HEALTHFORALL

INDEX CASE TESTING IN ANGOLA CONTRIBUTES TO INCREASED HIV CASE FINDING

July 2019

Produced by MSH

Background

Angola has a relatively low adult-HIV prevalence of 2.0% compared to surrounding countries[1] and an estimated 310,000[2] people living with HIV (PLHIV). The number of PLHIV receiving antiretroviral therapy (ART) is low: coverage of adults and children is 26% and the coverage of pregnant women who receive antiretroviral drugs (ARVs) for the prevention of mother-to-child transmission (PMTCT) is just 34%.[1]

Prevalence varies significantly among different population groups and geographically. Women are more than twice as likely to be infected with HIV—prevalence in women is 2.5% compared to men at 1.2%. Prevalence rates are high in the southern and eastern provinces of the country, while HIV prevalence in Luanda province is estimated at 1.9%, which is similar to the national prevalence rate.[1]

Angola has developed a national strategic plan (NSP) for HIV, viral hepatitis, and other sexually transmitted infections.[3] Through the plan, which covers 2019–2022, the Government of Angola aims to increase the early diagnosis of HIV, viral hepatitis, and syphilis by 15%, prioritizing key and vulnerable populations.

In 2016, the Instituto Nacional de Luta contra SIDA (INLS)—Angola's National AIDS Control Program—and USAID Angola's ForçaSaúde Project (2011–2017) began the process of standardization and piloting a new strategy to improve the coverage of the screening, identification, and testing of PLHIV partners and children. This strategy, based on successful experiences in Mozambique, was adapted for Angola and is called *Busca Activa Consentida Através do Caso Indice* (BACCI), or active voluntary case finding of index case contacts. In 2016, after the pilot, the INLS institutionalized this strategy and proposed to roll out the approach nationwide.

REPÚBLICA DE ANGOLA
GOVERNO DA PROVÍNCIA DE LU ANDA
GABINETE PROVINCIAL DE SAÚDE DE
LUANDA

Approach

Health for All (HFA) works in support of the Government of Angola's plan to accelerate early HIV diagnosis and linkage to care. The purpose of BACCI, or index case testing (ICT), is to identify the contacts of PLHIV through whom he or she may have received the HIV infection or to whom he or she may have transmitted it. Contacts include sexual partners, children, and people with whom they have been sharing needles (e.g., to inject drugs). These contacts are traced, contacted, and offered HIV testing and counseling services. The aim is to counsel and test all contacts of PLHIV for HIV and provide access to prevention, care, and ART, if needed, through health education, preventive measures to ensure that those who test negative remain negative, and early identification of PLHIV and linkage to ART (figure 1).

The BACCI strategy was introduced as a pilot project in one and then three health facilities in Luanda province in November 2016 and February 2017, respectively, under USAID Angola's ForçaSaúde Project. Beginning in June 2017, HFA took over implementation of the pilot and ultimately scaled the intervention in October 2017 to six health facilities in Luanda, namely Divina Providencia Hospital, David Bernardino Pediatric Hospital, Kilamba Kiaxi Maternal and Child Specialized Hospital, Viana Health Center I, Rangel Health Center, and Luanda TB Dispensary.

Intervention

Once an index case (IC) is identified through HIV testing services, the health worker offers the BACCI approach to the IC. If the IC accepts the offer, a community counselor (CC) provides support to the IC by explaining the process, gathering needed information, connecting with contacts, and scheduling a date and time for a home visit. The CC visits the IC home to meet with immediate relatives. The CC also visits the neighbors to provide preventive

health education for a number of diseases, including HIV; embedding HIV messaging within broader health education prevents inadvertent public disclosure of the IC's HIV status and any potential resulting discrimination. Lastly, the CC visits other contacts referred by the IC, including extramarital partners.

Discussion points for the home visit include other important diseases, such as malaria and tuberculosis; basic sanitation; and how to live positively with HIV. An HIV test is performed during the home visit if the contacts consent. Once a contact has been found HIV-positive, the contact becomes a new IC. If needed, the CC will accompany contacts to the health facility to initiate ART.

If the IC does not consent to BACCI, the IC will be counseled, provided with contact details for a health facility, and assured that all health services remain available to the IC.
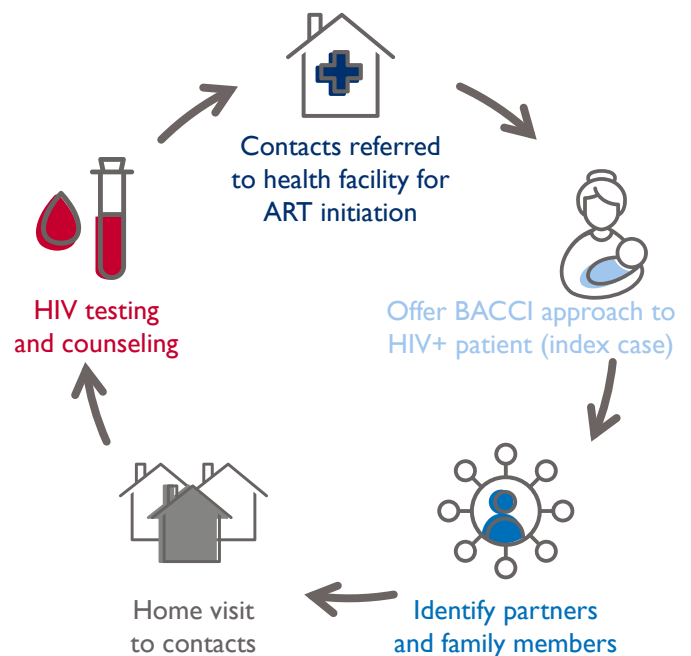
Figure 1. BACCI approach

Benefits of index case testing

- Increase the early identification of PLHIV to ensure timely referrals and enrolment in HIV care and treatment services
- Improve coverage of counseling and referral to prevention services, such as condom use and male circumcision, to ensure that HIV-negative contacts remain free of HIV
- Efficient use of resources (both testing kits and staff time) through increased yield of positive cases

Results and achievements

Between October 2016 and March 2019, 173,251 HIV tests were carried out in Luanda's USAID-supported health facilities, of which 12,924 produced an HIV-positive result (table 1). This reflects a 7.5% positivity rate, or yield, overall. The HIV positivity rate for tests conducted through voluntary counseling and testing (VCT) was 13.0% and 4.9% across other testing points, such as outpatient and inpatient departments and departments for nutrition and tuberculosis. The high positivity rate for VCT may be partly due to the fact that the service sees patients that are referred from other health facilities that do not provide HIV testing services. ICT produced the greatest results: 4,223 ICs were identified and 5,673 contacts were tested, of which 1,483 tested positive, giving an HIV positivity rate of 26.1% (results by quarter are depicted in figure 2). The linkage to HIV care and treatment of contacts who were newly diagnosed with HIV through ICT was also high at 78%. This is considerably higher than linkage rates among PLHIV identified through VCT (73%) and HIV testing at other service delivery points (45%), both measured between April 2018 and March 2019.

Table 1. HIV tests performed from October 2016 to March 2019 in six health facilities in Luanda province

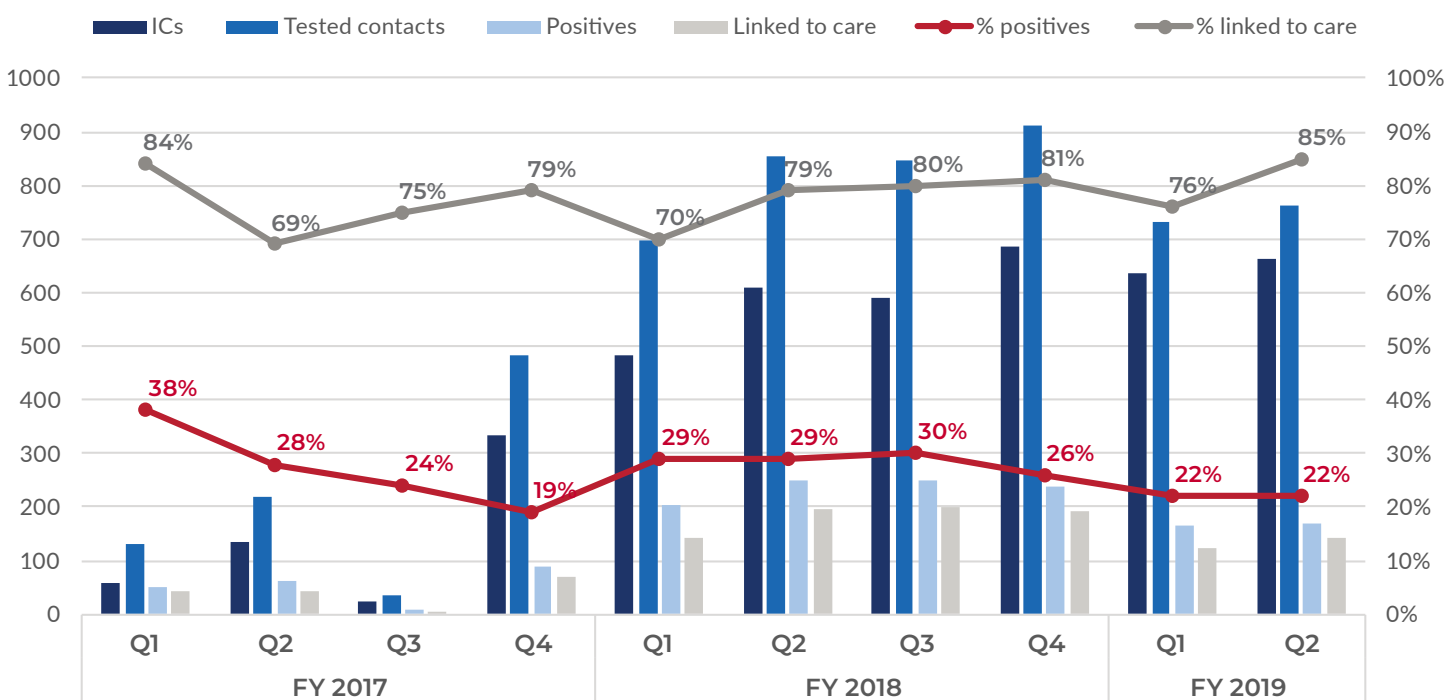| Testing modality	HIV tests performed	Positive results	Proportion positive
VCT	40,163	5,211	13.0%
Other testing points	127,415	6,230	4.9%
Index case testing	5,673	1,483	26.1%
Overall	173,251	12,924	7.5%

Figure 2. ICs, contacts, positives, and linked-to-care at all health facilities supported by HFA, FY 2017–2019
FY2017 Q1: 1 health facility, FY2017 Q2–Q4: 3 health facilities, FY2018 Q1–FY2019 Q2: 6 health facilities

Table 2. ICs, contacts, positives, and linked-to-care at all health facilities supported by HFA, FY 2017–2019

	FY 2017				FY 2018				FY 2019	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
ICs	60	135	25	333	484	608	590	687	638	663
Tested contacts	131	221	34	483	697	853	848	912	732	762
Positives	50	61	8	90	204	248	251	239	164	168
Linked to care	42	42	6	71	142	197	201	194	124	142
% positives	38	28	24	19	29	29	30	26	22	22
% linked to care	84	69	75	79	70	79	80	81	76	85

Lessons Learned

The BACCI approach proved to be a highly effective and efficient testing strategy, resulting in an increase in the number of new cases identified and a higher yield than other testing modalities. Importantly, HFA also found higher linkage and adherence to ART rates among those PLHIV identified through BACCI.

Introduction of the BACCI approach required careful planning to ensure that the right personnel and commodities were in place to support activities in health facilities and the community. HFA recruited and trained CCs to provide tracing services, as well as HIV testing services in clients' homes. In addition to training, CCs must be provided with the tools needed to deliver services, including rapid HIV testing kits and airtime to call ICs and their contacts. The deployment of CCs for these services also alleviated some of the medical staff shortages that plague many health facilities in Angola, allowing professional cadres, such as nurses and clinicians, to focus more on clinical care management.

CCs proved to be effective in both supporting ICs to provide contact names and counseling contacts to consent to testing. Their friendly and understanding approach, along with the strength of their existing relationships as members of the local communities, aided in their success. However, the current acceptance rate is only 31%. To optimize the BACCI approach, ways of increasing the number of PLHIV that are comfortable disclosing their status or having their health provider anonymously notify their sexual and/or drug-injecting partner(s) of their potential exposure to HIV infection must be identified.

Conclusion

With a yield that is more than twice as high as other traditional HIV testing strategies, the BACCI approach is a successful strategy for case identification in Angola as it has proven to be in other countries. The higher linkage-to-care rate (78%) for newly diagnosed PLHIV is also an important benefit of this strategy. BACCI and critical components, such as the CCs, should be prioritized for investment because they are key strategies that contribute to the NSP's goal of increasing the early diagnosis of PLHIV and accelerating progress toward epidemic control.

References

[1] Instituto Nacional de Estatística, Ministério da Saúde, Ministério da Planeamento e do Desenvolvimento Territorial, and ICF. Key Findings of the 2015-16 Angola IIMS. 2017

[2] UNAIDS Country Factsheets, Angola 2017

[3] VI Plano Estratégico Nacional de Reposta ao VIH-SIDA, Hepatites Virais e outras Infecções de Tansmissão Sexual, 2019-2022 [draft]

USAID HFA Project
Dr. Paulo R Proto de Souza | Chief of Party, Health for All Project | PSI Angola
pproto@psiangola.org | +244 948 010 569

Dr. Arturo Silva | HIV/AIDS Technical Director, Health for all Project | MSH
asilva@msh.org | +244 946114075