

Strengthening Capacity to Use Data to Inform HIV Responses for Key Populations

The Global Fund to Fight AIDS, Tuberculosis and Malaria 2017–2021 (Global Fund) strategy and U. S. President's Emergency Plan for AIDS Relief (PEPFAR) 3.0 have highlighted the need for data to inform an effective global HIV response. Key populations—sex workers, gay men and other men who have sex with men, transgender people, incarcerated populations, and people who use drugs—have a disproportionate HIV burden. Yet it has been difficult to understand their prevention and treatment needs in the context of generalized epidemics where less attention has been placed on these groups. Moreover, available data on these populations are often not cited in policy documents that inform the content and scale of HIV programming.

Understanding the dynamics of HIV transmission related to transactional or compensated sex and same-sex practices over different time horizons could better demonstrate the importance of specific HIV responses, even in the context of broadly generalized HIV epidemics. We posit that leveraging these dynamic transmission models that integrate differential risks of onward HIV transmission will provide insights that represent a fundamental shift from the conventional wisdom that the unmet needs of specific populations are not a priority in generalized HIV epidemics.

Research Partners: Johns Hopkins University; LINKAGES/FHI 360; The Global Fund to Fight AIDS, Tuberculosis and Malaria; UNAIDS; Pennsylvania State University; St. Michaels Hospital, University of Toronto

Locations: Global with six focus countries—Cote d'Ivoire, Jamaica, Kazakhstan, Malawi, Swaziland, Thailand

Study Duration: 2016–2018

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Project SOAR is synthesizing data on key populations and strengthening the capacity of stakeholders to effectively use these data to inform programming.

OUR APPROACH

Project SOAR is addressing these data disconnects by synthesizing and assessing the quality of available data on key populations. We are also implementing targeted activities to strengthen the capacity of stakeholders to use these data and facilitate better understanding of risk distribution. This includes highlighting and setting priorities for data collection efforts that provide more robust information on human rights-related barriers to HIV prevention and treatment, and developing corresponding programmatic responses. This work comprises three components:

1. **Synthesizing and making available data to support evidence-based approaches for HIV prevention and treatment targeting key populations.** SOAR is culling data from both the peer-reviewed and grey literature in Global Fund and PEPFAR high-impact HIV countries, including data characterizing HIV prevalence and incidence, antiretroviral treatment access and retention, as well as population size estimation data for key populations.

We are assessing the data for quality, geographic reach, specific population focus, chronology of when data collection was undertaken, whether the data were peer reviewed, and whether the study received an ethics review. These data will be publicly available through an online platform, Global.HIV, that displays key population HIV statistics for more than 150 countries. The online tool will include:

- An interactive, global map that displays multiple HIV datasets pertaining to key populations.
- A mechanism to make comparisons between countries and sub-national units within a country.
- Country dashboard pages to download country-specific datasets.

2. Conducting quality assessments of available data and determining stakeholders' current level of data use on key populations.

SOAR is reviewing planning documents on key populations in all Global Fund and PEPFAR high-impact countries used to inform HIV programming. We are assessing the quality and uptake of epidemiologic and intervention data, and changes in the utilization of HIV data by government and other institutional and community stakeholders over a two-year period. Key informant consultations in six focus countries (Cote d'Ivoire, Jamaica, Kazakhstan, Malawi, Swaziland, and Thailand¹) are ascertaining reasons why stakeholders may not have utilized available data.

3. Strengthening the capacity of key stakeholders to better understand their data needs and address key data gaps in the HIV response.

SOAR is collaborating with US Government implementing partners, including FHI 360's LINKAGES project, and the Global Fund, to convene a series of workshops in the six focus countries with the key stakeholders (government, community, and researchers). The country level workshops will balance a focus on reviewing country-level data with building epidemiologic skills around assessing data needs.

Workshops will include presentations of quality epidemiologic methods for sampling, recruitment, and others among key populations to promote collection of representative and unbiased data in future data collection efforts. In addition, new tools and initiatives for leveraging existing data, including both small area estimation analyses (see box) and dynamic transmission modeling will be presented.

What is small area estimation (SAE)?

SAE is an emerging statistical technique used to generate or predict estimates of population size in areas where they have not been collected. SAE attempts to use existing population size estimates and a range of other factors that may be related to the key population size (e.g., population density) to predict where data do not exist. For example, if population size estimation activities have been conducted in only 4 urban centers, but size estimates are needed at the 10 main urban centers in a country to develop adequate programs and policies, SAE can be employed to predict key population size at these other areas making use of all the available data. SAE can utilize a number of different statistical techniques, including imputation, regression, and more complex models.

EXPECTED RESULTS

The intended impact of this process is the increased use of high quality, comprehensive, and rights-based data and the leveraging of existing data using new approaches, including SAE and dynamic transmission modeling, to better characterize the unmet needs of key populations to guide HIV responses. In gathering and synthesizing available data, determining its quality, and identifying data gaps, it will be possible to prioritize the collection of high-quality data on key populations where appropriate to inform HIV responses and to set realistic and meaningful coverage targets for key population programs in response to the data. In addition, key stakeholders will be able to independently assess the quality of existing data to inform the prioritization of new research. Global.HIV will continue to serve as a resource to facilitate the use of evidence in guiding advocacy, surveillance, research, and programs.

¹The six focus countries were selected in consultation with multiple stakeholders to ensure relevance for both USAID-supported key populations programs as well as Global Fund priority settings.