NACO's STRATEGIC INFORMATION MANGEMENT DIVISION

PROGRAMME MONITORING & SIMS GROUP REPORT
NACP IV

5/14/2011

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This report is a consolidation of the topics outlined in the TOR for the Sub Group on Programme and Monitoring under the SIMU working group for NACP IV.

I.   Strengthening current system of programme monitoring at NACO/SACS

Status of programme monitoring at NACO / SACS during NACP-3

The guiding principle of NACP-3 was the unifying belief of *Three Ones*, i.e., one Agreed Action Framework, one National HIV/AIDS Coordinating Authority, and one Agreed National M&E System. Strengthening the nationwide Strategic Information Management System was one of the four key strategies of the third phase of the national AIDS control program of India. The need for evidence as a prerequisite for effective programmatic interventions was also identified and spelled out in NACP-3. Organization commitment to excel in strategic information management, since then, has been the key focus of NACO. The objective of imbibing the sense of one M&E system has largely been attained. There is also an appreciable sense of accountability for reporting by all the (service facility) reporting centres across the country, for all the program components. Establishment of the dedicated unit for M&E in NACO and SACS, provided the required leadership and human resource. Establishment of standard indicators, their indicator definitions and of standard data collection reporting formats greatly helped in strengthening the basic set-up for the program monitoring during the NACP-3.

What were the key weaknesses?

While the aforementioned positive changes were instrumental in setting up an excellent system for strategic information management, some gaps have been observed which prevented the realization of the full potential of this wonderful system.

- Although the need, that programmatic interventions should be evidenced based, was realized, there was a glaring gap in terms of its practical implementation. Translation, of the information generation by M&E by program divisions as evidence for planning and implementing interventions, was not a routine affair. The third phase witnessed phenomenal scale-up in terms of implementation of the various program components, including testing and counselling services, targeted interventions and treatment facilities. Therefore, while the M&E division was working hard to establish strategic information system keeping in pace with the program scale-up, the program divisions, because of urgency and reluctant to wait for functional M&E to establish and inform, went ahead with their own data update system. This created confusion and departure from the principle of 'one data' for the program. There were multiple versions of the same information, as data from M&E and data from program. This necessitated such unwarranted procedures to reconcile information between program division and M&E, incurring wastage of precious program time.
- Added to this, during program scale-up, the medley of inclusion of many indicators, frequent changes of reporting formats, inadequate trainings to staff about these changes, staff turnover at facility, state, and NACO levels resulted in situation which was not conducive for ensuring quality of data. Moreover, there are little instances of adequate regular programmatic use of all of the indicators collected so painstakingly.

- The strategic information system still needs to reach the finest arena where data emerging from the M&E system is valued for its quality. Overlooking of a systematic data quality procedure has been one inadvertent missed opportunity of the third phase of the program. While some of the program components have improved on their data quality, there are insufficient mechanisms that are currently at place for routine data quality assurance, across all of the program components.
- As fallout of the rapid scale-up of different program components separate software programs were established for different program components such as the CLHA / PLHA for ART, individual reporting for ICTC apart from the main CMIS software. While optimum utilization of the data emanating from CMIS had always been the issue, the additional usage of different software created a hindrance in timely sharing and usage of the information. Moreover, there were inadequate communication between the units monitoring the different software and the data emerging from them.

What can be done to strengthen programme monitoring?

The planning for NACP-IV gives a desirable opportunity to resolve the issues observed, and put in place an efficient programme monitoring system by building upon the strengths attained during NACP-III. The following scheme is suggested keeping in mind the principle that the information deduced from the data generated ought to be used for the ultimate benefit of the population to which the program strives to serve. Under this scheme, the goal would be to produce timely and high quality routine programme monitoring data.

- **Minimum essential indicators**:
  - Data collection strategy should be explicitly linked to data use. Review for precision of indicators: and in consultation with program managers, decrease the number of indicators, if possible.
  - Indicators were recently finalized as part of development of SIMS
  - In the light of the ongoing discussion for NACP-4 in other program components, there is an opportunity to review the indicators again
  - ensure that indicators from other implementing partners / NGOs are in line with the national indicators framework
- **Ensuring quality of program data**:
  - New information management software (SIMS) to be leveraged
  - Completeness of reporting:
    - customized reports to be generated for the supervisor at the next level to (i) highlight fields which have not been filled; and (ii) quickly ascertain which reporting units have not yet reported (especially important at district/state level)
    - certain logic checks are included in SIMS, which would highlight if inconsistent / implausible entries are made
    - written procedure to address incomplete reporting, late reporting, missing reports, including following-up with reporting levels on these issues
  - Timeliness of reporting:
    - fixed dates for reporting from facilities to district / state / NACO

- intensive follow-up to ensure reporting by due dates, and mechanism to freeze entry of data after due date; the date for data freezing should appear in all the internal reports whenever M&E division communicates with the program division
  - o Training of personnel
    - systematic assessment of training needs, follow-up
    - Periodic training to ensure that everyone who is involved with collection, collation, analysis and supervision of reporting has the similar understanding of the indicator definition, without any ambiguity.
  - o Verification with source data:
    - Correctness of the data to be verified periodically by comparing with the source data, on a sample basis
  - o Personal data:
    - reiterate the importance of confidentiality, and mention in the document about access control procedures at place
- **Ensuring use of data by programme managers:**
  - o Systematic regular communication between M&E and program units
    - Mechanism to systematically generate demand for data of the M&E system
    - Mechanism to ensure that information out of the collected data is communicated from M&E to program units, through established communication channels
    - Mechanism to avoid duplicate reporting (separately one for program unit and another for M&E unit)
    - Generate monthly standard reports for each program component for select indicators (standard template) both at the SACS and NACO levels
    - Revive dashboard indicators for each program components in consultation with program managers
  - o Clear delineation of responsibility of the M&E officer to
    - present the template report at specified time to program units,
    - highlight data quality issues identified with them
    - prioritize areas / units that need supportive supervision
    - highlight areas / units where staff requires training
    - as a follow-up action, should reconcile and discrepancies in report
- **Human resource:**
  - o Mapping job responsibilities of M&E officers within M&E unit as well as those M&E officers who are posted within program units (at NACO)
    - ensuring streamlining of activities
    - avoid duplication of work
    - avoid conflicts
  - o creation of a position for a person with software related experience to overall manage the software related factors of the SIMS, liaison for trouble shooting
- **Essential tools and equipment for data analysis**
  - o promote greater use of simple, easily available but effective tools
    - excel function in computers, using pivot tables functions

- o special areas such as drug stock management for ART: centralized at NACO or decentralized at states
- **Training**:
  - o periodic training / refresher training for collection and reporting of data to sustain the momentum of activities
  - o training on analysis, graphical presentation, (trends, bar charts, pie charts), and interpretation and reporting of key points
  - o training on preparation of regular monthly reports as outputs
  - o periodic needs assessment for trainings of incumbent M&E officers
- **Periodic reports:**
  - o systematic mechanism to prepare and publish bulletin for each program component units on key / agreeable indicators
- **Supportive supervision:**
  - o supervision plan for reporting units,
  - o key issues identified with any reporting units to be communicated to program units to aid in supervision while program officers are visiting those sites
- **Periodic systematic reviews to assess the program monitoring system of each program component**
  - o establish a Technical Working Group who would periodically assess the entire program monitoring system for each component, at a time,
  - o select the levels and sites to be included
  - o conduct site visits
  - o review outputs and reports
  - o develop a system strengthening plan
  - o including state visits, and submit a detailed report to NACO and states concerned, highlighting action points and clear roadmap for inclusion of the recommendations as a follow-up action

II. Ensuring & Enhancing Program Data Quality under NACP IV
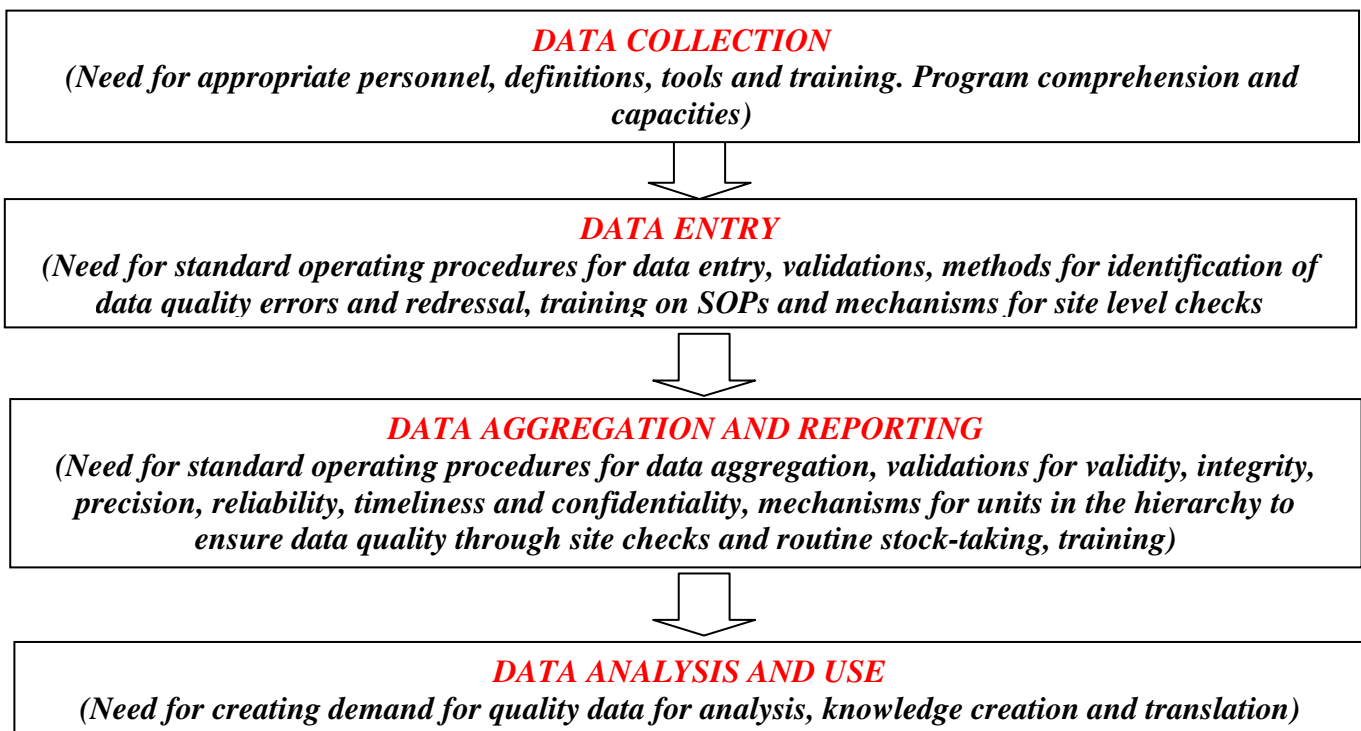
Background

Data Quality plays a major role in information utilization for target setting, improved program and resource management and results reporting. High-quality data means that the data are accurate, reliable, complete, sufficiently precise, and collected/ reported in a timely fashion and with integrity1.Ensuring data quality within operations and implementation of any public health program is a discipline that is as important as the implementation itself. The presence of data quality systems in a program is never as obvious as its absence. Making program decisions on the basis of poor quality data is risky and may lead to unsatisfactory or misleading results considering that data which is questionable distorts the real situation thereby resulting in

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[1] *Data Quality Assurance Tool for Program-Level Indicators (January 2007);*
www.pepfar.gov/documents/organization/79628.pdf

erroneous analyses and decision making. Almost all of an organization's operational and analytical processes rely on a solid, high-quality, data foundation.

As the National AIDS Control Plan in its third phase has significantly scaled up program response in prevention, care and treatment, there has been a resulting need for generation and reporting of strategic information for further characterizing the epidemic and directing the national response to the population and geographic areas where intervention is most critically needed. Another factor which has greatly influenced this equation is the decentralization that has been operationalised in this phase of the program. The Strategic Information Management Unit (SIMU) at the national level is tasked with coordination of program data collection, analysis, and reporting, however the cascading sub-national structures— State AIDS Control Societies, the District AIDS Prevention and Control Units and the reporting facilities—are the primary stakeholders in the data life cycle. Combined, these units are heavily relied on to fuel increased demand from stakeholders for timely and robust data on the HIV epidemic and response.

Current Data Quality Challenges:

DATA COLLECTION
(Need for appropriate personnel, definitions, tools and training. Program comprehension and capacities)

⬇

DATA ENTRY
(Need for standard operating procedures for data entry, validations, methods for identification of data quality errors and redressal, training on SOPs and mechanisms for site level checks

⬇

DATA AGGREGATION AND REPORTING
(Need for standard operating procedures for data aggregation, validations for validity, integrity, precision, reliability, timeliness and confidentiality, mechanisms for units in the hierarchy to ensure data quality through site checks and routine stock-taking, training)

⬇

DATA ANALYSIS AND USE
(Need for creating demand for quality data for analysis, knowledge creation and translation)

Despite the national government's best efforts to instill the importance of good quality data in all levels of the implementation hierarchy, the current understanding of the rationale for and utilization of good quality data is largely limited. This limited understanding leads to a less level of rigor in the generation and collection of data at service delivery sites. This further translates into non-standardized and often invalid data aggregation and reporting. The equation is made more complicated with a lack of demand for good quality data for analysis

and interpretation. Where it does exist, the quality of analysis varies. The visual below lays out an illustration for the levels at which data quality challenges present themselves, and identifies the needs and opportunities for interventions under NACP IV.

Strategies for data quality improvement under NACP IV
A two pronged approach will be adopted to provide a fillip to the quality of data generated under NACP IV. The program will conduct a systems assessment and make recommendations for the creation of a strong system. Upon the creation of this system, regular data verification processes will be put in place for an ongoing quality check of the program data.

The following aspects will be closely studied, analysed and addressed and NACP IV will pioneer the development and implementation of a Data Quality Improvement Plan at all relevant levels of the organizational and programmatic hierarchy:

•   **M&E Structures, Functions and Capabilities**: The national program will ensure that an adequate number of human resources are recruited to support data quality of M&E and data management systems. This human resource needs to be adequately capacitated to support all functions from interacting with program personnel to understanding challenges with data gathering, data aggregation and reporting. It is recommended that a needs assessment be carried out to take stock of the personnel currently in the field and up the reporting hierarchy and recommendations be made for staffing up for achieving data quality success.

•   **Indicator Definitions and Reporting Guidelines**: Under NACP IV, the national M&E indicators will be updated to harmonize the efforts of all stakeholders engaged in the HIV response, and to rationalize the number and types of indicators to increase their relevance to the new strategy. Operational guidelines on national indicators and indicator definitions that meet relevant standards will be updated / made available and be systematically followed by service delivery points. Training on these guidelines should be conducted at all levels for uniform understanding.

•   **Data Collection, Reporting Forms and Tools**: Standard data collection and reporting forms will be made available for use, and there will be written policies and procedures for maintenance of source documents.

•   **Data Management Process and Quality Controls**: A dedicated group (including state and district representatives) will be constituted to undertake the aforementioned needs assessment for human resource requirements, systems assessment and develop relevant standard operating procedures for data collection and reporting. The final and most important function of this group will be to derive the national policy for data quality management. Procedures to ensure documentation, SOPs for data collection, aggregation and manipulation, identification of data quality challenges and providing solutions at various reporting levels (through supportive supervision visits / ad-hoc field visits / review missions by experts) will be laid down. These guidelines, once finalized, will be disseminated widely amongst all national, state and district functionaries and training will be provided to all concerned. Some other areas that will need special emphasis for strengthening the quality of program data are as follows:

- The Strategic Information management System (SIMS) is a transformed, upgraded and a state of the art program monitoring system with the capacity for advance data capture, aggregation and analysis, tracking Global Fund inputs, capturing PLHIV data from individualized service access cards, interfacing with other financial and contractual data systems at NACO and serving as the repository of all data related to HIV/AIDS epidemic and response. The SIMS is an improvement over the CMIS which is currently being used for capturing program data. This system will be a crucial vehicle for introducing routine data quality checks and validations for all data entry formats. The system can also be programmed to generate data completeness and validity reports. As part of the data quality improvement plan, routinizing of data quality checks will need to be emphasized. With adequate human resources available, the quality of reported data for key indicators will be verified periodically. There will be a special emphasis on ensuring and maintaining data quality of the SIMS and equipping the intermediary local functionaries at the district level to support primary reporting units to maintain the quality of the data that they collect and report.
- Finally with the personnel and systems in place, NACP IV will make every effort to strengthen the feedback loop from national, state to district level, while also encouraging data analysis and data use for informing national programming and guiding the planning process. The program will constantly measure, analyze and improve upon its defined standards for data quality and ensure that it becomes an integrated and inextricable part of NACP IV.

III. Strategic Information Management System (SIMS)

Introduction

The SIMS was developed as a mechanism for improving on the CMIS. It was developed on the principle to achieve the one of the core objectives of NACP-III, Thereby addressing the various issue related to Completeness, Timeliness and Quality of CMIS data and also addressing the challenge of integrating different programme data sources at one place.

It was envisaged that following the launch of SIMS; data generated at different levels could be comprehensively utilised for guiding effective response formulation and concerns over gaps in data reporting and data quality.

SIMS is a web-based application with a central server and sophisticated tools aiding in data analysis and integration from different data sources/platforms. It is proposed to increase the efficiency of computerized M&E system by having adequate data quality through centralized validated data. Data transfer mechanisms shall be improved by using the web-enabled application and efficient data management rights (Access Rights Control) from reporting unit to national level will be there. It will provide evidence to track the progression of epidemic with respect to demographic characteristics, geographical area including GIS support.

SIMS provides tools for better decision making through data triangulation from different sources and thereby facilitates ease of evaluation, monitoring and taking policy decisions at strategic or tactical level. The Built in rules, regulations and policies to facilitate alerts and data integrity checks, The Ad-hoc reporting through data warehousing, drill-down and slice-n-dice facility shall also be available through cubes.

SIMS was launched on 26th August 2010. Presently training-cum-roll out of SIMS is underway. The training was divided into four phases– State M&E Officers, Other SACS Officers orientation, DAPCU personnel training and Reporting unit users' training. After successfully completed three phases of Training Fourth phase of training is expected to be completed by May, 2011 for all the components expect ART, Lab and LWS.

Review of the roll out of SIMS up to facility level in different states and assessment of the challenges in its effective implementation

As the actual roll-out of SIMS is yet to take place, various operational challenges may come-up. However, even during the training phases, various issues have come-up which are being addressed in a timely manner.

The perceived challenges in effective implementation of SIMS include

- Computer, Internet connectivity and Power back/support at all level
- Involvement and ownership feeling of programme division in SIMS
- Comparison of CMIS & SIMS data
- Analytics report, portal, mail messaging & content management
- Development and Training of other remaining component plan
- Help Desk support at SACS and NACO
- User ID creation for all the user at all level
- Offline ICTC set-up file distribution and installation
- GIS Mapping, Data triangulation & Analysis
- Additional manpower support at SACS and NACO
- Motivation & Interest of personnel at all level

Recommendations for ensuring effective implementation of SIMS in the programme and for harnessing its fullest potential offered for improving programme management:

1. *SIMS is a tool which gives us immense opportunities to collect good quality progamme data. Its potential should be fully harnessed. It is advisable that personnel at level should have sound capacity to understand it and utilize it.*
2. *Programme staff, involved in collection and compilation of this information, should have correct knowledge about the definition of each of the data field which they gather. For this, separate training/refresher training may be periodically done for all the concern personnel.*

3. *Programme and Monitoring and Evaluation personnel at DAPCU, SACS and NACO level should see the data, use the data, and analyse the data on a fix monthly basis.*
4. *That means focus should be given in SIMS to quality of data, analysis of data and use of data for programme monitoring.*
5. *Supportive supervision and data quality assessment should be institutionalized, as also a system of sending the feedback based on the monthly/quarterly data*

Proposed mechanisms to enhance ownership of programme divisions on SIMS to ensure reporting through One System and access to One Database under the programme: There should be no parallel data gathering by programme division other than SIMS. That means the concept of 'one data and one system' should be followed in letter and spirit by all personnel at all levels.

IV. System & HR requirements for M&E activities

1.   STATUS

Strengthening the nationwide Strategic Information Management System has been one of the four key strategies of NACP-III. In this line, NACP-III envisaged a robust Strategic Information Management System (SIMS) to focus on programme monitoring, evaluation and surveillance, and knowledge gathering. In order to maximize effective use of all available information and implement evidence based planning, SIMU was established in NACO and SACS.

Following is the level of M&E system and the status of manpower

Level	Head	Team
National	DDG (M&E)	Programme Officer, 3-4 Technical Officers
State	DD (M&E)/ State M&EO	State M&EO, Statistical Officer/ Assistant, Divisional Assistant
District	DACO/ DPM	M&E Assistant
Sub district (Reporting Unit)	Facility In-charge	Counsellor, Program Manager etc

The functioning of SIMU team has led to considerable enhancement of data flow and feedback at all levels. Timeliness and correctness of reporting is being monitored on a monthly basis, and feedback is provided to SACS and reporting units for improving them. SIMU also assisted in tracking the epidemic and the effectiveness of the response and help assess how well NACO, SACS and all partner organizations are fulfilling their commitment to meet agreed objectives

With an aim to meet the objectives of NACP-III, a web-based integrated SIMS is being developed as a mechanism for improving efficiency of the CMIS and was launched in Aug 2010 and is scheduled to be implemented during 2011.

Highlights of NACP–III in terms of HR system strengthening under M&E Division are:

1. *State M&E officer placed in all states*
2. *Induction training on CMIS completed for all State M&E Officers*
3. *Review and training of State M&E Officer on CMIS trouble shooting completed*
4. *Induction training on SIMS completed for all State M&E Officer and DAPCU Officials*
5. *Training of State M&E Officer on Data Analysis (SPSS) completed*

2.   GAPS IDENTIFIED/ CHALLENGES

The key challenges/ gaps in the present M&E HR system include

HUMAN RESOURCE

i. *Retention of trained State M&E Officer is difficult, due to the prevailing competitive market and the high emoluments offered by other agencies.*
ii. *Non availability of dedicated staffs in the M&E team. The DA attached to the M&E Division are less in number or are frequently shifted to other division, and hence the quality in the M&E system gets affected.*

CAPACITY

i. *With the existing system of CMIS, the M&E team is mostly utilized in data entry in the CMIS software and preparing power point. Analytical capacities at the state level are weak and, with few exceptions, have not utilized the existing data for planning purposes.*
ii. *State ownership and recognition of the importance of M&E are still weak, and the involvement of the program officers in the M&E activities are very less, which affects the M&E system.*
iii. *Inadequate training of the DAPCU M&E staffs on M&E system has led to lower understanding and has affected the quality of reporting.*
iv. *Non availability of nodal officer in the district without DAPCU has also posed hindrance in achieving quality M&E system in the sub-district level*
v. *The ICTC (in SIMS) has to be operated offline, followed by online twice. This call for more time in reporting and other important functions (like counselling, outreach activity, HIV-TB meeting, follow up etc) might be compromised for want of time.*
vi. *The monitoring visit to facilities is not recorded in a standard format/ checklist. Hence, a concrete follow up cannot be made for the ensuing visit. This calls for a more systematic checklist development for supportive supervision and onsite validation*
vii. *The reporting format has changed in SIMS based on the recommendation of the Division's feedback in NACO. There is no uniform understanding on the new reporting format and the indicators amongst the SACS, DAPCU and the RU officials. This might lead to improper and inadequate reporting*
viii. *The understanding of the reporting system and indicators are not uniform with the partner organization. Hence there are difference in reporting system, which lead to inadequate reporting.*

SYSTEM/ INFRASTRUCTURE

i. *a major contributor to the issue of late reporting.*

3.   RECOMMENDATIONS

The availability of the critical mass of well trained human resources is the backbone to a quality M&E system. Recognizing the need for deploying skilled and competent human resources at all levels of M&E system to meet the demands of the new SIMS, it is recommended that:

HUMAN RESOURCE

i. *Salary range of State M&E Officer may be revised to Rs. 35,000-45,000 based on experience and performance.*

ii. *The Divisional Assistant needs to be redesignated as M&E Assistant and should be exclusively used for M&E activities.*

iii. *In the districts without DAPCU, a suitable medical officer (in-charge of the RCH programme, DTO, District Epidemiologist, etc) needs to be identified as nodal officer, who will be responsible for the NACP activities in the district. This will also act as a link between the programmes in the district.*

CAPACITY

i. *The State M&E team has to be provided training on basic data analysis. This will help them provide proper feedback to the reporting units (RU).Analysed data can also be utilized for planning purposes.*

ii. *The role of the SIMU team needs to be clearly worked out. The SIMU team should be responsible for providing technical support in rolling out the SIMS and ensure handholding to the RU and the DAPCU to ensure effective roll out. Basic data analysis should also be ensured out of the SIMU Team.*

iii. *Role of the state programme officers in the M&E activities needs to be spelt out. The involvement of the POs should be ensured especially for timely reporting, data analysis and review of performance*

iv. *The DAPCU M&E staff should be periodically oriented on M&E system. Basic data analysis training can be provided by the trained SACS M&E team.*

v. *State M&E Officer needs to be trained on SAS and other analytical options under SIMS. This will immensely contribute to adequate data analysis.*

vi. *The reporting protocol needs to be revised especially for ICTC (in SIMS) so that adequate time can be allotted for counseling.*

vii. *A standard checklist needs to be developed for supportive supervision and onsite validation and the M&E team should be trained on the format. It also needs to be ensured that there is onsite validation to important facilities based on the requirement.*

viii. *The SACS M&E Team needs to be trained on the new reporting format and the indicators. The team then in turn can train the SACS, DAPCU and RU officials on the new format*

ix. *The partner agencies need to be trained on the new reporting format and the indicator, so that uniformity is maintained in the system. Good practices implemented by the partners, if any, needs to be shared for replication. This also calls for a joint meeting with the partner agencies and the SACS.*

x. *Since SIMS is a new software and it is still in its development phase, a refresher training of the State M&E officer needs to be organized in a span of 3 months after the roll out has been done. This will help in making corrective changes in the software and the system based on the issues and findings in the 3 months of implementation*

xi. *To improve the skills on the M&E system, a concerted approach needs to be put to ensure participation of the M&E officer in National/ International workshop/ seminars on M&E system. The learning can be disseminated to all M&E officers. This will also instill a sense of growth options being available in the programme.*

xii. *In line with the other components under NACP, a National/ Regional review of M&E officers needs to be organized with primary focus on SIMS roll out, data management, and issues and suggestions to ensure effective system in place. This will provide a good platform for the M&E Officer to share their experience and various recommendation can be made based on the field level experience*

SYSTEM/ INFRASTRUCTURE

i. *Due to the massive plan of rolling out of SIMS across the reporting units of the country, a dedicated computer system needs to be ensured in all the reporting units. This will help in effective data management and ease of retrieve.*
ii. *The centres with computer system should be ensured with adequate configuration (e.g., proper operating system and anti-virus software installed) so that smooth functioning of SIMS software may be ensured*
iii. *Dedicated internet connectivity needs to be ensured in the reporting unit, district and even at the state level. In extreme cases of non-availability, the existing NIC, DIC or CIC office needs to be identified and utilized.*
iv. *In the district without DAPCU, the existing IDSP or NRHM system can also be used for SIMS reporting*
v. *The M&E team also should ensure a web page to put forward the demographic and vital performance indicator of the district. Various good practices also need to be highlighted in the website, so that other states can also replicate it.*

V. M&E systems & information from Partners' interventions

It was landmark towards national response to HIV/AIDS epidemic when Govt. of India adopted the three ones principle of UNAIDS. Under the "Three Ones" principles action framework as a national AIDS coordinating authority NACO need to monitor the progress of interventions of HIV/ADIS in the country.

NACO has developed monitoring indicators and computerised management and Information System (CMIS) through not only involving the development partners but also civil societies representatives and UN agencies to receive the program data and review the progress towards HIV epidemic. All development partners working on HIV/AIDS have agreed to report their key program performance data under one country-level monitoring and evaluation system.

Donor and development partners' M&E system is very exhaustive and they have aligned their programme performance indicators with NACO's monitoring indicators to report the data in national CMIS.

Monitoring & Evaluation Systems and Information from Partner Interventions
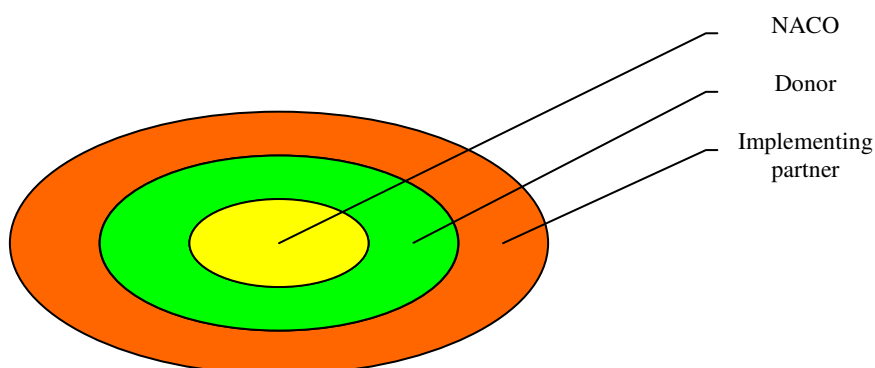
The monitoring framework of partner interventions features three level of information:

- Implementing partner required indicators.
- Donor required indicators
- NACO required indicators

The Donor requirements often is a subset of the implementing partners defined list of indicators and NACO requirements again a subsequent subset of Donor requirements.

Indicators of importance at different stages of intervention

The indicators of interests are often not the same over a period of intervention period. For example, during the initial stage of any intervention, the program would be looking at number of people contacted, given education, condom demonstration, mobilizing them to the clinic, and DIC etc. Subsequently, the program would aim to examine the regularity contact and clinic visit, number visiting the clinic for routine check up, DIC visit, number diagnosed with STI etc and on a later stage, program would be monitoring repeat STIs, partner notification and treatment, HIV testing, linkages to HIV care etc.

Hence, the base formats were revised from time to time so that the focus of the program is monitored and strengthened, which again is incorporated in the CMIS.

Different types of Management Systems available at partner level are;
- Paper based MIS
- Computerized Management System
  - Aggregate level
  - Individualized (web-based and non web-based)

Paper based MIS

Paper based MIS is a simple approach and often do not require advanced technology. The services provided and recorded in the base formats are compiled in the report developed as per the requirement on a monthly basis and share with different stakeholders. Though, it is simple and easy to fill-up depending on the nature of the formats and do not require advanced technology to compile the report, however, it is a very time consuming and can expect a number of compilation errors.

CMIS Software

The measurements can be done both at the aggregate and individual levels. While the aggregated measures relate to all the people contacted, the individualized MIS will provide information related to each people who were given services, in terms of cycle of outreach, services, and behaviour change within different program elements.

A CMIS can be used either to report aggregate level data or an individualized level data. In an aggregate level data, usually, the reports compiled as discussed in a paper based system and is computerized. This again can invite errors in data compilation at different levels, including duplication.

Hence, most partner interventions follow an individualized CMIS so that each service given to the target population is computerized with a Unique ID number. This helps track each

individual in terms of service utilization, including condom supply and repeat STIs. Moreover, in an individualized system, the number of formats required to track the services are minimum.

Such CMIS also has the features to generate the different reports required for the month, that for the partner, for the donor and for the NACO. Once the reports are generated, the implementing partner reviews the report and shares it during the monthly meeting. Similarly, the NACO report is generated from the CMIS and is directly uploaded into the NACO CMIS. Thus, this does not take time in compiling reports and therefore expect minimum or no error.

Different types of CMIS evolved over time, with a stand alone CMIS during the initial period and subsequently upgrading it to a web-based CMIS.

Stand alone CMIS
Initial period of interventions used stand alone CMIS, where the software were installed in the local system at the district level. The districts enter the data and generate the report and sent the data to the central office. Though his facilitate in a good system and the data is synchronized centrally, however, to ensure the data entry, reporting etc timely, the team often may need to follow up with the districts.

Web-based CMIS
Since most of towns are linked with the internet facilities, a web-based system not only facilitated the data transfer quickly, but also facilitated in monitoring the data gathering and reporting. That is, a web-based system facilitate not only make available the data at the central server as soon as the the data is uploaded from the district, which facilitate for the state level analysis, but also helps in monitoring the progress of data entry and data uploading/reporting. For example, the web server could facilitate the central team in monitoring which reporting units completed data entry, reports generated and uploaded the data.
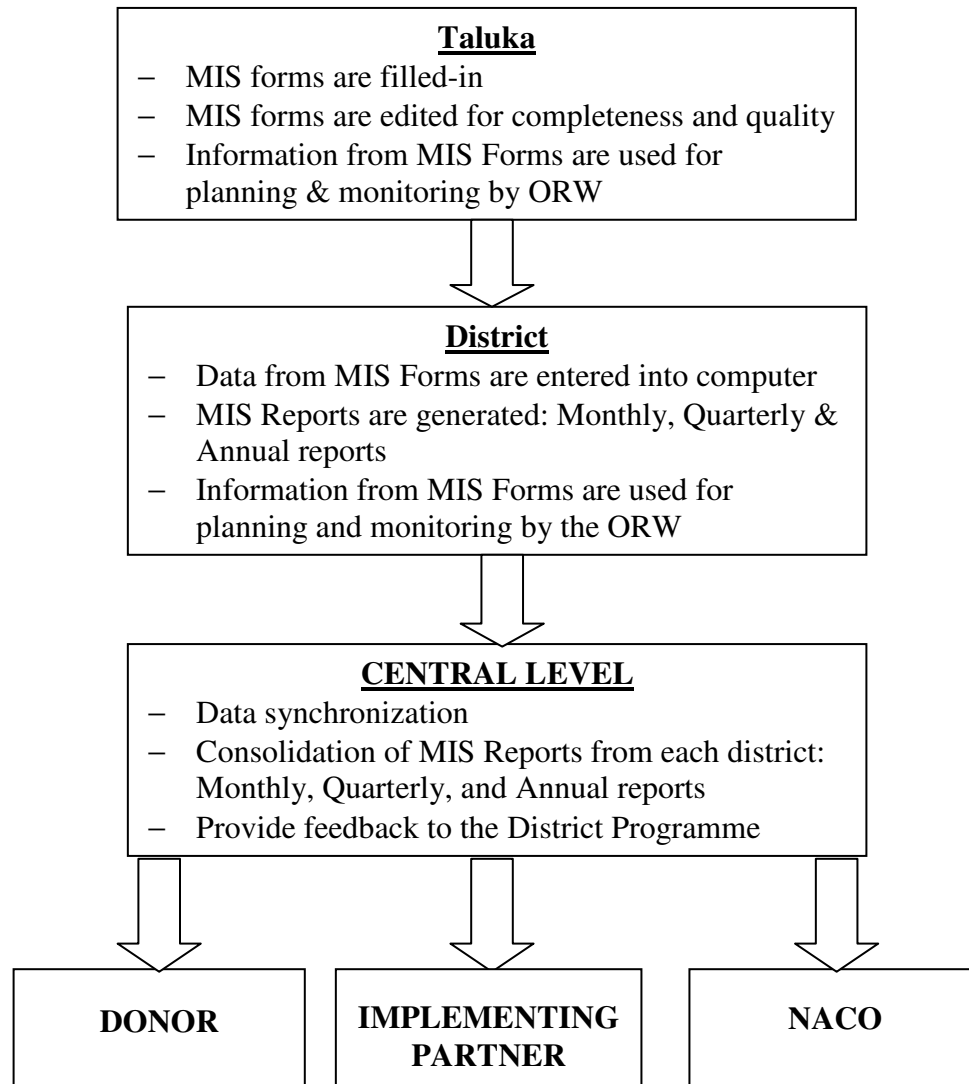
Flow of Data
District often is considered as an intervention unit and if a district has, say 5000 HRGs, treating it as a single intervention, a reasonably skilled MIS persons is placed, who is supported by one data entry person.

The filled in format are send to the MIS officer on a regular intervals (once in 15 days), who will manage the data entry with the help of data entry operator. A first level of quality check is being done at district MIS officer level, and any inconsistency noticed is communicated back to the source so that any discrepancy is addressed.

The entered data for any month is then uploaded onto the server on 5th of the immediate month. Once the data is uploaded, any analysis at the program level can be done after downloading the data from the central server. The central server also has the features to generate district level and program level reports of partners, Donor and NACO.

The central M&E consolidates the report generated for each district and shares it with the programme team every month. This would include district level and program level reports.

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┌─────────────────────────────────────────────────────┐
│                      Taluka                          │
│  −  MIS forms are filled-in                          │
│  −  MIS forms are edited for completeness and quality│
│  −  Information from MIS Forms are used for           │
│     planning & monitoring by ORW                      │
└─────────────────────────────────────────────────────┘
                          │
                          ▼
┌─────────────────────────────────────────────────────┐
│                     District                         │
│  −  Data from MIS Forms are entered into computer    │
│  −  MIS Reports are generated: Monthly, Quarterly &  │
│     Annual reports                                    │
│  −  Information from MIS Forms are used for           │
│     planning and monitoring by the ORW               │
└─────────────────────────────────────────────────────┘
                          │
                          ▼
┌─────────────────────────────────────────────────────┐
│                  CENTRAL LEVEL                       │
│  −  Data synchronization                             │
│  −  Consolidation of MIS Reports from each district: │
│     Monthly, Quarterly, and Annual reports           │
│  −  Provide feedback to the District Programme       │
└─────────────────────────────────────────────────────┘
        │               │                │
        ▼               ▼                ▼
┌──────────────┐ ┌──────────────┐ ┌──────────────┐
│              │ │ IMPLEMENTING │ │              │
│    DONOR     │ │   PARTNER    │ │    NACO      │
└──────────────┘ └──────────────┘ └──────────────┘
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Management Structure

The M&E management structures followed in most of the program is shown in the below chart. This helped in not only to ensure the quality and reporting on time, but also to share the data with the program team on a regular basis. The zonal MIS officer will lead the data quality assurance plan and conduct the data audit on a regular interval. He/she will be sharing the program progress and gaps with the entire program team within the zone once in a quarter. In addition, the district MIS officer will share the program progress and gaps with the district every month during the monthly meeting so that any program gap is addressed during the immediate month.
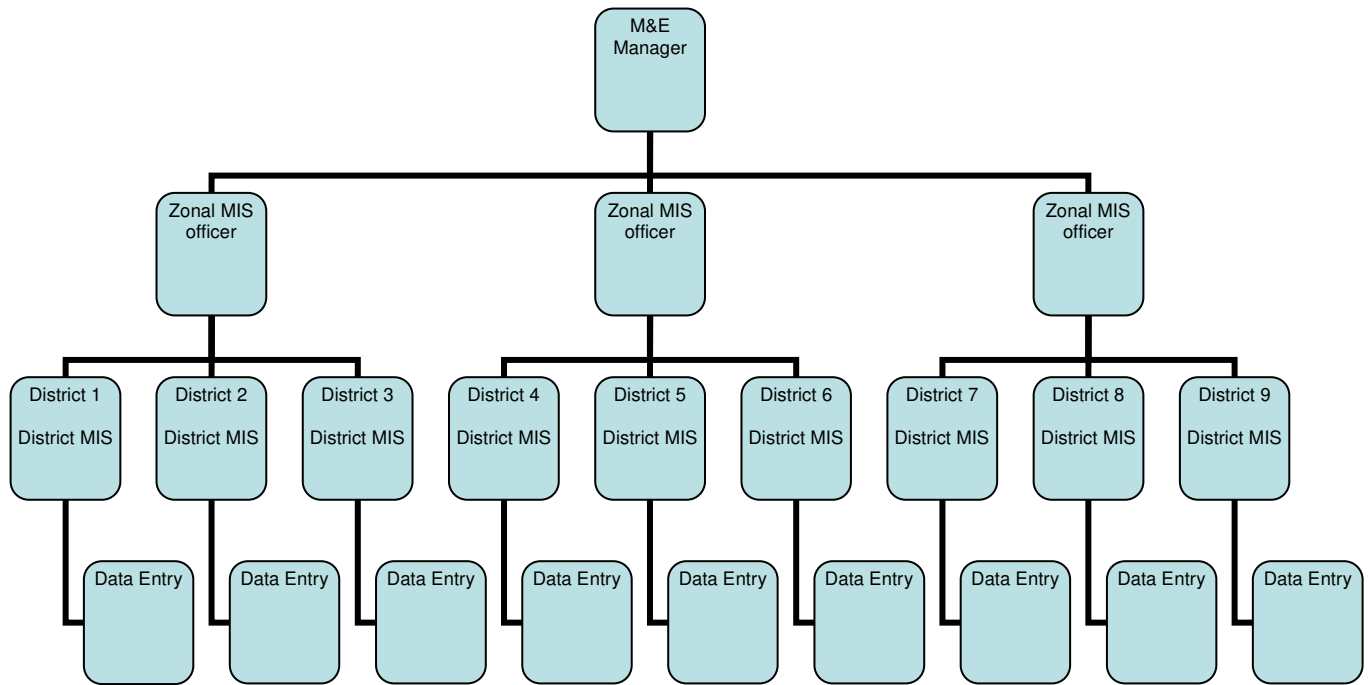
Features of M&E system of partner interventions

Acceptability

NGOs partners initially hesitated to adopt an advanced MIS system, however, that were addressed by a series of workshop explaining the importance of such a system and how it is simplified the work. In order to make this happen, a series of workshop with the program managers, MIS officers conducted, where the data is well analyzed and shared with the team. The data, focusing of strengths and gaps were discussed in detail over a number of workshops. Subsequently, built up their capacity to analyse the data and interpret it. Again, it is important that though the NGOs compile or generate reports every month, if such reports can further be shared from the state with key areas of progress and gaps, the intervention can be strengthened.

Flexibility

Though the M&E framework is standardized, the system is flexible in adapting different requirements of the program. Any strategic shifts is quickly adapted and implemented by orienting the district team as soon as changes were made. With the zonal level structure, the trainings and capacity building would be fairly quick and any intervention activities would be able to capture in the CMIS quickly.

Capacity building

The State level M&E team conducts a number of capacity building of both the program POs, zonal and district MIS officers on a regular intervals in analysing, and interpreting the data. During the capacity building workshops, a series of hands on training is also conducted so that the team interpret the data correctly and address the gaps. Further, such workshops/training is continued at regular intervals to refresh/review their skills.

Reporting

As discussed, the M&E system report three major reports, at partner level, at donor level and at NACO level. Districts were able to generate the NACO report by 5th of immediate month from the CMIS, which could not have happened if compiled manually. They review the NACO reports as soon as they generate and upload well before 10th of every month, though different donors require at different time.

While the reports are generated and shared with NACO, Donor and other stakeholders, most critical reporting in the intervention is that the respective PO analyze the reports critically and share it with the intervention program team on a routine basis.

Some major challenges observed during NACP–III in reporting and sharing the programme data and information to NACO by Donor/development partner–led interventions:–

- Source formats for data collection of partner intervention is structured based on their donor's requirement. Source data for NACO's monthly reporting indicators is not properly mapped by some of the partners. Hence, it is difficult to do consistency check of data during field visit to partner laid interventions
- Since many times donor partners were not oriented/involved in trainings organized by SACS, the donor partners have different level of understanding on monthly reporting format, which lead to certain level of data mismatch/error due different definitions followed.
- Partners of donor funded projects are sometimes more accountable to their donors and feel extra burden to report the data to NACO, though few interventions have a system, which can facilitate any NACO requirement fairly quickly using their individualized CMIS. Due to this, percent reporting in CMIS is much lower as compared to NACO's supported interventions.
- Data collection tools and reporting structure are different at different State Lead Partners (SLPs), which sometimes lead to difficulties in understanding by the SACS since they were oriented on NACO tools.
- There was also less coordination between SACS and staff of different SLPs of donor supported project.

Suggestions to improve M&E system/reporting of information of partners' interventions

1. In recent years, partner's laid interventions have started transitioning to SACS in phased manner. Hence, it would be important to provide orientation on NACO's SIMS and MIS formats to M&E team of partner's interventions.
2. Some of the partner has agreed to stop their parallel MIS formats & reporting system and adopt the NACO's SIMS and MIS formats. Proper follow-up plan is need to be prepared in this regard.

3. SACS has to take initiative to regularly conduct the co-ordination meeting with all the development partners in the state.
4. Involvement of M&E resource team of donor partner in capacity building of district level/reporting unit level team as they have rich experience in developing the capacity of outreach team in analysis, interpretation and use of programme data in planning, monitoring and review.

VI.   Strategic *orientation for Use of data from monitoring system*

1- INTRODUCTION

India's achievement in halting and reversing the HIV epidemic is mostly attributable to the National AIDS Control Programme's strategic thrust on evidence for monitoring the programme and the epidemic.

Programme monitoring data has consistently enabled more evidence informed programming and understanding on:
- The extent to which the HIV programme is on track for achieving targets and so if any corrections are accordingly required.
- It supports informed decision making regarding operations management and service delivery.
- It provides accountability for HIV programme and services to the funding authorities and the communities they serve.

2- BEST PRACTICES.

Several initiatives have been put in place to ensure continuous data availability (?) from monitoring system. Some data are generated from routine processes whilst others are on ad-hoc basis. The key initiatives that can be mentioned are following:

- Joint Implementation reviews of the programme. Taking place twice a year, these reviews provide the opportunity to review and analyse the key indicators on the programme and the epidemic, and decide on the key recommendations and corrective measures to be implemented to ensure improved performance of the programme. Financial, programmatic and epidemiological data is used in this process.

- District profiling using data triangulation, is also another important process where data from monitoring systems had been matched with epidemiological and vulnerability data to have better understanding for the future direction of the programme. This exercise has resulted in evidence informed classification of districts for prioritization and funds and allowed for a comprehensive process of data quality assessment and improvement.

- Regular evaluations and reviews of TI project's performance—by the TSUs and TI division—is aimed at reviewing the performance of contracted NGOs / CSOs and deciding on the continuation of funding. Although this initiative has a financial and contractual dimension in its background, it

allows strongly for clearer understanding of the performance of the programme and provides opportunity for regular implementation of corrective measures.

- Monthly programme review meetings implemented at state level in certain SACS (i.e. Karnataka) is also another example of good initiatives implemented by SACS to regularly review and use the programme monitoring data.

These are some good examples of using the data form the programme monitoring at different levels to provide strategic and operational guidance to the programme at national, state, district and implementation levels. These practices need to be sustained and strengthened or generalized to the extent possible across all programmes and in all states and districts.

3- Rationale and need for measures to be put in place

There are three major factors that in general affect the use of data for programme monitoring, these can be classified as follows:

(1)Capacity for analysing and using data
(2) Tools to facilitate data dissemination and analysis, and
(3) Processes and systems that encourage and support data use.

Capacity: Substantial efforts were made during NACP-III to strengthen human resources at SACS and DAPCU with creation of posts and presence of M&E officers, Statisticians and epidemiologists. However, the capacity for proper presentation and analysis of data is not uniformly present. In some places, data from programme and surveillance were presented in incorrect ways, with consequent incorrect interpretation of performance or the epidemiological situation. It is important to strengthen the **technical skills and capacity** of staff at all levels in data analysis, presentation and interpretation to ensure a strong base for data use.

Tools: The development of information technology allows for a wide spread access to data and tools for analysing it. The ability to use data from programme monitoring for management and decision making depends strongly on the capacity to **access data and the tools to analyse it**.

There is an opportunity for NACO to ensure easy for programme managers both and national and sub-national levels, to the programme data, and provide easy tools for accessing it. The SIMS software provides both the opportunity for accessing data in a format of compiled reports, and for accessing easy tools for data analysis.

Processes and systems: Data use for monitoring needs to be systematized so that it is done on regular basis. Processes need also to be put in place to ensure this is continuous. Often, the data is only looked at when there are external requirements of reports, and in most cases this happens only once a year during the annual reporting or annual planning processes. Moreover, it is observed at service delivery levels that data is only used for reporting to upper levels, and not for assessing performance. This often results in complaints about the burden and the time required for reporting processes, and also in quality issues of data, . It is important now to establish processes for regular reviews of data especially at SACS and DAPCUs—and to the extent possible at service delivery level—while ensuring full documentation of the process of reviews, conclusions and recommendations made. As a foundation step, guidelines for routine

data monitoring systems can be drafted, piloted and approved. If need be, they can be translated to local languages so that they can be easily understood.

4- Strategies for strengthening use of data from programme monitoring.

Based on the above rationale, the following three major strategic orientations are proposed for NACP IV with suggestions on the key steps that need to be in place:

Strategies	Initiatives

Strengthen the technical capacity for data analysis and use of data for programme monitoring.	▪ Develop a document description of required skills for programme monitoring.
	▪ Identify constraints for addressing human capacity gaps and ways to overcome them.
	▪ Develop and roll out strategies for capacitating individuals responsible for monitoring—particularly at decentralised levels—through for example:
	  o Support and provide in-service training on areas including data analysis and interpretation.
	  o Develop long-distance and modular training courses.
	  o Conduct meetings / conferences to share experience and develop capacities.
	▪ Implement, monitor and report on capacity strengthening activities and progress.
	▪ M&E officers to work collaboratively with other programme divisions for making decisions on data use and programme monitoring and streamlining data needs.
	▪ Develop a standard format for state level programme monitoring reports, and encourage SACS to complete it on a regular basis.

Develop Tools for Strengthening analysis and dissemination of data for routine HIV programme monitoring	M&E officers to produce timely and high quality routine data for monitoring captured under CMIS / SIMS. ▪ Clearly define timeline and mechanism for data collection, reporting, analysis, and report writing. ▪ Essential tools and equipment for data management. ▪ Well defined and managed database. Ensure data quality of database. ▪ Conduct periodic data analysis and disseminate to stakeholders in regular meetings. ▪ Ensure that SIMS software includes tools for simple data analysis and graphical presentations of trends and geographical representation to allow for rapid understanding of programme performance and data quality. ▪ Establish an independent platform for dissemination of programme data dedicated to programme managers, which would allow for presenting already analyzed data for quick overview of the programme (e.g. Data Hub)
Systems and processes supporting	Data dissemination and use is essential for informing programming and planning.

Data use and dissemination	- National M&E plan to include a data use plan. - Conduct analysis of data needs and data users. Data analysis must be demand driven. - Develop data use calendar to guide the timetable for major collection efforts and reporting requirements. - Develop and implement a Standard format for data tabulation, and report compilation. - Implement a regular process for data triangulation at state level on the basis of a subject to be selected by state based on key priorities of programmatic questions, allowing for a deeper analysis of data. - Information products tailored for different audiences and a dissemination schedule. - Conduct periodic (monthly or bi-monthly) programme reviews meetings at state levels on the basis of updated analysis of data, and disseminate as appropriate to concerned stakeholders. - Evidence of data use should be well maintained (example, data referenced in funding proposals and planning documents submitted to NACO; documentation and justification of corrective measures made… etc.)

VII. Convergence M&E component of NACO into the National Rural Health Mission

PRESENT SCENARIO

The National Rural Health Mission (NRHM), launched in April 2005, is a flagship programme of the Government of India, and covers all programmes in the health sector except HIV/AIDS, mental health and cancer. The Mission aims to undertake architectural correction of the health system and promote policies that strengthen public health management and service delivery in the country. It provides service guarantees through a vast public sector network of sub-centres, primary health centres, community health centres, and district hospitals. It has, as its key components, provision of a female health activist in each village (known as ASHA); a village health plan prepared through a local team headed by the Health and Sanitation Committee of the Panchayat; strengthening of the rural hospital for effective curative care and made accountable to the community through Indian Public Health Standards (IPHS); integration of vertical Health and Family Welfare Programmes and Funds for optimal utilization of funds and infrastructure and strengthening delivery of primary healthcare.
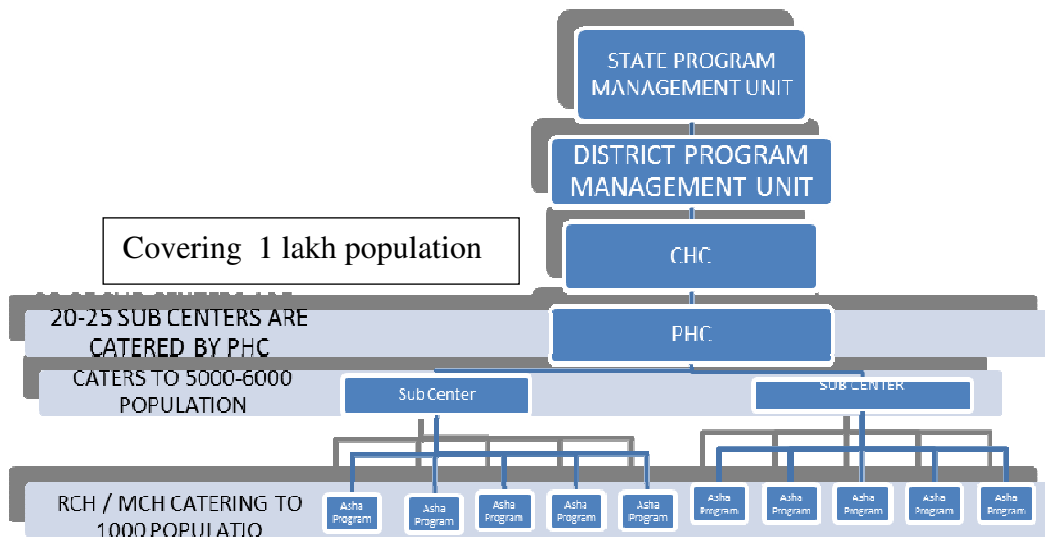
The structure of NRHM is:
At the village level: ASHA monitored by the sub-centre;
At the panchayat level: PHC caters to 20-25 sub centers and monitors activities of sub centers;
At block level: CHC caters to 1 lac population and coordinates activities of PHCs
At the district level: District program Management Unit monitors all the NRHM activities at the district level.

At the state level: Programme management unit of NRHM monitors activities of all district level program management units. The channel of communication / flow of information is as follows:

The structure also supports other programs initiated by health department from time to time. The structures of the NRHM is well established and it is integrated within the government health system.

To monitor the performance and quality of the health services being provided under the NRHM, MOHFW is putting in place several mechanisms that would strengthen the monitoring and evaluation systems, through performance statistics, surveys, community monitoring, quality assurance etc. The Health Statistics Information Portal facilitates the flow of physical and financial performance from the District level to the State Headquarters and the Centre using a web based Health Management Information System (HMIS) interface.

NRHM has also introduced community-based monitoring mechanisms for ensuring the transparency and public accountability of the program (the pilot program already started in selected states). This mechanism can also be used for ensuring quality of services given as part of HIV intervention.

Presently, the NACP provides services through various components across the country. The components are ICTC, ART, CCC, STI, IEC, TI, BLOOD SAFETY. Towards strengthening of NRHM and ensuring the sustainability of the HIV-related programmes, it is proposed that certain components of the NACP can be integrated into the NRHM.

Clinical services (HIV testing, STI treatment, Blood bank, Care support & Treatment) can be merged with NRHM. IEC activities can also be integrated with NRHM with specific focus on HIV and related issues.

While integrating the programs like STI, ICTC, Blood Safety, IEC and ART with NRHM, the M&E systems at NACO level should be integrated with that of NRHM. This will result in overall

management of program and its progress both in terms of physical achievements and quality of services.

Approach to the NACP system integration:

1. *All the data collection and reporting tools developed at the NACP with regard to ICTC, STI, HIV-TB and IEC could be merged at the PHC/CHC level.*

2. *In districts that have a DAPCU, the ART and Blood Safety data could be captured at the district level through DAPCU and integrated with the overall data of the District. District coordinator of DAPCU could be the nodal person for integrating the NACP program including M&E with District Program Management Unit of NRHM. In districts with no DAPCUs, this responsibility could be assigned to the DPMU M& E officer with some honorarium from NACP-4 for the additional work.*

3. *Formats for integrated reporting should be worked out with NRHM. Induction training should be provided to all DPMU M&E Officers and their roles and responsibilities need to be clearly specified.*

4. *The M&E assistant who is well aware of NACP MIS tools including reporting should ensure to compile information at the DAPCU through reporting units at the district during the initial phase of integration for providing technical support to the District Program Management Unit (DPMU). This will be help in smooth transfer of the M&E systems into NRHM.*

5. *District Programme Manager (DPM) and M&E assistant of DAPCU should be part of District Health and Family Welfare Society and attend the monthly review meeting of NRHM at the district level. The M&E assistant focus should be able to resolve issues related to HIV program data and suggest strategy for improving quality of data collection and reporting.*

6. *Likewise, at state level, SACS representative may be included in the review meeting of NRHM and the policy level issues may be addressed in this joint meeting. The SACS M&E officer should coordinate and provide technical support on collecting NACP data.*

7. *If the above said strategy comes into force, it might lead to reduction in cost of HIV program budget substantially and help in strengthening the programs directly being implemented by NACO, for example, focus on specific interventions like TI.*

8. *As the reporting structure will be complex and involve large number of units across the country, use of appropriate Information Communication Technology (ICT) should also be explored to increase efficiency, timeliness and improve data quality and it's use.*

Challenges Foreseen:

If under NACP-4, the clinical services get merged with the NRHM facility, there will be a need to create standardized reporting structure so as to receive the program related information in appropriate and timely manner. This will require some modification in the reporting formats, restructuring of the reporting structure and capacity building of reporting staff including program staff at all of the NRHM to ensure the timeliness, quality of data reported and use of data by programme staff (medical officers, etc.). Real time data sharing on health issues particularly HIV related from NRHM units will be a critical area to look at. Presently data in some of the states for STI component from NRHM is received at the SACS/TSU after 2 months or so.