Improving M&E STI/HIV programmes

Keith Sabin - UNAIDS

with

<table>
<thead>
<tr>
<th>WHO</th>
<th>UNDOC</th>
<th>UNC/MEASURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Martin Donoghoe</td>
<td>Riku Lehtovuori</td>
<td>Sharon Weir</td>
</tr>
<tr>
<td>David Jacka</td>
<td>Mirlan Mamyrov</td>
<td></td>
</tr>
</tbody>
</table>
Roles of M&E of STI Program

• Global
  – Assess progress toward universal access to STI/HIV prevention, care and treatment
  – Assess global response across countries

• National
  – Assess national program response to STI/HIV

• Local
  – Is our project working? Are we reducing STI/HIV?
3 Stepped Approach

- Agree on useful indicators
- Set targets for accepted indicators
- Collect data on indicators
3 Steps Elaborated

• Agree on useful indicators
  – What indicators will improve program?

• Set targets for accepted indicators
  – Use Technical Guide

• Collect data on indicators
  – Use operational guideline
Data Management for M&E

Oh yeah, and report the data!

- National programs should have information management systems sufficient to:
  - Aggregate,
  - Analyze,
  - Interpret,
  - and report the data.

If you don’t use the data, it’s not worth collecting it!!!!
Baby Steps

• Define, define, define

• What is the case definition of each STI?
  – Lab-based or syndromic?

• What is the definition of key populations?
Baby Steps

• Define, define, define

• What is the case definition of STI?
  – What client information will you collect?
    • What ages?
    • What geographic areas?
    • How recently?
    • Risk behaviors?
    • Quality of experience using service?
Target Setting Guide*

- “Represents an initial attempt to develop a framework for assessing countries’ progress in delivering a comprehensive package of core interventions.”
- For each service in the comprehensive package, Guide suggests indicators for:
  - Availability
  - Coverage
  - Quality
  - Impact
- But.. “Guidance on operationalization, and monitoring and evaluation of interventions is outside the scope of this Guide...” - Operational guideline to respond to this need
- Revised in 2012.

* WHO and others created a target setting guide for PWID programs; the guide for MSM/SW/TG Programs will arrive in early 2014. STI program indicators are included in each.
Indicators

• Selecting useful indicators
  – Steps to choosing data elements to collect

You are the manager of a needle and syringe program.

The National STI/HIV Program asks you to report number of condoms distributed per sex worker per year.

1. How do you do this?  Do you want to know this?
2. What would you want to know?
3. How do you decide?
Targets

- Do we need targets for our program? Why? How do we use them? How do we set them?
What is the current programmatic response and what are the targets?

The objectives of this step

- To define the package of services that should be provided as part of the national and sub-national response
- To map the availability of services that are part of the comprehensive package in each sub-national area
- To specify coverage, outcome, and impact indicator targets for the national level and in each sub-national area
3.1 Based on the epidemic among the population, what services are needed in response?

3.2 In each sub-national area:
   - What services are currently available?
   - What contributing factors are being addressed?

3.3 Based on the assessment, what are the 2-year targets for impact, outcome and coverage indicators in each sub-national area?
<table>
<thead>
<tr>
<th>Key Questions</th>
<th>Methods</th>
<th>Products</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Based on the epidemic among people who sell sex and analysis of contributing factors, what combination of services and activities is needed to prevent STI transmission?</td>
<td>1. Strategic Response Planning</td>
<td>Documents that define the combination of services and activities provided as part of the national response</td>
<td>To define coverage indicators (see Step 6)</td>
</tr>
</tbody>
</table>
## How to Answer the Key Questions

<table>
<thead>
<tr>
<th>Key Questions</th>
<th>Methods</th>
<th>Products</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>What services are currently provided in each sub-national area? What other activities are being undertaken to address factors that contribute to the HIV epidemic?</td>
<td>1. Service availability mapping and Stakeholder Meetings</td>
<td>Map showing geographic availability of services and community-strengthening activities</td>
<td>To monitor service availability and identify gaps in services</td>
</tr>
</tbody>
</table>
STI intervention sites for high-risk groups

Source: UNAIDS Republic of Moldova 2008 Country Report
<table>
<thead>
<tr>
<th>Key Questions</th>
<th>Methods</th>
<th>Products</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3 What are the current baseline and the two year targets for changes in coverage, outcome and impact indicators?</td>
<td>1. Target setting methods</td>
<td>Completed target-setting worksheet</td>
<td>Assess programme effectiveness (see Step 7)</td>
</tr>
</tbody>
</table>
Targets are:

• Set based on baseline measures of indicators.
  – If baseline data are not available, use your judgment
• Based on what could be achieved with funding and resources
• Reflect programme strategies tailored to local epidemic
• For two years based on change from baseline
• Often from bio-behavioural surveys.
• Set for impact, outcome, and coverage at the national and sub-national areas
## Data Sources for Targets

<table>
<thead>
<tr>
<th>Use survey data when:</th>
<th>Use programme data when:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimating trends or conducting surveillance among the entire population of people who sell sex</td>
<td>Estimating trends among those who receive services</td>
</tr>
<tr>
<td>Estimating the proportion of the population reached with services</td>
<td>Estimating the number of people reached with services</td>
</tr>
<tr>
<td>Describing the characteristics and behaviours of the population</td>
<td>Describing the characteristics of those reached</td>
</tr>
<tr>
<td>Assessing the effectiveness of the STI prevention programme every 2 years</td>
<td>For monthly, quarterly and annual reporting of activities completed</td>
</tr>
<tr>
<td>Characterizing those not reached</td>
<td>Characterizing those routinely reached and those newly reached</td>
</tr>
<tr>
<td>Assessing whether national and sub-national outcome and coverage targets are reached</td>
<td>Assessing whether service delivery targets are reached</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>International Reference Method.</strong></td>
<td>Determine whether the baseline estimates are “high” “medium” or “low” based on international guidelines on target setting. (See UNODC Technical Guide for Countries to set targets for universal access to HIV prevention, treatment and care for people who inject drugs). Set the target at the next level higher than the baseline. For example, if the baseline is “low”, set a target of “medium.”</td>
</tr>
<tr>
<td><strong>10 Years to 80% Method.</strong></td>
<td>Identify the baseline indicator: example: 20% and determine the gap between 20% and a target of 80%. If it takes 10 years to get to 80% from 20%, how far can you get in 2 years? The programme should aim to improve 6% each year or 12% in 2 years. At this rate, the target of 80% will be achieved in 10 years. The justification for this approach is that a target of 100% is rarely reached. Targets of 80% are more feasible. Change does not occur quickly. A ten year plan is reasonable for hard to change behaviours. At this rate, the target of 80% will be achieved in 10 years. The justification for this approach is that a target of 100% is rarely reached. Targets of 80% are more feasible. Change does not occur quickly. A ten year plan is reasonable for hard to change behaviours.</td>
</tr>
<tr>
<td><strong>X% increase method.</strong></td>
<td>For each indicator, increase the target 10% from baseline. For example, if targets should increase proportionally by 20% and the baseline is 40%, then the target is (20% of 40% = 8%) 48%.</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Absolute increase method.</strong></td>
<td>For each indicator, an absolute increase in the baseline of X amount is set as a target. For example, if targets should increase by an absolute 20% and the baseline is 40%, then the target is 60% (40% + 20% = 60%). This type of target setting is often difficult to rationalize.</td>
</tr>
<tr>
<td><strong>Expert opinion or consensus.</strong></td>
<td>Some behaviours are harder to change than others and take a longer time to modify. Programmes that are newly implemented may require a longer time to gain the cooperation of the community and see results. Many factors can affect the achievement of targets. In this method, local people including members of the target population assess these factors and set reasonable targets based on their insight and knowledge.</td>
</tr>
<tr>
<td><strong>Trends method.</strong></td>
<td>For countries and sub-national areas that have a strong programme and can review trends in indicators, one method is to extend the trend line of each indicator (unless the trend is going the wrong direction!).</td>
</tr>
<tr>
<td><strong>Better than the rest method.</strong></td>
<td>If baseline targets are known for several priority prevention areas, targets can be set higher than any area has achieved. The goal is to improve beyond what the best area has achieved. This method is not appropriate in some settings, but may serve to encourage a healthy competition.</td>
</tr>
</tbody>
</table>
Example of Target Setting

X% INCREASE METHOD

For each indicator, increase the target 10% from baseline.

If target is to increase proportionally by 20% annually.
Baseline = 40%, >> target is (20% of 40% = 8%) therefore 40% + 8% = 48%.
Definitions are Key

Defining “reached” can be problematic. For example:

• How many condoms does a person need to be “reached” by a condom distribution program? Enough for a day? A week? A month?

• If one person is picking up condoms for five others, how many have been reached?

• If a person refuses to get tested for HIV, has he been reached by the testing service? What if he refuses because he knows that he is infected?

• Does seeing a STI prevention poster on a wall meet the definition of being reached with targeted IEC?
<table>
<thead>
<tr>
<th>Service</th>
<th>Simple Definition of “Reached”</th>
<th>More Complete definition of “Reached”</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the operational definition of &quot;a person reached with a service&quot;?</td>
<td>Adopt the national definition of &quot;person reached&quot; for service delivery and for reporting</td>
<td>Definition of person reached with a service/ service package</td>
</tr>
<tr>
<td>What is the operational definition of a critical enabler intervention being implemented?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Size Matters (I)

What is the size of the population at risk for STIs in the catchment area?

Why do I care?

To measure coverage – are we doing our jobs?
Size Matters (II)

STEPS:

• Ask 50-100 local people where sex workers are reached.
• Visit and map all places named.
• *Sex worker informants will be best*
Size Matters (III)

Low Tech Version
Size Matters (IV)
Size Matters (V)

Sub-National Area 1
SW <25: 5000
Prevalence: 10%
SW age 25+: 8,000
Prevalence: 15%

Sub-National Area 2
SW <25: 10,000
Prevalence: 10%
SW age 25+: 5,000
Prevalence: 20%

Sub-National Area 4
SW <25: 10,000
Prevalence: 15%
SW age 25+: 10,000
Prevalence: 35%

Sub-National Area 3
SW <25: Unknown
Prevalence: Unknown
SW age 25+: Unknown
Prevalence: Unknown
Crude size estimation for service providers

• Count number of SW reached by a service provider in a month. Divide this number by the estimated percent of SW reached by provider.
  – Example: service provider reaches 2000 people/mo. Estimates it reaches 50% of all sex workers. There are 4000 sex workers (2000 ÷ .50).

• Estimate the number of people who sell sex at each venue identified during mapping and sum all sites.
Size Matters: Lessons

Request the following information:

• National and sub-national HIV prevalence estimates
• STI prevalence for men and women; by age >= 25
• All reports on STI among SW
• Information on effective HIV/STI prevention programmes
• Information on national HIV/STI prevention targets for most at risk populations
• Important information gaps
Size Matters: Lessons

Sub-groups could include:

- Young people experimenting with drug injection for first time
- Women who sell sex to get money for drugs
- Homeless men who are injecting long-term
- People recently released from prison
- Recent migrants
- Men who have sex with men
## Table II.3.1 Examples of targets for quality, output and coverage indicators

NOTE: Not all possible indicators are included here. Numbers and percentages in the table are examples for illustrative purposes only.

<table>
<thead>
<tr>
<th>Indicator type</th>
<th>Indicator</th>
<th>2010 (baseline)</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indicator type</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
</tr>
<tr>
<td></td>
<td>Baseline estimate, % or N</td>
<td>% change from baseline</td>
<td>Target % or N</td>
<td>% change from baseline</td>
</tr>
<tr>
<td>Quality</td>
<td>5.3 Percentage of providers testing and treating for STIs who have been</td>
<td>60%</td>
<td>+10%</td>
<td>66%</td>
</tr>
<tr>
<td></td>
<td>trained to provide STI services to sex workers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td>4.2 Number of sex workers provided with condoms by HIV prevention</td>
<td>60</td>
<td>+20%</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>programmes for sex workers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coverage</td>
<td>3.6 Percentage of sex workers reached by condom promotion and</td>
<td>50%</td>
<td>+20%</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td>distribution programmes the past 12 months</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TSG = Target-Setting Guide
## Outputs Monitor

<table>
<thead>
<tr>
<th>Information needed for specifying output indicators and for monitoring outputs</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>A well-defined item or activity that can be counted</td>
<td>Number of condoms distributed to clients</td>
</tr>
<tr>
<td>Whether the quality of the output must be assessed prior to counting it as an output</td>
<td>Whether expired condoms are excluded from the number of condoms distributed</td>
</tr>
<tr>
<td>A data collection form to obtain information needed to counting the item or activity</td>
<td>An encounter form recording whether condoms were provided to clients of the needle/syringe exchange site</td>
</tr>
<tr>
<td>A protocol for aggregating the indicator from outreach workers to service center</td>
<td>Computer spreadsheet programme; Hand tally</td>
</tr>
</tbody>
</table>
## Outputs Monitor (II)

<table>
<thead>
<tr>
<th></th>
<th>The time period during which activity occurs</th>
<th>Condoms distributed each calendar month</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Justification that increases in output increases desired outcomes &amp; reduced STI/HIV</td>
<td>Condoms distributed to IDU, if used, reduces probability of sexual transmission among IDU and their sexual partners</td>
</tr>
</tbody>
</table>
| 6 | Baseline estimate of the indicator and feasible target | Baseline: 5000 condoms distributed in January based on providing 10 condoms per month to 500 clients  
Target: 6000 condoms distributed per month in 2 years. Based on 10 condoms per month to 600 clients |
| 7 | Operational definition of what is meaning of “reached” | Reached by a targeted condom distribution programmes is defined as receiving at least two condoms in past calendar month |
| 8 | Graphs for displaying trends in the output indicator at the service delivery level | Graph at the service delivery level showing condoms distributed for each calendar month and the target for each month |
Double Counting

**Method to Avoid Double Counting**

- **Simple**
  Use when information is not routinely recorded when contacting people who inject drugs

- **Moderate**
  Use when information is recorded for each client encounter, but it is not possible to use a Unique Identifier Code

- **Complete**
  Use when it is feasible to collect a Unique Identifier Code and to link records

**Quarterly Brief Intercept Surveys of Clients during 3-days period**

- Ask all contacts accessing the service over 3 days: Is this the first time you have received this service here? If not, when was the last time you received the service?
- Answer: Days ago, weeks ago, months ago, or years ago.

**Record whether the encounter is a first time encounter or not**

- Ask clients if the contact with the service is the first one this month, first one this year, or first ever

**For each encounter, record the service provided and the individual's Unique Identifier Code**

- Record each service provided to the client at the time the service is provided using a Unique Identifying Code (UIC) to link services provided to the same client over time

World Health Organization
Double Counting Solved: Simple

Quarterly Brief Intercept Surveys of Clients during 3-days period

- Ask all contacts accessing the service over 3 days: Is this the first time you have received this service here? If not, when was the last time you received the service?
- Answer: Days ago, weeks ago, months ago, or years ago.
Double Counting Solved: Moderate

Record whether the encounter is a first time encounter or not

- Ask clients if the contact with the service is the first one this month, first one this year, or first ever
Double Counting Solved: Complete

For each encounter, record the service provided and the individual's Unique Identifier Code.

- Record each service provided to the client at the time the service is provided using a Unique Identifying Code (UIC) to link services provided to the same client over time.
Quality Assessments: A Checklist

STI clinics
- Clients receive IEC when accessing STI clinic
- Clients receive condoms when accessing STI clinic
- Clients’ risk assessed for comprehensive testing

Outreach interventions
- Clients receive sufficient condoms to protect all sex acts
- Clients receive STI/HIV testing referrals
- Clients are engaged voluntarily
Quality Assessments: A Checklist

Quality Checklist for *all* Services:

- There is a system in place to ensure no stock-outs occur
- UIC or other system exists to count the number of unique clients rather than the number of contacts with the service
- There is an established referral system including a follow-up mechanism
- IEC is provided
- A risk assessment is conducted
- Condoms are provided for sexually active IDU
Data collection and Management

- Must I use a unique identifier? How do I make a data collection form? Pencil and paper vs. digital?
**Data Management**

**Encounter Form**
(see Tools x, y)
- Records the Unique Identifier Code, and the characteristics of the person reached by the service delivery organisation
- Records the services provided
- Can be simple or comprehensive

**Referral Forms**
(see Tools x, y)
- Records that a referral for a service was made
- Records the result of the referral

**Aggregation Forms**
(see Tools x, y)
- Used by service delivery providers to aggregate data from individual encounter forms

Tools and forms can be accessed at:
http://www.cpc.unc.edu/measure/publications/ms-11-49a
# Sample Encounter Form

| A1  | Type of Location | A2  | Sub-national area number | A3  | Today’s Date Day  / Month  / Year  
|-----|------------------|-----|--------------------------|-----|-----------------------------
| 1   | STI clinic site (fixed) |     |                          |     |                             
| 2   | Condom distribution site (outreach) |     |                          |     |                             
| 3   | Other provider (specify____________________________ |     |                          |     |                             

<table>
<thead>
<tr>
<th>A4</th>
<th>Service delivery provider (eg. NGO) number</th>
<th>A5</th>
<th>ID number of individual providing service:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>B1</th>
<th>Unique Identifier Code</th>
<th>B2</th>
<th>First EVER visit to site? 1 YES 2 NO</th>
<th>B5</th>
<th>Gender: 1 M 2 F 3TG-MTF 4TG-FTM</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>B3</th>
<th>First visit since January 1: 1 YES 2 NO</th>
<th>B6</th>
<th>Birth Date Day  / Month  / Year</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>B4</th>
<th>Other Service Providers Visited in Past 30 Days:</th>
<th>B7</th>
<th>Primary Language:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>B8</th>
<th>When Moved to This Area: Month: Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drugs Used in past 30 Days</td>
<td>A Smoked/Sniffed/Other</td>
</tr>
<tr>
<td>----------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>C1 Cocaine</td>
<td>1</td>
</tr>
<tr>
<td>C2 Crack</td>
<td>1</td>
</tr>
<tr>
<td>C3 Heroine</td>
<td>1</td>
</tr>
<tr>
<td>C4 Speed/Meth</td>
<td>1</td>
</tr>
<tr>
<td>C5 Other Opioids</td>
<td>1</td>
</tr>
<tr>
<td>C6 Other (1)</td>
<td>1</td>
</tr>
<tr>
<td>C7 Other (2)</td>
<td>1</td>
</tr>
<tr>
<td>C8 Sex in Past 30 Days</td>
<td>A Sex for Money</td>
</tr>
</tbody>
</table>
Referral Card and Form for Monitoring Referrals

| Date Referred: | | |
|----------------|------------------|------------------|------------------|
| UIC | Referred by (A4) | Referred to (Code) | Service Requested (E) |

World Health Organization
# Referral Follow Up

<table>
<thead>
<tr>
<th>Date Referred</th>
<th>UIC</th>
<th>Service Requested (code from E):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Referral Results (check one):**

- □ Person never came to referral site
- □ Person came to referral site – doesn’t need to return
- □ Person came to referral site -- needs to return
- □ Person came –referred elsewhere

Date seen: 

Date referred: 

**World Health Organization**
**Data use/reporting**

- I have piles of data. What do I do with it?
**Data use/reporting**

1. Don’t be overwhelmed
2. Ask simple, answerable, and actionable questions
   E.g., Did I have a condom stock out in the past 6 months?
3. Ask for help
4. Put analysis and reporting in budget and work plan