

PHIA PROJECT UPDATE



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About the PHIA Project

The scale-up of HIV prevention, care and treatment programs has succeeded in bending the trajectory of the global HIV epidemic. The PHIA Project, led by ICAP and its partners, is a multi-country initiative to assess the impact of scaled-up national HIV programs in PEPFAR-supported countries. In close collaboration with key stakeholders and the Centers for Disease Control and Prevention, ICAP is launching household-based, population-level HIV impact assessments (PHIAs) in three countries in 2015 and will conduct surveys in about 20 African countries over the next five years. The PHIA cross-sectional surveys will estimate HIV prevalence, incidence and the prevalence of HIV viral load suppression among adults and HIV prevalence among children. These estimates will assess the reach of each country's HIV prevention, care and treatment services, guide policy and set funding priorities.

RECENT ACHIEVEMENTS AND HIGHLIGHTS

- **Household listings complete in Malawi:** A tablet-based household listing of the 500 enumeration areas (EAs) selected for MPHIA was completed in May. This novel approach of using electronic tablets for the listing greatly simplifies data cleaning and review.
- **IRB and ethical reviews nearing completion in Malawi and Zimbabwe:** Scientific and ethical approvals have been obtained from each of the relevant IRBs and ethical committees for the MPHIA and ZIMPHIA surveys. A final round of minor protocol amendments and updates are in progress now. For Zambia, the ZAMPHIA survey protocol is under review by the CDC IRB, the first step of the ethical review process.
- **Tablet apps developed:** Field staff for each PHIA will use electronic tablets to collect questionnaire data from participants. A team from ICAP, CDC, and Westat has finalized the specifications for the tablet applications, including: a navigation app that will help teams navigate to selected EAs; a barcode scanner app that will scan pre-printed barcode labels and then assign identification numbers to each consenting participant; electronic versions of informed consent forms with an electronic signature pad; programmed skip patterns and consistency checks to ensure high quality data collection; and a program to randomly select a sub-set of participants who will be asked questions from supplemental modules on topics such as HIV knowledge and attitudes.
- **Questionnaire development complete:** The PHIA team has finalized an array of questionnaires and survey forms for MPHIA and ZIMPHIA which will be programmed onto tablets. Work on the household, adult and adolescent questionnaires for Zambia and Uganda is well underway.

UPCOMING PLANS

- The PHIA team in Zambia is in the process of mapping EAs and drawing the sampling frame this month. Satellite labs for the Zambia PHIA will be selected this month and the household listing, using tablets as described above, is planned for mid-July.
- The Uganda PHIA protocol is still under development by the Technical Working Group.

USING NATIONAL DATA TO IMPROVE DISTRICT ESTIMATES

The PHIAs will provide a snapshot of the HIV epidemic and the response to date in each PHIA country by estimating key indicators such as HIV incidence at the national level and prevalence of viral load suppression at

national and sub-national (regional) levels. There is also a great deal of interest in obtaining estimates for these indicators at a district level in order to tailor local policies and programs; however, the sample sizes needed to obtain such district-level estimates are, in most settings, not feasible.

The PHIA Project has therefore been working with key partners to identify ways to leverage existing local data from other sources, such as from health care facilities, which, in conjunction with national and regional PHIA data, will allow for relatively precise estimates of these key indicators at the district level. The PHIA Project has begun to explore applications of one such approach, called **small area estimation (SAE)**, with countries interested in developing district-level estimates of HIV prevalence.

For example, in Tanzania, with 169 districts, it will not be feasible to power the PHIA to obtain direct estimates of HIV prevalence at the district level. In May 2015, a member of Tanzania's National Bureau of Statistics joined ICAP staff at a workshop on SAE led by the PHIA Project partner WESTAT, in Rockville, Maryland. This two-day workshop considered different approaches to SAE and compared SAE with other modelling methods, such as Kernel Density Estimation that is used by UNAIDS. Relevant variables and existing sources of data in Tanzania were identified, and a SAE test-run using existing data is planned for later this year.

About ICAP

ICAP was founded in 2003 at Columbia University's Mailman School of Public Health. Now a global leader in HIV and health systems strengthening, ICAP provides technical assistance and implementation support to governments and non-governmental organizations in more than 21 countries. ICAP has supported work at more than 3,380 health facilities around the world. More than 2.3 million people have received HIV care through ICAP-supported programs and over 1.4 million have begun antiretroviral therapy. More information can be found online at ICAP.columbia.edu

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