

How the Priorities for Local AIDS Control Efforts (PLACE) Method Helps Prevent HIV Transmission and Reach the 90-90-90 Targets

Local Focus

The HIV pandemic is global, but the epidemic differs widely by country, and within a country HIV prevalence differs by region, district, and even community. In fact, no two local HIV epidemics are the same. Local epidemics are driven by sexual and injecting-drug use networks in unique local contexts — whether urban, rural, along a major highway, within a fishing village, or along drug trafficking routes. Therefore, all transmission is also local. To be effective, responses to HIV should be tailored to the local context and drivers of transmission.

PLACE Method to Help Reach the 90-90-90 Targets

To help countries tailor HIV responses, MEASURE Evaluation—funded by the United States Agency for International Development (USAID) and the United States President's Emergency Plan for AIDS Relief (PEPFAR)—developed the PLACE method. According to the global 90-90-90 targets, by 2020, 90 percent of those with HIV will have been diagnosed, 90 percent of those diagnosed will be in antiretroviral treatment, and 90 percent of those treated will be virally suppressed. PLACE addresses the challenge of achieving these ambitious targets, by identifying where to reach those most likely to acquire and transmit HIV. Many people with HIV do not have symptoms or are members of mobile, stigmatized, or hard-to-reach populations. The PLACE method can help identify where to reach these people in settings outside a health care facility or typical service delivery site. Methods are needed that are based on sound epidemiological science and that use technology appropriate to the setting to uncover local transmission networks in a way that leads to effective, ethical, and evidence-based prevention.

COLLECT LOCAL EVIDENCE
UNDERSTAND
RESPOND

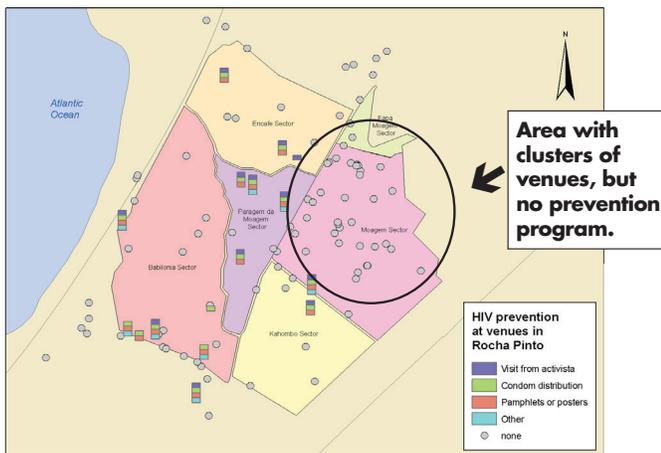
The PLACE method increases the understanding of the local HIV epidemic among service delivery providers, community leaders, and other stakeholders, so they can tailor local responses to the epidemic. Such understanding is crucial for those who design, fund, and manage HIS and service delivery programs, to enable them to allocate resources where they are most needed, to design effective programs, and to scale up programs that work. The heart of the PLACE method is to identify where to reach those most likely to acquire and transmit infection, measure gaps in services to these people, develop action plans to close the gaps, and link those who are HIV-positive to treatment.

Specifically, the PLACE method:

1. Identifies areas with high incidence of HIV and other sexually transmitted infections (STIs), using available data and guided by the following principles of epidemiological theory and empirical research:
 - The proximate determinants model of HIV transmission [1]
 - Mathematical models of HIV transmission [2] [3]
 - The rate and pattern of new sexual partnerships [4]
 - The concept of geographic cores for STIs and empirical evidence of these cores' existence [5-8]
2. Is guided by evidence of the association between high-risk venue affiliation and HIV/STI transmission [9-20], the benefits of community engagement, and ethical principles
3. Actively engages with local stakeholders, including members of key populations, and uses approved protocols to identify and map systematically venues and events where people meet new sexual or needle-sharing partners
4. Assesses prevention outreach within these venues and creates coverage maps [21] showing where prevention and treatment programs have gaps



Mapping risk venues using the PLACE method in Luanda, Angola identified risk venues without prevention outreach



Source: Weir, S., et al. (2013). *Prioridades de Esforços para o Controle Local da SIDA: PLACE, Luanda, Angola, 2010–2011*. Chapel Hill, NC, USA: MEASURE Evaluation, University of North Carolina. Retrieved from <https://www.measureevaluation.org/resources/publications/wp-13-142-po>

- Estimate the sizes of key populations
- Establish cascade indicators for HIV prevention and treatment
- Produce coverage maps to show gaps in services
- Develop action plans based on local analysis of data

PLACE is an innovative strategy that fills gaps left by other surveys and rapid assessment methods.

- Demographic and Health Surveys (<https://dhsprogram.com/>) and PHIA (population-based HIV impact assessment) surveys (<http://www.http://phia.icap.columbia.edu/>) provide national-level indicators for the general population. PLACE provides local estimates for the people most likely to acquire and transmit HIV.
- Risk group-specific surveys usually limit recruitment to people meeting particular behavioral criteria, such as sex work, and consequently do not provide a full description of the local sexual and needle-sharing network. These surveys often miss people who are not willing to admit that they engage in sex work or other stigmatizing behaviors. PLACE helps to close these gaps.
- Rapid assessments that use only qualitative methods, such as focus groups, are informative but do not provide monitoring indicators, such as the percentage of sex workers using a condom during last sex. PLACE offers tools for quantitative measures.
- Most rapid assessment tools are not designed for local implementation in resource-poor settings. PLACE is appropriate for local implementation and is not resource-intensive.

- Obtains program indicators from surveys of venue patrons and workers, including HIV prevalence, behavioral risk, and access to prevention and treatment programs
- Describes key populations (sex workers, men who have sex with men, transgender people, and people who inject drugs), including their population size, HIV prevalence, behaviors that increase their risk of acquiring or transmitting HIV, and their access to prevention and treatment programs
- Estimates risk behaviors and prevalence of HIV and other STIs among people in risk venues, through the use of new testing technologies feasible in outreach settings, such as HIV and syphilis rapid tests, target amplification nucleic acid probe tests for gonorrhea and chlamydia [22], CD4 counts, and viral loads from dried blood spots
- Builds capacity at the local level to analyze and interpret data
- Applies the findings immediately to local action plans to address gaps in prevention and treatment programs and repeats assessments to evaluate programs over time
- Summarizes deliverables for each area where PLACE is implemented:

- Interview community informants to identify venues where people at risk of acquiring or transmitting HIV gather
- Map and characterize these risk venues
- Interview venue staff and patrons and test them for HIV and other STIs
- Estimate behavioral and program coverage indicators for key populations

The PLACE method benefits:

- People in resource-poor settings most at risk of acquiring and transmitting HIV and who benefit from an improved response for outreach testing and condom distribution
- The partners of people who have HIV and whose behaviors increase the likelihood that they will transmit the virus
- Local service-delivery providers, including those distributing condoms who want to know where to reach key populations
- Local HIV testing and treatment providers who want to know who has been missed through current testing and treatment programs
- HIV surveillance and monitoring and evaluation teams at the national and local levels who want to track HIV prevalence, risk behaviors, and program coverage among key populations

- Strategic planners at the national level who want to know where to target HIV prevention resources, to prevent HIV transmission.

Replicability and Funding

PLACE was conceived in 1999 and implemented in a township in Cape Town, South Africa [23]. Since then, the method has been adapted, in response to new empirical evidence of the role of environmental influences on behavior; the availability of new mapping technologies; improved access to mapping; and the improvement of HIV and STI testing technologies, which allow collection of biological specimens in field outreach settings without a cold chain or other major storage issues.

PLACE has been implemented to date in 33 countries in more than 100 target areas. PLACE has also been replicated in Jamaica, Malawi, Rwanda, Tanzania, and Zambia, without technical assistance or funding from MEASURE Evaluation, USAID, or PEPFAR. In almost all implementations of PLACE, there is cost-sharing. Funding/co-funding sources are the United States Centers for Disease Control and Prevention (CDC), the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), the National Institutes of Health (NIH), the Government of Jamaica, the STD Control Center of China, the Joint United Nations Programme on HIV/AIDS (UNAIDS), the World Health Organization (WHO), the World Bank, PSI, and FHI 360.

Evaluation and Learning

The validity and reliability of the PLACE method have been evaluated three ways:

1. Concurrent implementation of PLACE and respondent-driven sampling in Liuzhou, China, in 2009 found that PLACE identified those with higher prevalence of syphilis [24].
2. Repeat implementations of PLACE in the same cities found similar findings, illustrating reliability.
3. The prevalence of infection is higher and the behavioral profile is riskier among those surveyed at risk venues identified by PLACE, compared with the prevalence and behavior of the general population in the same country [25], confirming that PLACE identifies key members of transmission networks.

Information about the PLACE method is shared in many ways:

- A webinar in March 2013 provided information on the method to a large audience.

- Peer-reviewed publications extend findings from specific assessments to a wider audience.
- MEASURE Evaluation maintains a website devoted to the PLACE method.
- Findings from PLACE are provided through feedback sessions to local areas implementing PLACE.
- The method is recommended by UNAIDS and Global Fund guidelines.
- The PLACE method is recommended in *Achieving an AIDS Transition* [26].

Tools for using the PLACE method:

PLACE offers the following tools (available here: <http://www.measureevaluation.org/resources/tools/hiv-aids/place>):

- **PLACE manual:** instructions for producing a study, including overview, strategy, identifying venues, conducting interviews, describing venue patrons, and using results to improve programs)
- **PLACE mapping tool:** a mapping plug-in for QGIS (a free, open-source geographic information system [GIS] program), which walks users through the creation of PLACE maps and provides templates for formatting data and base geometry for 14 countries, plus a tutorial with sample data
- **Reports** produced in various countries since 2001
- **Documents and forms** used in previous studies
- PowerPoint **presentations** used in workshops taught worldwide

Alignment with USAID, PEPFAR, and Global Fund Priorities

USAID and PEPFAR are focusing more closely on finding “recent positives”—people who have just received news that they are HIV-positive. The ability of PLACE to locate “hot spots” and to provide size estimates of those who have HIV aligns well with the push to find locations likely to yield recent positives. These results provide index cases necessary for partner tracing and for reaching and characterizing previously unreached populations, such as the male partners of adolescent girls and young women.

Reaching these people helps PEPFAR programs make headway in “the first 90” of the global 90-90-90 targets [27]: by 2020, 90 percent of those with HIV will have been diagnosed, 90 percent of those diagnosed will be in antiretroviral treatment, and 90 percent of those in treatment will be virally suppressed. PLACE remains a vital part of this effort and MEASURE Evaluation has recently updated its protocol to include the collection of dried blood spots from those with a positive HIV test. These samples are tested for

evidence of viral suppression and provide the data necessary to calculate the 90-90-90 HIV treatment cascade.

PLACE won a USAID Pioneer Prize for innovation in 2013. The PLACE focus on HIV prevention is well aligned with USAID strategies. According to PEPFAR guidance, prevention remains the paramount challenge of the HIV epidemic, and the major priority for the next five years. The PLACE approach of using strategic information to guide decisions, building local capacity, planning interventions at risk venues, and maintaining high standards of scientific rigor reflects PEPFAR's strategy of "evidence-based, mutually-reinforcing biomedical, behavioral, and structural interventions."

In 2013, the Global Fund focused attention on the value of programmatic mapping and size estimation of key populations. The PLACE method, along with a similar approach developed by the University of Manitoba, formed the basis of a programmatic mapping and size-estimation protocol currently promoted by the Global Fund, WHO, and UNAIDS.

For more information

In addition to the tools on MEASURE Evaluation's website (<https://www.measureevaluation.org/resources/tools/hiv-aids/place>), you'll find a video about the PLACE method here: <http://www.vimeo.com/105257631>

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