | output | Percentage of infants born to HIV infected women by their feeding practices(exclusive breastfeeding, replacement feeding, mixed feeding/other) at DPT3 visit | Routine programme monitoring data | SDPs, NCASC | Monthly/ Trimester |

| Results chain | Indicator no | Indicator type | Indicators | Methods of data collection | Responsible for collecting data | Frequency of collecting data |
|---|---|---|---|---|---|---|
| Purpose 1.4: | Reduction of blood-borne transmission of HIV | | | | | |
| | 20 | Output | Percentage of donated blood units screened for HIV in a quality assured manner | Routine programme data | SDPs, NCASC | Trimester |
| Purpose 1.5: | Creation of enabling environment in HIV Prevention | | | | | |
| | 10 | Outcome | Percentage of health workers both women and men expressing accepting attitude towards people living with HIV (This indicator will also measure the progress on purpose 2.5) | Special surveys | NCASC | Annually |
| Goal 2: | By 2016, the AIDS-related deaths are reduced by 25% compared to 2010(Target 1 of National HIV/AIDS Strategic Result Framework) | | | | | |
| | 4 | Impact | Percentage of adults and children with HIV known to be on treatment 12, 24 and 36 months after initiation of antiretroviral therapy | Routine programme monitoring data | SDPs, NCASC | Annually |
| Purpose 2.1: | People living with HIV received prophylaxis for opportunistic infections, and treatment of common co-infections according to national guidelines | | | | | |
| | 21 | Output | Percentage of people enrolled in HIV care and treatment who received cotrimoxazole prophylaxis in the last 12 months | Routine programme monitoring data | SDSP, NCASC | Monthly |
| | 22 | Output | Percentage of adults and children living with HIV enrolled in HIV care (currently) received diagnosis and treatment of opportunistic infections | Routine programme monitoring data | SDSP, NCASC | Monthly |
| Purpose 2.2: | Adults and children living with HIV eligible for antiretroviral received it | | | | | |
| | 23 | output | Number (and percentage) of eligible adults and children currently receiving antiretroviral therapy | Routine programme monitoring data and EPP/ Spectrum modeling | NCASC | Monthly |
| | 24 | output | Percentage of people starting antiretroviral therapy who picked up all prescribed antiretroviral drugs on time | Routine programme monitoring data | SDPs | Monthly |
| | 25 | output | Percentage of health facilities dispensing antiretroviral therapy that have experienced a stock-out of at least one required antiretroviral drug in the last 12 months | Routine programme monitoring data | SDPs, NCASC | Trimester |

| Results chain | Indicator no | Indicator type | Indicators | Methods of data collection | Responsible for collecting data | Frequency of collecting data |
|---|---|---|---|---|---|---|
| Purpose 2.3: | Adults and children with HIV associated co-infections (TB) received treatment of co-infection management | | | | | |
| | 26 | Output | Number (and percentage) of adults and children enrolled in HIV care who had their TB status assessed and recorded during last visit (among all adults and children enrolled in HIV care in the reporting period) | Routine programme monitoring data | SDPs | Monthly |
| | 27 | Output | Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV | Routine programme monitoring data | NCASC | Annually |
| | 28 | Output | Number (and percentage) of adults and children newly enrolled in HIV care who start treatment for latent TB infection (isoniazid preventive therapy) among the total number of adults and children newly enrolled in HIV care over a given time period | Routine programme monitoring data | NTC, NCASC | Annually |
| | 29 | Output | Number (and percentage) of TB patients who had tested for HIV and test results are mentioned in the TB register | Routine programme monitoring data | NTC, NCASC | Monthly/ Trimester, Annually |
| Purpose 2.4: | PLHIV received care and support services according to their needs | | | | | |
| | 30 | Output | Number (and percentage) of adults and children living with HIV who received care and support services outside facilities ( This indicator also measure the progress of purpose 2.5) | Routine programme data | SDPs, NCASC | Monthly/ Trimester |
| | 31 | Output | Number (and percentage) of (currently identified) PLHIV who received at least one home visit and/or palliative care service in last 12 months | Routine programme data | SDPs, NCASC | Monthly/ Trimester |
| | 32 | Output | Number (and percentage) of people living with HIV benefiting from nutritional support in the last 12 months | Routine programme data | SDPs, NCASC | Monthly/ Trimester |
| | 33 | Output | Number (and percentage) of children affected by AIDS (CABA) received minimum package of care and support services as defined in the national guidelines on CABA | Routine programme data | SDPs, NCASC | Monthly/ Trimester |
| | 34 | Output | Ratio of school attendance of orphans (AIDS orphans) to school attendance of non-orphans aged 10-14 years | Special surveys | NCASC, MoHP | Annually |
| Purpose 2.5: | PLHIV received impact mitigation support (social protection) | | | | | |
| | 35 | Output | Number of cases of stigma and discrimination among PLHIV reported at districts | Routine programme data | DACC | Monthly/ Trimester/ Annually |

| Results chain | Indicator no | Indicator type | Indicators | Methods of data collection | Responsible for collecting data | Frequency of collecting data |
|---|---|---|---|---|---|---|
| Purpose 3: | Cross-cutting strategies (Health system and community system strengthening) | | | | | |
| HSS - service delivery | 40 | Input | Number of facilities providing (and upgraded) (i) HIV testing and counseling services, (ii) PMTCT services and (iii) ART services | Routine programme data | DACC | Monthly/ Trimester/ Annually |
| HSS - leadership and governance | 36 | Process | Number of districts submitting (to RHDs and NCASC) annual HIV/AIDS response review reports | Routine programme data | DACC | Annually |
| HSS - Information system | 37 | Process | Number of districts reporting (to RHDs and NCASC) relevant indicators as defined in the National M&E Guidelines on HIV Response in Nepal | Routine programme data | NCASC | Monthly/ Trimester/ Annually |
| HSS - Human resource for health | 38 | Output | Number of health care providers trained in the past 12 months on (i) HIV testing and counseling, (ii) PMTCT, (iii) clinical management of HIV, and (iv) M&E of HIV response | Routine programme data | RHDs, NCASC | Trimester/ Annually |
| HSS – Financing | 41 | Input | Percentage of government fund allocation to national response to HIV | National AIDS Spending Assessment | NCASC, MoHP | Annually/ Biannually |
| Community System Strengthening | 39 | Output | Number of community-based organization with staffs and/or volunteers received training/retraining on organizational management, leadership and/or accountability in the last one year | Routine programme data | DACC | Trimester/ Annually |

Chapter

4

# NATIONAL HIV/AIDS MONITORING & EVALUATION SYSTEMS, COMPONENTS AND TOOLS



## 4.1 National Monitoring and Evaluation Systems

National HIV/AIDS monitoring and evaluation system includes people, policies, structure and processes as that are in place at the present, and/or will be put in the course of implementing this guidelines (2011-2016). Overall, M&E systems, components and tools are essential for the effective monitoring of the national response to HIV in Nepalare illustrated below.

Monitoring and evaluation allows tracking the implementation of planned activities in terms of input, output, and the outcome within a coherent framework. It also helps the managers to allocate resources, assess performance and demonstrate impact. An effective monitoring and evaluation system can capture data in an organized and cost-effective way that will contribute to more efficient allocation of resources for the disease specific activities. Therefore, it is important that monitoring and evaluation should be integrated in an overall evidenced-based planning system at district, regional, and national levels. Monitoring and evaluation are two functions that provide different but yeta complimentary types of information.

**Monitoring** is a continuous process of collecting and analyzing qualitative and quantitative data to track the progress of programmes. Monitoring assess the extent to which the input deliveries and whether work schedule and other required actions are proceeding according to plans. Monitoring is a process aimed at ensuring that activities are on the right track and in case of deviation appropriate corrective actions can be instituted. Managers depend on the resulting parameters to determine which areas require greater effort and,thereby, may contribute to an improved response.

**Evaluation** is a periodic assessment of on-going or completed programmes. It links a particular output or outcome directly to particular intervention. The aim is to determine the relevance, efficiency, effectiveness, impact and sustainability of the interventions. Evaluation explores deeper at explaining the cause and effect and other wider issues about the interventions. Evaluation helps to deal with problems that monitoring is not able to address. At the same time, monitoring data is often necessary to conduct successful evaluation. Evaluation helps program managers determine the value of particular program. In addition to measuring impact, it is important to evaluate the coverage rates of both prevention and treatment interventions undertaken at the district and community level.

The national systems monitoring and evaluation of HIV interventions in Nepal has been defined in terms of the followingbroad areas:

1. M&E related polices governed for HIV response in Nepal
2. M&E structure
3. Human resource for M&E
4. Data flow (responsibility and frequency)
5. Essential M&E process (reviews)

**4.1.1 M&E related policies governed for HIV response in Nepal:** The M&E related policies are illustrated in chapetr-2 above under the sub-headings 2.1 and 2.3.

**4.1.2 Monitoring and Evaluation Structure:** Overall M&E structure of national response to HIV in Nepal has been described at three levels as depicted below in Table-4. This M&E plan has envisioned

strengthening M&E at local level led by DACC; as well as the role of Regional Health Directorate (RHDs) for providing effective supervision and monitoring support to districts and regularly reviewing the interventions at the regional level using routine programme data as defined.

*Table 4: Levels of M&E structures of national response to HIV in Nepal*

| Level of M&E structures | Key organizations | Key M& E roles |
|---|---|---|
| 1) National level | • National AIDS Council (NAC) | • The National AIDS Council (NAC) chairs the overall multi-sectoral M&E functions of national response in Nepal. HIV and STI Control Board will provide secretariat role to NAC. |
| | • MoHP/NCASC | • NCASC co-ordinates and leads M&E of HIV & AIDS under the MoHP |
| | • HIMIS | • HMIS is a system of recording and reporting of all routine health sector information, including HIV |
| 2) Regional level | • Regional Health Directorates | • RHDs exercise the M&E functions of the respective districts of in the region, particularly providing supportive monitoring to districts and regional level review of national response |
| 3) District level | • District AIDS Co-ordination Committee (DACC) | • DACC has a centre role of M&E of local level response to HIV – district and below. Monitoring of service delivery points in the district and below is one of the key functions of DACC. |
| | • DHO/DPHO | • DHO/DPHO functions as the secretariat of DACC. |

**4.1.3 Human Resource for M&E:** This M&E plan has envisioned the followings human resources to exercise the M&E functions of the national response to HIV in Nepal (Table-5).

*Table 5: Human resource at various levels for M&E functions of national response to HIV in Nepal*

| Level of M&E structures | M&E Staffs |
|---|---|
| 4) National level | ▸ National AIDS Council (NAC):<br>▸ NCASC:<br>• Senior Strategic Information Advisor - 1<br>• Surveillance and Research Specialist -1<br>• Surveillance and Research Associate - 1<br>• M&E Specialists -2<br>• M&E Associates - 2<br>• Research Officer -1<br>• Data/MIS Associate -1<br>▸ HIMIS:<br>• M&E staffs NCASC are to be shifted for HMIS upon functional integration of M&E functions of NCASC. |
| 5) Regional level | ▸ Regional Health Directorates:<br>• Regional Statistical Officers - 5<br>• Regional HIV/AIDS Coordinators –5 |
| 6) District level | ▸ District AIDS Coordination Committees (DACCs):<br>• DACC Coordinators - 50<br>• DHOs/DPHOs:<br>• District Statistical Assistants/Officers - 75<br>• District HIV/AIDS focal points - 75 |

**4.1.4 Data flow and feedback:** Recognizing that the inconsistency in the data flow at any one level affects the quality of overall information on program status therefore, it is extremely important to have constant and consistent flow of information from and at different stages of program implementation for regular progress update, data verification and data accuracy. Keeping in mind the importance of timely recording and reporting thus, there exists a strong and reliable information flow system from and at different levels within the program to complement the overall M&E system. The data flow system ensures that the information flow from one stage to another is reliable, realistic, complete, and verified (at the source or at different levels mechanism).

Data flow and feedback mechanism displays upward and downward flow of information system for both routine/regular and periodic data to cover all sorts of HIV related data hooked-up at Strategic

Information Unit ofNCASC. At the national level, smooth linkage shall be maintained between HMIS and SI unit of NACSC to share relevant HIV/AIDS data and prepare a national HIV/AIDS data bank at NCASC, which in the long-run shall be handled by the HMIS.

### 4.1.4.1 Routine program monitoring data flow at district level

Routine HIVrelated data generated at the health facility level i.e. ANC, STI Clinics, Antiretroviral Therapy (ART) sites, HTC, TB clinics, Hospitals, Health Centres, Health Posts, Sub-Health Posts, Private Hospitals, and Blood Banks shall be reported to their respective District AIDS Coordination Committees (DACCs) as part of the health facility based routine reporting system. District (Public) Health Office (D(P)HO) is the secretariat of DACC. Similarly, all multi-sectoral HIV program response data generated by different government line agencies, NGOs, CBOs, private sector, programs shall report to the DACC. The DACCsshall compile data and send respective data according to prescribed reporting forms to NCASC and HMIS at the national level and also provide a copyto the Regional Health Directorates (RHDs). Upward blue coloured arrows show reporting and downward red coloured arrows denote feedback. Data flow system is displayed in theFigure 5.

### 4.1.4.2 Flow of other periodic data into national M&E structure

While the periodic data on HIV is generated through population based surveys, the special programme evaluations shall be coordinated directly by NCASC at the central level. Periodic data collection tools approaches include National Commitments and Policy Instruments (NCPI), Demographic and Health Surveys (DHS), the Multiple Indicator Cluster Surveys (MICS), the Reproductive Health Surveys (RHS), the Sexual Behavior Surveys (SBS), Behavioral Surveillance Surveys (BSS), HIV Sero-serveillance Survey (HSS), and Integrated Biological and BehaviouralSurveillance (IBBS) Surveys, Nepal Living Standard Surveys, Adolescent and Youth Surveys.

### 4.1.4.3 Data Feedback channels and methods

Feedback on received data is critical for reporting because it is a living and reciprocal system. If there is prompt and timely feedback it will encourage data reporters to report on time on a regular basis.Otherwise, if feedback is stopped then the data reporting will also be stopped. This Guideline, thus, clearly delineates data flow and feedback mechanism following the same chain of command depicted in the data flow and feedback chart with blue and red arrows where blue denotes reporting lines and red specifies the feedback channel. From the central level, NCASC shall provide feedback to the regions and districts at the service delivery level.The districts shall provide feedback to the respective SDPs (Figure 5).

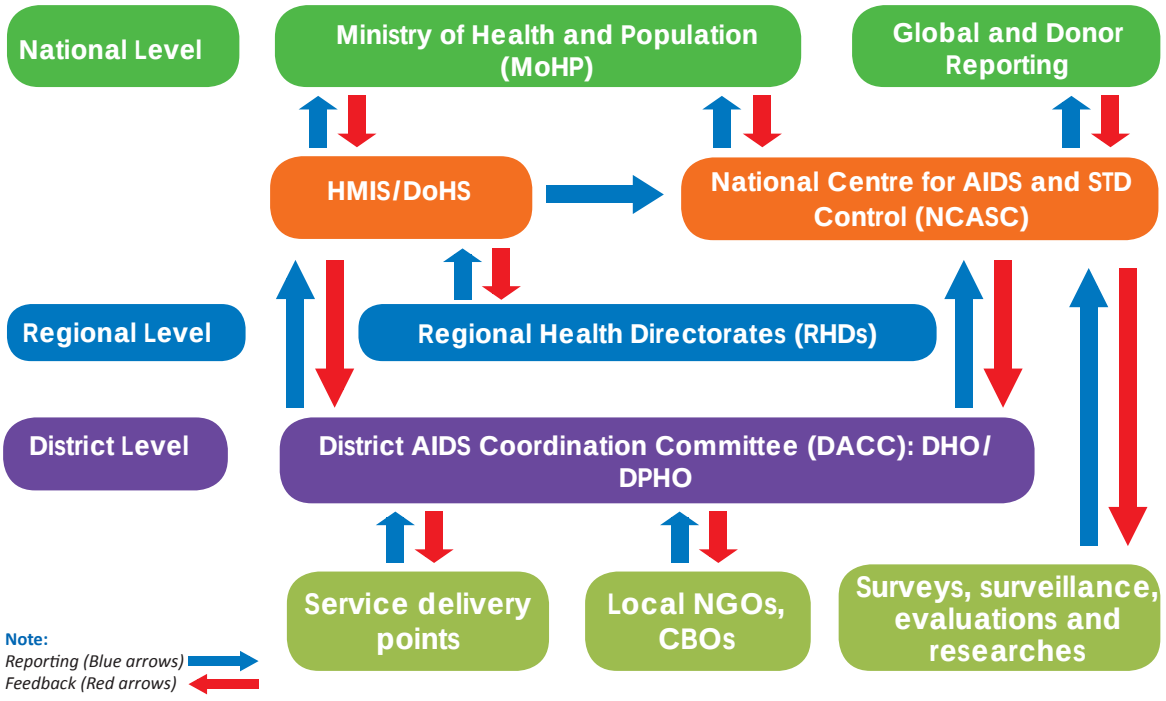



*Figure 10: Routine HIV data flow in national M&E structure in Nepal*

Mechanisms of data feedback will follow the same channel of data flow with reverse arrow (red colour) for providing feedback. Methods of feedback suggested are: verbal feedback on list or through telephone/facsimile, and/or email, formal written feedbacks, management letters, and appreciation letters etc.

**4.1.4.3.1 Data flow Pyramid:** Data flow upwards from facility level to district, from district to regional and central level and from national level to international levels. At the apex level, all HIV related data collected through HMIS and NCASC are shared mutually at the central level; and NCASC maintains HIVdata bank to report to the Ministry of Health and Population and to various global commitments such as the United Nations' high level political comments and donors (GF). Few indicators are required to report at the international leveland some selected indicators at national (mostly outcome and impact with a little output indicators) are required while many indicators are required including the input used and activity performed and outputs produced at project level. The pyramid below shows the volume of data flow at various levels as shown in Figure 6.

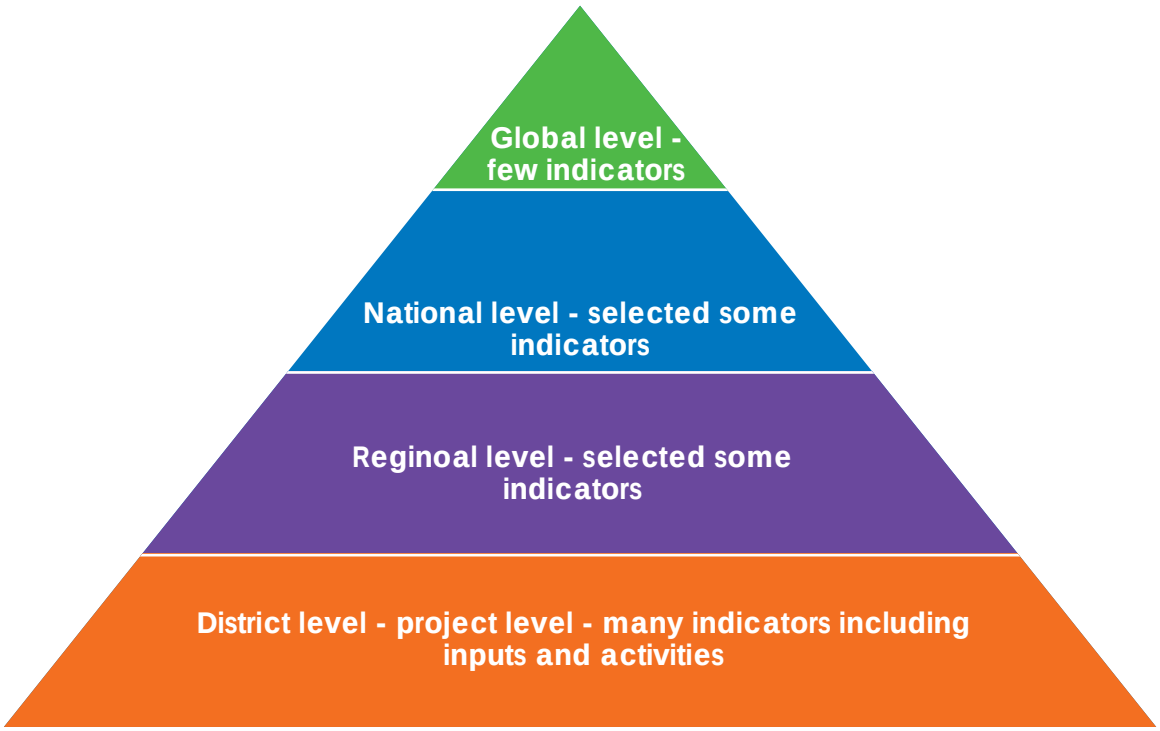



*Figure 11: Data pyramid: data flow at various levels*

### 4.1.5 Essential Monitoring and Evaluation Process (reviews)

**4.1.5.1 Participatory process:** Monitoring and evaluation of key program areas will be done through program reviews at district, regional and national level on a periodic basis throughout National Strategic Plan during the period of five years ---- monthly, trimester, annually facilitated by NCASC SI unit staffs in collaboration with respective program areas.

**4.1.5.2 On-site Joint Monitoring Process:** This M&E Guideline emphasizes on the joint monitoring approach both at intra units of NCASC and inter agency – NCASC and External Development Partners (EDPs).

**4.1.5.3 Intra agency joint monitoring:** At this level, this is strongly suggested that NCASC key units like Prevention, Treatment Care and Support, Admin & Finance, and SI units do joint monitoring visits at local level and discuss available data with reference to program and financial performance at the central level. This mechanism will help develop inter-dependence amongst NCASC units to effectively deliver services and achieve the NSP targets.

**4.1.5.4 Inter agency joint monitoring:** Equally important is also the practice of joint monitoring between NCASC and EDPs and amongst EDPs as well. Joint monitoring (field visit and data discussion at central level) by NCASC staff along with Strategic Information Technical Working Group (SITWG) members is recommended. This will enhance data quality, build trust among key players, help mobilize resources, and provide an opportunity of learning and replicating the best practices to achieve goals.

**4.1.5.5 Independent review process:** This ensures unbiased review of the progress on key programme areasoutlined in the National HIV/AIDS Strategy (2011-2016) by independent review group (IRG) and/ or individuals at three intervals- Annual Progress Review(APR) every year from 2012-2016; Mid-term Review (MTR) at the middle stage and final evaluation by the end of implementation of the national strategy respectively.

Recommendations of all these reviews will help stimulate programs to expedite service delivery and improve program implementations.

## 4.2 Components of Strategic Information

In order to understand the bigger picture of the HIV epidemic and national response mechanismcomprehensive strategic information is essential which will be generated through four strategic information components: surveillance, research, and monitoring& program evaluation as reflected in Figure 7 below.

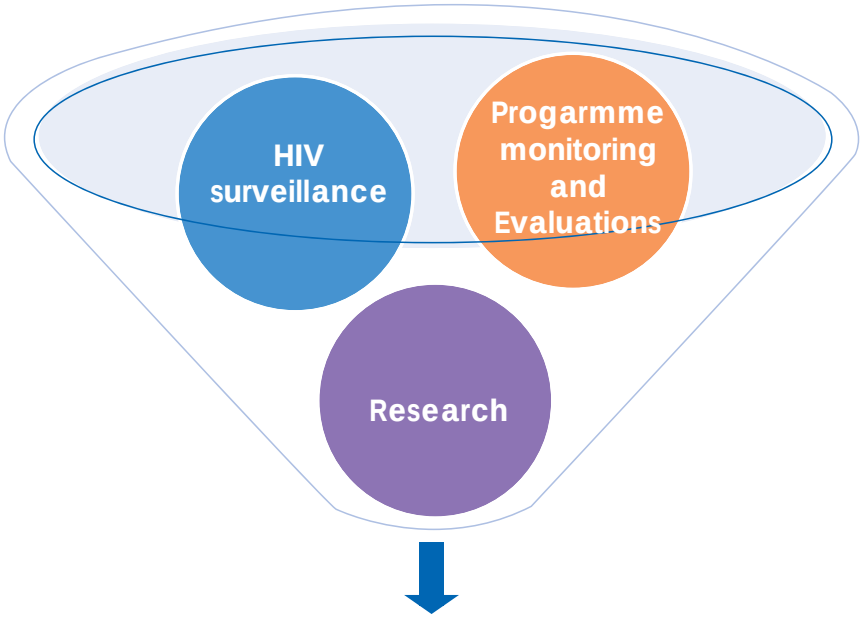



*Figure 12: Strategic information components*

### Surveillance

To know the HIV epidemic, surveillance is required. Overall the goal of national surveillance plan is to generate information on HIV cases, new HIV infections, and behaviours and characteristics of key population at higher risk, and, thereby, track the epidemic and catalyze HIV prevention programmes where it is most needed. HIVsurveillance enhances efforts to prevent HIV transmission, improve allocation of resources for treatment services. To this effect, the national HIV and STI surveillance Guidelines and Plan[8] is prepared. NCASC is taking the charge of strengthening overall HIV surveillance in Nepal which is primarily focused on the second generation surveillance including surveillance of HIV drug resistance and monitoring early warning indicators.

*8 NCASC (2012) National Guidelines on Surveillance of HIV and STI in Nepal, 2012*

### Research

Research is needed to further understand the underlying causes and driving forces of HIV and explain the behavioural patterns of the people especially amongst high risk groups in the Nepalese contest with reference to the HIV epidemic. For this purpose National HIV Research Agenda[9] is developed and efforts have been made to follow the agenda.

### Programme Monitoring

Programme monitoring is required to measure performance and improve efficiency and track resources and guide programmeimprovement. NCASC collects routine programme data on HTC, STI, BCC, ART/OI and PMTCTthrough trimester reports that are generated at facility level, compiled at district level and verified, analyzed and reported by the DACC. Routine programme monitoring by DACC and NCASC is up-dated and standardized which allows trimester reporting in the form of paper-based reports as well as electronic data files. Over the next few years an increasing number of facilities will switch to trimester reporting in the form of electronic data files that can be easily transferred to and incorporated into district and national level databases.

### Evaluation

Program evaluation tells us whether the programme has achieved its objectives, learnt lessons on what worked, what did not work and why while measuring effectiveness, relevance, high level results of the programme and sustainability of the achievements. For more information, an evaluation framework is presented below under the chapter VI.

## 4.3 Monitoring and Evaluation Tools (M&E Toolkit)

To ensure the M&E functions are practiced at various level of national response to HIV, it is critical to have a minimum of defined M&E toolkit at each level. This Guideline has outlined the following M&E toolkit as show inTable 6.

*Table 6: M&E toolkit for various levels*

| Levels for M&E functions | M&E toolkits |
|---|---|
| **National level: NCASC** | 1) National M&E framework, plan and guidelines<br>2) National M&E work plan<br>3) National HIV and STI surveillance plan and guidelines and training curricula<br>4) National HIV research agenda and plan<br>5) National M&E capacity assessment plan and guidelines<br>6) Recording and reporting forms for various programmes<br>7) M&E training curricula<br>8) National HIV database<br>9) Job aids on M&E recording and reporting for responsible staff members<br>10) National SI calendar<br>11) SI products – annual reports, factsheets, web updates,district AIDS profile, etc.<br>12) Surveillance and research reports<br>13) Programme monitoring checklists, including feedback systems<br>14) Programme review guidelines and tools<br>15) Software such as EPP, Spectrum, AEM, etc. |
| **Regional level:Regional Health Directorates (RHDs)** | 1) National M&E framework, plan and guidelines<br>2) Regional M&E work plan<br>3) National HIV and STI surveillance plan and guidelines, and training curricula<br>4) National HIV database<br>5) Reporting forms for various programmes<br>6) M&E training curricula<br>7) Job aids on M&E recording and reporting for responsible staff members<br>8) National SI Calendar<br>9) SI Products – annual reports, factsheets, web updates, etc.<br>10) Programme monitoring checklists, including feedback systems |

9 NCASC (2012) National HIV Research Agenda, 2012

| Levels for M&E functions | M&E toolkits |
|---|---|
| **District level: DACC-DHO/DPHO** | 1) National M&E framework, plan and guidelines<br>2) M&E work plan<br>3) Recording and reporting forms for various programmes<br>4) National HIV database<br>5) Job aids on M&E recording and reporting for responsible staff members<br>6) National SI calendar<br>7) District AIDS profile<br>8) Programme monitoring checklists, including feedback systems |
| **Service sites level:** | |
| **HIV testing and counselling (HTC) sites** | 1) Recording and reporting forms for HIV testing and counseling (HTC), including HIV case report<br>2) Job aids on HTC recording and reporting<br>3) National HIV database |
| **Sexually Transmitted Infections (STI) sites** | 1) Recording and reporting forms for STI diagnosis and treatment<br>2) Job aids on STI recording and reporting<br>3) National HIV database |
| **Targeted prevention Interventions among key populations** | 1) Recording and reporting forms for BCC interventions<br>2) Recording reporting forms for OST services<br>3) Job aids on BCC interventions recording & reporting<br>4) National HIV database |
| **PMTCT** | 1) Recording and reporting forms for PMTCT<br>2) Job aids on PMTCT recording and reporting<br>3) National HIV database |
| **Blood safety** | 1) Recording and reporting forms for blood safety programme (NRCS)<br>2) Job aids on blood safety recording and reporting |
| **ART andOI, including TB assessment among PLHIV** | 3) Recording and reporting forms for ART and OI<br>4) TB assessment among PLHIV enrolled in HIV care recording and reporting<br>5) Job aids on ART andOI recording and reporting<br>6) National HIV database |
| **Community Care Centres (CCC)** | 1) Recording and reporting forms for CCC<br>2) Job aids on CCC recording and reporting<br>3) National HIV database |
| **Community and Home Based Care (CHBC)** | 1) Recording and reporting forms for CHBC<br>2) Job aids on CHBC recording and reporting<br>3) National HIV database |
| **Training (HSS and CSS)** | 1) Training records and reports<br>2) National HIV training database |

Chapter

# 5

# DATA COLLECTION, ANALYSIS AND REPORTING



Collection of appropriate data is essential for various result areas to monitor the national response. Therefore, this guideline has added more indicators to measure the performance in addition to the indicators presented in the national HIV/AIDS strategic result framework. This balances between the performance and outcome/impact monitoring. Performance measurement will be done through routine reporting while outcome and impacts will be measured through surveys and surveillance.

Nepal has adopted a multiple approach for collecting the data needed for the monitoring and evaluation of the HIV programs in the country. The various components of the data collection system, potential data flow and use of the data are depicted in Figure 8. Data are mainly collected from routine programmes, second generationsurveillance, qualitative and behavioural surveys and operational research. NCASC makes use of data for HIV, ART estimation, resource allocation, reports, preparing communication materials and media advocacy. NCASC also makes use of data for improving program implementation, strategic policy planning, reviewing national response to HIV and AIDS. The ultimate purpose of data generated from this system is to use it in planning, programming and reviewing of the response and policy formulation. The detail of surveillance and research related data are explained in the Surveillance Guideline 2012. However, this Guideline talks about the programme data in detail in terms of data collection, types, source and data flow in the section below.

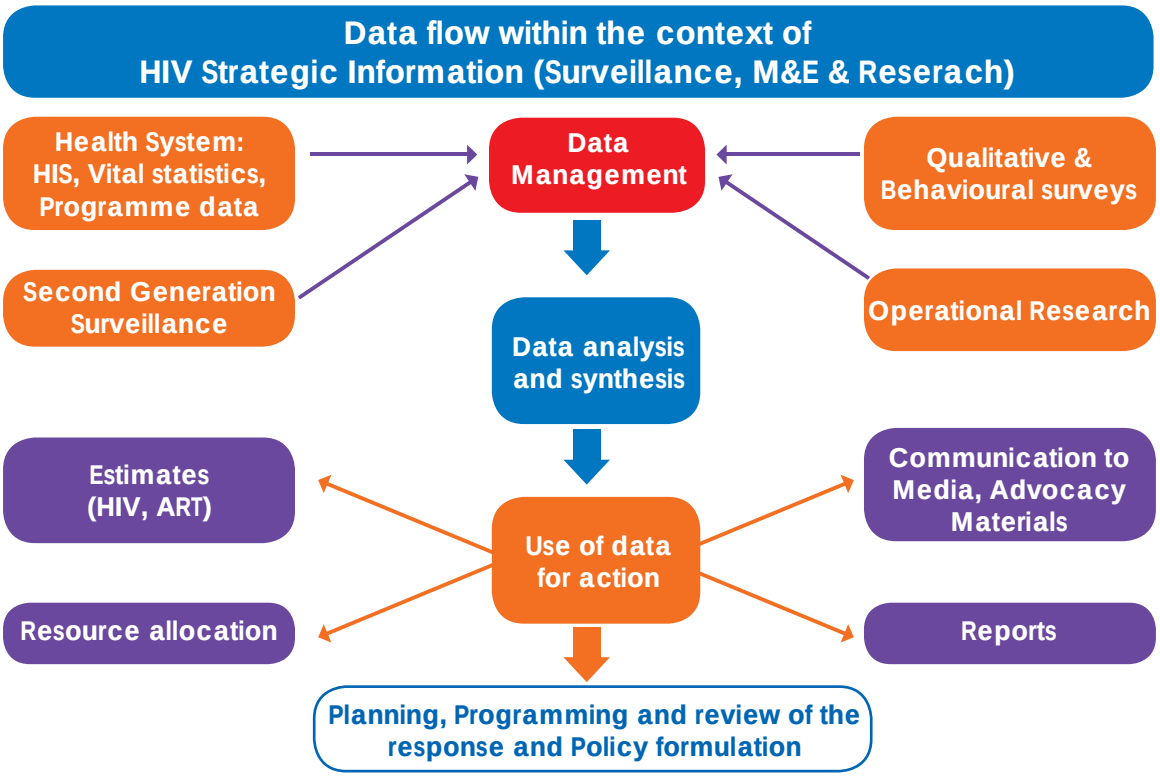



*Figure 13: Data flow within the context of HIV strategic information (HIV surveillance, M&E and research)*

## 5.1 Data Collection

Routine HIV related data generated at the health facility level by ANC clinics, STI clinics, ART sites, HCT (VCT and PICT), TB clinics, Hospitals, Health Centres, Health Posts, Sub-Health Posts, Private Hospitals and Blood Banks shall be reported to their respective District AIDS Coordination Committees (DACCs) following online reporting or manual reporting on a monthly basis.

Similarly, all multi-sectoral HIV programme response data generated by different government line agencies, NGOs, CBOs and private sector,programmes shall report to the DACC following online reporting or manual reporting as prescribed by NCASC on a monthly basis. This arrangement will promote harmonization across the sectors and help reduce monitoring cost. The DACCs shall compile data and send respective data accordingly to the prescribed reporting forms to NCASC. Few indicators on HIV/AIDS as defined in the HMIS reporting forms shall be reported to HMIS at MOHP. The same reports shall also be copied to the Regional Health Directorates (RHDs) on a trimester basis for quick supervision and feedback.

In future, the programme is expected to have the vertical system that will be integrated into health management information system (HMIS) system. Although HMIS is well positioned and functional there is yet an urgency of gathering comprehensive data on HIV response. Collecting different types of information also provides an opportunity to complement prevention, treatment, care and support services, as well as monitor the impact of the services. Also it is imperative to collect routine data on an integrated framework to provide a holistic picture of prevention, treatment and care and support and enable better policy planning, programming at the national, regional and local levels for improving program implementation.

To meet the specific needs of the respective programmes and agencies, they may collect additional information with the knowledge of the NCASC at the national level and the DACCs at the district levels.

### 5.1.1 Unique coding system

With the aim to (i) provide standardized unique registration number (data number) to all service sites andclients served, (ii) assess the extent of repetition to services by the clients, (ii) ensure linkage to various services through unique coding, and (iv) support further analysis of HIV data (data with uniformity) at all levels and programme components:A unique coding system will be designed and implemented, reviewed and updated. This will be used across all service sites and by all partners in implementing HIV response interventions in Nepal.

## 5.2 Data Management

The NCASC shall continue managing data and serve as the national HIV and AIDS data center.It is essential that necessary data are acquired, validated, stored, protected, and processedon defined intervals by skilled personnel. The data management system shall assure accessibility, reliability and timeliness of data to satisfy the needs of the data users. For this, an effective system for data management is envisioned that includes all activities associated with data other than the direct use of the data. That includes:

- Data collection and organization
- Ensuring confidentiality of data
- Data security
- Data synchronization
- Data sharing or publishing
- Archiving data for long-term preservation (storage)

NCASC is designated to establish and serve for “HIV databank” of all the HIV related data generated through (a) routine data from health systems (HMIS) – epidemiological data, viral case reports, routine programme data; (b) Surveillance – HIV, STI case report, HSS, BSS, IBBS, surveys;and (c) research – operational researches and program evaluations. Data management from surveillance and research are explained in separate guidelines mentioned elsewhere (National Guidelines on Surveillance of

HIV and STI, 2012 and National HIV Research Agenda, 2012). This Guideline, therefore,presents the guide for the management of program monitoring data.

For the data management of program monitoring data of all components, NCASC has developed standard recording and reporting tools with job aids. The first-hand information i.e. client's level information are to be recorded in the standard registers by service sites. Based on the information of recorded in registers, service sites prepares the monthly report in the standard monthly report developed and sends to DACC on monthly basis. After data verification, DACC sends the reports to NCASC using either electronic system or paper based system.

Upon receiving data,the NCASC stores data in the national HIV data bank (database). National database is established at NCASC to store and to manage routine HIV and STI related data. Data are derived from different sources and transferred into the national database for the data users. However, the current electronic database system has some limitation that needs upgrading or replacement with new versatile database system to be designed and adopted. Interestingly, some partner organizations like FHI360 has started managing HIV/AIDS data using the geographical information system (GIS) which could be adopted at NCASC too.

## 5.3 Data analysis and Interpretation

Key indicators to monitor the national response to HIV are to be tracked in regular internalat various levels as per the requirement and its use. Data analysis is all about examining whether the objectives of the programmeshave been achieved and supported by the level of indicators measured.Usually analysis is to be carried out to track the epidemic trends, comparison of results of/by indicators for performance measurement (targets vs. achievements) over the time and to guide for the improvement of programme. Key indicators as analyzed at service sites are also required to be analyzed at district level after reports from service sites are received. Further the results of analysis are to be used for producing reports.

Few questions that are mentioned below are the examples for which each programme can perform regular analysis to understand the performance and act as a guide for the improvement of programmes.

- Is the programme out and running?
- Is it progressing as planned?
- Does it reach out to those to whom it was intended?
- Is there any change over time?
- Do those reached by the programme differ from those not reached (e.g. in behaviour)?
- Is there any evidence of impact?

Data analysis is not completed unless it is interpreted and used. Data interpretation essentially transforms the analysis into a complete story--- it is the "voice" behind the numbers. It tells us what the numbers mean. Theinterpretation of data can help to make decisions. However, caution should be taken as to know what our data is saying. We should not make assumptions (or, at least clearly state them if you do), and we should not generalize when data tells only about the situation among the people who gave the information. Few questions, for instance, that may be used for the interpretation ofthe data is given below:

- Who do these data represent?
- What is this data telling me?
  - Are more people coming to the clinic?
  - Are more people taking HIV positive tests?
  - Do we need more outreach volunteers?
- Sometimes, interpretation leads to more questions.
  - Why are more people coming to our clinic?
  - Is my programme failing? Why are more people testing positive?

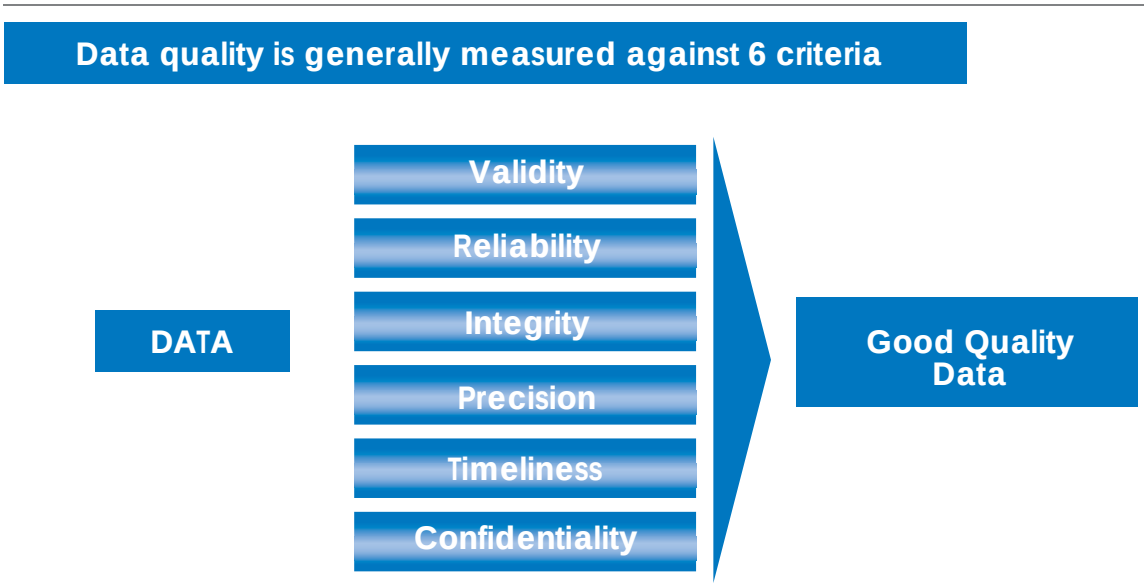



*Figure 14: Six criteria for measuring data quality*

## 5.4 Data Quality Assurance Mechanism

Data quality refers to the worth and accuracy of the information collected and as well as the reflection of programme activities. It reflects true performance and verifies that the data management process is of a high standard. Assured data quality is required to make informed decisions based on the facts and figures to reasonably assess whether the service providers meet as agreed upon standards of prevention, treatment, care and support services as against NSP targets, and to tell the true picture of HIV in-depth and mobilize resources accordingly. Each set of data is considered a good quality data if itsuccessfully passes through the screening through the six quality gauze: validity, reliability, integrity, precision, timeliness and confidentiality as show in Figure 9. The six criteria are defined in Table 7.

*Table 7: Six traits of data quality*

| Quality traits | Definitions |
|---|---|
| 1.Validity | Data clearly, directly, and adequately represent the result that it was intended to be measured |
| 2. Reliability | Reliability is a process through which we will get same results if the procedure is repeated over and over. |
| 3. Integrity | The data are protected from deliberate bias or manipulation for political or personal reasons. |
| 4. Precision | The data have sufficient detail. |
| 5. Timeliness | Data are up-to-date (current), and information is available on time. |
| 6. Confidentiality | Clients are assured that their data will be maintained according to national and/or international standards for data. |

NCASC ensure assessment ofdata quality in terms of the validity, reliability, and completeness of recording and reporting using national HIV data validation and analysis protocoltrimester-wise and annually. This tool provides guidance and standards for data quality assurance at various levels by service components.

### Key methods and approaches for data quality assurance in M&E of HIV response

NCASC facilitates the data reporters at national, regional, district and facility level using the following approaches for ensuring data quality:

***Data verification:*** NCASC developed the data verification protocol in 2010. According to the protocol, data verification should be done at three levels: (1) service sites, (2) district level, and (3) national level.

***Data verification at service sits:*** Before sending the report to the higher levels all the reportshould be verified to check if any errors or inconsistencies are in the reports and then approved by the office in charge after verifying the reports at SDP level.

***Data verification at district level:*** At district level,DACC (DPHO/DHO) is responsible for managing HIV response statistics collected from different service sites.

Data verification at RHD and national level:At the RHD and national level data inconsistency should be checked and if any fault noticed it should be asked to DACC and clarified.

## Data Quality Assessment (DQA)

Data quality Assessment (DQA) is a participatory exercise that verifies the output level indicators with the evidences and also looks into strengthening M&E systems at service site with adequate technical support from NCASC. Based on the national DQA protocol, selected service sites will be audited for data quality. Similar audit will be conducted at national level as well. Since the number of sites is large, sampling for DQA needs to follow a systematic randomization. NCASC will provide the sample of sites selected for DQA every year. Other methods and approaches for ensuring the data quality assurance are providing supportive supervision of sites and distance monitoringincluding timely reporting of records.

***Supportive monitoring visits:*** Field visit as well as distance monitoring needs to be regularly done as validation mechanisms with emphasis on observing the progress being made at all level. Field visits will also provide an opportunity to engage directly with the local level stakeholders. The focus of the field visit will be: To support the site to manage the program, data verification of the reported number, to ensure the standard forms/formats are in use for recording/reporting, and to ensure national guidelines and procedures are maintained for HCT, STI,BCC, PMTCT, ART/OI, CCC, and CHBC servicesincluding training for health care providers.

***Distance monitoring:*** Often distance monitoring is done through the use of technology such as telephonic communication, facsimile reports and feedback, and web-based monitoring of data reported and/or uploaded by service sites. This kind of monitoring has been practiced at various level particularlyrequesting for reports (programmatic and financial) and communication of programmatic activities and field visits programme. This Guideline suggests documenting the process, results and recommendations of the distance monitoring of interventions. This is very much useful and critical to ensure the quality of data is reported particularly in difficult situations, and also in the situation where staffs on M&E for onsite data verification are few.

***Social audit:*** Social audit is considered as one of the key approaches for ensuring data quality especially from the perspective of ultimate beneficiaries of the interventions of HIV response at the communities. This Guideline recommends engaging the infected and affected individuals, communities and community leaders in the review of national response to HIV at district and community levels, and also aims the same at regional and national level reviews.

***Joint Monitoring***: Joint monitoring should be done through various programme components (programme, monitoring & evaluation, supply chain management, and finance) and team of mix stakeholders (the government, programmemanagers, component programme officers, donors, representatives for civil society networks and beneficiaries) in regular interval. This kind of joint monitoring ensures the data quality from various perspectives by programme and stakeholders. This Guideline recommends the joint monitoring in selected sites in regular intervals,and ensuring the documentation and sharing of the joint monitoring reports.

## Reporting Mechanism

Reporting must be done for accountability, satisfaction, programmeimprovement and for resource mobilization. Routine reporting of the regular data shall be done through following the given data flow mechanism using the specific prescribed forms. NCASC in consultation with the Strategic Information Technical Working Group (SITWG) and key stakeholders will revise existing data reporting forms both for health facility based routine reporting and response based multi-sectoral reporting as

and when needed. Thereafter, NCASC will train key stakeholders on data reporting using the revised forms. Reporting shall be done at three levels as follows (Table-8).

*Table 8: Recording & reporting forms, frequency, and responsibilities of routine monitoring*

| Service components | Recording forms | Reporting forms | Reporting frequency | Reporting deadline | Reporting responsibility |
|---|---|---|---|---|---|
| HTC | HTC register | Monthly HTC reporting form | Monthly | Within the 7th day of successive month | HTC sites |
| STI | STI register | STI reporting form | Monthly | | STI sites |
| Targetedprevention interventions among key populations | TI register<br>OST register | TI reporting form<br>OST reporting form | Monthly | | TI-BCC IPs<br>OST sites |
| PMTCT | PMTCT register | PMTCT reporting form | Monthly | | PMTCT sites |
| ART | Pre-ART and ART registers | ART reporting form | Monthly | | ART sites |
| OI | OI register | OI reporting form | Monthly | | ART/OI sites |
| | TB assessment form | TB assessment report | | | |
| CCC | CCC register | CCC reporting form | Monthly | | CCCs |
| CHBC | CHBC register | CHBC reporting form | Monthly | | CHBC sties |
| DACC | Report from service sties to DACC | DACC reporting form (To be updated) | Trimester wise | Within the 15th day of the successive month | DACCs (DHOs/ DPHOs) |

All the service providers operating in the respective districts shall report their programme reports on a monthly basis to their DACC (DHO/DPHO) within one week (7days) of the lapse of the previous month. Service provider needs to ensure that right data are collected in standard recording and reporting templates, compiled, verified and administratively approved before passing on the reports.

DACC (DHO/DPHO) will collect, verify, check quality, analyze and review data at district level on a trimester basis and shall report to NCASC with a cc to RHDs within two weeks (15 days) upon lapse of the previous quarter.

NCASC and respective stakeholders shall prepare HIV response monitoring annual progress report (APR) and share amongst key stakeholders within one month of the lapse of the previous year.

Chapter

6

# EVALUATION OF HIV RESPONSE



## 6.1 Definition

Evaluation is the systematic collection of information about theactivities, characteristics and outcomes of a specific programmeto determine its merit or worth. If a programme is judged to be ofmerit, it is also important to determine whether it is worth its cost.Evaluation provides credible information for improving programmes, identifying lessons learned and informing decisions about futurere source allocation.The investigation of any public health problem begins with asking fundamental questions:

- What is the nature of the problem, who is it affecting (the population, sub-population, groups) and whatis the extent of it/ the prevalence rate, incidence rate?
- What factors are contributing to the problem/ the driving forces of HIV?
- What can be done to alleviate it / HIV response plan?

Once an appropriate programmatic response has been determined, questions are then focused on:

- Is the programme working / effectiveness?
- Is the programme reaching enough people/coverage to reduce the problem or, ideally, eliminate it / impact?

There are several definitions of evaluation adopted by different institutions and programs. For the purpose of this guideline, the term evaluation is operationalized as "Evaluation is the systematic investigation of the HIV response program's efforts in terms of its merit (quality of service delivery and efficiency), significance (coverage, relevance), effects-changes (outcome and impact), and the worth (value for money- cost-effectiveness, sustainability)"[10].

This is thus of great essence to realize that the qualitative and quantitative evaluation approaches will be employed to measure the results and quality of service delivery of the programmatic areas, measure relevance and change effects generated by the program interventions at outcome and impact levels, and measure the worth (cost effectiveness) of the programs. Generally speaking, evaluation investigates beyond monitoring. A generic HIV evaluation needs investigation on the following key questions:

- What is the nature of the HIV epidemic?
- Who is infected and affected(which population groups) and what is the extent of the problem (prevalence, stigma, socio-economic consequences)?
- What factors are contributing to the problem?
- What can be done to minimize the spread of HIV, reduce AIDS related deaths, and mitigate stigma and discrimination against PLHIV?

Evaluation questions illustrated above are broad-based, therefore, it is suggested that each specific evaluation exercise must explore additional areas of investigation depending on their respective program focus and the need for evaluation.

10 CDC, A Framework for Program Evaluation Available at:http://www.cdc.gov/eval/framework/index.htm

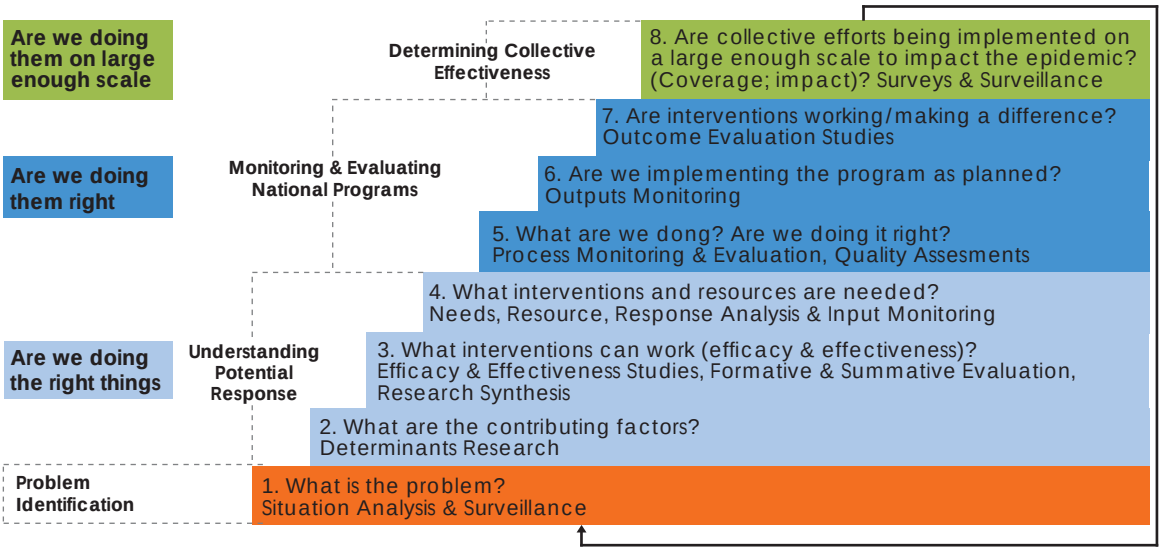
## 6.2 Evaluation Approach

There are many types of evaluation approaches starting from simple program cycle approach to more complex scientific – experimental approaches conducted for a particular purpose. To be more practical, this guideline adopts the following approaches for measuring the goals and the purposes of the NSP:

- Public health approach
- National HIV/AIDS Strategy cycle approach
- Program management approach

### Public health approach

Globally adopted, the public health approach to evaluation has been adopted in this Guideline. The public health approach[11] mainly illustrates a four stage evaluation functions that includes: i. Identify HIV & AIDS problems through situation analysis and surveillance; ii. Understand response mechanism – process evaluation; iii. Evaluate national programs - Coverage and outcome evaluation; iv. Understand collective effectiveness – Impact evaluation. The following self-explanatory diagram provides more information on the public health approach of evaluation as shown in Figure 10.




*Source: Rugg D. Carael M. Boerma T, Novak J. Global advances in monitoring and evaluation of HIV/AIDS: from AIDS case reporting to program improvement. In: Global Advances in Monitoring and Evaluation of HIV/AIDS, Rugg D. Peersman G. Carael M (Eds). New Directions for Evaluation, 2004; 103:33-48*

***Figure 15: A Public Health Questions Approach to HIV Monitoring and Evaluation***

### NSP cycle approach

To measure the merits, effects and worth of overall NSP and its programmatic areas such as prevention, treatment, care and support, and cross cutting issues, there will be internal and external evaluations which will be conducted during the NSP period following the NSP cycle such as situation analysis during NSP formulation; annual progress report (APR) during implementation on an annual basis; mid-term review (MTR) at the middle of the NSP implementation; and final evaluation towards the end of the NSP period. Evaluation plan by NSP cycle and programme management approaches is presented in Table 9.

***Annual Progress Review (APR) and Joint Annual Review (JAR):*** The NCASC has been practicing the annual reviews which shall be continued during the new NSP cycle for the three programmatic areas (Prevention, treatment, care and support). Annual reviews will be done by the respective program staff facilitated by M&E Unit of NCASC on an annual basis in all the regions.

*11 UNAIDS, Strategic Information for HIV/AIDS*
*http://www.usaid.gov/our_work/global_health/aids/TechAreas/multisectoral/strategic.html*

***Mid-Term Review (MTR):*** At the middle stage of the NSP period (2011-2016), there will be one mid-term evaluation conducted by a group of independent evaluators to be engaged by the NCASC somewhere in late 2013 to early 2014.

***Final Evaluation:*** Final evaluation of the NSP will be done by a team of independent evaluators towards the end of 2015 to assess the effectiveness of the NSP, lessons learned and find out the best way forward for the next cycle of the NSP.

*Table 9: Evaluation Plan for National Response to HIV in Nepal, 2012-2016*

| Programmatic/ thematic areas | Evaluation types and methods | Frequency |
|---|---|---|
| NSP | APR, MTR and Final evaluation | • APR – Annually<br>• MTR – Once at the middle of the NSP period<br>• MTR – Once at the end of the NSP period<br>• Systematic review of HIV and AIDS related researches/ evaluations/studies in Nepal – Every two years |
| VCT and STI | APR, MTR,and effectiveness evaluation | • APR – Annually<br>• MTR – Once at the middle of the NSP period<br>• Effectiveness evaluation -twice during NSPperiod |
| Targeted Prevention Interventions: TI and BCCI | APR, MTR, Behavioural survey on condom use, stigma & discrimination, ethnographic study, effectiveness evaluation of BCC strategies and approaches | • APR – Annually<br>• MTR – Once at the middle of the NSP period<br>• Behavioural survey on condom use, stigma & discrimination - twice during NSP period<br>• Ethnographic study – twice during NSP period<br>• Effectiveness evaluation of BCC strategies - twice during NSP period<br>• Impact evaluation of interventions once during NSP period |
| PMTCT | APR, MTR, Impact evaluation | • APR – Annually<br>• MTR – Once at the middle of the NSP period<br>• Impact evaluation - twice during NSP period<br>• Cost-effectiveness of institutional vs. community based models |
| ART | APR, MTR, Impact/ outcome evaluation | • APR – Annually<br>• MTR – Once at the middle of the NSP period<br>• Impact/outcome evaluation - twice during NSP<br>• Impact assessment, adherence– twice during NSP period |
| CCC | APR, MTR, client survey – effectiveness of CCC and Satisfaction | • APR – Annually<br>• MTR – Once at the middle of the NSP period<br>• Client survey - twice during NSP period |
| CHBC | APR, MTR, client survey | • APR – Annually<br>• MTR – Once at the middle of the NSP period<br>• Client survey - Once during NSP period |
| Training | Knowledge and effectiveness | •Knowledge –Assessment of the participants' knowledge shall be done during the training sessions<br>• Effectiveness – Effectiveness of the knowledge and skills gained at the training shall be assessed through the training effectiveness evaluated - twice during NSP period |

## Program management approach

From the programme management perspective it is imperative for the programme manager to know what is the status of his/her programme in terms ofits coverage, efficiency, quality of services and effectiveness (Are the program interventions producing results to meet the objective?). What type of evaluation is needed for specific program evaluation[12]? Would it be determined by the area of investigation based on the problem that has occurred in a particular program or by what we want to know about that programme?The following self-explanatory table provides a basis for choosing the type of evaluation corresponding to the specific area of investigation at a particular stage of the programme cycle (Table 10).

*12 Evaluation a Systemic Approach, 7th edition by Peter Rossi, Mark W. Lipsey & Howard E. Freeman, 2004)*

*Table 10: Types of Evaluations Required at Different Stage of Programme*

| Programme Stage | Key Areas of Investigation and Guiding questions | Types of Evaluation Methodology |
|---|---|---|
| 1. Pre-planning stage - Identification of problems/ needs | To what extent are the needs of the target group met? What else is needed to meet their needs? | Needs assessment |
| 2. Goal setting stage - Determination of goals at program formulation stage | What must be done to meet those needs and standards? | Needs assessment |
| 3. Program design Stage - Design of problem alternatives | What services could be used to produce the desired change? | Program logic and theory |
| 4. Program selection Stage - Selection of alternatives | Which of the program approaches is the best? | Formative evaluation |
| 5. Program implementation Stage - Program implementation | How should the program be put into operation? | On-going evaluation |
| 6. Program implementation Stage - Program operation | Is the program operating as planned? What has constrained the smooth functioning (blockages) of the program implementation | Process evaluation Operational research |
| 7. Program implementation Stage - Program outcomes | Is the program having the desired effect? | Outcome evaluation |
| 8. Program implementation Stage - Program impacts – efficiency | Is the program efficient and sustainable? | Impact evaluation |

## 6.3 Generic Steps of Evaluation

Before conducting evaluation, we must make sure that an appropriate evaluation steps are followed and necessary preparations are made accordingly. Learning from the Center for Disease Control (CDC)[13], this M&E Guideline adopts the six steps of evaluation with four broad categories of the evaluation standards as illustrated in the Figure 11 below.

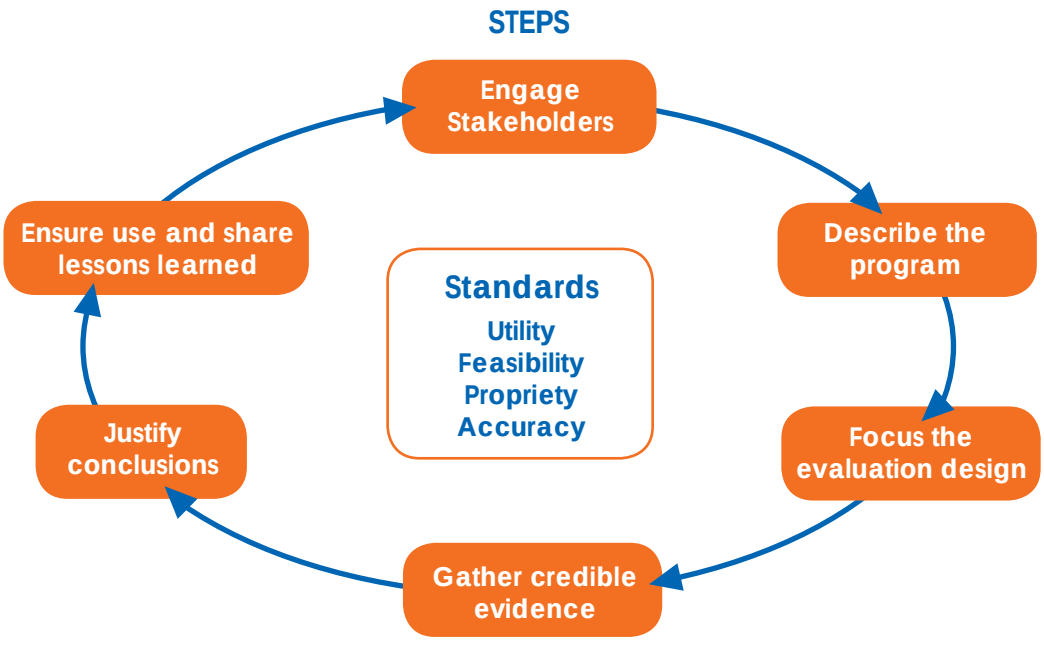



*Figure 16: Steps of Evaluation of Public Health Programmes*

13 CDC. Program Evaluation Steps. Available at: http://www.cdc.gov/eval/steps/index.htm.

**Step-1:** Engage relevant stakeholders (ensuring avoidance of participation bias) –meaningful engagement of the key stakeholders is the first and foremost requirement of evaluation process. Key stakeholders of a typical program are the program staff, donors/funding agency representatives, operations staff, primary users of the evaluation and representative of the beneficiaries. They should identify budget, prepare TOR, and form a reference group.

**Step-2:** Describe the program –This step further justifies evaluation needs and the requirements to be met by the evaluation, expected effects, activities, resources, stage, context and logic model, recruitment of the consultant (s).

**Step-3:** Focus on the course of the evaluation, design evaluation methods/procedures and scope of work - to assess the issues of greatest concern to stakeholders while using time and resources as efficiently as possible. Think of the purpose, users, uses, questions, methods and agreements.

**Step-4:** Gather credible evidence –At this stage the evaluator collects evidence to strengthen evaluation judgments and the recommendations using defined indicators, sources, quality, quantity and logistics.

**Step-5:** Justify conclusions - Justify conclusions on the basis of evidence using these five elements: standards, analysis/synthesis, interpretation, judgment and recommendations.

**Step-6:** Ensure use and share lessons learned –Upon completion of the evaluation it should be disseminated to the key stakeholders and the users.

## 6.4 Evaluation Support system

The NCASC shall provide necessary technical support for HIV/AIDS evaluation. This is important to note that the evaluation problems and the type of evaluation presented in the table above is just a guide in a situation where any program or the implementing agencies faced other problems they might choose evaluation methods beyond what has been presented above corresponding to their nature of the problem and/or the need of evaluation. The strategic information unit of the NCASC will provide necessary technical support on evaluation to the partner organization. Any HIV and AIDS related evaluation or research study to be conducted in the country should be brought to the knowledge of the NCASC.

Chapter 7

# HIV DATA DISSEMINATION MECHANISM, INFORMATION PRODUCTS AND ITS USE



## 7.1 Mechanism of HIV Data Dissemination

Dissemination of HIV data and related information to the policy planners, programme managers, donors, stakeholders, communities, media and general people is imperative in order to gain commitments for improved response to HIV epidemic and as well to express the accountability for the commitments made. Following are the key strategies recommended as the mechanism for HIV data dissemination:

### Data sharing/dissemination meetings

HIV and STI data will also be disseminated through special meetings called for data sharing and dissemination. For example,NCASC conducts data sharing meetings while submitting reports to global commitments (UNGASS and UA reports).

### National and international conferences, seminars

It is an opportunity to share the data (in form of reports, presentation, and factsheets) through relevant national and international conferences, seminars and workshops for wider range of scientific audiences, policy makers, implementers, donors, and media.

### Media release and media ads

Media release will be prepared on a trimester basis and shared with media to inform the general population on HIV related issues as news coverage. Likewise, substantial media advertisements will also be made to inform the people.

### National AIDS Research Library (resource centre)

NCASC has established National AIDS Research Library as a resource center which will be updated with HIV related resources for latest reports and information.

### Contribute to global regional, HIV database (HIV and AIDS Data Hub for Asia Pacific, UNAIDS and WHO Reporting)

NCASC will update the updated data on HIV and STI to HIV and AIDS Data Hub for Asia and the Pacific regularly. Also, HIV data will be contributed to prepare global reports facilitated by UNAIDS and WHO annually as per the template provided.

### Web updates

NCASC has its own website where people can find information by browsing this link http://www.ncasc.gov.np. This website will be updated from time to on a regular basis with relevant data, information and reports.

### Data use advocacy sessions

Use of data is more important than generating and reporting data. If there is no use of data there is no need to collect and report the data. During the current period of NSP, NCASC will expediteits data use for advocacy at various levels: national, regional, district, and local level.

## 7.2 Products

Followings are the key SI products for HIV data dissemination and advocacy use:

- Annual Progress Report on National Response to HIV (NCASC Annual Report)
- Trimester Review (Progress) reports
- Monthly Fact Sheets
- Annual Epidemiological and Programme Fact Sheets
- Annual Surveillance Report
- Continue National SI Review – Six Monthly and Annually
- IBBS Reports, including factsheets
- Annual Report of Department of Health Services (HIV/AIDS Chapter)
- Nepal Country Progress Report for UNGASS(GARP) and UA Progress Report
- MDG Progress Reports (Goals: 4, 5 and 6)
- Estimation and Projection Reports
- Reports of various researches
- District AIDS Profile ( and Annual Report of District AIDS Coordination Committees)
- Presentations slides/working papers/abstracts in National and International Conferences and workshops
- Updates of National AIDS Research Library
- AIDS data hub – Nepal Country Profile (PPT Slides)
- WHO SEARO HIV/AIDS Situation Report (Nepal Chapter)
- National SI calendar

## 7.3 Data Use

### 7.3.1 Identify the users of data

This is always important to identify the users of the data before collecting the data. The users of HIV and AIDS data are individuals who implement the programmes, make decisions,develop policies and plans,formulate advocacy messages, provide support services (including technical and financial), and do further research for academic purposes or so.

### 7.3.2 Internal use of Data

Data are used for internal and external purposes. Data used within the M&E unit and the organization that collects data are said to be internal use of data. At NCASC, the internal use of data is done for the following purposes:

- Performance monitoring
- Results (outcome and impact) assessment
- Prepare reports and meet reporting requirements
- Improve programmeimplementation
- HIV infections estimations and projections
- Needs calculation, target setting, and quantifications of HIV related commodities and supplies
- Review of national response by component, strategic planningand allocate resources
- Information generation for programme improvementand public message

### 7.3.3 External / Public use of HIV data

External or public use of data is more important in order to effectively respond to the HIV. Several institutions and individuals make use of data for the following purposes:

- Justify value of money (tracking the return on investments made)
- Scientific and academic researches
- Express accountability – donors, government and people
- Evaluation – effectiveness, quality and coverage
- Policy reforms and strategic planning
- Resource mobilization on national response to HIV epidemic
- Project development for HIV and AIDS impact mitigation

Chapter

8

# MONITORING AND EVALUATION COORDINATION AND IMPLEMENTATION FRAMEWORK



For the successful implementation of M&E plans following the guidelines outlined in this Guideline it is essential to set up and strengthen M&E coordination mechanism at various levels.

## M&E Coordination Mechanisms and Responsibilities

M&E coordination at national, regional and district level is essential to effectively monitor HIV response programs, ensure one M&E framework, assure data quality, provide timely information to decision-makers and the users of data, develop partnership amongst various stakeholders, entrust mutual ownership and accountability, and simultaneously build M&E capacity of the related stakeholders at all levels.

### National level M&E coordination

The National AIDS Council (NAC) is created under the chairmanship of the Prime Minister to oversee national HIV & AIDS response in the country. To coordinate the multi-sectoral response, the HIV and STI Control Board (HSCB) is formed as a secretariat of the NAC.

The National Centre for AIDS and STD Control (NCASC) of Ministry of Health and Population (MoHP) is responsible for setting up and implementing overall M&E functions (12 components of functional M&E systems) of all the activities planned, implemented and reviewed under MoHP (National Policy on HIV and STI, 2011). The NCASC coordinates HIV response activities through central, regional, zonal and district level health structures, district public health offices, health centres, health posts, sub health posts and female community health volunteers. To ensure the technical coordination of M&E functions at national level, HIV Strategic Information Technical Working Group, NCASC will play the following M&E coordination roles:

- Update the TOR for the SI-TWG and continue seeking technical inputs on important SI activities, processes and products;
- Provide effective, timely and relevant information to decision makers and stakeholders on the progress and constraints of the national response to enhance informed decision making and improve programs;
- Mobilize and allocate resources to strengthen decentralized M&E system;
- Establish an institutionalized network with key line ministries, civil society and private sector, and external development partners on HIV multi-sectoral M&E towards one national M&E framework;
- Provide technical guidance to strengthen M&E capacity among key stakeholders on systematic collection, processing and analysis of data at various levels, assure data quality, standardize M&E methodologies and tools across multiple actors at various programme levels;
- Analyze and use of data for HIV, ART estimation, resource allocation, reporting, preparing communication materials and media advocacy. NCASC also makes use of data for improving program implementation, strategic policy planning, review national response to HIV and AIDS;
- Build M&E capacity of all related stakeholders in the country; and
- Provide supportive supervision and feedback

### Regional/State level M&E coordination

Inadequate regional coordination is one of the weakestlinks in monitoring and evaluation of HIV response in Nepal in the present situation. However, NCASC has recently deployed one regional HIV/AIDS Officer in all the regions to coordinate HIV response in the respective region including coordination of M&E functions. The NCASC will build the regional M&E capacity and provide

necessary technical support to the regional directorate for health in all the regions to effectively coordinate and monitor HIV response. Regions will play the following M&E coordination roles:

- Compile and prepare regional reports. Report to NCASC and give feedback to the districts;
- Coordinate and institutionalize regional network with key stakeholders covering civil society and private sectors related to HIV;
- Guidance to the D(P)HOs, DACCs to implement the programmes and follow the national guidelines;
- Provide supportive supervision to the districts and service delivery sites; and
- Seek technical and other support from NCASC

### District level M&E coordination

The Local Self Governance Act (1998) and by laws (1999) allow District Development Committees (DDCs) to play important role in establishing multi-sectoral HIV response plan and review its progress through the District AIDS Coordination Committee (DACC) which is comprised of the DHO, D(P) HO, public sector, private sector and non-state actors (civic societies). The DACC play crucial role in mobilizing health sector and NGOs in implementing and monitoring HIV related activities in a coordinated way. The National HIV/AIDSStrategy (2011-2016),has identified the following key roles of the DACC in accordance with the DACC Guidelines (2008):

- Collect, compile and prepare district reports. Report to NCASC and give feedback to service sites;
- Review HIV/STI data on a routine basis;
- Ensure participatory approach through social audit; and
- Provide M&E support to the service sites and seek M&E technical assistance from the NCASC and the RDH to some extent

## 8.1 Technical Support

This Guideline envisioned to seek necessary M&E technical support from various technical agencies such as WHO, UNICEF, UNDP, UNFPA, UNAIDS, USAID, the World Bank, FHI 360, etc. at the required time. National HIV-Strategic Information Technical Working Group (SI-TWG) formed under the leadership of NCASC Director will provide hands on technical assistance on the specific agenda and/or questions related to HIV M&E, surveillance and research.

## 8.2 Partnership and Roles

M&E is a multi-sectoral function, therefore, it is the responsibility of every organization to monitor and evaluate what they have been doing in the field of HIV, keep the records and report to the established national mechanism which is at present NCASC. The multi-sectoral agencies engaged in HIV response programs will collect data of their respective programs and report to the respective DACC where the program has been implemented on a monthly basis following the electronic or manual approach. Specific roles of the key stakeholders are specified in the Table 11 below.

*Table 11: M&E Roles and Responsibilities of Key Stakeholders*

| Key Stakeholders | M&E Roles |
|---|---|
| Ministry of Health and Population | Overall leadership on M&E of national response to HIV in Nepal (through NCASC) |
| Ministry of Education | • Monitoring and evaluation by incorporating defined indicators in routine monitoring forms and report to the respective DACC.<br>• Seek M&E technical capacity building support from NCASC to effectively monitor HIV response interventions |
| Ministry of Local Development | • Monitoring and evaluation by incorporating define indicator in routine monitoring forms and report to the respective DACC<br>• Seek M&E technical capacity building support from NCASC to effectively monitor HIV response interventions |
| Ministry of Women, Children and Social Welfare | • Monitoring and evaluation by incorporating define indicator in routine monitoring forms and report to the respective DACC<br>• Seek M&E technical capacity building support from NCASC to effectively monitor HIV response interventions |

| Key Stakeholders | M&E Roles |
|---|---|
| Ministry of Tourism | • Monitoring and evaluation by incorporating define indicator in routine monitoring forms and report to the respective DACC<br>• Seek M&E technical capacity building support from NCASC to effectively monitor HIV response interventions |
| Ministry of Home Affairs | • Monitoring and evaluation by incorporating define indicator in routine monitoring forms and report to the respective DACC<br>• Seek M&E technical capacity building support from NCASC to effectively monitor HIV response interventions |
| Nepal Police | • Monitoring and evaluation by incorporating define indicator in routine monitoring forms and report to the respective DACC<br>• Seek M&E technical capacity building support from NCASC to effectively monitor HIV response interventions |
| Ministry of Labourand Transport | • Monitoring and evaluation by incorporating define indicator in routine monitoring forms and report to the respective DACC<br>• Seek M&E technical capacity building support from NCASC to effectively monitor HIV response interventions |
| Ministry of youth and Sports | • Monitoring and evaluation by incorporating define indicator in routine monitoring forms and report to the respective DACC<br>• Seek M&E technical capacity building support from NCASC to effectively monitor HIV response interventions |
| Private Sector | • Private sectors include organized business motive organizations such as FNCCI, Bankers Associations, hotel association etc. HIV response programmes and fulfill the following M&E roles:<br>• Monitoring and evaluation by incorporating define indicator in routine monitoring forms and report to the respective DACC.<br>• Seek M&E technical capacity building support from NCASC to effectively monitor HIV response interventions. |
| Media | • Disseminate HIV and AIDS related information released by the NCASC to the general public.<br>• Display media advertisements issued by NCASC |
| CSOs (including networks, local NGOs, CBO) | • CSOs are important players in HIV response especially at community level that so why their role in M&E vital and should play the following roles:<br>• Monitoring and evaluation by incorporating define indicator in routine monitoring forms and report to the respective DACC.<br>• Seek M&E technical capacity building support from NCASC to effectively monitor HIV response interventions. |
| External Development Partners (EDPs) | • Main role of the EDPs in M&E is to mobilize technical and financial resources for strengthening the national M&E system and suggest international best practices in M&E<br>• Strengthen national M&E capacity and provide technical assistance for coordinated, harmonized and evidence based information generation, dissemination and use<br>• Help coordinate national M&E system<br>• Build capacity of the NCASC at various areas of M&E in line with the 12 components of a functional M&E system including the exposure of the M&E staff to national and international, training, workshop, seminars, observation studies. |

Chapter 9

# MONITORING AND EVALUATION CAPACITY BUILDING FRAMEWORK



## 9.1 Monitoring and Evaluation Capacity Development

Sustained capacity for M&E of HIV response programmes at the national, regional and local levels is essential to generate quality strategic information on a timely basis. Strong M&E system provides relevant data to make policy decisions; implement planning and reporting for accountability; enable program improvement and strategic planning; and support accessible and targeted program service delivery for high-risk populations.

Widely accepted definition of capacity development from UNDP is relevant and hence adopted in the context of M&E capacity development of HIV response in Nepal. The United Nations Development Programme (UNDP) has defined "capacity" as "the ability of individuals, institutions and societies to perform functions, solve problems, and set and achieve objectives in a sustainable manner". The terms "capacity building" or "capacity development" describes the task of establishing human and institutional capacity. To effectively support capacity development, it requires identifying what key capacities do already exist and what additional capacities may be needed to achieve the set goals of National HIV/AIDS Strategy (2011-2016).

### Monitoring and Evaluation Capacity Assessment

Starting point of capacity development is the identification of the capacity gapsthrough capacity assessment to estimate the existing "capacity assets" and the future "capacity needs". To clearly understand the capacity gap, it is required that M&E capacity assessment of NCASC, RHDs, DACCSs and that of the key stakeholders be done by applying specific assessment tools.

### Capacity assessment/development approaches

Capacity assessment is an analysis of desired capacities against existing capacities and offers a systematic way of gathering data and information on capacity assets and needs. Conducted during the initial stages of development planning, a capacity assessment serves to provide an input for formulating a capacity development response that addresses those capacities that could be strengthened and that optimizes existing capacities that are already strong and well founded.

There are several approach of capacity assessment developed and applied by many organizations around the globe, however, most suitable to this context isthe UNDP's capacity development process which could be applied in line with the UNAIDS's – 12 components of a functional M&E systems.

### Steps of capacity development

Stepwise approach of capacity development is suggested in a sequential manner starting from engaging key stakeholders, developing capacity assessment tool and assessing the capacity, formulating capacity development plan, implementing capacity development plan, monitoring and evaluating the capacity implementation plan. Adopted from UNDP, the capacity development process is diagrammatically represented below (Figure 12).

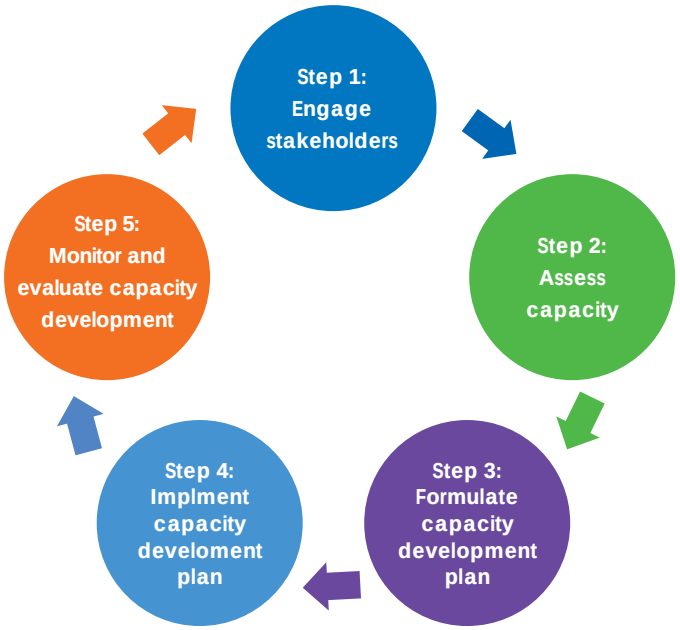



*Figure 17: M&E Capacity Development Process*

## 9.2 M&E Capacity Development Plan

The capacity development plan should be determined by the findings of the capacity assessment. NCASC and key stakeholders have recently assessed M&E capacity (MESS, 2011) based on its findings the M&E capacity development plan should be built and updated through subsequent capacity assessment every two years and then adjustments need to be made in the capacity development plan accordingly. Broadly, the M&E capacity development areas are recognized as followings (Table 12):

*Table 12: Key areas of M&E capacity development*

| Level and organization | Capacity building areas |
|---|---|
| **National level:** | |
| **NCASC** | • Update guidelines and tools for M&E, surveillance and research<br>• Management and analysis of routine data<br>• Use of data for programme improvement<br>• Production of SI products such as policy brief, annual reports, surveillance reports<br>• Target setting, quantification and forecasting<br>• Epidemic analysis and modeling<br>• Evaluation of interventions including targeted interventions, PMTCT, ART<br>• Research, particularly operational research, writing scientific papers and reports<br>• Data quality assurance and improvement<br>• Statistical software – SPSS, SAS, Epi-data, GIS<br>• Technical update while monitoring at field |
| **PRs (Save the Children, FPAN)** | • Management and analysis of routine data<br>• Data quality assurance and improvement |
| **Other key partners at national level (FHI 360, CARE International)** | • Management and analysis of routine data<br>• Advocacy and use of data for programme improvement<br>• Epidemic analysis and modeling<br>• Programme evaluations<br>• Operational research and writing of scientific papers and reports |
| **Line ministries** | • Collection, management, analysis and use of HIV data for mainstreaming of HIV response into broader development programme |
| **National networks related to HIV in Nepal** | • Basics of M&E and fundamentals of research and surveillance<br>• Use of data for advocacy and community system strengthening<br>• Generating and using of evidence for interventions design |
| **Regions** | |

| Level and organization | Capacity building areas |
|---|---|
| **RHDs** | • Management and analysis of routine data<br>• Use of data for programme improvement<br>• Data quality assurance and improvement<br>• Technical update while monitoring at field<br>• Regional level programme reviews (routine) and reporting |
| **Districts/DACC** | • Data management and analysis of routine data<br>• Use of data for programme improvement at local level<br>• Data quality assurance<br>• Programme monitoring<br>• District level reviews and reporting |
| **NGOs implementing interventions** | • Basics of M&E of related programmes<br>• Collection and management of routine data<br>• Progress reporting<br>• Documenting best practices and lesion learned |

Chapter

# 10 MONITORING OF STRATEGIC INFORMATION (M&E FUNCTIONS)



This chapter refers to the "M&E of M&E" and gives thought to track SI system of NCASC in terms of universally recognized M&E standards, specific progress and key SI performance areas.

Effective M&E system provides managers and decision makers with adequate information that they need to make right decisions; provide early warning of problematic activities and processes that need immediate corrective actions to improve implementation; build understanding and capacitate, motivate, and stimulate learning among those involved in the project; and assess progress and thus enable accountability in the requirements to be met (USAID, 2011).Simultaneously, monitoring of the M&E functions is also essentially required to judge the performance of M&E itself.

Usually, M&E looks outwards to measure the performance and results of other programs, nevertheless, this chapter refers to the "M&E of M&E" and presents a comprehensive checklist of key M&E functions to be monitored on an annual basis. This Guideline thus equally recognizes the importance of monitoring of M&E to track the performance of the strategic information system of the NCASC. Key areas to be monitored include operational M&E standards, progress reviews, information products, and punctuality of meeting the deadlines as discussed below:

## 10.1 Operational M&E Standards

The M&E standards define the key elements and expected level of performance for conducting designing, monitoring and evaluation of the M&E functions. Key standardsaddress the organizational environment in which M&E takes place, policies and guidelines, human and financial resources for M&E, coordination mechanism and strategic information components.

## 10.2 Review of Strategic Information Progress

Functionality of the M&E is also measured through the quality and quantity of data it produces, effectively managing and supplying data to the users as and when required. SI unit can measure its own progress on a monthly, trimester and annual basis.

### Monthly and Trimester Review Meetings

Ensure that monthly meetings are held to discuss the received data on the month, give feedback to those who reported and do follow-up to those who did not report. Monthly meetings shall be held both at national and district levels with necessary feedback and follow-ups.

Trimester review meetings are important to review trimester progress as against the set targets and resources allocated.

### Annual Review Meeting

Annual review is imperative to see the progress with reference to the planned activities and annual budget plan. Annual meeting held with key stakeholders, including external development partners ensure ownership of the annual achievements and help mobilize resources for the next year. Joint annual review meeting also provides a forum to monitor progress with reference to NSP targets on an annual basis both at national and district levels.



### External review (independent review of M&E systems and functions)

This is also equally important to see to it that the M&E functions are reviewed by the third party (external and/or independent party) so that the biases of routine M&E that are likely to happen will be minimized and reviewed providing references as recommendations for strengthening of M&E up to the international standards of practice.

## 10.3 Update tools and database (guideline, reporting tools, action plans)

Performance of the SI unit is also viewed from the tools, guidelines and action plans it prepares to efficiently monitor national response to HIV. The timely updated guidelines, reporting tools and action plans that are fully transferred to service sites level are proof of very rigorous M&E systems in place. This guideline recommendschecking these frequently.

## 10.4 Evidence of the SI products

Strategic Information Unit of NCASC and M&E sections of respective M&E authorities should also be able to show the evidence of various strategic information products that need to be prepared and shared with stakeholders to improve program implementation and make informed decisions.

## 10.5 Meeting Deadlines of Reporting Frameworks

Efficiency and practicality of the SI Unit of NCASC and respective section of M&E authorities to produce required quality reports by meeting the given deadlines isdirectly reflected and shall be measured through the performance of the strategic unit of NCASC.

Chapter

11

# COSTED MONITORING AND EVALUATION PLAN



Monitoring and evaluation plan is aligned with the overall developmental perspectives of the MTDP, NHSP-II, and NSP-IV. The 12 components approach of the functional M&E system is adopted as a guiding principle of the costed M&E plan. The total estimated cost for the M&E functions for the next five years (2012-2016) is 12.43 million US dollars. Costing of the activities is estimated on the basis of 2012 as a base year. It is assumed that the cost will rise by 10% per annum. The another basis of estimation is the conversion rate of NRs 80 = 1 US dollar. The summary of the costed M&E plan by 12 components is displayed below (Table-13).

*Table 13: Summary of Multi-Year Costed M&E Plan (2012-2016), estimated at NRs 80=1USD.*

| No | M&E Components | 2012 | 2013 | 2014 | 2015 | 2016 | Total |
|---|---|---|---|---|---|---|---|
| 1 | Organizational Structures with M&E Functions | 468,575 | 535,433 | 566,976 | 643,674 | 686,041 | 2,900,699 |
| 2 | Human capacity | 484,550 | 230,425 | 492,850 | 280,655 | 56,173 | 1,544,653 |
| 3 | Partnerships and Coordination | 23,700 | 32,700 | 32,700 | 33,000 | 33,200 | 155,300 |
| 4 | National Multi-Sectoral M&E Plan/Resources | 55,000 | - | 52,000 | - | 58,800 | 165,800 |
| 5 | Annual Costed M&E Work Plan | 6,000 | 6,600 | 7,260 | 7,986 | 8,785 | 36,631 |
| 6 | M&E Advocacy, Communication | 16,850 | 25,310 | 18,710 | 30,496 | 21,971 | 113,337 |
| 7 | Routine HIV Programme Monitoring | 382,710 | 458,010 | 525,960 | 495,058 | 558,582 | 2,420,319 |
| 8 | Surveys and Surveillance | 398,810 | 617,110 | 848,770 | 414,016 | 463,737 | 2,742,443 |
| 9 | National and Sub-national HIV Databases | 320,000 | 133,000 | 48,000 | 98,000 | 48,000 | 647,000 |
| 10 | Supportive Supervision and Data Auditing | 49,625 | 55,475 | 56,285 | 60,326 | 61,621 | 283,332 |
| 11 | HIV Evaluation and Research | 28,500 | 382,000 | 268,000 | 167,500 | 286,000 | 1,132,000 |
| 12 | Data Dissemination and Use | 89,525 | 60,450 | 81,180 | 69,073 | 85,450 | 385,678 |
| | **Total** | **2,323,845** | **2,536,513** | **2,998,691** | **2,299,783** | **2,368,359** | **12,527,191** |

*Note: Cost assumption with 10 % increment per annum*

## Brief description of the budget by 12 M&E components

### 1. Organizational Structures with M&E Functions

In order to establish and maintain a network of organizations responsible for HIV M&E at the national, sub-national, and service-delivery levels essential costing of the manpower is proposed. The following table shows year-wise manpower cost of the NCASC at national, regional and district level. However, the organization cost of the key partners such as FHI, FPAN, Save the Children and other EDPs and stakeholder is not included (Table 14).

*Table 14: Operational Cost (Staff)*

| Activities | 2012 | 2013 | 2014 | 2015 | 2016 | Total (USD) |
|---|---|---|---|---|---|---|
| Operational Cost - Staff | | | | | | |
| NCASC | 203,938 | 224,331 | 246,764 | 271,441 | 298,585 | 1,245,059 |
| Save the Children | 55,250 | 60,775 | 66,853 | 73,538 | 80,892 | 33,7307 |
| Family Planning Association of Nepal | 31,044 | 34,148 | 37,563 | 41,320 | 45,452 | 189,527 |
| FHI 360 | 107,250 | 117,975 | 129,773 | 142,750 | 157,025 | 654,772 |
| Staff at Regional Level (RHDs) | 22,344 | 24,578 | 27,036 | 29,740 | 32,713 | 136,411 |
| Staff at District Level | | | | | | |
| (DACC -DHO/DPHO) | 48,750 | 53,625 | 58,988 | 64,886 | 71,375 | 297,624 |
| Capacity assessment of M&E system | 0 | 20,000 | 0 | 20,000 | 0 | 40,000 |
| **Total** | **468,575** | **535,433** | **566,976** | **643,674** | **686,041** | **2,900,699** |

## 2. Human capacity

Developing human capacity and their retention is the top most priority to carry out the M&E functions. Therefore, this guideline proposes a series of national and international trainings, workshops and study for NCASC staffs. Likewise, trainings for the national partners, regional, district and SDP level stakeholders both from public and civic societies, and M&E capacity assessment and update capacity assessment plan at national, regional and district levels are well considered.

*Table 15: Capacity development cost*

| Activities | 2012 | 2013 | 2014 | 2015 | 2016 | Total (USD) |
|---|---|---|---|---|---|---|
| Training of NCASC Staff | 2,800 | 26,600 | 2,800 | 26,600 | 0 | 58,800 |
| Training of National Partners | 10,000 | 28,000 | 10,000 | 28,000 | 0 | 76,000 |
| Training of Regional | 9,000 | 18,750 | 9000 | 18,750 | 0 | 55,500 |
| Training of District level training for M&E focal persons & DACC members and SDPs | 270,000 | 118,125 | 270,000 | 118,125 | 0 | 776,250 |
| Training of NGO Outreach and M&E/ Focal point from other ministries | 30,500 | 0 | 30,500 | 0 | 0 | 61,000 |
| International workshops, conferences, seminars (International AIDS Conference and ICAAP) | 30,000 | 33,000 | 36,300 | 39,93 | 43,923 | 183,153 |
| Sponsoring of M&E staff for higher studies (Masters' degree) | 120,000 | 700 | 120,00 | 44,000 | | 284,700 |
| GIS training at National Level | 5,000 | 0 | 6,000 | 0 | 7,000 | 18,000 |
| For M&E, Surveillance &Research and other training activities | 7,250 | 5,250 | 8,250 | 5,250 | 5,250 | 31,250 |
| **Total** | **484,550** | **230,425** | **492,850** | **280,655** | **56,173** | **1,544,653** |

## 3. Partnerships and Coordinate

Stakeholder engagement and management is a key to success, therefore, this guidelines emphasizes on a coordinated approach with all related stakeholders. NCASC will continue its on-going practice of establishing and maintaining smooth working and strategic relationship with concerned partners within the country and outside the country /international stakeholders. Costing for the partnership, coordination and TWG meetings is estimated (Table 16).

*Table 16: Partnerships and Coordinate cost*

| Activities | 2012 | 2013 | 2014 | 2015 | 2016 | Total (USD) |
|---|---|---|---|---|---|---|
| M&E coordination meetings at national level | 1200 | 1200 | 1200 | 1200 | 1200 | 6000 |
| District level coordination meeting | 21,000 | 30,000 | 30,000 | 30,000 | 30,000 | 141,000 |
| Annual SI retreat | 1500 | 1500 | 1500 | 1800 | 2000 | |
| **Total** | **23,700** | **32,700** | **32,700** | **33,000** | **33,200** | **1,55,300** |

## 4. National Multi-Sectoral M&E Plan/Resources

In order to develop and regularly update a national M&E plan, identification of data needs, national standardized indicators, data collection procedures and tools including the roles and responsibilities for implementation of a functional national HIV M&E system, cost is allocated as presented in the Table 17 below.

*Table 17: National multi-Sectoral M&E plan/resources cost*

| Activities | 2012 | 2013 | 2014 | 2015 | 2016 | Total (USD) |
|---|---|---|---|---|---|---|
| Develop and regularly update a national M&E plan including identified data needs, national standardized indicators, data collection procedures and tools, and roles and responsibilities for implementation of a functional national HIV M&E system. | 20,000 | | | | | |
| Review and update of national M&E framework guidelines and plan (2012-2016) including workshops and printing | | | 18,000 | | 19,80 | 37,800 |
| Surveillance plan and guidelines including workshops and printing | 15,000 | | | | 25,000 | 40,000 |
| Review and update of national surveillance plan (2012-2016) including workshops and printing | | | 24,000 | | | 24,000 |
| Preparation of national HIV research agenda (2012-2016) including workshops and printing | 20,000 | | | | | 20,000 |
| Review and update of national HIV research agenda (2012-2016) including workshops and printing | | | 10,000 | | 14,000 | 24,000 |
| **Total** | **55,000** | **0** | **52,000** | **0** | **58,800** | **165,800** |

## 5. Annual costed M&E work plan

NCASC will continue participatory annual M&E planning process with key stakeholders. So, costing for preparing annual M&E work plan is estimated and presented below (Table 18).

*Table 18: Annual costed M&E work plan cost*

| Activities | 2012 | 2013 | 2014 | 2015 | 2016 | Total (USD) |
|---|---|---|---|---|---|---|
| Preparation of costed annual plan of work (APW) | 6000 | 6,600 | 7,260 | 7,986 | 8,784.6 | 36,631 |
| **Total** | **6000** | **6,600** | **7,260** | **7,986** | **8,784.6** | **36,631** |

## 6. M&E Advocacy, Communication

M&E advocacy is an essential M&E function to ensure that the decision makers and the programme managers have informed knowledge and commitment to HIV M&E and its M&E system. This guideline, thus, proposes activities costing for M&E advocacy, policy briefs, journals and media release, information orientation and web-updates for users (Table 19).

*Table 19: M&E advocacy, communication cost*

| Activities | 2012 | 2013 | 2014 | 2015 | 2016 | Total (USD) |
|---|---|---|---|---|---|---|
| Staff support for Knowledge sharing portal | 6,000 | 6,000 | 7,260 | 7,986 | 8,785 | 36,031 |
| Planning meetings for M&E advocacy | 3,000 | 3,000 | 3,000 | 3,000 | 3,300 | 15,300 |
| Data use advocacy workshop | | 8,000 | | 10,400 | | 18,400 |
| Procurement of national and international journals related to HIV and STI | 1,600 | 1,760 | 1,600 | 1,760 | 1,936 | 8,656 |
| Workshop for preparation of policy briefs, press/media release, factsheets, abstracts, PPTs | 3,000 | 3,300 | 3,600 | 3,900 | 4,200 | 18,000 |

| Activities | 2012 | 2013 | 2014 | 2015 | 2016 | Total (USD) |
|---|---|---|---|---|---|---|
| HIV journal club in Nepal | 1,800 | 1,800 | 1,800 | 1,800 | 1,800 | 9,000 |
| Routine Orientation to key partners on key national guidelines/SOPs | 450 | 450 | 450 | 450 | 450 | 2,250 |
| Web site update | 1,000 | 1,000 | 1,000 | 1,200 | 1,500 | 5,700 |
| **Total** | **16,850** | **25,310** | **18,710** | **30,496** | **21,971** | **113,337** |

## 7. Routine Programme Monitoring

Routine programme monitoring is a vital M&E function to produce high quality data on a timely basis. That is why, this guideline has well taken important activities into account. The key costed activities under routine programme monitoring include: Review and update routine recording & reporting tool including printing, Development of Unique coding system, Annual M&E Programme reviews at national, regional and district levels, Supportive monitoring visits by central level in each region, Joint Monitoring visit with EDPs Social auditing, and ART cohort analysis (Table 20).

*Table 20: Routine programme monitoring cost*

| Activities | 2012 | 2013 | 2014 | 2015 | 2016 | Total (USD) |
|---|---|---|---|---|---|---|
| Review and update routine recording & reporting tool including printing | 30,000 | | 30,000 | | 30,000 | 90,000 |
| Development of Unique coding system | 1,500 | | | | | 1,500 |
| Review and update of Unique coding system | | | 3,000 | | | |
| Routine M&E reviews and mentoring (system and tools) | | | | | | |
| Regional level | 30,000 | 32,500 | 32,500 | 35,000 | 35,000 | 165,000 |
| National level | 8,000 | 8,000 | 8,000 | 9,000 | 9,000 | 42,000 |
| Data verification and analysis workshop at district level | 210,000 | 300,000 | 300,000 | 300,000 | 300,000 | 1,410,000 |
| Annual data verification/triangulation and analysis workshop at national level | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 30,000 |
| Supportive monitoring visits by central level in each region | 5,000 | 5,500 | 5,550 | 6,105 | 6,715 | 28,871 |
| Update of Routine recording and reporting templates | 2,500 | | 3,500 | | | |
| Printing of recording and reporting templates /registers /reporting forms (TI/ BCC, HTC, STI, PMTCT, ART, I, CHBC, CCC and DACC) | 12,210 | 12,210 | 12,210 | 13,283 | 14,355 | 64,268 |
| Joint Monitoring visit with EDPs | | 1,000 | 1,100 | 1,210 | 6,655 | 9,965 |
| Social auditing | 3,000 | 3,300 | 3,600 | 3,960 | 4,356 | 18,216 |
| ART cohort analysis | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 7,500 |
| District, regional and national level annual programme reviews | 73,000 | 88,000 | 119,000 | 119,000 | 145,000 | 544,000 |
| **Total** | **382,710** | **458,010** | **525,960** | **495,057** | **558,582** | **2,420,319** |

## 8. Surveys and Surveillance

In view of the epidemiological and survey based HIV/AIDS information, surveys and surveillance are the key M&E functions to produce timely and high quality data through a number of methods such as IBBS, HIV Sentinel Surveillance among, STI Sentinel surveillance, BSS, Mapping and size estimation of high risk groups, Estimation and projection (epidemic analysis and modeling), HIV drug resistance surveillance, Data management and analysis. Therefore, these important activities are costed and proposed to carry across the years as presented below (Table 21).

*Table 21: Surveys and surveillance cost*

| Activities | 2012 | 2013 | 2014 | 2015 | 2016 | Total (USD) |
|---|---|---|---|---|---|---|
| IBBSs among key populations at higher risk | | | | | | |
| IBBS among PWIDs | 90,000 | 90,000 | 90,000 | 90,000 | 90,000 | 450,000 |
| IBBS among FSWs | 45,000 | | 90,000 | 45,000 | | 180,000 |
| IBBS among Clients of FSWs | | 45,000 | | | 45,000 | 90,000 |
| IBBS among MSM | | | | | | |
| Kathmandu | 45,000 | | 4,5000 | | 45,000 | 135,000 |
| Pokhara | | 45,000 | | 45,000 | | 90,000 |
| Eastern terai | | | 45,000 | | | 45,000 |
| Western Terai | | | 45,000 | | | 45,000 |
| IBBS among Male Migrants | 45,000 | | | | | 45,000 |
| Western hill districts | | | 45,000 | | 45,000 | 90,000 |
| Mid and Far western hill districts | | | 45,000 | | 45,000 | 135,000 |
| Central Hilly districts | | 45,000 | | 45,000 | | 90,000 |
| HIV Sentinel Surveillance among | | | | | | |
| ANC attendees (14 PMTCT sites) | 21,000 | 11,550 | 12,705 | 13,976 | 15373 | 74,604 |
| TB patients (6 regular sites) | 9,000 | 9,900 | 10,890 | 11,970 | 13,177 | 54,946 |
| STI patients (14 sites) | 21,000 | 14,850 | 16,335 | 17,969 | 19,765 | 89,919 |
| Development of training package and update | 3000 | | 3500 | | 4,000 | 10,500 |
| Training to sentinel sites | 10,560 | 10,560 | 10,56 | 10,560 | 10,560 | 52,800 |
| STI Sentinel surveillance | | | | | | |
| FSWs (5 sites) | 7,500 | 8,250 | 9,075 | 9,983 | 10,981 | 45,788 |
| MSM/TG (5 sites) | 7,500 | 8,250 | 9,075 | 9,983 | 10,981 | 45,788 |
| Clients (5 Sites) | 7,500 | 8,250 | 9,075 | 9,983 | 10,981 | 45,788 |
| Migrants (5 sites) | 7,500 | 8,250 | 9,075 | 9,983 | 109,81 | 45,788 |
| ANC attendees (14 sites) | | | | | | |
| BSS | | | | | | |
| Uniform services | | 25,000 | | | | 25,000 |
| Prison population & trecking guides | | 25,000 | | | | 25,000 |
| Mapping of vulnerability and risk for HIV among selected populations | | 25,000 | | | | |
| Mapping and size estimation of high risk groups: | | | | | | |
| PWIDs, FSWs, MSM/TG | | | 140,000 | | | 140,000 |
| CABA | | | 25,000 | | | 25,000 |
| Migrants & migration streams | | | 35,000 | | | 35,000 |
| Estimation and projection (epidemic analysis and modeling) | 18,000 | 1,58,000 | 87,230 | 23,353 | 75,688 | 362,271 |
| HIV drug resistance surveillance | 10,000 | 73,000 | 15,000 | 65,000 | 5000 | 168,000 |
| Data management and analysis | 51,250 | 6,250 | 51,250 | 6,250 | 6,250 | 121,250 |
| **Total** | **398,810** | **617,110** | **848,770** | **414,016** | **463,736** | **2,742,443** |

## 9. National and Sub-national HIV Databases

In order to develop and maintain national and sub-national HIV databases that enable stakeholders to access relevant data for policy formulation and programme management and improvement, most essential activities such as database development, integrating GIS into database and providing GIS and database trainings to NCASC staff as well as staff of related stakeholders at national, regional and district/SDP levels is proposed and costed as displayed in the table below (Table 22).

*Table 22: National and sub-national HIV databases cost*

| Activities | 2012 | 2013 | 2014 | 2015 | 2016 | Total (USD) |
|---|---|---|---|---|---|---|
| National Database development and update using UNIQUE code system | | 30,000 | | | | 30,000 |
| Integrate GIS into database | | 15,000 | | | | 15,000 |
| Data base training for national, regional, district and service delivery points | | 40,000 | | 40,000 | | 80,000 |
| Up-scale national HIV/AIDs database software | | | | 10,000 | | 10,000 |
| Devise mechanism for onsite and online data entry by all service providers | 320,000 | 48,000 | 48,000 | 48,000 | 48,000 | 512,000 |
| **Total** | **320,000** | **133,000** | **48,000** | **98,000** | **48,000** | **647,000** |

## 10. Supportive Supervision and Data Auditing

Data quality assurance activities are proposed to monitor data quality periodically and address any obstacles to producing high-quality data (i.e., data that are valid, reliable, comprehensive, and timely). Some important costed activities in this regard include data quality training, data audit, data verification and supportive supervision as displayed below (Table 23).

*Table 23: Supportive supervision and data auditing cost*

| Activities | 2012 | 2013 | 2014 | 2015 | 2016 | Total (USD) |
|---|---|---|---|---|---|---|
| Updating of HIV data verification, and audit protocol for different level of sites and printing | | 1,500 | | 1,500 | | 3,000 |
| Data quality training | 14,000 | 14,000 | 14,000 | 14,000 | 14,000 | 70,000 |
| Data quality assessment | 6,000 | 6,600 | 7,260 | 7,986 | 8,785 | 36,631 |
| On site data verification | 7,500 | 8,250 | 9,075 | 9,982.5 | 10,981 | 45,788 |
| Supporting supervision visits from districts to SDPs | 5,250 | 8,250 | 9,075 | 9,983 | 10,981 | 43,538 |
| Supportive monitoring visits by centre | 16,875 | 16,875 | 16,875 | 16,875 | 16,875 | 84,375 |
| **Total** | **49,625** | **55,475** | **56,285** | **60,326** | **61,621** | **283,332** |

## 11. HIV Evaluation and Research

This guideline has recognized the importance of HIV evaluation and research to meet the identified needs, and enhance the use of evaluation and research findings for policy planning and improvement of program implementation. Important evaluation and research activities identified and costed are: Development of evaluation protocol and preparation of evaluation training manual, Program evaluation, development of research agenda and update, Systematic review, upgradeof national AIDS research library, cost effectiveness evaluation of VCT, BCCI, PMTCT, CHBC programme ,Impact evaluation and client survey (CHBC and CCC), Evaluation of training effectiveness, ethnographic study, study on stigma and discrimination, Organization of national AIDS conferences, seminars and roundtable meeting for scientific discourse, Operational research, MTR and Final evaluation of the NSP as displayed below (Table 24).

*Table 24: HIV evaluation and research cost*

| Activities | 2012 | 2013 | 2014 | 2015 | 2016 | Total (USD) |
|---|---|---|---|---|---|---|
| Development of HIV evaluation protocol with involvement of relevant stakeholders and update | | 15,000 | | 15,000 | | 30,000 |
| Development of HIV programme evaluation training manuals and training | | 15,000 | 15,000 | | | 30,000 |
| Programme evaluation of which: | | | | | | |
| Targeted prevention interventions | | | 30,000 | | 30,000 | 60,000 |
| HTC | | 15,000 | | | 15,000 | 30,000 |
| STI | | 15,000 | | | 15,000 | 30,000 |
| PMTCT | | 20,000 | | 20,000 | | 40,000 |

| Activities | 2012 | 2013 | 2014 | 2015 | 2016 | Total (USD) |
|---|---|---|---|---|---|---|
| ART/OI | | 20,000 | | | 20,000 | 40,000 |
| Care and Support (CHBC and CCC) | | 20,000 | | | 20,000 | 40,000 |
| Effectiveness of nutritional support among PLHIV and PMTCT clients | | 20,000 | | | | 20,000 |
| ART adherence assessment | | 15,000 | | 15,000 | | 30,000 |
| Systematic review to measure the effectiveness of key interventions through defined systematic research questions | | 30,000 | 60,000 | 60,000 | 30,000 | 180,000 |
| Evaluation of training effectiveness | | 10,000 | | 8,500 | | 18,500 |
| Mid-term evaluation of NSP | | | 50,000 | | | 50,000 |
| Final evaluation of NSP | | | | | 50,000 | 50,000 |
| CHBC and CCC client survey | | 20,000 | | | 20,000 | 40,000 |
| Communicating research for policy reform and programme improvement | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 25,000 |
| Research publications | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 25,000 |
| Upgrade of national AIDS research library | 1,5000 | | | | | 15,000 |
| Ethnographic study key ethnic groups in the communities (e.g. Badi, Polyandry communities) | | 25,000 | 25,000 | | | 50,000 |
| PLHIV Stigma Index Study | | 15,000 | 20,000 | | | 35,000 |
| Cost electiveness of institutional vs. community based models - once in NSP period | | | 15,000 | | | 15,000 |
| Operational research | | 30,000 | 30,000 | 15,000 | 15,000 | 90,000 |
| Operational research on linking FP HIV (PMTCT) | | 15,000 | | | | 15,000 |
| Stigma survey among Health workers | | 5,000 | 6,000 | 7,000 | 7,500 | 25,500 |
| NASA | | 10,000 | | 10,000 | | 20,000 |
| National AIDS Conference (4th and 5th) | | 50,000 | | | 50,000 | 100,000 |
| Seminars | 2,500 | 5,000 | 5,000 | 5,000 | 2,500 | 20,000 |
| Round table meeting for scientific discourse | 1,000 | 2,000 | 2,000 | 2,000 | 1,000 | 8,000 |
| **Total** | **28,500** | **382,000** | **268,000** | **167,500** | **286,000** | **1,112,000** |

## 12. Data Dissemination and Use

Data dissemination and data use are the essence of M&E system that virtually guide policy formulation and programme planning and improvement. For this purpose, production and distribution of various M&E reports, preparation of the fact sheets, district profiles and projections, web-updates and data dissemination workshops, meeting and media meet/release have been proposed and costed (Table 25).

*Table 25: Data dissemination and use cost*

| Activities | 2012 | 2013 | 2014 | 2015 | 2016 | Total (USD) |
|---|---|---|---|---|---|---|
| Development of data dissemination/sharing protocol/mechanism, share, review and update | | 1,000 | | 500 | | 1,500 |
| Conduct HIV data need assessment and update (Strategic Information) | | 2,500 | | 2,500 | | 5,000 |
| Fact sheets development and production | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 60,000 |
| Development of Annual reports, surveillance report, SI report, estimation and projection report | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 | 60,000 |
| Printing of key SI products (reports) of which: | | | | | | |
| Annual reports | 600 | 600 | 990 | 1,089 | 1,198 | 4477 |
| Surveillance report | 300 | 300 | 330 | 363 | 399 | 1,692 |

| Activities | 2012 | 2013 | 2014 | 2015 | 2016 | Total (USD) |
|---|---|---|---|---|---|---|
| SI reports | 300 | 300 | 330 | 363 | 399 | 1,692 |
| District AIDS Profile | 3,500 | 5,000 | 3,850 | 4,235 | 4,659 | 21,244 |
| Estimation and projection report | 600 | 600 | 330 | 363 | 399 | 2,292 |
| Data sharing/dissemination workshops at national level of which: | | | | | | |
| Programmatic updates | 2,000 | 2,000 | 2,000 | 2,400 | 3,000 | 11,400 |
| Epi updates | 1,000 | 1,000 | 1,000 | 1,200 | 1,500 | 5,700 |
| Data sharing/dissemination workshops at regional level (Programmatic and epi updates) | 25,000 | | | | | 25,000 |
| Data sharing/dissemination workshops at district level | 13,125 | 18,750 | 18,750 | 1,8750 | 18,750 | 88,125 |
| Development of Nepal Country Progress Report | 15,000 | | 15,000 | | 15,000 | 45,000 |
| Printing of Nepal Country Progress Report | 600 | | 1,000 | | | 1,000 |
| Sharing of Nepal Country Report with Report | 1,500 | | 1,500 | | 1,500 | 1,500 |
| Publication and sharing of HIV and STI related scientific papers in local and international journals | 2,000 | 4,400 | 12,100 | 13,310 | 14,641 | 46,451 |
| **Total** | **89,525** | **60,450** | **81,180** | **69,073** | **85,450** | **385,678** |

# Chapter 12 ANNEXES



## Annex I: Indicator Reference Sheet

### Goal 1: The incidence of HIV is halved by 2016 compared to 2010 (Target 1 of National HIV/AIDS Strategic Result Framework)

| HIV prevalence in young people (IM-1) | |
|---|---|
| **Indicator** | Percentage of young people aged 15-24 who are living with HIV |
| **Rationale/Purpose** | |
| It measures progress towards reducing HIV infection. The national response goal is to reduce HIV prevalence. See the difference between the cumulative numbers of people that have become infected with HIV up to this age minus the number who have died, expressed as a percentage of the total number alive at this age. At older ages, changes in HIV prevalence are slow to reflect changes in the rate of new infections (HIV incidence) because the average duration of infection is long. Furthermore, declines in HIV prevalence can reflect saturation of infection among those individuals who are most vulnerable and rising mortality rather than behaviour change. At young ages, trends in HIV prevalence are a better indication of recent trends in HIV incidence and risk behaviour.<br>Thus, reductions in HIV incidence associated with genuine behaviour change should first become detectable in trends in HIV prevalence figures for 15–24 years old. | |
| **Numerator** | Number of antenatal clinic attendees (aged 15–24) tested whose HIV test results are positive |
| **Denominator** | Number of antenatal clinic attendees (aged 15–24) tested for HIV |
| **Data collection frequency** | Annually |
| **Data source/ Measurement Tool** | EPP/Spectrum modeling |
| **Method of measurement** | This indicator is calculated using data from pregnant women attending antenatal clinics in HIV sentinel surveillance sites in the capital city, urban areas and rural areas. The sentinel surveillance sites used for the calculation of this indicator should remain constant to allow for the tracking of changes over time. |
| **Disaggregation** | Sex |

*Purpose 1.1: Reduction of sexual transmission of HIV*

| HIV prevalence in key populations (Sex workers, MSM, male migrants) (IM-2) | |
|---|---|
| Indicators | • Percentage of sex workers who are HIV-infected<br>• Percentage of men who have sex with men who are HIV-infected<br>• Percentage of male labor migrants who are HIV-infected |
| **Rationale/Purpose** | |
| It measures progress on reducing HIV prevalence among MARPs. Most at risk populations typically have a higher HIV prevalence than the general population. Reducing prevalence among MARPs is a critical measure of a national-level response to HIV. | |
| Numerator | Number of respondents who test positive for HIV |
| **Denominator** | Number of respondents tested for HIV |
| **Data collection frequency** | 2-3 years |
| **Data source/ Measurement Tool** | Integrated Biological and Behavioral Surveillance Survey (IBBS-Survey) |
| **Method of measurement** | |
| This indicator is calculated using data from HIV tests conducted among respondents in the IBBS survey.<br>The survey sites used for the calculation of this indicator should remain constant to allow for the tracking of changes over time. | |
| **Disaggregation** | Age (<25/25+) |

| Men who have sex with men (MSM): Condom use (OC - 5) | |
|---|---|
| **Indicator** | Percentage of men reporting the use of condom the last time they had anal sex with a male partner |
| **Rationale/Purpose** | |
| It measures progress in preventing exposure to HIV among men who have unprotected anal sex with a male partner. Condoms can substantially reduce the risk of the sexual transmission of HIV. Consequently, consistent and correct condom use is important for men who have sex with men because of the high risk of HIV transmission during unprotected anal sex. In addition, men who have anal sex with other men may also have female partners who could become infected as well. Condom use with their most recent male partner is considered a reliable indicator of longer-term behaviour. | |
| **Numerator** | Number of MSM who reported that a condom was used the last time they had anal sex |
| **Denominator** | Number of MSM who reported having had anal sex with a male partner in the last 12 months |
| **Data collection frequency** | 2-3 years |
| **Data source/ Measurement Tool** | Integrated Biological and Behavioral Surveillance Survey (IBBS-Survey) |
| **Method of measurement** | In IBBS survey of a sample of men who have sex with men, respondents are asked about sexual partnerships in the preceding 12 months, about anal sex within those partnerships and about condom use when they last had anal sex. Whenever possible, data for men who have sex with men should be collected through civil society organizations that have worked closely with this population in the field whenever possible. Access to MSM as well as the data collected from them must remain confidential. |
| **Disaggregation** | Age (<25/25+) |

| Sex workers: Condom use (OC-6) | |
|---|---|
| **Indicator** | Percentage of male and female sex workers reporting the use of a condom with their most recent client |
| **Rationale/Purpose** | |
| It measures progress in preventing exposure to HIV among sex workers through unprotected sex with clients. Various factors increase the risk of exposure to HIV among sex workers including multiple and non-regular partners and more frequent sexual intercourse. However, sex workers can substantially reduce the risk of HIV transmission both from clients and to clientsthrough consistent and correct condom use. | |
| **Numerator** | Number of Sex workers who reported that a condom was used with their last client |
| **Denominator** | Number of Sex workers who reported having commercial sex in the last12 months |
| **Data collection frequency** | 2-3 years |
| **Data source/ Measurement Tool** | Integrated Biological and Behavioral Surveillance Survey (IBBS - Survey) |
| **Method of measurement** | Respondents are asked the following question:<br>Did you use a condom with your most recent client?<br>Data for sex workers should be collected through civil society organizations that have worked closely with this population in the fieldwhenever possible,access to Sex workers as well as the data collected from them must remain confidential. |
| **Disaggregation** | Sex and age (<25/25+) |

| Male Migrants: Condom use (OC- 7) | |
|---|---|
| **Indicator** | Percentage of male labor migrants aged 15-49 reporting the use of condom the last time they had sex with non-regular sexual partner |
| **Rationale/Purpose** | |
| It measures progress in preventing exposure to HIV among male migrants through unprotected sex with sexual partners. Various factors increase the risk of exposure to HIV among male migrants including multiple, non-regular partners and more frequent sexual intercourse. However, male migrants can substantially reduce the risk of HIV transmission both from non-regular sexual partners through consistent and correct condom use. | |
| **Numerator** | Number of male labor migrants who reported that a condom was used with their last non-regular sexual partners<br>Or<br>Number of respondents who reported having had more than one sexual partners in the last 12 months who also reported that a condom was used the last time they had sex. |
| **Denominator** | Number of male labor migrants who reported having sex with non – regular sexual partners in the last 12 months<br>Number of respondents who reported having had more than one sexual partner in the last 12 months. |
| | |
| **Data collection frequency** | 2-3 years |
| **Data source/ Measurement Tool** | Integrated Biological and Behavioral Surveillance Survey (IBBS-Survey) |
| **Method of measurement** | Respondents are asked whether or not they have ever had sexual intercourse with non-regular sex partner and, if the answer is yes, they are asked: How many different people have you had sexual intercourse within the last 12 months? If more than one, the respondent is asked: Did you use a condom the last time you had sexual intercourse? |
| **Disaggregation** | Age (<25/25+) |

| HIV testing in key populations (sex workers, people who inject drugs, MSM/TG, male migrants, and general adult populations) (OP - 11) | |
|---|---|
| **Indicator** | • Number (and Percentage) of sex workers who received an HIV test in the past 12 months and know their results<br>• Number (and Percentage) of men who have sex with men (MSM) and transgender people who received an HIV test in the past 12 months and know their results<br>• Number (and Percentage) of Male Labor Migrants that have received an HIV test in the past 12 months and know their results<br>• Number (and percentage) of injecting drug users who received an HIV test in the last 12 months and who know their results<br>• Number (and percentage) of general people who received and HIV test in the last 12 months and who know their results |
| **Rationale/Purpose** | It measures progress in implementing HIV testing and counseling among key populations. In order to protect themselves and to prevent infecting others, it is important for key populations to know their HIV status. Knowledge of one's status is also a critical factor in deciding to seek treatment. |
| **Numerator** | Number of key populations who have been tested for HIV during the last 12 months and who know their results. This is usually the adult populations aged 15+ years in the |
| **Denominator** | Number of key populations included in the sample (in calculating the proportions of key populated reached from HTC services), and it is the estimated number of key populations in the defined year and geographical areas (in calculating the proportions of key (adult) populations from routine HIV testing and counseling services. |
| **Data collection frequency** | (1) 2-3 years (from surveys), and (2) Monthly/trimester-wise/annually (from routine HIV testing and counseling programme monitoring data) |
| **Data source/ Measurement Tool** | (1) Integrated Biological Behavioral Surveillance Survey (IBBS-Survey) |
| | (2) routine programme monitoring data from HIV testing and counseling sites. The data are recorded at HTC registers by counselors, and reported monthly by using HTC monthly reporting template. |

| **Method of measurement** | |
|---|---|
| In the surveys, key population are asked the following questions:<br>1. Have you been tested for HIV in the last 12 months?<br>If 'yes',<br>2. I don't want to know the results but did you receive the results of that test? Data for sex workers should be collected through civil society organizations that have worked closely with this population in the field whenever possible. Access to sex workers as well as the data collected from them must remain confidential.<br>While reporting the progress against this indicator from routine programme monitoring data, the data is routinely collected from all HIV testing and counseling sites in the last reporting period. This counts the total number of adults who were pre-test counseled, tested for HIV, and also received the test results (post-test counseled data).<br>This indicator is calculated using data from HIV tests conducted among respondents in the IBBS surveys. The survey sites used for the calculation of this indicator should remain constant to allow for the tracking of changes over time. And, it is suggested to have round table meeting among surveillance team and programme officer implementing targeted interventions with routine programme monitoring data to discusson agreements and gaps between the survey findings and programme data.<br>While the data are recorded from routine HIV testing and counseling, the data are recorded at HTC sites in HTC registers. The reports are made monthly using HTC monthly reporting template. There will be a separate report (attached with monthly HTC report) for HIV positive cases where detail of the cases are reflected. | |
| **Disaggregation** | Sex and age (<25/25+) |

| **HIV Prevention programs among key populations (sex workers, MSM, male migrants): (OP-12a)** | |
|---|---|
| **Indicator** | Percentage of key populations (sex workers, MSM, male labor migrants) reached with HIV prevention programs |
| **Rationale/Purpose** | |
| It measures progress in implementing basic elements of HIV prevention programs for key populations. Key populations are often difficult to reach with HIV prevention programs. However, in order to prevent the spread of HIV and AIDS among key populations as well as into the general population, it is important that they access these services. | |
| **Numerator** | Number key populations who replied "yes" to both questions |
| **Denominator** | Total number of key populations surveyed |
| **Data collection frequency** | 2-3 years |
| **Data source/ Measurement Tool** | Integrated Biological Behavioral Surveillance Survey (IBBS-Survey) |
| **Method of measurement** | |
| A) Key populations are asked the following questions:<br>1. Do you know where to go if you wish to take an HIV test?<br>2. Have you been given condoms in the last twelve months? (e.g. through an outreach service, drop-in centre or sexual health clinic)<br>Scores for each of the individual questions—based on the same denominator—are required in addition to the score for the composite indicator. Whenever possible, data for sex workers should be collected through civil society organizations that have worked closely with this population in the field. Access to sex workers as well as the data collected from them must remain confidential. | |
| **Disaggregation** | Sex and age (<25/25+) |

| HIV Prevention programs among key populations (sex workers, MSM, male migrants): (OP-12b) | |
|---|---|
| **Indicator** | Number (and percentage) of key populations (sex workers, MSM/ TG, male labor migrants) reached with HIV prevention programs (for both who enrolled for the first time and continuously on reach by the comprehensive prevention interventions). |
| **Rationale/Purpose** | |
| Key populations at risks are often difficult to reach with HIV prevention programs. However, preventing the spread of HIV among these populations and among the general population requires that they access essential prevention services. This indicator aims to monitor coverage of targeted HIV prevention programs through routine programme monitoring data. It will be calculated and reported separately for each population group at higher risks to HIV. | |
| **Numerator** | Number of key populations at risk who have received a basic (minimum) package of targeted HIV prevention services |
| **Denominator** | Estimated number of the targeted key population at higher risk |
| **Data collection frequency** | Trimester/annually |
| **Data source/ Measurement Tool** | Routine programme monitoring data from targeted prevention intervention among key populations. The data are recorded Targeted Intervention (TI) registers and reported using TI monthly reporting template. |
| **Method of measurement** | |
| The data are to be collected through targeted HIV prevention interventions monitoring the reports of implementing partners on a regular basis. These records are compiled and aggregated to obtain an overall measure of the number of people reached by a prevention program. Implementers at the community level are arranged and instructed to collect accurate data and report regularly following the national standards and systems defined. The targeted prevention programme data include minimum of followings components of comprehensive programme:<br><br>Basic (minimum) package of targeted HIV prevention services among FSWs: behaviour change communication (promoting safer behaviour and educational materials) though outreach and peer education approaches; provision of consumables (for eg. condoms as needed), counseling from outreach worker/social mobilizer/peer-educator or relevant trained service providers, and referral to another service or specialist as appropriate and as per the individual client need.<br><br>Basic (minimum) package of targeted HIV prevention services among MSM and TG people: behaviour change communication (promoting safer behaviour and educational materials) though outreach and peer education approaches; provision of consumables (condoms and lubricants as needed), counseling from outreach worker/social mobilizer/peer-educator or relevant trained service providers; and referral to another service or specialist as appropriate and as per the individual client need.<br><br>Basic (minimum) package of targeted HIV prevention services among male labor migrants and their spouses: behaviour change communication (promoting safer behaviour and educational materials) though outreach and peer education approaches; provision of consumables (condoms as needed), counseling from outreach worker/social mobilizer/peer-educator or relevant trained service providers; and referral to another service or specialist as appropriate and as per the individual client need.<br><br>Other services such as HIV testing and counseling, diagnosis and treatment of sexually transmitted infections, stigma and discrimination reduction activities, and in case of HIV positive, treatment of antiretroviral therapy and management of opportunity infections, including TB screening and treatment, care and support services are made available to all key populations at higher risk; and thus measured and monitored the progress through various indicators as mentioned in the M&E framework in this guidelines.<br><br>For the calculation, the number of minimum services that an individual received will be counted as "reached" and by no means should diminish the importance of other relevant services provided at service delivery points.<br><br>To track the extend of repetition of service by the same client from one and/or other service sites, a client's Unique Identification Code as in nationally definedrecording templates qualifying the individual "clients served" will be implemented. This repletion factor is suggested to mention in each reporting so that actual number of clients serviced can be calculated in a regular interval annually. To match these number a national HIV database with all unique identification code is essential (thus all service provider will design and implement the database).<br><br>To track the actual programme coverage (percentage of key populations reached through targeted prevention interventions), up-to-date population size estimates will be applied as denominator for each population group. In case of population size estimates are not available and/or reliable, and thus, only the numerator will be reported to national level for this indicator. | |
| **Disaggregation** | Sex and age (<25/25+) |

| **HIV Prevention programs among male migrants and their spouses( reached for the first time through outreach and peer education): (OP-12c)** | |
|---|---|
| **Indicator** | Number (and percentage) of male labor migrants and their spouses reached for the first time through outreach and peer education services. |
| **Rationale/Purpose** | |
| Migrants and their spouses are the biggest populations at higher risks in Nepal and often the most complex groups to cater the health service because of their mobility and cultural context. HIV prevention among migrants and their spouses is critical in order to contain the epidemic in Nepal. Improving access of prevention services, primarily through outreach and peer education approachare considered important tools to improve the coverage of targeted HIV prevention services. | |
| **Numerator** | Number of male labour migrants who have received a basic (minimum) package of targeted HIV prevention services for the first time through outreach and peer education approach<br>Number of male labour migrants who have received a basic (minimum) package of targeted HIV prevention services for the first time through outreach and peer education approach |
| **Denominator** | Number of the male labour migrants and number of spouses of male labour migrants |
| **Data collection frequency** | Trimester/annually |
| **Data source/ Measurement Tool** | Routine programme monitoring data from targeted prevention intervention among key populations. The data are recorded Targeted Intervention (TI) registers and reported using TI monthly reporting template. |
| **Method of measurement** | |
| The data are to be collected through targeted HIV prevention interventions monitoring reports of implementing partners on a regular basis. These records are compiled and aggregated to obtain an overall measure of the number of people reached by a prevention program. Implementers at the community level are arranged and instructed to collect accurate data and report regularly following the national standards and systems defined. The targeted prevention programme is expected to reach among migrants and their spouses for the first time through outreach and peer education including the minimum of the followings:<br>Behaviour change communication (promoting safer behaviour and educational materials) through outreach and peer education approaches; provision of consumables (condoms as needed); counseling from outreach worker/social mobilizer/peer-educator or relevant trained service providers; and referral to another service or specialist as appropriate and based on the individual client need.<br>Other services such as HIV testing and counseling, diagnosis and treatment of sexually transmitted infections, stigma and discrimination reduction activities, and in case of HIV positive, antiretroviral therapy and treatment and management of opportunistic infections, including TB screening and treatment, care and support services are made available to them; and thus measured and monitored the progress through various indicators as mentioned in the M&E framework in this guidelines.<br>For the calculation, the number of minimum services that an individual received will be counted as "reached" and by no means should diminish the importance of other relevant services provided at service delivery points.<br>To track the extend of repetition of service by the same client from one and/or other service sites, a client's Unique Identification Code as in nationally defined recording templates qualifying the individual "clients served" will be implemented. This repletion factor is suggested to mention in each reporting so that actual number of clients serviced can be calculated in a regular interval annually. To match these number a national HIV database with all unique identification code is essential (thus all service provider will design and implement the database).<br>To track the actual programme coverage (percentage of male labour migrant and their spouses who reached targeted prevention interventions first time through outreach and peer education approaches), up-to-date population size estimates of migrants and their spouses are to be applied as denominator for each population group. In case of population size, estimates are not available and/or reliable, only the numerator will be reported to national level for this indicator. | |
| **Disaggregation** | Sex and age (<25/25+) |

| Comprehensive knowledge among key populations (sex workers, MSM, male labor migrants): (OP-13) | |
|---|---|
| **Indicator** | • Percentage of sex workers who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission<br>• Percentage of men having sex with men who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission<br>• Percentage of male migrants who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission |
| **Rationale/Purpose** | |
| It measures progress towards universal knowledge of the essential facts about HIV transmission.<br>HIV epidemics are perpetuated primarily through sexual transmission of infection to successive generations of young people. Sound knowledge about HIV is an essential pre-requisite, albeit, often an insufficient condition, for adoption of behaviors that reduce the risk of HIV transmission. | |
| **Numerator** | Number of respondents who gave the correct answer to all five questions. |
| **Denominator** | Number of all respondents |
| **Data collection frequency** | 2-3 years |
| **Data source/ Measurement Tool** | Integrated Biological and Behavioral Surveillance Survey (IBBS-Survey) |
| **Method of measurement** | |
| This indicator is constructed from responses to the following set of prompted questions.<br>1. Can the risk of HIV transmission be reduced by having sex with only one uninfected partner who has no other partners?<br>2. Can a person reduce the risk of getting HIV by using a condom every time they have sex?<br>3. Can a healthy-looking person have HIV?<br>4. Can a person get HIV from mosquito bites?<br>5. Can a person get HIV by sharing food with someone who is infected?<br>The first three questions should not be altered. Questions 4 and 5 ask about local misconceptions and may be replaced by the most common misconceptions. Examples include: "Can a person get HIV by hugging or shaking hands with a person who is infected?" and "Can a person get HIV through supernatural means?" Those who have never heard of HIV and AIDS should be excluded from the numerator but included in the denominator. An answer of "don't know" should be recorded as an incorrect answer. Scores for each of the individual questions (based on the same denominator) are required as well as the score for the composite indicator. | |
| **Disaggregation** | Sex, Age (<25/25+) |

| Sexually transmitted infections – key populations (OP-14) | |
|---|---|
| **Indicator** | Number of sexually transmitted infections diagnosed and treated |
| **Rationale/Purpose** | |
| The risk of HIV transmission is substantially increased when one or both partners in a sexual relationship have STI. Thus, the availability and utilization of services to treat and contain the spread of STI can reduce the rate of HIV transmission within a population. One of the corner stones of HIV prevention is the total control of STI through comprehensive case management of patients with systematic treatment of STI. Effective HIV prevention programs will aim to improve availability and expand the treatment of STIs, especially among those groups most at risk. This indicator also reflects investments in resources and training for STI care within the context of HIV prevention combined with efforts to ensure adequate supplies of drugs and other necessary materials to the care provision sites. | |
| **Numerator** | Number of sexually transmitted infections diagnosed and treated |
| **Denominator** | NA |
| **Data collection frequency** | Trimesterly/ annually |
| **Data source/ Measurement Tool** | Routine program data. If this is not feasible, sentinel surveillance, sero-prevalence surveys, or other special studies may be used |
| **Method of measurement** | Analysis of STI daily registers, complied report, STI drug consumption register |
| **Disaggregation** | Age, sex and the type of the STI syndromes |

| Sexually Transmitted Infections – ANC (OP-15) | |
|---|---|
| **Indicator** | Number (and percentage) of women accessing antenatal care (ANC) services who were screened for syphilis and treated |
| **Rationale/Purpose** | |
| Evidence indicates that sexually transmitted infections including syphilis are associated with a higher risk of HIV infection. Syphilis testing and treatment can effectively prevent adverse pregnancy outcomes caused by maternal syphilis exposure, and are the core intervention in congenital syphilis control. Congenital syphilis can be prevented if all pregnant women are tested and treated sufficiently early in pregnancy before poor outcomes in the fetus occur. Syphilis testing is part of the recommended basic antenatal services package, thus testing of antenatal care attendees for syphilis is also a marker of the quality of provision of essential antenatal care services. | |
| **Numerator** | Number of women attending first visit ANC services who were tested for syphilis |
| **Denominator** | Number of women attending first visit ANC services |
| **Data collection frequency** | Trimesterly/Annually |
| **Data source/ Measurement Tool** | Routine programme data (from ANC registers of PMTCT and MNCH programmes at service sites), special surveys Ideally national programme records aggregated from health facility data should be used. However, if national programme data are not available, data from sentinel surveillance or special studies can be reported if it is felt to be representative of the national situation. |
| **Method of measurement** | |
| All pregnant women should be tested ("screened") for syphilis at their first antenatal care visit. In the case of unable to distinguish the first visit from subsequent visits can still report data on this indicator, but should clearly comment on this difference when reporting the data. This indicator should be measured annually. Either non-treponemal tests that measure antigen antibody (e.g., VDRL or RPR) or treponemal tests that measure treponemal antibody (e.g., TPHA, TPPA, EIA or rapid treponemal tests) may be used for screening. For this indicator simply being tested by either type of test is sufficient. | |
| **Disaggregation** | Age, urban and rural |

### *Purpose 1.2: Reduction of HIV through injecting drug*

| HIV prevalence in people who inject drugs (IM-2) | |
|---|---|
| **Indicator** | Percentage of people who inject drugs who are living with HIV |
| **Rationale/Purpose** | It measures progress on reducing HIV prevalence among people who inject drugs. People who inject drugs typically have the highest HIV prevalence in countries with either concentrated or generalized epidemics. In many cases, prevalence among these populations can be more than double the prevalence among the general population. Reducing prevalence among people who inject drugs is a critical measure of a national-level response to HIV. |
| **Numerator** | Number of respondents who test positive for HIV |
| **Denominator** | Number of respondents tested for HIV |
| **Data collection frequency** | 2-3 years |
| **Data source/ Measurement Tool** | Integrated Biological and Behavioral Surveillance Survey (IBBS - Surveys) |
| **Method of measurement** | |
| This indicator is calculated using data from HIV tests conducted among respondents in the IBBS survey. The survey sites used for the calculation of this indicator should remain constant to allow for the tracking of changes over time. | |
| **Disaggregation** | Age (<25/25+) |

| People who inject drugs: Safe injecting practices (OC- 8) | |
|---|---|
| **Indicator** | Percentage of people who inject drugs reporting the use of sterile injecting equipment the last time they injected |
| **Rationale/Purpose** | |
| It measures progress in preventing injecting drug use-associated HIV transmission. Safer injecting and sexual practices among people who inject drugs are essential because: (i) the risk of HIV transmission from contaminated injecting equipment is extremely high; and (ii) people who inject drugs can spread HIV (e.g., through sexual transmission) to the wider population. | |
| **Numerator** | Number of respondents who report using sterile injecting equipment the last time they injected drugs |
| **Denominator** | Number of respondents who report injecting drugs in the last month |
| **Data collection frequency** | 2-3 years |
| **Data source/ Measurement Tool** | Integrated Biological and Behavioral Surveillance Survey (IBBS-Surveys) |
| **Method of measurement** | |
| Respondents are asked the following questions:<br>1. Have you injected drugs at any time in the last month?<br>2. If yes: The last time you injected drugs, did you use a sterile needle and syringe?<br>Data for people who inject drugs should be collected through civil society organizations that have worked closely with this population in the field whenever possible. Access to people who inject drugs as well as the data collected from them mustremain confidential | |
| **Disaggregation** | Age (<25/25+) |

| People who inject drugs: Condom use (OC-9) | |
|---|---|
| **Indicator** | Percentage of people who inject drugs reporting the use of a condom the last time they had sexual intercourse |
| **Rationale/Purpose** | |
| It measures progress in preventing sexual transmission of HIV among people who inject drugs. Safer injecting and sexual practices among people who inject drugs are essential because: (i) the risk of HIV transmission from contaminated injecting equipment is extremely high; and (ii) people who inject drugs can spread HIV (e.g. through sexual transmission) to the wider population. | |
| **Numerator** | Number of respondents who reported that a condom was used the last time they had sex. |
| **Denominator** | Number of respondents who report having injected drugs and having had sexual intercourse in the last month. |
| **Data collection frequency** | 2-3 years |
| **Data source/ Measurement Tool** | Integrated Biological and Behavioral Surveillance Survey (IBBS Surveys) |
| **Method of measurement** | |
| People who inject drugs are asked the following sequence of questions:<br>1. Have you injected drugs at any time in the last month?<br>2. If yes: Have you had sexual intercourse in the last month?<br>3. If the answer is yesfor both 1 and 2: Did you use a condom when you last had sexual intercourse?<br>Data for people who inject drugs should be collected through civil society organizations that have worked closely with this population in the field whenever possible. Access to survey respondents as well as the data collected from them must remain confidential | |
| **Disaggregation** | Age (<25/25+) |

| People who injects drugs: HIV testing and counseling (OP-11) | |
|---|---|
| **Indicator** | Number (and percentage) of injecting drug users who received an HIV test in the last 12 months and who know their results |
| **Rationale/Purpose** | |
| It measures progress in implementing HIV testing and counseling among key populations. In order to protect themselves and to prevent infecting others, it is important for key populations to know their HIV status. Knowledge of one's status is also a critical factor in deciding to seek treatment. | |
| **Numerator** | Number of key populations who have been tested for HIV during the last 12 months and who know their results. This is usually the adult populations aged 15+ years in the |

| | |
|---|---|
| **Denominator** | Number of key populations included in the sample (in calculating the proportions of key populated reached from HTC services), and it is the estimated number of key populations in the defined year and geographical areas (in calculating the proportions of key (adult) populations from routine HIV testing and counseling services. |
| **Data collection frequency** | (1) 2-3 years (from surveys), and (2) Monthly/trimester-wise/annually (from routine programme monitoring data) |
| **Data source/ Measurement Tool** | (1) Integrated Biological Behavioral Surveillance Survey (IBBS-Survey) as well as (2) routine programme monitoring data from HIV testing and counseling sites. The routine data will be recorded at HTC registers and reported by HTC counselor using HTC monthly reporting template. |
| **Method of measurement** | |
| In the surveys, key population are asked the following questions:<br>1. Have you been tested for HIV in the last 12 months?<br>If 'yes',<br>2. I don't want to know the results, but did you receive the results of that test?<br>Data for people who injects drugs should be collected through civil society organizations that have worked closely with this population in the field whenever possible. Access to people who inject drugs well as the data collected from them must remain confidential.<br>While reporting the progress against this indicator from routine programme monitoring data, the data is routinely collected from all HIV testing and counseling sites in the last reporting period. This counts the total number of adults who were pre-test counseled and tested for HIV, and thereby received the test results (post-test counseled data).<br>This indicator is calculated using data from HIV tests conducted among respondents in the IBBS surveys. The survey sites used for the calculation of this indicator should remain constant to allow for the tracking of changes over time. And, it is suggested to have round table meeting among surveillance team and programme officer implementing targeted interventions with routine programme monitoring data to discusson agreements and gaps between the survey findings and programme data.<br>While the data are recorded from routine HIV testing and counseling, the data are recorded at HTC sites in HTC registers. The reports are made monthly using HTC monthly reporting template. There will be a separate report (attached with monthly HTC report) for HIV positive cases where detail of the cases are reflected. | |
| **Disaggregation** | Age (<25/25+) |

| **People who inject drugs: Prevention programme (OP 12)** | |
|---|---|
| **Indicator** | Percentage of people who inject drug reached with HIV prevention programs (both new enrolled and currently in the harm reduction programme)<br>This is also defined as: Number of needles and syringes distributed per person who injectsdrugs per year by needle and syringe programmes |
| **Rationale/Purpose** | |
| It measures progress in improving coverage of an essential HIV prevention service for people who inject drugs. Injecting drugis the main route of transmission for approximately 10% of HIV infections globally, and 30% outside sub Saharan Africa. Preventing HIV transmission through injecting drug is one of the key challenges to reducing the burden of HIV. Needle and syringe programs (NSPs) are one of nine interventions in the WHO UNODC and UNAIDS comprehensive package for the prevention, treatment and care of HIV among people who inject drugs. Needle and syringe programs have the greatest impact on HIV prevention for people who inject drugs and there is a proof of scientific evidence supporting its efficacy in preventing the spread of HIV.<br>Thus, NSP and opioid substitution therapy (OST) among people who inject drugs are the two major harm reduction interventionsalong with other WHO UNODC and UNAIDS suggested prevention, care, treatment and support services. As suggested in the UNAIDS/WHO Guidelines of Global AIDS Response Progress (GARP) Reporting, 'number of syringes distributed per individual who inject drugs per year' has been defined as proxy indicator for monitoring the progress of harm reduction programme (also as a proxy of prevention programme coverage among PWID) in national response to HIV among PWIDs in Nepal. | |
| **Numerator** | Number of needles and syringes distributed in past 12 months by NSPs |
| **Denominator** | Estimated number of people who inject drugs |
| **Data collection frequency** | Monthly/trimester/annually |
| **Data source/ Measurement Tool** | Routine program data from targeted prevention interventions among people who inject drugs. The data are recorded at TI registers and reported using TI monthly reporting tamplate. |

| **Method of measurement** | |
|---|---|
| Programme data used to count the number of syringes distributed (numerator) in a year by NSP. This will apply for both newly enrolled PWID and those who are reached by harm reduction programme.<br>For the new as well as follow-up PWID, other than the clean needle and syringe, other prevention interventions provided are HIV testing and counseling, condom programming, treatment of STI, NSP, OST, PMTCT in case of pregnant female who inject drugs, ARV treatment, care and support services in case of HIV+ve PWIDs. These information are recorded through various indicators in the M&E framework in this M&E guidelines. However, for measurement of programme reach of harm reduction programme, the access to needle and syringe by NSP will be counted.<br>Denominator is the estimated population size of the number of people who inject drugs. | |
| **Disaggregation** | Age and sex |

| **People who inject drugs: Comprehensive Knowledge (OP-13)** | |
|---|---|
| **Indicator** | Percentage of people who inject drugs who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission |
| **Rationale/Purpose** | |
| It measures progress towards universal knowledge of the essential facts about HIV transmission. HIV epidemics are perpetuated primarily through sexual transmission of infection to successive generations of young people. Sound knowledge about HIV is an essential pre-requisite, albeit, often an insufficient condition, for adoption of behaviors that reduce the risk of HIV transmission. | |
| **Numrator** | Number of respondents who gave the correct answer to all five questions. |
| **Denominator** | Number of all respondents |
| **Data collection frequency** | 2-3 years |
| **Data source/ Measurement Tool** | Integrated Biological and Behavioral Surveillance Survey (IBBS Surveys) |
| **Method of measurement** | |
| This indicator is constructed from responses to the following set of prompted questions.<br>1. Can the risk of HIV transmission be reduced by having sex with only one uninfected partner who has no other partners?<br>2. Can a person reduce the risk of getting HIV by using a condom every time they have sex?<br>3. Can a healthy-looking person have HIV?<br>4. Can a person get HIV from mosquito bites?<br>5. Can a person get HIV by sharing food with someone who is infected?<br>The first three questions should not be altered. Questions 4 and 5 ask about local misconceptions and may be replaced by the most common misconceptions. Examples include: "Can a person get HIV by hugging or shaking hands with a person who is infected?" and "Can a person get HIV through supernatural means?" Those who have never heard of HIV and AIDS should be excluded from the numerator but included in the denominator. An answer of "don't know" should be recorded as an incorrect answer. Scores for each of the individual questions (based on the same denominator) are required as well as the score for the composite indicator. | |
| **Disaggregation** | Sex, Age (<25/25+) |

| **People who injects drugs: Opioid substitution therapy (OST) - (OP-16)** | |
|---|---|
| **Indicator** | Number(and percentage) of people who inject drugs currently on Opioid Substitution Therapy (OST) (who have been on OST continuously for the past 12 monthsas well as PWID newly enrolled in OST programme in the last 3 months) |
| **Rationale/Purpose** | |
| Medication-assisted treatment programs have been demonstrated to be an effective HIV prevention strategy. Methadone maintenance therapy (MMT) is associated with reduced HIV risk behaviors including reduced frequency of injecting and sharing of injection equipment, reductions in the number of sex partners, and exchanges of sex for drugs or money. Medication assisted therapy program should be an access point for IDUs and the program should refer and link to ARV treatment programs, PMTCT for female IDUs and a range of other prevention services. | |
| **Numerator** | Number of PWID on opioid substitution therapy who have been on OST continuously for the past 12 months; and this must include the "number of PWID newly enrolled on OST programme for this last 3 months". |

| | |
|---|---|
| **Denominator** | Total number of estimated PWIDs |
| **Data collection frequency** | Monthly/Trimester |
| **Data source/ Measurement Tool** | Routine programme data from OST site. The data are recorded in OST register and reported using monthly OST reporting template. |
| **Method of measurement** | |
| For the PWIDs who are currently on OST services, the numerator is generated by counting the total number of individuals who have been on treatment for at least 3 months since initiation of opioid substitution therapy or medication-assisted treatment (e.g. using methadone or buprenorphine to treat drug dependency in order to reduce frequency of injections and potentially reduce other behavioral risk factors) at any point in time within the reporting period. The numerator should equal the number of adults who initiated and remain on opioid substitution therapy or medication-assisted treatment for at least 3 months prior to the end of the reporting period. Adults who initiated or transferred in during the reporting period should be counted only if they have been on treatment for at least 3 months after initiation prior to the end of the reporting period. Count all individuals who complete at least 3 months of treatment even if they drop-out, die, or are otherwise lost to follow-up. Do not count individuals who initiate treatment too late in the reporting period to be able to reach a minimum of 3 months. These individuals will be counted in the next reporting period assuming they complete at least 3 months of treatment. For example: If an adult initiates his/her treatment in the last few months of reporting period, however, s/he does not complete at least 3 months in treatment before the end of the reporting period, then count this individual in the next reporting period. Rather this is newly enrolled case in the current reporting.<br><br>For the PWID newly enrolled in OST services, the numerator is calculated by counting the number of PWIDs who have been newly enrolled on medication-assisted OST treatment (e.g. using methadone or buprenorphine to treat drug dependency in order to reduce frequency of injections and potentially reduce other behavioral risk factors) at any point in time within the reporting period. Adults who initiated or transferred in during the reporting period should be counted only if they have been on treatment for less than 3 months after initiation prior to the end of the reporting period. Count all individuals who were enrolled within last 3 months of treatment even if they drop-out, die, or are otherwise lost to follow-up. Do not count individuals who initiate treatment in current reporting period if s/he restarted treatment after dropping out in previous reporting period.<br><br>The measurement will count all individuals who were enrolled within last 3 months of treatment even if they drop-out, die, or are otherwise lost to follow-up. It will no count individuals who initiate treatment in current reporting period if s/he restarted treatment after dropping out in previous reporting period.<br><br>To improve the adherence, the clients will be monitored at least 3 times follow-up through social support unit team:<br><br>Initial 15 days – provisional drop out<br><br>Next 15 days – first two follow-ups will be made<br><br>Next 60 days - 3rd follow-up will be done<br><br>Thus, a total of 90 days follow-up will be made for any drop out client. Actions taken while following up the clients will be recorded by date of follow up mentioning the significance to adherence<br><br>Explanation of denominator:<br><br>It is simply the estimated number of PWID. It is to be estimated by specified method agreed among the experts in regular intervals. | |
| **Disaggregation** | Age and sex |

*Purpose 1.3: Reduction of vertical (mother-to-child) transmission of HIV*

| **Mother-to-child transmission of HIV - (IM - 3)** | |
|---|---|
| **Indicator** | Percentage of infants born to HIV infected mothers who are infected |
| **Rationale/Purpose** | |
| It measures progress towards eliminating mother-to-child HIV transmission. Efforts have been made to increase access to interventions that can significantly reduce mother-to-child transmission including combination antiretroviral prophylactic and treatment regimens and strengthened infant-feeding counseling. It is important to assess the impact of PMTCT interventions in reducing new pediatric HIV infections through mother-to-child transmission. The percentage of children who are HIV-positive should decrease as the coverage of interventions for PMTCT and the use of more effective regimens increases. | |
| **Numerator** | The numerator is the estimated number of children who will be newly infected with HIV due to mother-to-child transmission among children born in the previous 12 months to HIV-positive women |

| | |
|---|---|
| **Denominator** | Estimated number of HIV positive women who delivered in the previous 12 months |
| **Data collection frequency** | Annually |
| **Data source/ Measurement Tool** | EPP/Spectrum modeling. For this the needed data set and methodological update (if any) will be made available annually and so the modeling for estimation and projection. |
| **Method of measurement** | |
| The mother-to-child transmission probability differs with the antiretroviral drug regimen received and infant-feeding practices. The transmission can be calculated by using the Spectrum model. The Spectrum computer programme uses the information on:<br>a) distribution of HIV-positive pregnant women receiving different antiretroviral regimens prior to and during delivery (peripartum) by CD4 category of the mother<br>b) distribution of women and children receiving antiretroviral after delivery (postpartum) by CD4 category of the mother<br>c) percent of infants who are not breastfeeding in PMTCT programmes by age of the child<br>d) mother-to-child transmission of HIV probabilities based on various categories of antiretroviral drug regimen and infant feeding practices<br>The estimated national transmission rate is reported in the Children 0-14 summary display in Spectrum. This variable can also be calculated using the variables in Spectrum on "New HIV infections" for children 0-14 years and 15 plus and dividing this by the variable "Women in need of PMTCT". | |
| **Disaggregation** | Age and sex |

| **Prevention of mother-to-child transmission of HIV – Complete course of antiretroviral (OP--17)** | |
|---|---|
| **Indicator** | Percentage of HIV+ve pregnant women who received a complete course of antiretroviral to reduce the risk of mother-to-child transmission of HIV |
| **Rationale/Purpose** | |
| It measures progress in preventing mother-to-child transmission of HIV through the provision of antiretroviral drugs. This is one of the four main methods for the prevention of mother-to-child transmission, along with primary prevention of HIV for women of childbearing age, prevention of unintended pregnancies among women living with HIV, and appropriate treatment, care and support for mothers living with HIV. | |
| **Numerator** | Number of HIV-infected pregnant women who received complete course of antiretroviral drugs during the past 12 months to reduce mother-to-child transmission |
| **Denominator** | Estimated number of HIV-positive pregnant women within the past 12 months. |
| **Data collection frequency** | Monthly/Trimester/Annually |
| **Data source/ Measurement Tool** | Routine program data from PMTCT progarmme. The data for this are recorded at PMTCT registers and reported using PMTCT monthly reporting template. |
| **Method of measurement** | For the numerator: These records are aggregated from PMTCT registers, monthly program reports<br>For the denominator: The estimated number of HIV positive pregnant woman is to be calculated from EPP/Spectrum modeling. |
| **Disaggregation** | Age and rural, urban setting (suggested) |

| **PMTCT : Early infant diagnosis (OP-18)** | |
|---|---|
| **Indicator definition** | Number and percentage of infants born to HIV-infected women receiving a virological test for HIV within 2 months of birth |
| **Rationale/Purpose** | |
| It measures progress in the extent to which infants born to HIV-positive women are tested within the first 2 months of life to determine their HIV status and eligibility for ART, disaggregated by test results. Infants infected with HIV during pregnancy, delivery or early postpartum often die before they are recognized as having HIV infection. WHO recommends national programmes to establish the capacity to provide early virological testing of infants for HIV at 6 weeks, or as soon as possible thereafter to guide clinical decision-making at the earliest possible stage. HIV disease progression is rapid in children; they need to be put on treatment as early as possible. | |
| **Numerator** | Number of infants who received an HIV test within 2 months of birth, during the reporting period |

| | |
|---|---|
| **Denominator** | Number of HIV-positive pregnant women giving birth in the last 12 months |
| **Data collection frequency** | Periodically and annually |
| **Data source/ Measurement Tool** | Program datafrom PMTCT progarmme. The data for this are recorded at PMTCT registers and reported using PMTCT monthly reporting template. The denominator will be obtained from Spectrum estimates. |
| **Method of measurement** | |
| For numerator: Infants tested should only be counted once. The numerator should only include the most recent test result for an infant tested in the first 2 months of life, and not any earlier tests.<br>For denominator: This is a proxy measure for number of infants born to HIV-infected women. This is to be calculated using a projection model – EPP/Spectrum | |
| **Disaggregation** | Age and sex |

| **Prevention of mother-to-child transmission – Feeding practice (OP-19)** | |
|---|---|
| **Indicator** | Percentage of infants born to HIV infected women by their feeding practices |
| **Rationale/Purpose** | |
| Feeding of HIV-exposed infants, derived from 24-h recall, measured at the time of the third dose of diphtheria, pertussis and tetanus vaccine (DPT3), which is often around 3 months of age or at the closest visit after 3 months.<br>HIV can be transmitted during breastfeeding even in settings where 100% of HIV-infected pregnant women receive either lifelong antiretroviral therapy or antiretroviral medicines as prophylaxis for the prevention of mother-to-child transmission of HIV. Mixed feeding before 6 months of age increases the risk for HIV transmission when compared with exclusive breastfeeding. WHO therefore recommends that when mothersknown to be HIV-infected breastfeed, they should be given ARVs to reduce the risk of transmission and also exclusively breastfeed for the first 6 months, introduce complementary feeds from 6 months and continue breastfeeding until 12 months of age. Coverage with the third dose of diphtheria, pertussis and tetanus vaccine close to the recommended age of 14 weeks is relatively high in most countries. It is proposed to collect data at this time because most infants are seen then and it is mid-way between birth and the time at which exclusive breastfeeding would stop making it comparable to the way that exclusive breastfeeding is usually reported for the general population in demographic and health surveys. Infant feeding practices can also be stratified using "percentage of HIV-exposed infants who are receiving replacement feeding at DPT3 visit" and the "percentage of HIV-exposed infants who are receiving mixed feeding at DPT3 visit". | |
| **Numerator** | Number of HIV-exposed infants who were breastfeeding by their feeding practices at DPT3 visit |
| **Denominator** | The denominator is the same for all three indicators (exclusive, replacement and mixed feeding): the number of HIV-exposed infants whose feeding practice has been assessed at a DPT3 visit |
| **Data collection frequency** | Monthly/ Trimester/Annually |
| **Data source/ Measurement Tool** | Routine program data from PTMTCT (mother-baby register) and Maternal health registers from ANC/maternity clinic of sites. |
| **Method of measurement** | |
| The numerators are calculated from PMTCT registers and monthly reports.<br>At each visit, the health-care provider should enquire about infant-feeding practices during the previous 24 hours by asking: "What did you give your infant to eat or drink yesterday during the day and during the night?" After each response, the health provider should ask: "Anything else?"<br>The response will be recorded as exclusive breastfeeding, replacement feeding or mixed feeding. While this information is collected and recorded on the child health card (paediatric register) at every visit, providers should record it in the register only once, during the third visit for diphtheria, pertussis and tetanus vaccination.<br>The denominator is calculated from the total number of exposed infants whose feeding was assessed. Exposed infants who did not attend facilities are not included in the denominator. All public, private and nongovernmental organization run health facilities that provide HIV-exposed infant follow-up services, should be included.<br>In the case of community-based PMTCT, follow-up care for HIV-exposed infants has been integrated into community outreach services, data are to be collected at the community level and to be reported to the respective districts. | |
| **Disaggregation** | Age and sex |

### *Purpose 1.4: Reduction of blood-borne transmission of HIV*

| **HIV transmission - Blood Safety (OP 20)** | |
|---|---|
| **Indicator** | Percentage of donated blood units screened for HIV in a quality assured manner |
| **Rationale/Purpose** | |
| Blood safety programs aim to ensure that all blood units are screened for transfusion-transmissible infections including HIV, and that only the units that do not react on screening tests are released for clinical use. Universal (100 percent) screening of donated blood for HIV and other transfusion-transmissible infections cannot be achieved without mechanisms to ensure quality and continuity in screening. | |
| **Numerator** | Number of donated blood units screened for HIV in blood centers or blood screening laboratories that have both: (1) followed documented standard operating procedures and (2) participated in an external quality assurance scheme |
| **Denominator** | Total number of blood units donated<br>In this context, donation refers to any blood collected for the purposes of medical use. This includes all possible types of providers of blood, regardless of whether they receive remuneration or not.<br>Examples of different categories of blood donors include:<br>voluntary non-remunerated blood donor: an altruistic donor who gives blood freely and voluntarily without receiving money or any other form of payment;<br>family or replacement blood donor: a donor who gives blood when it is required by a member of the patient's family or community, which may involve a hidden paid donation system in which the patient's family pays the donor;<br>paid donor: a donor who gives blood for money or other form of payment; and<br>autologous donor: a patient who donates his or her blood to be stored and re-infused, if needed, during surgery |
| **Data collection frequency** | Trimester/Annually |
| **Data source/ Measurement Tool** | Blood Safety Programme Monitoring Tools. The data are recorded at blood transfusion unit of Nepal Red Cross Society, and reported to NCASC trimesterly. |
| **Method of measurement** | |
| The following information is required to measure this indicator.<br>1. How many total blood units were donated? For each blood center and blood screening laboratory that screen donated blood for HIV:<br>2. How many units of blood were donated in each blood center or blood-screening laboratory?<br>3. How many donated units were screened in the blood center or blood-screening laboratory?<br>4. Does the blood center or blood-screening laboratory follow documented standard operating procedures for HIV screening?<br>5. Does the blood center or blood-screening laboratory participate in an external quality assessment scheme for HIV screening? | |
| **Disaggregation** | Geographical distribution (suggested) |

### *Purpose 1.5: Creation of enabling environment in HIV Prevention*

| **Expressing accepting attitude towards people living with HIV (OC- 10)** | |
|---|---|
| **Indicator** | Percentage of health workers both women and men expressing accepting attitude towards people living with HIV |
| **Rationale/Purpose:** | |
| This indicator measures accepting attitudes toward people living with HIV among health workers. HIV-related stigma refers to unfavorable attitudes, beliefs, and policies directed toward people living with HIV and their family members, close associates and communities. HIV-related stigma can reduce the effectiveness of programs and services designed for those living with HIV and those who are affected by the disease. This indicator provides a measure of the effectiveness of HIV awareness interventions among care providers and can highlight whether more needs to be done to counter HIV-related stigma. | |
| **Numerator** | Number of health workers both men and women who report accepting attitudes towards people living with HIV |

| | |
|---|---|
| **Denominator** | All respondents in the survey |
| **Data collection frequency** | Annually |
| **Data source/ Measurement Tool** | Special survey among health workers |
| **Method of measurement** | The numerator is calculated by first asking survey respondents a series of questions about people with HIV (based on an assessment tool for the survey). |
| **Disaggregation** | Age, sex, and Job type |

## Goal 2: By 2016, the AIDS-related deaths are reduced by 25% compared to 2010 (Target 1 of National HIV/AIDS Strategic Result Framework)

| **Impact of HIV/AIDS - AIDS-related deaths (IM-4)** | |
|---|---|
| **Indicator** | Percentage of adults and children with HIV known to be on treatment 12, 24 and 36 months after initiation of antiretroviral therapy |
| **Rationale/Purpose** | |
| It measures progress in increasing survival among infected adults and children by maintaining them on antiretroviral therapy. One of the goals of any antiretroviral therapy programme is to increase survival among infected individuals. It is important to understand why and how many people drop out of treatment programs. These data can be used to demonstrate the effectiveness of those programs and highlight obstacles to expanding and improving them. | |
| **Numerator** | Number of adults and children who are alive and on treatment at 12, 24 and 36 months after initiating treatment |
| **Denominator** | Total number of adults and children who initiated antiretroviral therapy who were expected to achieve 12, 24 and 36 months outcomes within the reporting period, including those who have died since starting therapy, those who have stopped therapy, and those recorded as lost to follow-up at month 12, 24 and 36 |
| **Data collection frequency** | Annually |
| **Data source/ Measurement Tool** | Routine programme monitoring data from HIV care sites (also known as ART sites. The data recorded in ART registered and reported annually the cohort reports. |
| **Method of measurement** | |
| Information on survival can be obtained from patient registers by tallying results for several monthly cohorts of same people each tabulated when on antiretroviral therapy for 12, 24 and 36 months.<br>For a comprehensive understanding of survival, the following data must be collected.<br>• Number of adults and children initiating antiretroviral therapy and the start date.<br>• Number of adults and children who continue on antiretroviral therapy at 12, 24 and 36 months after initiating treatment.<br>• Number of people who have stopped antiretroviral therapy, including those lost to follow-up and those who have died.<br>A proportion of people who have stopped treatment or were lost to follow-up may still be alive. However, since they are not continuously on treatment, they should not be included in the numerator. People who transfer between antiretroviral therapy programs and whose start date of treatment exists should be counted as continuously on treatment. | |
| **Disaggregation** | Sex (Male, Female) and age (0-14, 15+) |

*Purpose 2.1: People living with HIV received prophylaxis for opportunistic infections, and treatment of common co-infections according to national guidelines*

| People living with HIV - Cotrimoxazole Prophylaxis (OP-21) | |
|---|---|
| **Indicator** | Percentage of people enrolled in HIV care and treatment who received cotrimoxazole prophylaxis in the last 12 months |
| **Rationale/Purpose** | Co-trimoxazole prophylaxis is a simple and cost-effective intervention that reduces the risk ofopportunistic infections and mortality among children and adults living with HIV. WHO recommends administration of co-trimoxazole for adults living with HIV, including pregnant women, children living with HIV and infants exposed to HIV. |
| **Numerator** | Number of adults and children living with HIV enrolled in HIV care and receiving co-trimoxazole prophylaxis |
| **Denominator** | Estimated number of adults and children with HIV infection |
| **Data collection frequency** | Monthly/Annually |
| **Data source/ Measurement Tool** | Routine programme data from HIV care site (also known as ART sties. The data are recorded at Pre-ART registers as well as Opportunity Infection (OI) registers. And it is reported monthly using OI monthly reporting template. |
| **Method of measurement** | |
| Numerator: Individuals will be counted to be "receiving" co-trimoxazole prophylaxis if co- trimoxazole has been prescribed and obtained by the patient (provided by a program or procured by the patient). Do not include HIV-exposed infants who have not yet been confirmed as HIV positive and are therefore not enrolled in HIV care. If individuals are served by more than one program that might provide co-trimoxazole prophylaxis, the figure should be adjusted as needed so that the numerator represents only unique individuals receiving cotrimoxazole within the reporting period. People living with HIV receiving co-trimoxazole in both the private sector and the public sector should be included in the numerator where data for both are available.<br>Denominator: The denominator is an estimation of the number of people living with HIV. It is calculated through the EPP/SPECTRUM model. | |
| **Disaggregation** | Age, sex and locations |

| People living with HIV – Opportunistic infection management (OP -22) | |
|---|---|
| **Indicator definition** | Percentage of adults and children living with HIV enrolled in HIV care (currently) received diagnosis and treatment of opportunistic infections |
| **Rationale/Purpose** | |
| To assess progress towards providing treatment for opportunistic diseases. While the epidemic matures, increasing numbers of people for longer period will require anti-retroviral treatment. OI treatment along with Antiretroviral therapy has been shown to reduce mortality amongst those infected. OI therapy are recommended to be provided in conjunction with broader care and support services including counseling for family caregivers. | |
| **Numerator** | Number of adults and children living with HIV infection who are currently receiving OI therapy |
| **Denominator** | Number of PLHIV needing diagnosis and treatment of OIs |
| **Data collection frequency** | Monthly/Annually |
| **Data source/ Measurement Tool** | Routine programme data from HIV care sites. The data are recorded at OI registers and reported using monthly OI reporting template. |
| **Method of measurement** | |
| For numerator, OI register and monthly reports are to be used as a primary source of data for PLHIV diagnosed and receiving OI services. PLHIV might have multiple OIs and/or multiple episodes of the OIs in the reporting period. This is to be adjusted to calculate the number of PLHIV who received diagnosis and treatment of OIs in the reporting period.<br>For denominator, targets are to be calculated based on the estimated number of PLHIV, morbidity of OIs, program scale up plan, and mortality patterns in the specific geographical reasons for the reporting period. | |
| **Disaggregation** | Age and sex |

*Purpose 2.2: Adults and children living with HIV eligible for antiretroviral received it*

| PLHIV (Adults and children) – Receiving Antiretroviral Therapy (OP-23) | |
|---|---|
| **Indicator** | Number and percentage of eligible adults and children currently receiving antiretroviral therapy |
| **Rationale/Purpose** | |
| To assess progress towards providing anti-retroviral therapy. An increasing numbers of people for longer period will require anti-retroviral treatment while the epidemic matures. Antiretroviral therapy has been shown to reduce mortality amongst those infected. Antiretroviral therapy are recommended to be provided in conjunction with broader care and support services including counseling for family caregivers. This is to increase the quality survival of PLHIV. | |
| **Numerator** | Number of adults and children with advanced HIV infection who are currently receiving therapy in accordance with the nationally approved treatment protocol |
| **Denominator** | Estimated number of adults and children needing ART |
| **Data collection frequency** | Monthly/Annually |
| **Data source/ Measurement Tool** | Routine programme data from HIV care sites (also known as ART sites). The data are recorded at ART registers and reported using monthly ART reporting template. |
| **Method of measurement** | |
| The numerator can be generated by counting the number of adults and children who received antiretroviral combination therapy at the end of the reporting period. The numerator should equal the number of adults and children with advanced HIV infection who started antiretroviral treatment minus those patients who are not currently on treatment prior to the end of the reporting period. Patients who are currently not on treatment at the end of the reporting period, in other words, those who are excluded from the numerator, are patients who died, stopped treatment or are lost to follow-up.<br>Some patients pick up several months of antiretroviral drugs at one visit, which could include antiretroviral drugs received for the last months of the reporting period, but not be recorded as visits for the last months in the patient register. Efforts should be made to account for these patients as they need to be included in the numerator.<br>Antiretroviral therapy taken only for the purpose of prevention of mother-to-child transmission and post-exposure prophylaxis are not included in this indicator. HIV-infected pregnant women who are eligible for antiretroviral therapy and on antiretroviral therapy for their own treatment are included in this indicator.<br>Patients receiving antiretroviral therapy in the private sector and public sector should be included in the numerator where data are available.<br>Explanation of denominator:<br>The denominator is generated by estimating the number of PLHIV requiring) antiretroviral therapy. This is to be calculated using EPP/Spectrum modeling.<br>Programme monitoring and HIV surveillance For the numerator: facility-based antiretroviral therapy registers or drug supply management systems. For the denominator: HIV prevalence estimation models such as Spectrum. For children the indicator should be further disaggregated by the ages <1, 1-4, 5-14 years where possible. | |
| **Disaggregation** | Age, sex and duration of ARV consuming |

| PLHIV – Picking up all prescribed antiretroviral drugs on time (OP-24) | |
|---|---|
| **Indicator** | Percentage of people starting antiretroviral therapy who picked up all prescribed antiretroviral drugs on time |
| **Rationale/Purpose** | |
| Developing simple and affordable ways of monitoring people after they initiate antiretroviral therapy has become a major public health priority. Since the central paradigm of antiretroviral therapy is suppression of viral replication and since the costs of second-line regimens are higher than those of first-line regimens, monitoring efforts should largely focus on preserving the antiretroviral effectiveness of first-line combinations. Failure to identify people who are at high risk of future antiretroviral failure or who are currently on partly suppressive regimens may result in resistance to antiretroviral drugs, which has been associated with more rapid disease progression and death. Evaluating whether people have periods during which they have no antiretroviral drugs available through the extent to which they pick up antiretroviral drugs on time has been shown to be highly associated with antiretroviral failure and is one potentially useful and low-cost method of identifying people at high risk for failure. In addition, if more than 10 percent of people are picking up their antiretroviral drugs after their previously dispensed antiretroviral drugs run out, this may indicate that an underlying programmatic problem that affects the quality of services provided (such as the cost of drugs or clinic appointments, transport, clinic hours or a combination of issues) should be addressed. | |

| | |
|---|---|
| **Numerator** | Number of people who have picked up all their prescribed antiretroviral drugs on time for two consecutive drug pick-ups after a selected month |
| **Denominator** | Number of people who picked up antiretroviral drugs during a selected period |
| **Data collection frequency** | Monthly/Annually |
| **Data source/ Measurement Tool** | Routine programme datafrom ART register/Drug dispensing registers |
| **Method of measurement** | |
| On-time drug pick-up is defined as picking up antiretroviral drugs at each of the monitored pick-ups before the antiretroviral drugs previously dispensed would have been finished if taken according to schedule. Expected or scheduled pick-up dates should not be used to calculate this indicator. People who die or transfer out before the first drug pick-up after the selected month should be excluded from the numerator and the denominator. People who die or transfer out between the first and second drug pickups after the selected month should be classified according to whether their first drug pick-up was on time. Identifying the people who picked up antiretroviral drugs during the selected month is easy at sites with electronic or manual antiretroviral drug pick-up, pharmacy registers or dispensing records that include personal identifiers arranged sequentially by date. Data abstractors should record the following information for each patient who picked up antiretroviral drugs in the selected month:<br>• a patient identifier;<br>• last antiretroviral drug pick-up date during the selected month (baseline pick-up);<br>• two consecutive antiretroviral drug pick-up dates after the selected month (pick-up 1 and pick-up 2);<br>• list of antiretroviral drugs including number of days, or pill number, number of pills in a dose and frequency of doses to be taken that were dispensed (or in hand on leaving the pharmacy) at the baseline pick-up and pick-up 1;<br>• date of transfer out after baseline pick-up if two antiretroviral drug pick-ups were not recorded after the baseline pick-up;<br>• date of death after baseline pick-up if two antiretroviral drug pick-ups were not recorded after the baseline pick-up; and<br>• date of antiretroviral therapy stopped after the baseline pick-up (that is, a recorded decision by the person receiving antiretroviral therapy or physician that no more antiretroviral drugs should be dispensed) if two antiretroviral drug pickups were not recorded after the baseline pick-up. | |
| **Disaggregation** | Age, sex, location and duration |

| **Logistics – ARV Supply (OP-25)** | |
|---|---|
| **Indicator** | Percentage of health facilities dispensing antiretroviral therapy that have experienced a stock-out of at least one required antiretroviral drug in the last 12 months |
| **Rationale/Purpose** | |
| This indicator measures a key aspect of antiretroviral (ARV) drug supply management: whether health facilities dispensing ARV drugs have run out of stock of at least one required ARV in the last 12 months. As countries scale-up ART services, it is important to ensure that ARVs are available to those who need them. ART is a long term treatment strategy for people living with advanced HIV infection, and treatment interruptions may lead to HIV drug resistance. Efficient supply management is needed to ensure that required ARVs do not run out of stock. A stock-out is defined as the complete absence of a required ARV drug at a delivery point for at least one day. Health facilities include public and private facilities, health centres and clinics (including TB centres), as well as health facilities that are run by faith-based or nongovernmental organizations. | |
| **Numerator** | Number of health facilities dispensing ARVs that experienced one or more stock-outs of at least one required ARV drug in the last 12 months. |
| **Denominator** | Total number of health facilities dispensing ARVs |
| **Data collection frequency** | Bimonthly/Annually |
| | |
| **Data source/ Measurement Tool** | Program records and Health facility surveys |
| **Method of measurement** | |
| Information for this indicator is extracted from national ARV logistics management information system where details on ARV availability at the health facilities are available.<br>Alternatively, the information may need to be captured through routine service tracking surveys of the health facilities. . This information should be collected from both public and private ARV dispensing sites. | |
| **Disaggregation** | Geographical regions |

***Purpose 2.3: Adults and children with HIV associated co-infections (TB) received treatment of co-infection management***

| PLHIV (Adults and children) – TB Assessment (OP-26) | |
|---|---|
| **Indicator** | Number (and percentage) of adults and children enrolled in HIV care who had their TB status assessed and recorded during last visit (among all adults and children enrolled in HIV care in the reporting period) |
| **Rationale/Purpose** | This indicator assesses activity intended to reduce the impact of TB among people living with HIV. It demonstrates the level of implementation of the recommendation that people living with HIV be screened for TB at diagnosis and at all follow-up visits. |
| **Numerator** | Number of adults and children enrolled in HIV care who had their TB status assessed and recorded during their last visit |
| **Denominator** | Total number of adults and children enrolled in HIV care in the reporting period |
| **Data collection frequency** | Trimester/Annually |
| **Data source/ Measurement Tool** | Routine programme data from recorded at Pre-ART and ART registers and reported monthly using ART reporting template. |
| **Method of measurement** | |
| Data should be recorded routinely at every visit on the person's HIV care or antiretroviral therapy card and transferred onto the pre–antiretroviral therapy and antiretroviral therapy registers at all facilities providing routine HIV care. These data should be analyzed trimester annually and reported on the trimester cross-sectional reports to the national level. TB and HIV programs should collaborate to ensure that agreed criteria for identifying a person suspected of having TB and that the methods of TB screening used are consistent with TB control program protocols.<br>A suggested method of conducting the screening would be to ask clients living with HIV whether they are currently receiving TB treatment. If not, they are then asked about the key symptoms of TB disease (such as cough lasting more than two weeks, persistent fever, night sweats, unexplained weight loss and lymphadenopathy). A simple checklist could be used, and any positive response would indicate that the individual may be suspected of having TB. If, on questioning, they are defined as suspected of having TB (in accordance with national protocols), treatment for latent TB infection should not be given and they should be investigated for TB (or referred to a TB service for investigation) and treated appropriately. Those found not to have TB should be offered six months of isoniazid preventive therapy. | |
| **Disaggregation** | Age and sex |

| PLHIV (Adults and children) – Treatment for both HIV and TB (OP-27) | |
|---|---|
| **Indicator** | Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV |
| **Rationale/Purpose** | |
| TB is one of the most common causes of morbidity and mortality among people living with HIV even those receiving antiretroviral therapy. Intensified TB case-finding and access to quality diagnosis and treatment of TB in accordance with international and national guidelines is essential for improving the quality and quantity of life for people living with HIV. A measure of the percentage of HIV-positive TB cases that access appropriate treatment for their TB and HIV is important. | |
| **Numerator** | Number of adults with advanced HIV infection who received antiretroviral combination therapy in accordance with the nationally approved treatment protocol and who were started on TB treatment (in accordance with national TB programme guidelines), within the reporting year. |
| **Denominator** | Estimated number of incident TB cases in people living with HIV |
| **Data collection frequency** | Annually |
| **Data source/ Measurement Tool** | Routine programme data / ART registers and reports |
| **Method of measurement** | Numerator is collected from routine program data<br>Denominator is the estimates of incident TB cases among people living with HIV. This is estimated through indirect method, by WHO. |
| | |
| **Disaggregation** | Age, sex and geographical locations |

| PLHIV (Adults and children) – Isoniazid Preventive Therapy (OP-28) | |
|---|---|
| **Indicator** | Number (and percentage) of adults and children newly enrolled in HIV care who start treatment for latent TB infection (isoniazid preventive therapy) among the total number of adults and children newly enrolled in HIV care over a given time period |
| **Rationale/Purpose** | To ensure that eligible people living with HIV are given treatment for latent TB infection and thus to reduce the incidence of TB among people living with HIV. |
| **Numerator** | Total number of adults and children newly enrolled in HIV care who start (given at least one dose) isoniazid preventive therapy during the reporting period |
| **Denominator** | Total number of adults and children newly enrolled in HIV care during the reporting period |
| **Data collection frequency** | Monthly/Trimester/Annually |
| **Data source/ Measurement Tool** | Pre-ART and ART registers record the data and reported monthly using reporting template. |
| **Method of measurement** | |
| The data needed for this indicator are collected from pre–antiretroviral therapy and antiretroviral therapy registers at the HIV care service sites depending on where TB preventive therapy is to be administered. People living with HIV should have their TB status assessed. Those found not to have evidence of active TB will be offered TB preventive therapy according to nationally determined guidelines. All those accepting TB preventive therapy and receiving at least the first dose of treatment should be recorded. The report should be able to depict the number of new cases, continuing cases and completed cases on a regular basis. | |
| **Disaggregation** | Age and sex |

| TB patients – HIV testing and counseling (OP-29) | |
|---|---|
| **Indicator** | Number (and percentage) of TB patients tested for HIV and their test results are recorded in TB register. |
| **Rationale/Purpose** | |
| HIV testing among TB patients is one of key HIV prevention interventions in TB-HIV collaborative programs. It is aimed to tackle the double burden of TB and HIV among individual and population levels for achieving program impact.<br>HIV testing among TB patients allows timely detection of HIV among high risk TB patients; and if positive can be linked to HIV care and treatment programme immediately to minimize the damage. This can also be considered as an indicator to track the progress of service integration from perspectives of health system strengthening efforts. | |
| **Numerator** | Number of TB patients who tested for HIV and test results are recorded in TB register |
| **Denominator** | Total number TB patients diagnosed and registered in the TB register |
| **Data collection frequency** | Trimester-wise/annually |
| **Data source/ Measurement Tool** | Routine programme monitoring data from TB registers, and reported using quarterly trimester reporting template. |
| **Method of measurement** | |
| The numerator of this indicator is calculated by counting the number of TB patients tested for HIV and the whether the test results are reflected in the TB register in the reporting period (trimester wise and annually). It is critical to note whether the testing of HIV is following the recommended test-algorithms (national HIV testing and counseling guidelines) in quality assured manner (national guidelines for laboratory quality assurance of HIV related test).<br>The denominator is calculated by counting the total number of TB patients diagnosed and registered in the TB register in same reporting period (usually trimester wise and annually). | |
| **Disaggregation** | Age and sex |

*Purpose 2.4: PLHIV received care and support services according to their needs*

| PLHIV - Care and support (OP-30) | |
|---|---|
| **Indicator** | Number of adults and children living with HIV who received care and support services outside facilities (CCC and CHBC) |
| **Rationale/Purpose** | |
| Adults and children living with HIV should receive a comprehensive package of services to improve the quality of life, extend life and delay the need for antiretroviral therapy. Care and support programs can cover support including psychosocial, medical, nutritional, legal, and other support of social protection. The goal is to provide services in different domains and to provide these services using a holistic approach from the time of HIV diagnosis. Many of these services are provided outside the formal health care system and take place at the household level and some at the community level. This indicator tracks information on the level of coverage and care and support provided outside facilities (at the household and community levels) to people living with HIV. | |
| **Numerator** | Number of adults and children living with HIV who received at least one service from the essential package (regardless of the number of service provision episodes) outside a health facility during the reporting Period. This include new PLHIV enrolled in CCC and CHBC services for the first time; as well as those PLHIV who enrolled previously in CCC and CHBC services (records are to be made knowing who are new and who are repeated clients). |
| **Denominator** | Not Applicable |
| **Data collection frequency** | Monthly/Trimester |
| **Data source/ Measurement Tool** | Routine programme monitoring datafrom CCC and CHBC services (CCC and CHBC registers) |
| **Methods of measurement** | |
| To ensure quality care, all PLHIV should receive health care support for their illness regardless of whether that support takes place within a facility or outside of a facility.<br>Package for CHBC consist of medical, psycho-social, spiritual and nutritional support, primarily for positive living, reducing stigma and discrimination if any, supporting for adherence to treatment.<br>Package for CCC consist of positive prevention, infection prevention, linkage to social services, education, literacy, medical services, nutritional support and care and support.<br>The numerator to be counted is a PLHIV who received at least one service from the essential package of services as defined in the national guidelines for the same. And the service must take place outside a health facility. For the purposes of reporting on this indicator "outside a facility" may refer to community care center (CCC) and/or community and home-based care (CHBC) settings. CCC and CHBC registers are the primary tools to record the data. Services provided in primary, secondary or tertiary health facilities or hospitals should not be counted here. | |
| **Disaggregation** | Age and sex |

| PLHIV - Care and support (HBC) (OP-31) | |
|---|---|
| **Indicator** | Number (and percentage) of (currently identified) PLHIV who received at least one home visit by care providers for care and support services (palliative care) in last 12 months |
| **Rationale/Purpose** | |
| Care at home and communities is to increase the access to the servicesowned by the PLHIV and the communities and, thus, improving the physical, mental, social and spiritual wellbeing of PLHIV. National CHBC is aimed to support families by providing home-based care, the services range from psychological support to help with nursing from training provision to home caregivers to income substitution for lost earnings. This indicator aims to provide a picture of the proportion of households touched by potentially HIV–related incapacity that are reached by community and home-based care programs. | |
| **Numerator** | Number of PLHIV who received at least one home visit by care providers for care and support services (palliative care) in last 12 months |
| **Denominator** | Total number of PLHIV identified in the given geographical area in the reporting period. |
| **Data collection frequency** | Trimester/ Annually |
| **Data source/ Measurement Tool** | Routine programme data by CHBC Program /Household Survey |

| **Method of measurement** | |
|---|---|
| This information is to be captured from CHBC registers and periodic reports. PLHIV who received at least one visit by the CHBC workers in the reporting period is to be counted.<br>Denominator is the total number of identified PLHIV in the given geographical area. In the districts, this number is expected to be available from updated DACC progress report.<br>Alternatively, this information can be captured through household surveys among PLHIV. | |
| **Disaggregation** | Age, sex and location |

| **PLHIV - Care and support (Nutritional Support) (OP-32)** | |
|---|---|
| **Indicator** | Number (and percentage) of people living with HIV benefiting from nutritional support in the last 12 months |
| **Rationale/Purpose** | |
| HIV-affected individuals are in need of nutritious food while they are on treatment and to gain good health status. Thus, ensuring food security of PLHIV and household with PLHIV is critical for the success of overall treatment and care programs because the target of food and nutrition security programs are PLHIV and households vulnerable to food insecurity.<br>The purpose of this indicator is to determine (a) whether PLHIV and households with PLHIV are addressed with the food security, and (b) weather they are benefiting from participation in these food and nutrition security programs. | |
| **Numerator** | Number of PLHIV receiving food and nutrition support (as defined in the national guidelines)at any point during 12 months |
| **Denominator** | Number of PLHIV identified during the same period |
| **Data collection frequency** | Monthly/ Trimester/Annually |
| **Data source/ Measurement Tool** | Routine programme data from HIV care sites (ART). |
| **Method of measurement** | |
| The indicator is measured using records from programs providing nutritional support services. When the number of PLHIV and HIV affected households receiving nutritional support services is being measured, the value of the indicator is the number of PLHIV and/or HIV affected covered by the services during the reporting period. When the percentage of PLHIV receiving services is being measured, the numerator is the number of PLHIV receiving nutritional support services at any point during the reporting period. The denominator is the number of PLHIV and/or HIV-affected households identified during the same period. The duration of the reporting period is determined by the facility/program gathering the data.<br>Frequency of measurement and reporting: This indicator is measured at the individual and/or household level. Programs may further decide to disaggregate the indicator based on categories that are relevant to their target groups and service types (ART, CHBC, CCC, or other specific nutritional support program) e.g. by geographic region or by type of food support received. The indicator may be disaggregated by the referral source where programs target clients through a referral process (for example, referrals from ART, PMTCT, CHBC or CCC). | |
| **Disaggregation** | Age, sex and programme type (suggested) |

| **Care and Support - Children affected by AIDS (CABA) - (OP - 33)** | |
|---|---|
| **Indicator** | Number (and percentage) of children affected by AIDS (CABA) received minimum package of care and support services as defined in the national guidelines for CABA in Nepal |
| **Rationale/Purpose** | This measures the coverage of the care and support services with especial focus among CABA following the established national standards |
| **Numerator** | Number of CABA reached with care and support services |
| **Denominator** | Estimated number of CABA in the given geographical area in the given time.<br>Or<br>Number of CABA registered in the given geographic area in the given time |
| **Data collection frequency** | Monthly/Trimester/Annually |
| **Data source/ Measurement Tool** | Routine programme data from HIV care sites (ART sites). District AIDS Coordination Committee (DACC) will record all the detail of CABA and support provided. The reports are made bi-monthly along with DACC reports. |

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|---|---|
| **Method of measurement** | Check program records of the service providers for finding out the number of children reached with care and support services. While the denominator can be recorded from the HIV testing facilities |
| **Disaggregation** | Age, sex gender classification andgeographical location |

| **Care and Support - AIDS orphans (OP-34)** | |
|---|---|
| **Indicator** | Ratio of school attendance of orphans (AIDS orphans) to school attendance of non-orphans aged 10-14 years |
| **Rationale/Purpose** | |
| It measures progress towards preventing relative disadvantage in school attendance among orphans versus non-orphans. The indicator is split up in two parts so comparisons can be made between orphans and non-orphans:<br>• Part A: current school attendance rate of orphans aged 10-14 representing primary school age, secondary school age.<br>• Part B: current school attendance rate of children aged 10–14 primary school age, secondary school age both of whose parents are alive and who live with at least one parent. AIDS deaths in adults occur just at the time in their lives when they are forming families and bringing up children.<br>Orphanhood is frequently accompanied by prejudice and increased poverty factors that can jeopardize children's chances of completing school education and may lead to the adoption of survival strategies that increase vulnerability to HIV. It is important therefore to monitor the extent to which program responding to HIV succeed in securing the educational opportunities of orphaned children. | |
| **Numerator** | Part A: Number of children who have lost both parents and who attend school aged 10-14, primary school age, secondary school age<br>Part B: Number of children both of whose parents are alive, who are living with at least one parent and who attend school aged 10-14, primary school age, secondary school age |
| **Denominator** | Part A: Number of children who have lost both parents<br>Part B: Number of children both of whose parents are alive who are living with at least one parent |
| **Data collection frequency** | Annually |
| **Data source/ Measurement Tool** | Special surveys such as Demographic and Health Survey, Multiple Indicator Cluster Survey |
| **Method of measurement** | Population-based survey (Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative survey). For every child aged 10-14, of primary school age, and secondary school age, living in a household, a household member is asked:<br>1. Is this child's natural mother still alive? If yes, does she live in the household?<br>2. Is this child's natural father still alive? If yes, does he live in the household?<br>3. Did this child attend school at any time during the school year? |
| **Disaggregation** | Age, sex and attending grade in school |

### *Purpose 2.5: PLHIV received impact mitigation support (social protection)*

| **PLHIV – Social protection (OP-35)** | |
|---|---|
| **Indicator** | Number of cases of stigma and discrimination among PLHIV reported at districts |
| **Rationale/Purpose** | This is one of the measures of social protection as well as the human rights issues duly recognized following the formal structural systems. This can be read as a reflection of impact mitigation as efforts among PLHIV in the communities |
| **Numerator** | Number of cases of stigma and discrimination among PLHIV reported at districts |
| **Denominator** | Not applicable |
| **Data collection frequency** | Monthly/Trimester/Annually (As and when cases are registered) |
| **Data source/ Measurement Tool** | Routine programme data from District AIDS Coordination Committee (DACC). DACC is responsible for recording and reporting of cases stigma and discrimination in the districts. It is reported bi-monthly through DACC report. |

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|---|---|
| **Method of measurement** | Numerator of this indicator is measured from the official records of District AIDS Coordination Committee (DACC) secretariat where such cases are reported at district administration office, district (public) health office, district police office, human rights office in the districts. Results can be tracked over the year and can be compared among districts. |
| **Disaggregation** | Age, sex, and districts |

*Purpose 3: Cross-cutting strategies (Health system and community system strengthening)*

| **Health System Strengthening – Service delivery (IP-40)** | |
|---|---|
| **Indicator definition** | Number of facilities providing (and upgraded) (i) HIV testing and counseling services, (ii) PMTCT services and (iii) ART services |
| **Rationale/Purpose** | This indicator is aimed to measure the extent of availability of key services of national response to HIV such HIV testing and counseling, PMTCT and ART. These three services have been acknowledged as the priority and most representative proxy of the availability of priority services. Delivering of these services is critical to end the AIDS epidemic. |
| **Numerator** | Number of facilities providing (and upgraded) (i) HIV testing and counseling services, (ii) PMTCT services and (iii) ART services |
| **Denominator** | Not applicable. However, in case of the interest to knowing the percentage of health facilities providing (i) HIV testing and counseling services, (ii) PMTCT services and (iii) ART services, the denominator will be total number of registered health facilities (public and private) in the given year. |
| **Data collection frequency** | Annually |
| **Data source/ Measurement Tool** | This information is updated at DACC reports and reported annually. |
| | Also the indicator can be measured through annually service tracking survey conducted by Ministry of Health and Population |
| **Method of measurement** | For the numerator, the number of facilities that are provided (and upgraded) (i) HIV testing and counseling services, (ii) PMTCT services and (iii) ART services are to be counted in the given year. All the facilities providing such services and newly upgraded facilities with such services are to be cumulated at the end of the year. |
| | For the denominator, total number of health facilities both public and private registered up to the end of the reporting year. |
| **Disaggregation** | Type of services, type provider (public or private) |

| **Health System Strengthening – Leadership and governance (PC-36)** | |
|---|---|
| **Indicator definition** | Number of districts submitting (to Regional Health Directorates (RHDs) and NCASC) annual HIV/AIDS response review reports |
| **Rationale/Purpose** | This indicator measures the performance of the districts. |
| **Numerator** | Number of districts who submitted report to RHDs and NCASC on an annual basis |
| **Denominator** | Total number of districts |
| **Data collection frequency** | Annually |
| **Data source/ Measurement Tool** | Routine programme data from District AIDS Coordination Committee (DACC). DACC is responsible for all district level review and report annually. |
| **Method of measurement** | Measure from the recorded registers of the RDH and NCASC wherein the received districts are registered. |
| **Disaggregation** | Regions and districts |

| Health System Strengthening – Information system (PC-37) | |
|---|---|
| **Indicator definition** | Number of districts reporting (to RHDs and NCASC) relevant indicators as defined in the national M&E framework of National Guidelines on M&E on HIV response in Nepal |
| **Rationale/Purpose** | This indicator measures the performance of the districts in terms of accountability to reporting. |
| **Numerator** | Number of districts reporting (to RHDs and NCASC) relevant indicators as defined in the national M&E framework of National Guidelines M&E on HIV Response in Nepal |
| **Denominator** | Not applicable |
| **Data collection frequency** | Bimonthly/ Trimester |
| **Data source/ Measurement Tool** | DACC report |
| **Method of measurement** | Measure from the DACC reports sent to RDH and NCASC wherein the received districts are registered. |
| **Disaggregation** | Districts |

| Health System Strengthening – Human resource for health (OP-38) | |
|---|---|
| **Indicator** | Number of health care providers trained in the past 12 months on (i) HIV testing and counseling, (ii) PMTCT, (iii) clinical management of HIV, and (iv) M&E of HIV response |
| **Rationale/Purpose** | This indicator measure the capacity – knowledge and skills of the health care service providers in the field of (i) HIV testing and counseling, (ii) PMTCT, (iii) clinical management of HIV, and (iv) M&E of HIV response. |
| **Numerator** | Number of health care service providers trained on (i) HIV testing and counseling, (ii) PMTCT, (iii) clinical management of HIV, and (iv) M&E of HIV response |
| **Denominator** | Not applicable |
| **Data collection frequency** | Trimester/Annually |
| **Data source/ Measurement Tool** | Routine programme data on training on HIV/STI prevention and control, including critical enablers such as strategic information, health and community system strengthening, human rights and social protection. The data are recording in the national HIV training database and reported. |
| **Method of measurement** | Training providers records should be reviewed to measure the number of health care providers trained and the topics and duration of the trainings conducted in the field of (i) HIV testing and counseling, (ii) PMTCT, (iii) Clinical management of HIV, and (iv) M&E of HIV response. |
| **Disaggregation** | Age, sex, staff position, educational level |

| Health System Strengthening – Financing (IP-41) | |
|---|---|
| **Indicator** | Percentage of government fund allocation to national response to HIV |
| **Rationale/Purpose** | This indicator is tracked to monitor the government commitment on HIV response. The accurate and consistent data on flow of funds spent on HIV response at the national level is critical to design for sustainable financing on HIV response. |
| **Numerator** | Total budget spent from the national government (expenditure on HIV response) |
| **Denominator** | Total budget planned (planned budget) |
| **Data collection frequency** | Every two years |
| **Data source/ Measurement Tool** | National AIDS Spending Assessment (NASA) and/or other sub-national health account Sub-NHA on HIV/AIDS) |
| **Method of measurement** | Actual expenditures classified by eight AIDS spending categories and by financing sources including public expenditure from its own sources (i.e. government revenues such as taxes) and from international sources: 1. Prevention, 2. Care and treatment, 3. Orphans and vulnerable children, 4. Programme management and administration strengthening, 5. Incentives for human resources, 6. Social protection and social services (excluding orphans and vulnerable children), 7. Enabling environment and community development, 8. Research (excluding operations research included under programme management). Three main groups of financing sources: 1. Domestic public, 2. International, and 3. Domestic private |
| **Disaggregation** | Expenditure level (National, Regional, District) |

| Community System Strengthening (OP-39) | |
|---|---|
| **Indicator definition** | Number of community-based organization with staffs and/or volunteers received training/retraining on organizational management, leadership and/or accountability in the last one year |
| **Rationale/Purpose** | Retention of the trained staff of the CBOs and the volunteers in the organizational management system measures the use of training for the purpose it was imparted. |
| **Numerator** | Number of CBO staff/volunteers trained |
| **Denominator** | Not applicable |
| **Data collection frequency** | Trimester/ Annually |
| **Data source/ Measurement Tool** | Routine programme data on training related to community system strengthening. The data are recorded at national HIV training database and reported. |
| **Method of measurement** | This could easily be measured from the records of training institutes from the register of the participants' attendance sheet, and/or from the CBO's records of trained staff/volunteer as against total number of staff/ volunteers engaged by the respective CBO, and those who retained on the job after training. |
| **Disaggregation** | Age, sex, position and educational level |

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