Overview of the PLACE Tool Kit and Method
Overview of the Tool Kit and the Method It Supports
FOREWORD

I am grateful to the United States Agency for International Development (USAID) and the United States President’s Emergency Plan for AIDS Relief (PEPFAR) for supporting this work over many years.

I thank co-author Sarah Hileman, of the USAID- and PEPFAR-funded MEASURE Evaluation project at the University of North Carolina at Chapel Hill (UNC), for her patience and willingness to work with me on this material for the past five years. She has been gracious through all the changes and rewriting. I also thank MEASURE Evaluation co-authors Jessie K. Edwards, Becky Wilkes, Grace Mulholland, Zahra Reynolds, Michael Herce, Marcia Hobbs, Lauren Zalla, Whitney Ewing, , Kate Muessig, and Sabrina Zadrozy, as well as William Miller, Jean Lambert Chalachala, and Katherine Lancaster (formerly of UNC), for their technical contributions and overall support. I also thank those in other countries who have contributed so meaningfully to the new PLACE manuals through careful implementation and priceless feedback and insights. Among those who have contributed the most are Dr. Peter J. Figueroa, of Jamaica, and team members Lovette Byfield, Jackie Duncan, Marion Scott, and Carol Jones Cooper; Dr. Freddie Ssegooba, of Uganda, and team members Susan Babirye, Steven Ssendagire, Florence Nankya, Dr. Lynn Atuyambe, Dr. Simon Kasese, and Milly Nattimba; Dr. Fatou Maria Drame, of Senegal, and her colleague Dr. Dioula Diouf; Diane Mpinganzima and her team in Burundi; Nyanyiwé Mbeye, of Malawi, and colleagues Blackson Matatiyo, Shawn Aldridge, Agatha Bula, Innocent Mofolo, Victor Gama, and Melchiade Ruberintwari; and Baurzhan Zhussupov, of Kazakhstan, and colleagues on the USAID-funded Linkages across the Continuum of HIV Services for Key Populations Affected by HIV (LINKAGES) project.

Acknowledgment goes to Clare Barrington, Julie Nelson, Myron Cohen, and Irving Hoffman at UNC for their support and guidance. A shout-out is due to Krista Stewart and Joseph Mwangi, of USAID, who played a key role in that agency’s recognition of the PLACE method. I thank my colleagues in the Measurement & Surveillance of HIV Epidemics (MeSH) consortium (especially Stefi Baral, Liz Fearon, Brian Rice, James Hargreaves, and Anita Rao); at the Joint United Nations Programme on HIV/AIDS (especially Keith Sabin, Mary Mahy, and Peter Ghys); Txema Calleja, at the World Health Organization; Jinkou Jhou, at the Global Fund to Fight AIDS, Tuberculosis and Malaria; David Wilson, at the World Bank; and J. Ties Boerma, Jamie Blanchard, Faran Emmanuel, Shajy Issac, and Paranita Bhattacharjee, at the University of Manitoba.

Thanks to MEASURE Evaluation’s knowledge management team for editorial, design, and production services.

Sharon S. Weir
Senior Technical Advisor for Key Populations
MEASURE Evaluation, University of North Carolina at Chapel Hill

Suggested citation for the tool kit as a whole:

Suggested citation for this document:
# CONTENTS

Foreword.................................................................................................................................................. 5  
Figures .................................................................................................................................................... 7  
Tables ..................................................................................................................................................... 7  
Abbreviations ........................................................................................................................................ 8  
Definitions ............................................................................................................................................ 9  
Overview of the Tool Kit ......................................................................................................................... 10  
  PLACE Protocol Preparation (Part 1) .................................................................................................... 11  
  PLACE Fieldwork Implementation (Part 2) ........................................................................................... 12  
  Virtual PLACE Implementation (Part 3) ............................................................................................... 12  
Overview of the PLACE Method ........................................................................................................... 13  
  Aim ...................................................................................................................................................... 13  
  Statement of the Problem ..................................................................................................................... 13  
  Specific Objectives ............................................................................................................................... 14  
  PLACE Rationale: The Four Pillars .................................................................................................... 15  
  PLACE Strategy: The Three Phases of Implementation .................................................................... 23  
  How PLACE Differs from Other Surveillance and Surveys ............................................................... 27  
References ............................................................................................................................................... 29
FIGURES

Figure 1. PLACE Tool Kit.................................................................................................................. 11
Figure 2. Four pillars of PLACE....................................................................................................... 15
Figure 3. Epidemiological foundation of PLACE........................................................................... 16
Figure 4. Proximate determinants framework.................................................................................. 17
Figure 5. Phases of PLACE ............................................................................................................. 23
Figure 6. Fieldwork phase: Five-step fieldwork protocol................................................................. 23
Figure 7. Levels of respondents....................................................................................................... 24

TABLES

Table 1. Questions PLACE can address at the local level.............................................................. 19
Table 2. Differences between the PLACE method and other surveillance methods..................... 28
## ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANC</td>
<td>antenatal care</td>
</tr>
<tr>
<td>ART</td>
<td>antiretroviral therapy</td>
</tr>
<tr>
<td>CBO</td>
<td>community-based organization</td>
</tr>
<tr>
<td>FSW</td>
<td>female sex worker</td>
</tr>
<tr>
<td>GIS</td>
<td>geographic information system</td>
</tr>
<tr>
<td>GPS</td>
<td>global positioning system</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>monitoring and evaluation</td>
</tr>
<tr>
<td>MSM</td>
<td>men who have sex with men</td>
</tr>
<tr>
<td>NA</td>
<td>not applicable</td>
</tr>
<tr>
<td>PEPFAR</td>
<td>United States President’s Emergency Plan for AIDS Relief</td>
</tr>
<tr>
<td>PLACE</td>
<td>Priorities for Local AIDS Control Efforts</td>
</tr>
<tr>
<td>PMTCT</td>
<td>prevention of mother-to-child transmission</td>
</tr>
<tr>
<td>POC</td>
<td>point of care</td>
</tr>
<tr>
<td>PPA</td>
<td>priority prevention area</td>
</tr>
<tr>
<td>PrEP</td>
<td>pre-exposure prophylaxis</td>
</tr>
<tr>
<td>PWID</td>
<td>people who inject drugs</td>
</tr>
<tr>
<td>SOP</td>
<td>standard operating procedure</td>
</tr>
<tr>
<td>STI</td>
<td>sexually transmitted infection</td>
</tr>
<tr>
<td>UNAIDS</td>
<td>Joint United Nations Programme on HIV/AIDS</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
DEFINITIONS

- HIV prevention cascade: Those who need services to prevent HIV acquisition, those who have access to the service (or services), and those using the service consistently
- HIV treatment cascade: The number of people infected, the number of those on treatment, and the number on treatment who have achieved viral suppression
- Key population: Populations most at risk of acquiring and transmitting HIV either by sex or needle sharing, generally defined as men who have sex with men, female sex workers, people who inject drugs, and transgender women
- Priority population: A term often used along with the term “key populations,” priority populations are all other groups identified at a national or subnational level who are at increased risk of HIV transmission. Examples are fisher folk, truck drivers, and those in uniformed services.
- Priority prevention areas (PPAs): Geographic areas expected based on epidemiological data and contextual information to have higher incidence of HIV infection
- Stakeholder: Anyone who could be affected by a Priorities for Local AIDS Control Efforts (PLACE) study or who could benefit from the findings. Stakeholder consultations should include engagement with healthcare workers, politicians, national AIDS control committees, health ministry leaders, key populations, police, epidemiologists, and academics.
OVERVIEW OF THE TOOL KIT

This tool kit is a comprehensive resource for the design and implementation of the Priorities for Local AIDS Control Efforts (PLACE) method. MEASURE Evaluation—a project funded by the United States Agency for International Development (USAID) and the United States President’s Emergency Plan for AIDS Relief (PEPFAR)—developed the method to increase local capacity to understand the drivers of local HIV epidemics, identify gaps in services among those most likely to acquire and transmit HIV, and provide evidence to support tailored interventions to reduce HIV transmission.

PLACE was conceived in 1999 with funding from the National Institutes of Health under the Center for AIDS Research at the University of North Carolina at Chapel Hill (UNC), and further developed by MEASURE Evaluation.

MEASURE Evaluation published an implementation manual in 2005. Since then, the scope of the PLACE method has been broadened in response to new tools in testing for HIV and sexually transmitted infections, capabilities for geospatial analysis technologies, electronic data collection, and an increased urgency to find people who are HIV-positive—particularly key populations and other vulnerable people who may be at increased risk of transmitting the virus to others if not successfully engaged in treatment.

Thus, the time is right for a 2019 update of the 2005 PLACE manual and tool kit to guide today’s implementation according to best practices long established and new opportunities. Today’s manual takes PLACE’s contribution to HIV epidemic response even further. In addition to providing maps of places to reach people who are at risk of acquiring and transmitting HIV, the method provides data for estimating the size of those populations, for estimating HIV prevention and adherence to treatment, and for estimating standard biobehavioral surveillance indicators.

The new PLACE manual offers guidance on linking to care participants in a PLACE study who test positive for HIV. The new manual also has an evidence-informed strategy for ethical implementation of the protocol, including a preliminary readiness assessment that gauges protocol safety and provides guidance on the conditions under which the study should not be implemented. The new tool kit includes a sample protocol that can be adapted for use in any setting, a description of important protocol decisions, and a detailed implementation guide.

The tenet of PLACE remains the same. Conquering the AIDS pandemic requires more than global effort; it requires local action in the thousands of communities and districts where HIV transmission is most likely to occur. Many people don’t know they have the virus, making the local pattern of new infections almost impossible to detect. The lack of local information stymies national efforts to scale up effective programs. PLACE can be a vital part of the effort to engage local stakeholders to address the epidemic at the local level. The PLACE approach is an evidence-based strategy to use information at the local level to guide decisions, build local capacity, and plan interventions.

PLACE has been implemented to date in 33 countries in more than 100 subnational areas with funding from USAID; the United States Centers for Disease Control and Prevention; the Joint United Nations Programme on HIV/AIDS; the Global Fund to Fight AIDS, Tuberculosis and Malaria; the World Bank, and other donors.
As shown in Figure 1, the PLACE Tool Kit has three parts—“Protocol Preparation,” “Fieldwork Implementation,” and “Virtual PLACE Implementation.” Each has its own set of materials, summarized below. The entire tool kit is available here: https://www.measureevaluation.org/resources/tools/hiv-aids/place.

Figure 1. PLACE Tool Kit

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• PLACE Overview</td>
<td>• Fieldwork Implementation Guide (step-by-step instructions)</td>
<td>• Protocol</td>
</tr>
<tr>
<td>• Sample PLACE Protocol</td>
<td>• Fieldwork Forms</td>
<td>• Adapted Questionnaires (Virtual Form A, Virtual Form B, Virtual Form C)</td>
</tr>
<tr>
<td>• Survey Questionnaires (Form A, Form B, Form C), Fact Sheets for Informed Consent, and Interviewer Confidentiality Pledge</td>
<td>• Fieldwork Tools</td>
<td>• Adapted Fact Sheets for Informed Consent and Interviewer Confidentiality Pledge</td>
</tr>
<tr>
<td>• Protocol Decisions Manual (with tools and worksheets)</td>
<td>• Training Materials</td>
<td>• Worksheets</td>
</tr>
<tr>
<td>• District PLACE Report Template</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PLACE Protocol Preparation (Part 1)

In Part 1 (Protocol Preparation), the Overview—this document—describes the problem that PLACE addresses and the rationale for the PLACE strategy and approach. It also describes how PLACE differs from other surveillance methods and surveys and provides information useful for people who want to understand whether the method is appropriate in their setting. The focus of the PLACE method is to provide actionable data for local HIV prevention and treatment programs. Consequently, we provide a template to support the development of a full-length report on the results of a district study and a link to PLACE briefs on 25 districts in Uganda, to illustrate how the findings can be compiled at the district level for local use.

You can use the Sample PLACE Protocol as a template, adapting it to serve as the protocol for your own study. The sample protocol assumes a typical application of the PLACE method. It has sections on study rationale, objectives, methods, and data analysis.

The PLACE method has been used in more than 30 countries; however, no two countries have implemented PLACE in the same way. The protocol must be adapted appropriately to the epidemic context and the needs of people providing HIV services. The “Protocol Decisions Manual” is a guide for adapting the sample protocol, explaining the decisions that must be made along the way: where to implement PLACE, the specific objectives, fieldwork considerations, sample size, ethics, mapping readiness, selection of key indicators, and methods for data analysis and use. It also provides tools and worksheets to document those protocol decisions.

Developing a protocol for a PLACE study requires consultation with members of the community to be studied and their consent to participate in the study. “Survey Questionnaires and Fact Sheets for Informed Consent” offers the following generic survey questionnaires:
Form A: Interview with Community Informants
Form B: Interview with Venue Informants
Form C: Biobehavioral Survey of Venue Patrons and Workers

It also offers fact sheets on the PLACE method for use with these informants, to support the informed consent process, which is verbal and anonymous. And it offers a Confidentiality Statement, which interviewers will sign before meeting with any participants.

The Sample Protocol, Forms A, B, and C questionnaires and informed consent fact sheets; and District PLACE Report Template are all available in the PLACE tool kit not just in the pdf file format but also in MS Word, so they can be adapted easily to suit the needs of a given study.

**PLACE Fieldwork Implementation (Part 2)**

Part 2 (Fieldwork Implementation) offers a guide covering each of the five steps to implement the PLACE method at the local level, by engaging with a district to identify PPAs there, collect data, and report the results to the district. The five steps are as follows:

- Step 1: District launch and identification of PPAs
- Step 2: Venue identification
- Step 3: Venue verification and mapping
- Step 4: Biobehavioral survey of patrons and workers
- Step 5: Local data use workshop to report the results

Each step in the guide describes the resources necessary to implement it: forms for supervisors to use to monitor whether sample-size targets are reached, tools to use in selecting a sample of venues to visit for surveys using Form B and Form C, and training materials. Many of these resources are available as separate files in the PLACE tool kit online. Also in the tool kit online are the District PLACE Report Template—a template you can use to report the study’s results for a district to stakeholders—and examples of briefs on study results that can serve as a model if a shorter format is needed.

**Virtual PLACE Implementation (Part 3)**

The PLACE method’s purpose is to increase local capacity to understand the drivers of local HIV epidemics, identify gaps in services among those most likely to acquire and transmit HIV, and provide evidence to support tailored interventions to reduce HIV transmission. Virtual PLACE extends the PLACE method to virtual settings: Internet websites and social media applications. The virtual protocol can be implemented as part of the standard PLACE protocol or as an independent study. It has these objectives:

1. Describe Internet websites and social media sites on which people meet new sexual partners.
2. Interview users of social media sites about their sexual behaviors, visits to public venues, HIV testing history, and access to and use of HIV prevention services.
3. Use the data to improve programs.
OVERVIEW OF THE PLACE METHOD

Aim

The aim of PLACE is to increase local capacity to understand the drivers of local HIV epidemics, identify gaps in services among those most likely to acquire and transmit HIV, and provide evidence to support tailored interventions to reduce HIV transmission.

Statement of the Problem

Local Evidence to Inform the HIV Response Is Often Inadequate

Although the HIV epidemic is global, all transmission is local. To be effective, local responses should be tailored to the local context and guided by empirical evidence and epidemiological principles. National-level data are available to inform the HIV response, but local data at the district level are often not available or are inadequate. The lack of granularity at the district level prevents the strategic use of resources. Local programs do not know the characteristics of those most likely to acquire and transmit HIV or where to reach them.

People Most at Risk of Acquiring and Transmitting Infection Are Often the Least Likely to Receive Health Services

Not only are many people asymptomatic, which contributes to a hidden epidemic, but also people occupying central positions in HIV transmission networks are often members of mobile, stigmatized, and hard-to-reach populations. Data from low- and middle-income countries consistently show that sex workers, men who have sex with men (MSM), people who inject drugs (PWID), and transgender people are more likely to acquire HIV than the general population but less likely to access services. The Joint United Nations Programme on HIV/AIDS (UNAIDS) Strategy 2016–2021 (https://www.unaids.org/en/goals/unaidsstrategy) calls for special efforts to focus on key populations. Infections among key populations are a big driver of the epidemic in sub-Saharan Africa, where UNAIDS figures show they accounted for 25 percent of new infections in 2016. Elsewhere—where HIV transmission is much lower—infections among key populations represent almost all new HIV infections—80 percent in 2016, UNAIDS figures show (https://www.unaids.org/en/topic/key-populations). USAID, through PEPFAR, is pursuing control of the HIV epidemic through the Key Populations Investment Fund, one of several initiatives to expand access by key populations to services for HIV prevention, treatment, and care (https://www.pepfar.gov/priorities/keypopulations/index.htm).

Local Subgroups at Highest Risk Are Unknown

Many people in a district may be at risk of acquiring and transmitting HIV; however, often subgroups specific to a local area pose the greatest transmission risk. Identifying these subgroups is a challenge. Global definitions of key populations are not sufficiently granular to identify people most at risk. At the local level, a tailored HIV response will miss opportunities for strategic targeting of resources if these subgroups are not identified.
Engagement with Stakeholders Is Often Not Meaningful

Meaningful collaboration among stakeholders, including key population groups, service providers, and political leaders, is difficult to achieve. Without meaningful stakeholder engagement, efforts to improve outreach services may backfire, causing harm rather than improving health.

Tools to Monitor the HIV Response at the Local Level Are Often Inadequate

Effective monitoring and evaluation (M&E) improve access, quality, reach, acceptability, and effectiveness of programs. Local areas often do not have appropriate methods to estimate the number of people who are most likely to acquire and transmit HIV, identify service gaps, identify priorities, and monitor program coverage.

Specific Objectives

The objectives of a PLACE study are as follows:

- Analyze available evidence to identify PPAs (geographic areas that are likely to contain influential HIV transmission networks).
- Identify public venues in PPAs where people in HIV transmission networks go to socialize and meet new sexual (and/or needle-sharing) partners and could be reached with services.
- Visit, describe, map, and assess the availability of HIV prevention services at these venues.
- Measure key indicators of HIV infection status, population size, transmission risk, and access to HIV prevention and treatment services among key and priority populations at venues.
- Estimate HIV prevention and treatment cascades for key and priority populations.
- Engage with local stakeholders to use the data to improve programs.

A PLACE study produces outputs at local and national levels. Local outputs are:

- Meaningful stakeholder engagement
- Identification of geographic pockets (PPAs), where HIV transmission is more likely.
- Validated master list of venues, events, and social media sites where people meet new sexual partners and/or where PWID can be reached.
- Venue profiles
- Coverage maps
- Size estimates: key populations and priority populations
- Biobehavioral profile of key populations and priority populations, including:
  - Demographic profile
  - Transmission risk
  - Vulnerability and adverse event profile
  - HIV prevalence
  - HIV prevention and treatment cascades
  - Access to and use of HIV services
- Brief result summaries for each local area (district)
- Local capacity to use data
- Local action plans based on findings
Outputs at the national level, based on extrapolation from local level results, are:

- Size estimates of key populations and priority populations
- HIV prevalence for key populations and priority populations
- HIV prevention and treatment cascades
- Gap analysis for HIV prevention and treatment programming
- Action plans to address gaps in HIV prevention and treatment programs

**PLACE Rationale: The Four Pillars**

PLACE is a surveillance tool based on epidemiological theory and evidence that rigorously describes the local drivers of HIV epidemics, assesses HIV prevention and treatment coverage among those most likely to acquire and transmit the virus, and supports the local use of the data to improve services and reduce transmission.

**Figure 2. Four pillars of PLACE**

As shown in Figure 2, the four pillars of PLACE are as follows:

1. Epidemiological theory and available data
2. A focus on local epidemics and a tailored response based on evidence
4. Ethics, respect, and engagement with stakeholders, including members of key populations

Each of these is described in the following sections.

**Pillar One: Epidemiological Theory and Available Evidence**

The first pillar of PLACE is its reliance on proven epidemiological theory and empirical evidence.
The four key insights from epidemiological research that guide the PLACE protocol are shown in Figure 3:

1. The importance of geographic core areas for HIV transmission
2. The importance of new sexual and needle-sharing partnership rates in HIV transmission
3. The importance of viral load reduction as a prevention strategy
4. The advantages of venue-based outreach.

A brief description of their importance follows.

**Geographic Core Areas for HIV Transmission**

Surveillance data have documented the existence of geographic core areas for HIV and for sexually transmitted infections (STIs) (Bernstein, Curriero, Jennings, Olthof, Erbelding, & Zenilman, 2004; Blanchard, Moses, Greenaway, Orr, Hammond, & Brunham, 1998; Ellen, Hessol, Kohn, & Bolan, 1997; Jansen, Morison, Mosha, Changalucha, Todd, Obasi, &... Hayes, 2003). HIV prevalence can vary greatly in a region, with few infections in some areas and many infections in others (Schaefer, Gregson, Takaruza, Rhead, Masoka, Schur, Nyamukapa, 2017; Tanser, Barnighausen, Cooke, & Newell, 2009; Tanser, de Oliveira, Maheu-Giroux, & Barnighausen, 2014; Chimoyi, & Musenge, 2014). For example, in 2013, adult HIV prevalence averaged 4.7 percent across sub-Saharan Africa, but ranged from 0.2 percent in Bas-Congo, Democratic Republic of the Congo to 27 percent in parts of Swaziland (McGillen, Anderson, Dybul, & Hallett, 2016).

The clustering of prevalent HIV infection reflects the size and characteristics of local sexual and/or needle sharing networks and their access to treatment. Although sexual and needle sharing networks are not directly observable, clues to the location of areas with networks likely to sustain a higher incidence of HIV are available from a thoughtful review of demographic, epidemiological, and contextual data. Identifying subnational areas likely to have pockets of high HIV incidence is part of the PLACE planning process. These geographic pockets were previously called “high transmission areas” (Boerma, Urassa, Senkoro, Klokke, & Ngweshemi, 1999). In this protocol, they are identified as PPAs (priority prevention areas).

The identification of PPAs can inform an “upstream” public health response to reduce the spread of infection to other areas. A recent epidemiological model (McGillen, Anderson, Dybul, & Hallett, 2016)
showed that the combination of geographic targeting and programming for sex workers who have high rates of new sexual partnerships decreases HIV transmission in sub-Saharan Africa.

**New Sexual and Needle-Sharing Partnerships**

Conceptual models that describe the importance of new sexual and injecting drug use networks include the proximate determinants framework (Boerma & Weir, 2005), HIV transmission models (May & Anderson, 1988; Garnett, 2002a; Garnett, 2002b), and the phase-specific model (Aral, 2002). The proximate determinants framework (Figure 4) shows the three biological determinants of HIV transmission (exposure to HIV, transmission efficiency, and duration of infectiousness); the proximate determinants of these determinants; and the underlying determinants of context and program coverage.

The proximate determinants model of HIV transmission (Boerma & Weir, 2005) identifies the variables that directly increase the probability of HIV transmission by increasing exposure or susceptibility to HIV (Anderson & Garnett, 2000; Garnett, 1998; Anderson, Gupta, & Ng, 1990). Proximate determinants are biobehavioral and include sexual and needle-sharing partnership rates, the frequency of anal sex, the lack of condom use, the presence of other STIs, and viral load. Underlying determinants (such as education, access to services, income, and stigma) are important intervention targets because they can affect the biobehavioral determinants.

**Figure 4. Proximate determinants framework**

PLACE aims to reach people with the highest rates of sexual or needle-sharing partnerships in local networks, because they are the people most likely to acquire and transmit the virus to others if they are not reached with such prevention and treatment services as condoms, safe injecting equipment, STI treatment, and antiretroviral therapy for HIV infection.

**Reducing Viral Load**

Viral load refers to the amount of HIV detected in the body of someone who is HIV-positive. During the first few weeks of an HIV infection, the viral load is very high. Then, as the body mounts an immune response, the viral load falls. With proper treatment (Rennie & Mupenda, 2008), viral load can fall to undetectable levels. People with an undetectable viral load cannot transmit HIV.
Onward transmission is more likely during the acute phase of infection, when viral load is high and people are likely to be unaware of their infection (Pilcher, Eron, Jr., Galvin, Gay, & Cohen, 2004; Wawer, Gray, Sewankambo, Serwadda, Li, Laeyendecker, . . . Quinn, 2005). People with primary HIV infection who are unaware of their status are more likely to transmit the virus to more than one person if they have high rates of new partnerships. PLACE relies on three strategies to reduce viral load and prevent HIV transmission at the local level:

1. Identify where to reach people who are at greatest risk both of acquiring and transmitting HIV, especially during the acute phase, so that prevention interventions, such as condoms, clean injecting equipment, and/or pre-exposure prophylaxis (PrEP), can be provided to these people. The aim is to reduce the risk of transmission and interrupt the chain of transmission as early as possible.

2. Identify where to reach people with multiple partners who do not know they have HIV so that they can be linked to treatment and achieve viral suppression.

3. Identify where to reach people with multiple partners who have dropped out of treatment so that they can be linked back to care and achieve viral suppression.

**Venue-Based Approach**

Venue-based outreach is a proven approach for identifying and reaching people who are at risk of HIV acquisition and transmission. Supporting the strategy of a venue-based approach to HIV prevention is empirical evidence of the association between high-risk venue affiliation and HIV/STI transmission (Ellen & Fichtenberg, 2007; Frost, 2007; Kelaher, Ross, Rohrsheim, Drury, & Clarkson, 1994; Wohl, Khan, Tisdale, Norcott, Duncan, Kaplan, & Weir, 2011; Raymond, Rebchook, Curotto, Vaudrey, Amsden, Levine, & McFarland, 2010; Aynalem, Smith, Bemis, Taylor, Hawkins, & Kemdt, 2006; Sivaram, Johnson, Bentley, Srikrishnan, Latkin, Go, . . . Celentano, 2007; Auerbach, Hayes, & Kandathil, 2006; Campbell, Foulis, Maimane, & Sibiya, 2005; Hong, Fang, Li, Liu, & Li, 2008; Kerrigan, Ellen, Moreno, Rosario, Katz, Celentano, & Sweat, 2003; Cohen, Spear, Scribner, Kissing, Mason, & Wildgen, 2000).
Pillar Two: The Local Epidemic and A Local Evidenced-Based Response

The HIV pandemic is global; however, all HIV transmission occurs in a local context. The second pillar of PLACE is its focus on local epidemics and the local public health response. When resources are limited, HIV prevention needs to be feasible using local resources, and it needs to be effective and non-stigmatizing. The PLACE method focuses on identifying where to intervene at the local level to prevent HIV transmission. The findings are translated by local stakeholders into an appropriate local public health action plan.

The public health questions approach described in operational guidelines for monitoring and evaluation of HIV programs for people who inject drugs (https://www.measureevaluation.org/resources/tools/hiv-aids/operational-guidelines-for-m-e-of-hiv-programmes-for-people-who-inject-drugs/operational-guidelines-for-monitoring-and-evaluation-of-hiv-programmes-for-people-who-inject-drugs) and for sex workers, men who have sex with men, and transgender people (https://www.measureevaluation.org/resources/publications/ms-11-49a) has been adapted to describe the questions that PLACE is designed to address at the local level (Table 1).

Table 1. Questions PLACE can address at the local level

| 1. Know your local epidemic | Where are the PPAs where HIV transmission is most likely to occur? In these local areas, what subgroups have the highest HIV prevalence? Are there geographic clusters of infection? |
| 2. Measure determinants | What is the distribution of high-risk behaviors (and other proximate and underlying determinants)? What structural factors may increase transmission? |
| 3. Know your response | Based on the PLACE findings and the local standard package of services, what are the appropriate baselines and targets for each intervention? |
| 4. Identify inputs required | What strategies will be used to estimate the inputs necessary to achieve targets and obtain the resources needed? |
| 5. Assess quality | Do the PLACE findings show any gaps in service quality that should be addressed? |
| 6. Monitor outputs and coverage | What are the gaps in coverage for those most likely to acquire and transmit HIV? What are the gaps in prevention and cascade indicators? |
| 7. Monitor outcomes | Are there changes in HIV transmission risk? Are the changes attributable to the services provided? |
| 8. Evaluate impact | Is there evidence that the local programs are reducing the number of new infections? |
PLACE findings aim to be readily interpretable and actionable. The protocol includes the development of local reports, action plans, and maps that specify where to focus programs to reach the people most likely to acquire and transmit HIV. One of the most important outputs of the PLACE method is estimates of the size of key populations, such as female sex workers (FSWs), MSM, transgender women, and PWID.

Often people most at risk are those who do not meet the definition of a key population or who are members of several key population groups. Because of their increased risk of HIV acquisition and onward transmission, and their lack of access to services, efforts to increase access and program coverage for those subgroups at highest risk are ethically justified and are cost-effective. Even in countries with generalized epidemics, targeted interventions will have an important effect on the HIV epidemic in the country (Aral, Lipshutz, & Blanchard, 2007; Hollingsworth, Anderson, & Fraser, 2008; Zhussupov, Alimbekova, Tate, Bassett-Hileman, & Weir, 2004).

Local maps can provide insight on gaps in program services. Maps should not show the locations of stigmatized groups, such as sex workers, MSM, or PWID. The advantages of mapping are these:

1. It can identify venues unknown to service delivery providers and key population communities.
2. It identifies where condoms, lubricants, and safe injecting equipment should be made accessible.
3. It is a form of “ground-truthing” that gives incontrovertible evidence of risk environments that need services.
4. It is a locally implemented exercise that can be collaborative and build working relationships between key populations and healthcare providers.
5. It can be used to uncover human rights abuses, such as police harassment, discrimination, rape, child trafficking, coercion by third parties, and forced migration. Mapping can contribute to improved relationships with the judicial and police systems.
6. It provides concrete information that can be used to assess program coverage and improve the reach of services.

Local reports that include maps and indicators of program coverage can summarize information so that action plans can be developed; see the District PLACE Report Template for an example (available here: https://www.measureevaluation.org/resources/tools/hiv-aids/place). Either to support the full-length report or as an alternative format, a two- to four-page brief can be produced that summarizes a study’s results. For examples of these, see briefs that MEASURE Evaluation developed for 25 districts in Uganda. The briefs are available here: https://www.measureevaluation.org/resources/tools/hiv-aids/place/uganda.

Action plans contain the following strategies, most of which can be implemented by local outreach workers at priority venues:

1. Tailored messages on partnership reduction
2. Increased distribution and availability of condoms at venues and the promotion of condom use for anal and vaginal sex
3. Advocacy to obtain locally available PrEP for those most likely to become infected
4. Outreach testing at venues with seamless linkages to antiretroviral therapy (ART)
5. Increased availability of safe injecting equipment at or near venues frequented by PWID
6. Increased distribution, availability, and promotion of water-based lubricants
7. Outreach screening and testing for STIs and treatment
Box 1 provides resources on the components of HIV prevention and treatment programs.

**Box 1. Resources for Combination Prevention**


**Pillar Three: Scientific Rigor, Step-by-Step Protocol, and Data Quality**

The third pillar of PLACE is its step-by-step systematic implementation and adherence to standards of scientific research, survey design, and data quality. The results include HIV prevalence, behavioral indicators, and coverage estimates, with standard errors that reflect the sampling design and participant recruitment strategies.
Pillar Four: Engagement, Respect, Ethics

The fourth pillar of PLACE is the commitment to engagement, respect, and ethics.

At the national level, a PLACE national steering committee should be created to lead development of a PLACE study’s protocol. This committee guides a process of stakeholder consultation and engagement, to ensure that the protocol reflects issues that are important to stakeholder groups and that collaboration and data use are enhanced throughout the study.

Stakeholder consultations entail engagement with the following groups:

- Government offices of HIV strategic information, epidemiology, M&E, and geographic information system (GIS) mapping, to understand the HIV epidemic, align indicators with national strategies, select areas for PLACE implementation, and take advantage of national GIS expertise and procedures
- Key and priority population groups, to operationalize definitions of key populations; identify a typology of venues where people meet new sexual partners or where PWID can be reached; identify barriers to access to HIV services; assess the potential for risks arising from a PLACE study’s implementation; and identify strategies for reducing risks, maintaining the safety of participants and field workers, and increasing participation of key populations during the implementation phase
- Service delivery providers, including HIV testing and counseling offices, to specify any standard national packages of HIV prevention services, to align testing with national guidelines, to align coverage indicators from PLACE with national indicators, and to specify coverage maps
- Ethical review committees, to review the protocol regarding participant and study personnel safety, informed consent, and strategies to safeguard data so that the confidentiality of participants can be protected

The national steering committee adapts the protocol to the country setting based on stakeholder consultation and a synthesis of available epidemiological data and contextual factors. The first rule of public health is to do no harm. PLACE has been safely implemented for many years; however, PLACE should NOT be implemented if stakeholder engagement indicates the following:

- Strategies to protect the confidentiality and safety of participants cannot be implemented.
- Maps of locations where key populations can be reached cannot be safeguarded.
- There is no plan to use the information to improve services at the sites that are identified.

At the subnational level, the district steering committee is engaged to support the implementation of PLACE in the following ways:

- Identifying PPAs in the district
- Guiding collaboration in the district
- Ensuring that people are tested and linked to care using standard approved procedures
- Facilitating data use workshops
PLACE Strategy: The Three Phases of Implementation

A PLACE study has three phases: preparation, fieldwork, and supplemental analysis (Figure 5). Each is described below.

**Figure 5. Phases of PLACE**

![Figure 5. Phases of PLACE](image)

**Preparation Phase**

During the preparation phase, the national steering committee prepares for study implementation in consultation with stakeholders. Planning includes adaptation of the PLACE protocol; ethical review; stakeholder input; establishment of the timeframe, budget, and implementing organization; and selection of areas where PLACE will be implemented. Note that for clarity and convenience, the sample protocol (see below) and this manual as a whole assume that districts are selected.

**Fieldwork Phase**

Fieldwork conducted in each selected area is systematic and rigorous. Fieldwork follows a five-step protocol (Figure 6) to identify PPAs in the selected area; identify, describe, and map a full master list of venues where people go to meet new sexual or needle-sharing partners in the selected area; and interview and test a probability sample of men and women at these venues.

**Figure 6. Fieldwork phase: Five-step fieldwork protocol**

![Figure 6. Fieldwork phase: Five-step fieldwork protocol](image)
PLACE systematically obtains information from three levels of respondents (see Figure 7).

**Figure 7. Levels of respondents**

- Level 1 respondents: community informants who can identify venues
- Level 2 respondents: venue informants who can describe venue activities
- Level 3 respondents: workers and patrons at venues who can describe their own risk behaviors

Taken together, the data provided by these respondents identify the venues where people in key sexual and drug injecting networks can be reached; the characteristics of the venues, including available on-site HIV prevention programs; and a description of the people who work and socialize at the venues. By combining the data from the three types of respondents, the PLACE method provides a venue-based description of subgroups most at risk, including population size, HIV prevalence, risk behaviors, and access to and use of services.

The last step in fieldwork is a data use workshop during which the local stakeholders review the findings from PLACE. The findings are summarized in local PLACE reports; the PLACE Tool Kit offers a District PLACE Report Template to make these easier to produce. The full-length reports can be supported by briefs that are generally two to four pages long. The PLACE briefs on districts in Uganda cited earlier are useful examples. These local reports provide information that is useful for developing local action plans.
Supplemental Analysis Phase

There are often requests to combine local PLACE reports in one large comprehensive country report or to estimate country-level indicators based on the PLACE data. PLACE data have been extrapolated to provide estimates for districts where PLACE was not implemented. Country programs often request national indicators, such as coverage indicators, surveillance indicators, or size estimates. Methods for extrapolating PLACE data to other districts or to the national level are not fully described in this manual. Examples of these methods are available in PLACE reports published online.

Box 2. Reports on the results of using the PLACE method, 2001–2019, by country

Burkina Faso
- PLACE in Burkina Faso: Combating AIDS at the District Level.

Burundi
- Burundi PLACE Report. Priorities for Local AIDS Control Efforts

Jamaica

Kazakhstan

Mexico

Russia
- PLACE in Russia: Identifying Gaps in HIV Prevention in Samara, 2005
- PLACE in Russia: Identifying Gaps in HIV Prevention in Saratov-Engels, 2005

South Africa
- PLACE: Priorities for Local AIDS Control Efforts: A Pilot Study of the PLACE Method in a Township in Cape Town, South Africa.
Box 2. Reports on the results of using the PLACE method, 2001–2019, by country continued

Uganda
- PLACE Assessments in Uganda in 2018
- Priorities for Local AIDS Control Efforts, Uganda, 2013-2014
- PLACE in Uganda: Monitoring AIDS-Prevention Programs in Kampala, Uganda Using the PLACE Method.

Uzbekistan
- PLACE in Central Asia: A Regional Strategy to Focus AIDS Prevention in Almaty and Karaganda, Kazakhstan; Osh, Kyrgyzstan; Tashkent, Uzbekistan 2002.

Zambia
- PLACE in Zambia: Identifying Gaps in HIV Prevention in Mongu, Western Province, 2005
- PLACE in Zambia: Identifying Gaps in HIV Prevention in Kapiri Mposhi, Central Province, 2005

Zimbabwe
- PLACE in Zimbabwe: Identifying Gaps in HIV Prevention among Orphans and Young People in Hwange District, 2006
How PLACE Differs from Other Surveillance and Surveys

The PLACE method differs from other surveillance methods. Table 2 summarizes the differences. The PLACE method aims to find efficiently and describe people who are most likely to acquire and transmit HIV in a local area, regardless of whether these people are members of defined high-risk groups, such as FSWs.

Population-based household surveys describe the general population. People at highest risk of acquiring and transmitting HIV are a relatively small percentage of the general population and, consequently, population-based household surveys are not an efficient method for obtaining a large enough sample of high-risk people to fully describe them.

The United States Centers for Disease Control and Prevention recommends two sampling methods for surveillance of key populations: respondent-driven sampling and time-location sampling. Both methods limit the survey to a specific key population, such as FSWs. Respondents need to meet the screening criteria for the key population being surveyed. An important advantage of these methods is their efficiency in reaching a given population. The methods are usually implemented in areas where the general population is at least 500,000—large enough to yield a sufficient sample size for the key population of interest.

The PLACE method focuses on reaching key people in local sexual networks. No geographic area is too small for a PLACE study. PLACE captures members of key populations and other people. A fundamental principle is the importance of public venues in HIV transmission. Venues offer an environment for new sexual partnerships to develop and for sex work to occur, and often provide the location for unprotected sex. Consequently, the PLACE method prioritizes the provision of venue maps and gaps in HIV prevention outreach to venues. The PLACE method is less efficient for surveillance of a specific key population because it includes a wide variety of people who are part of the venue-based HIV transmission network.

The PLACE method has some disadvantages relative to other methods for some surveillance objectives. The approach requires a larger fieldwork team than does respondent-driven sampling, where peers bring recruited participants to a study office. Unlike respondent-driven sampling, the PLACE method misses members of key populations who do not visit public venues. As stated above, PLACE is less efficient in capturing a key population-specific sample. Because the PLACE study involves visits to venues, and interviews and tests participants on-site, the fieldwork requires additional safety precautions and advanced planning, including reaching out to local programs and venue managers.
### Table 2. Differences between the PLACE method and other surveillance methods

<table>
<thead>
<tr>
<th></th>
<th>PLACE method</th>
<th>Time-location sampling</th>
<th>Respondent-driven sampling</th>
<th>Household surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population of interest</strong></td>
<td>People with new sexual or needle-sharing partnerships</td>
<td>A specific key population</td>
<td>A specific key population</td>
<td>General population</td>
</tr>
<tr>
<td><strong>Geographic focus</strong></td>
<td>Local/district</td>
<td>Areas with 500,000+ population</td>
<td>Areas with 500,000+ population</td>
<td>Often entire countries</td>
</tr>
<tr>
<td><strong>Recruitment strategy</strong></td>
<td>Recruit from venues where people meet new sexual partners or where PWID can be reached</td>
<td>Recruit from venues where the key populations can be found</td>
<td>Recruit initial respondents and incentivize them to recruit peers, creating chains of recruitment</td>
<td>Recruit people in households</td>
</tr>
<tr>
<td><strong>Venue mapping</strong></td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Content of survey</strong></td>
<td>HIV, demographic characteristics, sexual behavior, and access to and use of programs</td>
<td>Same as PLACE</td>
<td>Same as PLACE</td>
<td>Same as PLACE</td>
</tr>
</tbody>
</table>
REFERENCES


