Global HIV Prevention Scorecard.  
An Approach to Synthesize Performance of HIV Prevention Responses  
(December 2018)

Introduction

UNAIDS has developed a draft scorecard with the purpose of assessing the status and tracking progress on HIV prevention in priority countries. In December 2018 the second version of the scorecard has been released.

The performance of HIV prevention responses is often not easy to understand for policy makers and even implementers may find it hard to compare the performance of programs in their own country to what other countries have achieved.

Rationale

To address this challenge UNAIDS has developed a scorecard, which provides the following layers of information:

- A big picture overview with overall scores for 28 priority countries in five priority pillars of prevention. [Note that the key population pillar has separate scores for each of the populations.] (target audience: global decision-makers, country policy makers);
- A HIV prevention coverage scores overview focusing solely on programmatic coverage scores for the 28 countries in the five pillars, not including outcome.
- A country summary providing a synthesis of prevention indicators in the country including information on the key indicators, based on which the overall scores were arrived at (target audience: country policy makers and country technical leads/program managers);
- Thematic summaries on 28 priority countries for the five priority pillars (target audience: country technical leads/program managers, regional and global technical advisors).

The five priority pillars are as follows:

1. Young women & male partners (only high-HIV prevalence settings in Africa)
2. Key populations (sex workers, men who have sex with men, people who inject drugs)
3. Condoms
4. Voluntary medical male circumcision (13 priority countries only)
5. ARV-based prevention

Each of the scores will be based on a combination of two dimensions:

- outcome (utilization/behavior at population-level)
- programmatic coverage (people covered by programs)
The choice of indicators was both informed by what is most important to measure and what is realistically available in a majority of countries, preferably through the Global AIDS Monitoring (GAM). In some areas, currently available indicators are used as proxy indicators, while additional information is being collected for future updates of the scorecard. Since indicators based on absolute numbers (e.g. number of condoms distributed, number of people on PrEP) cannot be compared across countries, scores will be based on standard definitions of denominators to estimate availability and/or coverage.

The most frequently used data sources the GAM, DHS or other surveys (IBBS) and program data. The country sheets have gone through a validation process with the countries and this could have resulted in other data sources being used.

Approach

All scores are expressed on a continuous scale of 0–10. All outcome and coverage indicators, which go into the score, have a specific weight. If either coverage or outcome information is unavailable, the score will be based on only one dimension.

The specific definition of composite scores in the five priority pillars of prevention is summarized below:

1. Adolescent girls, young women and male partners in high-incidence locations

The composite score is as follows:

<table>
<thead>
<tr>
<th>Weight</th>
<th>Level (acronym)</th>
<th>Indicator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>Population-level outcome (PO1)</td>
<td>Condom use at last sex with a non-regular partner (young women 15-24)</td>
<td>DHS, other surveys</td>
</tr>
<tr>
<td>25%</td>
<td>Population-level outcome (PO2)</td>
<td>% of adolescent girls who completed lower secondary education</td>
<td>UNICEF</td>
</tr>
<tr>
<td></td>
<td>This is collected by UNICEF using the following definition: Lower secondary completion rate among population aged 3-5 years above lower secondary graduation age (Percentage)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50%</td>
<td>Programmatic coverage (PC)</td>
<td>% of priority districts (administrative areas) with dedicated programs for young women &amp; male partners (full package)</td>
<td>GF, DREAMS, PEPFAR records</td>
</tr>
</tbody>
</table>

Scoring/Formula

General formula: \( \frac{((\text{PO1}+\text{PO2})/2) + \text{PC}}{2} \times 10 \)

Example:
Outcome (PO1): use DHS data, e.g. 43% of young women reported condom use at last sex with a non-regular partner (score of 4.3)

Outcome (PO2): Completion of lower secondary education = 75% (score of 7.5)
Coverage (PC): All administrative areas with HIV incidence among young women 15-24 above 0.3 in 100 person years = 15 out of 60 districts = 25% (score of 2.5).

*Formula for composite score applied to example:* \( \frac{((4.3+7.5)/2) + 2.5}{2} = 4.2 = \text{rounded score of 4.} \)

The coverage score is as follows:

<table>
<thead>
<tr>
<th>Weight</th>
<th>Level (acronym)</th>
<th>Indicator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>Programmatic coverage (PC)</td>
<td>% of priority districts (administrative areas) with dedicated programs for young women &amp; male partners (full package)</td>
<td>GF, DREAMS, PEPFAR records</td>
</tr>
</tbody>
</table>

Scoring

Coverage (PC): All administrative areas with HIV incidence among young women 15-24 above 0.3 in 100 person years that are covered (by Global Fund, DREAMS, PEPFAR) = 15 out of 60 districts = 25%.

*Scoring applied in example:* 25% = score of 2.5 (rounded to 3).

Additional indicators on AGYW and male partners are included in the country sheets and thematic sheet e.g. Condom use with non-regular partners (young men, 15-24); % who had multiple sexual partners (sexually active YW 15-24, men 15-49); % of ever-married or partnered women 15–49 who experienced physical or sexual violence from a male intimate partner in the past 12 months; Knows a formal source for condoms (young women and men 15-24); HIV prevalence among young women and men 15-24 and adults 15-49.

2. Key populations

a. Sex workers

The composite score is as follows:

<table>
<thead>
<tr>
<th>Weight</th>
<th>Level (acronym)</th>
<th>Indicator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>Population-level outcome (PO1)</td>
<td>Condom use of sex workers with most recent client (reported by sex workers)</td>
<td>GAM 3.6A/IBBS</td>
</tr>
<tr>
<td>25%</td>
<td>Population-level outcome (PO2)</td>
<td>Condom use at last paid sex act (reported by men)</td>
<td>DHS or other survey</td>
</tr>
<tr>
<td>50%</td>
<td>Programmatic coverage (PC)</td>
<td>% of all SW who received at least two HIV prevention interventions in the past three months</td>
<td>GAM 3.7A/IBBS/program data, target</td>
</tr>
</tbody>
</table>
Due to the high risk of HIV transmission in sex work settings and high HIV incidence being reported even with fairly high self-reported condom use at last sex, the scoring for self-reported condom use by sex workers was adjusted. The scale for scoring basically starts at 50% condom use with a score of 0 (rather than 5, which it would be for other indicators) and 55% condom use represents a score of 1, 95% condom use represents a score of 9 and only condom use of 97.5% and above will be rounded to a full score of 10. Very high condom use reported by sex workers was shown to be achievable.

**Example:**

Outcome (PO1): Reported condom use by sex workers at last paid sex in IBBS = 90% (score of 8.0)

Outcome (PO2): Reported condom use by men who paid for sex in DHS = 72% (score of 7.2)

Coverage PC:

Option 1. GAM indicator 3.7A on program coverage (reached in last 3 months with at least two services). If available, use this option as the preferred option. As described in GAM guidance it can be derived from IBBS or program records. Example: if indicator = 40% use that value

Option 2. Countries reported 2016 baseline program coverage in their HIV prevention framework (“target table”) for the 2020 Road Map.

Option 3. In 2017 a special analysis was conducted to estimate coverage based on a set of indicators.

Option 4. In 2018 Global Fund compiled an overview of coverage of key population programming data. This data was preferred if it was recent (2017/18).

In all options, plausibility considerations were taken into account, as well as the adequacy of population size estimates.

**Formula applied to example:** \( \frac{((8.0+7.2)/2)+4.0}{2}=5.8 \) = rounded score of 6

The coverage score is as follows:

<table>
<thead>
<tr>
<th>Weight</th>
<th>Level (acronym)</th>
<th>Indicator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>Programmatic coverage (PC)</td>
<td>% of all SW who received at least two HIV prevention interventions in the past three months</td>
<td>GAM 3.7A/IBBS/program data, target table, special analysis, GF</td>
</tr>
</tbody>
</table>

**Scoring Example:**

Coverage PC:

Option 1. GAM indicator 3.7A on program coverage (reached in last 3 months with at least two services). If available, use this option as the preferred option. As described in GAM guidance it can be derived from IBBS or program records. Example: if indicator = 40% use that value

Option 2. Countries reported 2016 baseline program coverage in their HIV prevention framework (“target table”) for the 2020 Road Map.

Option 3. In 2017 a special analysis was conducted to estimate coverage based on a set of indicators.
Option 4. In 2018 Global Fund compiled an overview of coverage of key population programming data. This data was preferred if it was recent (2017/18).

In all options, plausibility considerations were taken into account, as well as the adequacy of population size estimates.

*Scoring applied in example: 40% = rounded score of 4.*

---

**b. Men who have sex with men**

The composite score is as follows:

<table>
<thead>
<tr>
<th>Weight</th>
<th>Level (acronym)</th>
<th>Indicator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>Population-level outcome (PO)</td>
<td>Condom use at last anal sex</td>
<td>GAM 3.6B/IBBS</td>
</tr>
<tr>
<td>50%</td>
<td>Programmatic coverage (PC)</td>
<td>Percent of men who have sex with men reached by HIV prevention programs</td>
<td>IBBS, program records Compiled through GAM</td>
</tr>
</tbody>
</table>

**Formula**

*General formula: (PO+PC)/2*10

The formula is the same as for sex workers. However, there is an added level of complexity for men who have sex with men, because not all men who have sex with men will require intensive program coverage as a proportion of men who have sex with men will be in stable relationships with concordant HIV status. This sub-group of men who have sex with men would not require intensive program coverage. It is therefore important to understand if the population size estimate includes men who have sex with men at low risk. For calculating coverage this sub-group of men who have sex with men should be removed from the denominator.

**Example:**

Outcome (PO): Reported condom use by men who have sex with men at last paid sex in IBBS = 70% (score of 7.0);

Coverage (PC):

Option 1. GAM indicator 3.7B on program coverage (reached in last 3 months with at least two services). If available, use this option as the preferred option. As described in GAM guidance it can be derived from IBBS or program records. Example: if indicator = 40% use that value

Option 2. Countries reported 2016 baseline program coverage in their HIV prevention framework (“target table”) for the 2020 Road Map.

Option 3. In 2017 a special analysis was conducted to estimate coverage based on a set of indicators.

Option 4. In 2018 Global Fund compiled an overview of coverage of key population programming data. This data was preferred if it was recent (2017/18).

In all options, plausibility considerations were taken into account, as well as the adequacy of population size estimates.

*Formula for composite score applied in example: (7.0+4.0)/2=5.5 = rounded score of 6*

---

The coverage score is as follows:
### People who inject drugs

The composite score is as follows:

<table>
<thead>
<tr>
<th>Weight</th>
<th>Level (acronym)</th>
<th>Indicator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>Population-level outcome (PO)</td>
<td>Use of safe injecting equipment during last injection</td>
<td>GAM 3.8, IBBS</td>
</tr>
<tr>
<td>25%</td>
<td>Programmatic coverage (PC1)</td>
<td>% of all people who inject drugs who received at least two HIV prevention interventions in the past three months</td>
<td>GAM 3.7C/IBBS/program data, target table, special analysis, GF</td>
</tr>
<tr>
<td>25%</td>
<td>Programmatic coverage (PC2)</td>
<td>Number of needles and syringes distributed per PWID (250 = 100%)</td>
<td>GAM 3.9, program records</td>
</tr>
</tbody>
</table>

**Formula**

General formula: \((PO + ((PC1 + PC2)/2))/2*10\)

Due to the higher infectivity of injecting practices versus sexual practices, high use during last injection may be insufficient. As data on consistent use over longer time periods is not available a standard correction is applied to the reported use at last injection. This is the same adjustment made that is done for condom use reported by sex workers. To express this in a simple way, the gap towards 100% is multiplied by two. This implies the following outcome scores: 100% safe use = 10; 95% safe use = 9; 90% safe use = 8; 85% safe use is 7; 80% safe use is 6; 70% safe use = 4; 60% safe use = 2, 50% safe use or less = 0. This only refers to the outcome score.
Example:
Outcome (PO): Reported use of safe injecting equipment by people who inject drugs at last paid sex in IBBS = 90%, ie gap of 10% towards 100% safe use = score of 8.

Coverage PC1:

Option 1. GAM indicator 3.7C on program coverage (reached in last 3 months with at least two services). If available, use this option as the preferred option. As described in GAM guidance it can be derived from IBBS or program records. Example: if indicator = 40% use that value

Option 2. Countries reported 2016 baseline program coverage in their HIV prevention framework (“target table”) for the 2020 Road Map.

Option 3. In 2017 a special analysis was conducted to estimate coverage based on a set of indicators.

Option 4. In 2018 Global Fund compiled an overview of coverage of key population programming data. This data was preferred if it was recent (2017/18).

In all options, plausibility considerations were taken into account, as well as the adequacy of population size estimates.

Coverage PC2: 1,250,000 needles were distributed; divided by 10,000 PWID = 125 needles per person = 50% of 250 needles (estimated need).

Formula for composite score applied in example: \((8.0 + ((4.0+5.0)/2))/2 = 6.25 = \text{rounded score of 6}\)

The coverage score is as follows:

<table>
<thead>
<tr>
<th>Weight</th>
<th>Level (acronym)</th>
<th>Indicator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>Programmatic coverage (PC1)</td>
<td>% of all people who inject drugs who received at least two HIV prevention interventions in the past three months</td>
<td>GAM 3.7C/IBBS/program data, target table, special analysis, GF</td>
</tr>
<tr>
<td>50%</td>
<td>Programmatic coverage (PC2)</td>
<td>Number of needles and syringes distributed per PWID (250 = 100%)</td>
<td>GAM 3.9, program records</td>
</tr>
</tbody>
</table>

Formula: \(\text{General formula: } (PC1 + PC2)/2 \times 10\)

Example:

Coverage PC1:

Option 1. GAM indicator 3.7C on program coverage (reached in last 3 months with at least two services). If available, use this option as the preferred option. As described in GAM guidance it can be derived from IBBS or program records. Example: if indicator = 40% use that value

Option 2. Countries reported 2016 baseline program coverage in their HIV prevention framework (“target table”) for the 2020 Road Map.

Option 3. In 2017 a special analysis was conducted to estimate coverage based on a set of indicators.

Option 4. In 2018 Global Fund compiled an overview of coverage of key population programming data. This data was preferred if it was recent (2017/18).
In all options, plausibility considerations were taken into account, as well as the adequacy of population size estimates.

Coverage PC2: 1,250,000 needles were distributed; divided by 10,000 PWID = 125 needles per person = 50% of 250 needles (estimated need).

*Formula for composite score applied in example:* \((4.0+5.0)/2= 4.5\) = rounded score of 5

Additional indicators on key populations are included in the country sheets and thematic sheet e.g. HIV prevalence for different KPs and age groups; opioid users who receive opioid substitution therapy; population size estimates; avoidance of health care because of stigma and discrimination; data on transgender people (indicators similar to those of the other KPs).

3. Condoms

The composite score is composed as follows:

<table>
<thead>
<tr>
<th>Weight</th>
<th>Level (acronym)</th>
<th>Indicator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>Population-level outcome (PO1)</td>
<td>Condom use at last sex with a non-regular partner among males 15-49</td>
<td>DHS, other surveys</td>
</tr>
<tr>
<td>25%</td>
<td>Population-level outcome (PO2)</td>
<td>Condom use at last sex with a non-regular partner among females 15-49</td>
<td>DHS, other surveys</td>
</tr>
<tr>
<td>50%</td>
<td>Programmatic coverage (PC)</td>
<td>Percent of national condom distribution need met (2016/17) (actual number of condoms distributed divided by total estimated condom need as per Condom need estimation tool; the total condom need is calculated size of different populations, sexual behavior and partnership types, sexual frequency).</td>
<td>Program records &amp; estimation tool</td>
</tr>
</tbody>
</table>

*Formula*  

*Example:*  

Outcome PO1: Condom use for males is 62% (score of 6.2)  
Outcome PO2: Condom use for females is 48% (score of 4.8)  
Coverage PC: Condom distribution need met (PC) = (score of 6.5)

*Formula applied in example:* \(((6.2+4.8)/2) + 6.5)/2*10 = 6.0 = rounded score of 6.

The coverage score is composed as follows:

<table>
<thead>
<tr>
<th>Weight</th>
<th>Level (acronym)</th>
<th>Indicator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>Programmatic coverage (PC)</td>
<td>Percent of national condom distribution need met (2016/17) (actual number of condoms distributed divided by total estimated condom need as per Condom need estimation tool; the total condom</td>
<td>Program records &amp; estimation tool</td>
</tr>
</tbody>
</table>
need is calculated size of different populations, sexual behavior and partnership types, sexual frequency).

### Scoring

**Example:**
Condom distribution need met (PC) = 65%

*Scoring applied in example: 65% = rounded score of 6.5.*

Additional available indicators on related to condoms are included in the country sheets and thematic sheet e.g. Knows condom as prevention method (women and men 15-49); Woman justified to insist on condom use if husband has STI (women and men 15-49); Number of condoms distributed/sold per man 15-64 (2016 or 2017).

4. **Voluntary medical male circumcision (VMMC)**

The composite score is composed as follows:

<table>
<thead>
<tr>
<th>Weight</th>
<th>Level (acronym)</th>
<th>Indicator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>Population-level outcome (PO)</td>
<td>% of cumulative national VMMC target achieved (2016-20 target)</td>
<td>WHO</td>
</tr>
<tr>
<td>50%</td>
<td>Programmatic coverage (PC)</td>
<td>% of annual VMMC target achieved (derived from 2020 target)</td>
<td>GAM/program records</td>
</tr>
</tbody>
</table>

**Formula**

General formula: \((PO\div PC)\times 10\)

For the current baseline version of the tool, the level of achievement of cumulative 2015 targets (PO 2015) has been used as a basis for the score.

Formula: \((PO\times 10)\), i.e. 40% of cumulative 2015 target means a score of 4.

For subsequent years the following formula will be used:

\((PO\times 6/PC)\times 10\)  
... where Yi stands for years of implementation (2016 = 1 year, 2017 = 2 years, ... 2020 = 6 years).

**Example:**
Outcome PO: VMMC target for 2016-2020 is 1 million. 100 000 achieved in 2016 and 150 000 achieved in 2017, so 250,000 or 25% of cumulative national VMMC target achieved. Expected progress after 2 out of 5 years (2016-2020) would be 40% of 1 000 000, i.e. 400,000; hence 250,000 represents only 62.5% of expected progress. (score of 6.25)

Coverage PC: VMMC target for 2016-2020 is 1 million; annual target is 200 000. 150 000 achieved in 2017, so 75% of annual VMMC target achieved (score of 7.5)

*Formula applied to example: \((6.25+7.5)\times 2 = 6.88\) = rounded score of 7*

The rationale of this formula is to include both annual progress and overall progress towards 2020 targets into the score. Once a country has reached 90% of the 2020 target and/or moved to the VMMC maintenance phase, the country formula will be adjusted accordingly.

The coverage score is composed as follows:
<table>
<thead>
<tr>
<th>Weight</th>
<th>Level (acronym)</th>
<th>Indicator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>Programmatic coverage (PC)</td>
<td>% of annual VMMC target achieved (derived from 2020 target)</td>
<td>GAM/program records</td>
</tr>
</tbody>
</table>

**Scoring**

Example:

PC: VMMC target for 2016-2020 is 1 million; annual target is 200 000. 150 000 achieved in 2017, so 75% of annual VMMC target achieved.

*Scoring applied to example: 75% = score of 7.5*

Additional indicators on (VM)MC are included in the country sheets and thematic sheet e.g. National MC prevalence (15-24 and 15-49); Number of VMMCs performed per year (2016 and 2017); % change in number of VMMCs in the two most recent years.

5. **ARV-based prevention**

The composite score is as follows:

<table>
<thead>
<tr>
<th>Weight</th>
<th>Level (acronym)</th>
<th>Indicator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>Programmatic coverage (PC)</td>
<td>Regulatory approval for PrEP in place? No = 0 points, in preparation = 1 point, Yes = 2 points</td>
<td>GAM (numerator) / global targets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PrEP guidelines in place? No = 0 points, in preparation = 1 point, Yes = 2 points</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PrEP targets in place? No = 0 points, in preparation = 1 point, Yes = 2 points</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 or more people on PrEP per 100 new infections: 4 points</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5-9 people on PrEP per 100 new infections: 3 points</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-4 people on PrEP per 100 new infections: 2 points</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Any number of people on PrEP: 1 point</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No people on PrEP: 0 points</td>
<td></td>
</tr>
</tbody>
</table>

**Formula**

*General formula: Sum of points*

*Example:*


There is only a composite, not a separate coverage score for ARV-based prevention.

Additional indicators related to ARV-based prevention are included in the country sheets and thematic sheet e.g. % of all PLHIV diagnosed; % of all PLHIV on ART; % of all PLHIV virally suppressed; number of people who received PrEP at least once in the past 12 months; % of national PrEP need met.