Guyana Key Population Size Estimation Validation and Client Code Assessment

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Key population size estimation validation and client code assessment

Background
● With a generalized epidemic and an estimated adult HIV prevalence rate of 1.4 percent (Guyana Ministry of Health, 2015), HIV is a major cause of death in Guyana.

● Cases are concentrated in the coastal regions, and certain sub-populations face much higher rates of HIV.

● Notably, the 2013–2014 Guyana Bio-Behavioral Surveillance Survey (BBSS) revealed rates as high as 16 percent among female sex workers (FSWs) who find clients at street sites. Transgender (TG) women (7.8%) and men who have sex with men (MSM) (4.6%) also have elevated prevalence rates in comparison with the general population.

● These key populations (KPs) are due special attention and essential to any KP-targeted activities is understanding where key populations are and how many of their members can be reached with outreach activities.

● In 2014, MEASURE Evaluation (funded by USAID and the United States President’s Emergency Plan for AIDS Relief [PEPFAR]), provided technical assistance to Guyana’s National AIDS Programme Secretariat (NAPS) for a BBSS based on the Priorities for Local AIDS Control Efforts (PLACE) method.
The focus of this study was populations of special interest: miners, loggers, FSWs, MSM and TG women, thus presenting an opportunity to address the needs of that community.

In 2015, again with MEASURE Evaluation’s support, the BBSS/PLACE data were further analyzed to better characterize the HIV epidemics among key populations and to develop regional size estimates. These estimates were used to set targets for outreach and testing among key populations.

Because the PLACE study was not designed to produce subnational size estimates, it was agreed that a validation study to update the estimates would be beneficial.

In reviewing the BBSS-based size estimates, figures were compared with program data that had been collected by community-based-organization outreach programs. The size estimates varied significantly in some areas, raising questions about how the data were being collected, the quality of the data, and the differences between program data and survey indicators in definitions being used.

To address these issues, an assessment of the “client code” was suggested both by donor partners and MOPH staff members.
Client Code Assessment

Objective: To assess the quality, acceptability and usability of the HIV outreach client code.

Methods:

- 9 key informant interviews with M&E officers, outreach workers and program managers
- 3 focus groups with HIV NGO clients – FSWs, MSMs, TG persons

Data Collection
- Conducted over the course of 10 weeks, with interviews lasting an average of 30 minutes and focus groups averaging 45 minutes.
- Interviews were conducted primarily at organizational offices, and the focus groups were held either in SASOD’s offices or in the offices of other CBOs working with key populations.

Data Analysis
- Audiotaped interviews were transcribed verbatim and underwent thematic analysis
Results of the Client Code Assessment

**Identification of Key Populations**
- Self-identification rather than rigorous screening
- Based on behavior
- No time frame applied - “Some people don’t see themselves as MSM even if they have sex with men, and we try to explain why we categorize them as such. We don’t ask about a specific time frame. If you do that, it could be losing a lot of people. If we ask about the past six months, it may cut people out.”

**Client code knowledge**
- No written guidance, but training
- Created from components rather than replicating the entire code - “We try not to say, ‘What is your client code?’ because of the nature of the work. Ninety percent of the clients are under-educated. You just ask them for the same information each time. They may say that you asked them that three months ago or so, but we will tell them it’s the client code if they wonder about it.”
Client trust and preference for code verification
- General comfort with providing code
- Provision of false details - “I’m not sure how honest the codes are. I think clients may be changing their name, even their gender identity. They may tell you what you want to hear.”
- The focus group participants thought that, in general, reasons for supplying incorrect information might be a client’s lack of understanding of the code, fear of testing HIV-positive, or a deliberate effort to deceive the client’s partner about HIV status.

Functionality within the HIV care continuum
- Improvement over linking names to data
- Different codes used at different points in the system

Suggestions for improvement
- Adding “transgender” as an option for gender at the end of the code, adding distinguishing marks, adding a middle initial, and using thumbprints or other biometric data as alternatives.
- The latter two suggestions were countered by other participants, who argued that not everyone would have a middle initial, that requiring thumbprints might dissuade testing, and that thumbprints could be altered.
METHODS of the Size Estimation Validation

- Modified PLACE
- Community informant interviews to identify spots
- Individual interviews to ask about KP status and site visiting behavior + Two KP gatherings with interviews
- Region 4 divided into 7 sub-regions
- Most data collected in April, 2017

<table>
<thead>
<tr>
<th>Key population</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female sex workers (FSW)</td>
<td>Women who received money or gold in exchange for sex in the 12 months prior to the study</td>
</tr>
<tr>
<td>Men who have sex with men (MSM)</td>
<td>Men who had sex with another man in the twelve months prior to the study</td>
</tr>
<tr>
<td>Transgender (TG) people</td>
<td>People who currently identify as a gender different from their sex at birth (Note: Transgender women and men may be differentiated at points in the report.)</td>
</tr>
</tbody>
</table>
Results of the modified PLACE
Community Informant Interviews

- 400 interviews conducted
- 161 spots where KPs socialize mentioned

Identified sites compared with BBSS sites

- 73.50% Sites already identified
- 26.50% New sites identified
Results of the modified PLACE

Community Informant Interviews

Spot types for all identified spots

- Other: 7
- Campus/school: 2
- Fast food/restaurant: 5
- Shopping centre/mall: 2
- Market: 2
- Construction site: 2
- Park/plaza: 4
- Beach/creek: 4
- Other street site: 7
- Street sex work site: 8
- Small guest house: 4
- Hotel: 21
- Brothel: 3
- Night/exotic club: 10
- Informal bar: 58
- Formal bar: 22
Results of the modified PLACE INDIVIDUAL INTERVIEWS

- 60 spots where interviews conducted
- 171 people interviewed at spots and parties
- Mean age of 30.8 and median age of 27

<table>
<thead>
<tr>
<th>Sex of respondents</th>
<th>n=</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>325</td>
<td>52.6</td>
</tr>
<tr>
<td>Female</td>
<td>276</td>
<td>40.0</td>
</tr>
<tr>
<td>Trans Male</td>
<td>12</td>
<td>1.7</td>
</tr>
<tr>
<td>Trans Female</td>
<td>88</td>
<td>5.8</td>
</tr>
</tbody>
</table>
Results of the modified PLACE INDIVIDUAL INTERVIEWS

- 96% of respondents had ever had sex

| Average age at first sex work | 17.1 | 16.5 | 16.0 | 20.1 |
Results of the modified PLACE INDIVIDUAL INTERVIEWS

Percentage of respondents tested for HIV in the previous 12 months

- Yes: FSW (69.3), MSM (85.8), TG (69.5), Non-KP (60.0)
- No: FSW (29.9), MSM (14.2), TG (28.7), Non-KP (38.1)
- Missing: FSW (0.7), MSM (0.0), TG (1.8), Non-KP (1.9)
Results of the modified PLACE INDIVIDUAL INTERVIEWS

Percentage of respondents tested for HIV in the previous 12 months

<table>
<thead>
<tr>
<th>Ever tested if not tested in the previous 12 months</th>
<th>FSW (n=25)</th>
<th>MSM (n=22)</th>
<th>TG (n=19)</th>
<th>Non-KP (n=146)</th>
<th>Total (n=212)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>75.6</td>
<td>77.1</td>
<td>70</td>
<td>61.7</td>
<td>64.4</td>
</tr>
<tr>
<td>No</td>
<td>24.4</td>
<td>22.9</td>
<td>28.3</td>
<td>38.1</td>
<td>35.3</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>1.7</td>
<td>0.3</td>
<td>0.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Knows where to get an HIV test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Missing</td>
</tr>
</tbody>
</table>
Results of the modified PLACE INDIVIDUAL INTERVIEWS

Percentage of respondents who engaged with an outreach worker in the previous 6 months

- **Non-KP**
  - Yes: 75.9
  - No: 23.6
  - Missing: 0.5

- **TG**
  - Yes: 60.2
  - No: 39.9
  - Missing: 0

- **MSM**
  - Yes: 52.8
  - No: 46.6
  - Missing: 0.5

- **FSW**
  - Yes: 53.4
  - No: 46.2
  - Missing: 0.4
Percentage of respondents who received a client code if engaged by an outreach worker (based on respondents who recalled receiving a client code whether or not they actually did (i.e. more people get assigned a client code than know they got one))
Size estimates for Region 4

Based on results of validation meeting with stakeholders several points pertinent to size estimation calculation were raised:

- Survey-based size estimates reflect key populations identified through behavior (e.g. exchanging sex for cash), while program data reflects those who self-identify. It is very possible that people engage in sex work, but do not self-identify as a sex worker.

- Key populations are very mobile, and many socialize in Region 4 even if they do not live in Region 4. This assumption could inflate both annual targets (e.g. the annual estimate may be much larger than any point-in-time estimate), and a single-point in time estimate (e.g. populations from outside Region 4 can be found socializing in Region 4 as well as other regions at other points in time).

- Gender identify and sexual behaviors are fluid. Inclusion in a particular key population group is not consistent over time according to the operationalized definitions.

- Social norms are changing around perceptions of key populations, particularly transgender persons. People may be more comfortable identifying as transgender, potentially increasing size estimates for transgender compared to previous surveys.

- The environment around sex work in Guyana is changing. Finding transactional partners is easier with the advent of internet-based sites, mobile apps, and social media. Women may engage in this type of sex work without considering themselves sex workers. These individuals would be included in the survey-based size estimates, but are less likely to be included in size estimates based on service delivery.
Size estimates for Region 4

**Survey Data adjusted for Site visiting behavior** - Determine the proportion of KPs found within each spot
- Apply that proportion to the total number of people at the spot
- Adjust upward for monthly visiting behavior (e.g. if someone visits less than 12 times per month, they are given less weight)
- Representative of the number of KP members who can be reached at one busy point in time at spots where they work or socialize.

**Service multiplier method** - Use percentage of KP who said they engaged with an outreach worker (e.g. 46.2% of FSW)
- Apply the inverse of the proportion to the number of people reached in the APC USAID program in Region 4
- Better representation of how many KP members can be reached over the course of one year in Region 4.

**“Reachable” Key Populations** - This estimate was calculated by only including individuals who reported visiting the spot where the interview was conducted at least once a week if not more.
- The assumption is that frequent site visiting makes the individuals easier to reach with outreach services.
<table>
<thead>
<tr>
<th>Key Population</th>
<th>BBSS 2013/14 final estimate</th>
<th>USAID program data (April 2016-April 2017)</th>
<th>Weighted cross-sectional data</th>
<th>Weighted data with site visiting adjustment</th>
<th>Reachable core group with site visiting adjustment</th>
<th>Service multiplier method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female sex workers</td>
<td>1,821</td>
<td>2,259</td>
<td>607</td>
<td>2,037</td>
<td>1,332</td>
<td>4,891</td>
</tr>
<tr>
<td>Men who have sex with men</td>
<td>1,837</td>
<td>2,904</td>
<td>543</td>
<td>1,850</td>
<td>1,564</td>
<td>5,488</td>
</tr>
<tr>
<td>Transwomen</td>
<td>214</td>
<td>225</td>
<td>209</td>
<td>171</td>
<td>292</td>
<td></td>
</tr>
</tbody>
</table>
Size estimates for Region 4

The different size estimates can be utilized for different purposes:

- Estimates based on weighted data with a site-visiting adjustment provide a **point-in-time estimate** of all the key populations that can be reached at spots where they socialize, whether key population members self-identify or not.

- Reachable core group with a site-visiting adjustment are particularly useful for **key population programs that conduct outreach** at the types of places where the survey was conducted. These figures represent the key population members that regularly visit these spots and can be more easily reached than those who only visit spots infrequently.

- Estimates based on the service multiplier method are best suited for **long-term agendas** that include both the easily reached populations as well as the very hard to reach populations. Users of size estimates should consider the implications of using the different size estimates for their programs, targets and planning.
CONCLUSION

• Good-quality data are essential for understanding the concentrated HIV epidemic in Guyana, particularly in Region 4, which bears the largest burden of HIV among key populations.

• These data demonstrate the continuing need to address gaps in HIV outreach and testing among populations engaged in high-risk behavior.

• They highlight the need to expand definitions of key populations, because not all KP members may self-identify as FSWs or MSM, and the need for repeat mapping and size estimation in this dynamic area and among these mobile populations.

• Shine a light on an imperfect client code, which fails to adequately track key populations in outreach and along the HIV prevention-and-care continuum but is highly accepted among the key populations with whom NGOs work.
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