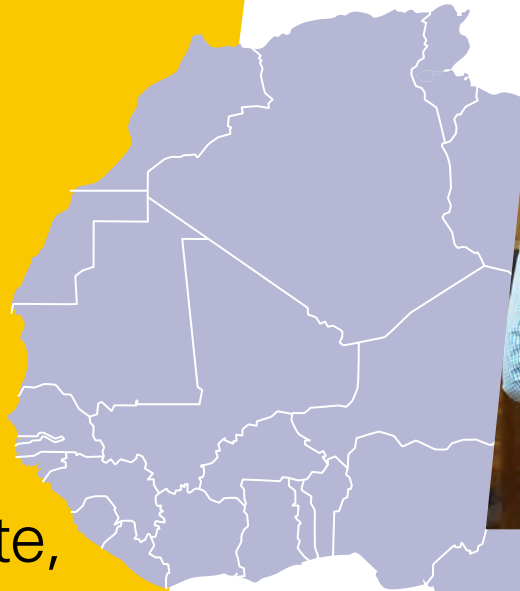


I-TECH BOTSWANA OVER THE YEARS

Improving the Health of
Communities in Botswana
through Strong, Compassionate,
and Equitable Health Systems



HRSA
Office of Global Health

 **I-TECH**
Fostering Healthier
Communities

OVERVIEW

There are currently about 360,000 people living with HIV, and of those, more than 330,000 are on treatment.¹

Botswana was one of the first countries in Africa to launch a nationwide response to the HIV epidemic and to offer free antiretroviral treatment (ART) to its citizens living with HIV. In 2003, with funding from PEPFAR and HRSA, the International Training and Education Center for Health (I-TECH) began to partner with the Government of Botswana to combat HIV and worked closely with the [Ministry of Health and Wellness \(MOH\)](#), the [US government](#), and local and international partners to respond to the health needs of the people of Botswana.



1. UNAIDS, 2021



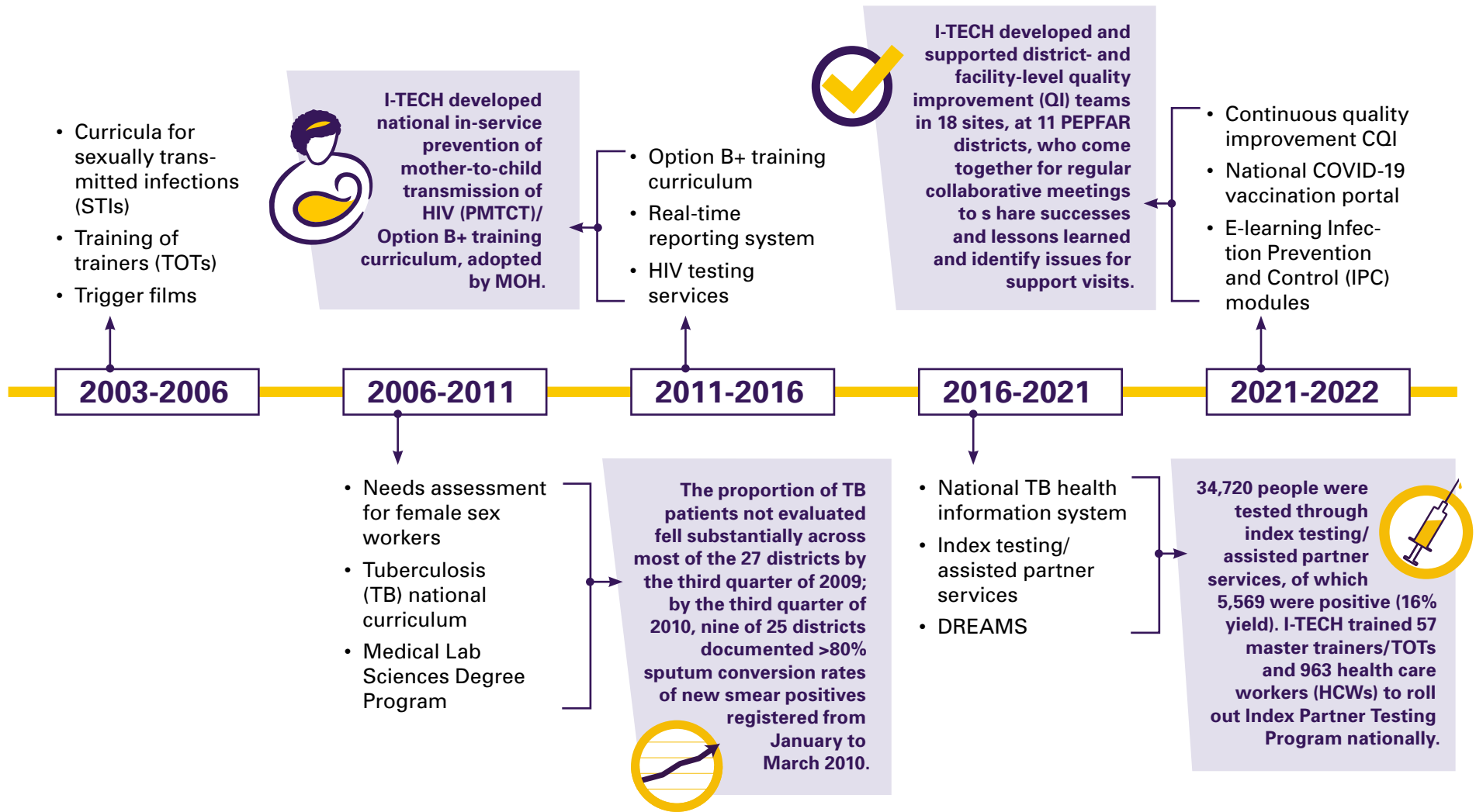
With the support of I-TECH Botswana, the MOH has made great strides in HIV testing services; laboratory systems continuous quality improvement (CQI); monitoring and evaluation of HIV and tuberculosis; health informatics; and operations research. I-TECH Botswana provided direct service delivery and technical assistance (TA) in support of the Government of Botswana's health priorities.

2. Fifth Botswana HIV/AIDS Impact Survey (BAIS V)

Botswana has met the UNAIDS 95-95-95 targets, with 95.1% of PLHIV aware of their status and 98% of those on ART; of those, 97.9% are virally suppressed.²



I-TECH BOTSWANA TIMELINE



2003-2006

From 2003-2006, I-TECH focused on high-level TA to MOH, curriculum development, training, and operations research.

ACHIEVEMENTS

- ✓ Developed a core set of curriculum materials in STI syndromic management that include new guidelines for the treatment of genital ulcer disease (GUD) using acyclovir, routine HIV testing in primary care, and patient-centered counseling.
- ✓ Provided training of trainers in syndromic management of STIs for nursing faculty, private providers in Gaborone and Francistown, and national and district-level trainers.
- ✓ Produced a set of five short “trigger” films that model appropriate counseling, diagnosis and treatment procedures for patients with STI-related complaints.
- ✓ Piloted the use of the TIMS training database system at the MOH AIDS/STD Unit in Gaborone.
- ✓ Conducted a cost-effectiveness study of syndromic management for GUD.



Slides from the “trigger” training films.



2006-2011

From 2006-2011, I-TECH focused on HIV training, clinical mentoring, strategic information, operations research and HIV testing.

ACHIEVEMENTS

- ✓ Conducted a HIV needs assessments of female sex workers in major towns, mining towns and along major roads in Botswana.
- ✓ Developed the TB National Curriculum; established a TB clinical mentoring program to help improve staff performance at facility levels and to strengthen the health system.
- ✓ Conducted various trainings including use of antiretroviral resistance testing in treatment experienced patients, National HIV/AIDS Guidelines, TB/HIV, STI Syndromic Management, PMTCT, and Monitoring and Evaluation (M&E) Training.
- ✓ In 2010, assisted MOH in starting a Bachelor of Science (Medical Lab Sciences) Degree at the University of Botswana; the program was fully transitioned to the University of Botswana.

100% of the M&E positions were absorbed into the MOH



2006-2011

SUCCESS HIGHLIGHT

Botswana had a shortage of workers trained in M&E. In response, the Government of Botswana identified the need for university graduates to serve as a new cadre of district-level M&E officers. This cohort had limited experience and exposure to M&E, so I-TECH was asked to develop and implement training and mentoring to ensure that officers had appropriate knowledge and skills. I-TECH, in conjunction with the Ministry of Local Government, MOH, the National AIDS Coordinating Agency, UNAIDS, and the African Comprehensive HIV/AIDS Partnerships, developed and implemented a training plan over two years. Officers, who were placed in each of the 28 districts in the country, received mentoring, site visits, telephone and email support from I-TECH for two years. The M&E positions were 100% absorbed into the MOH.



2011-2016

From 2011-2016, I-TECH supported curriculum development and HIV training, expanded HIV testing, QA/QC, informatics, and high-level TA and secondment to MOH.

ACHIEVEMENTS

- ✓ Trained providers on provision of PMTCT/Option B+ services to rapidly scale up services to meet national targets.
- ✓ Conducted evaluation of the MOH's Workplace Wellness Program.
- ✓ Implemented real-time reporting/early warning system using short-messaging-service (SMS) through a DHIS2 platform. The system assisted in identifying facility-level stock outs of TB drugs, and HIV test kits with assisted in timely remediation of challenges.
- ✓ Supported HIV testing services by developing guidelines, curriculum and job aides, training, mentoring and direct service delivery.

The real-time reporting system was implemented in **63** high-volume facilities



In March 2017, I-TECH

Botswana rolled out Checka Status—

a multi-media campaign with a strong focus on social media. This campaign targets young people and men and is designed to increase the uptake of facility-based HIV testing. The campaign is active on [Twitter](#) and [Instagram](#), which serve as a source of information about HIV transmission, testing, life after an HIV diagnosis, facility hours, locations, and more. The Checka Status campaign also includes posters, selfie booths, newspaper and television ads and radio spots in Setswana that promote Checka Status and HIV testing.

2011-2016

SUCCESS HIGHLIGHT

I-TECH Botswana supported laboratory strengthening by building MOH capacity to design and develop a laboratory information system, and developing and implementing quality assurance initiatives and training. Outcomes included: Decreased the average DNA-polymerase chain reaction (DNA-PCR) turnaround times at the Botswana-Harvard HIV Reference Laboratory in pediatric HIV testing from six weeks to one. DNA-PCR specimen rejection rates dropped from 6% to 2% due to rigorous training. Dried blood spot (DBS) and laboratory information systems (LIS) supportive supervision visits or trainings were conducted

in 6 catchment areas; LIS readiness assessments were conducted in three districts and a LIS manual was compiled. Trained 25 lab personnel as Rapid HIV Testing (RHT) master trainers, 141 HCW were trained on RHT, RHT was rolled out to 16 districts and RHT EQA retesting was done in 12 health districts and 19 Tebelopele sites.



2016-2021

From 2016-2021, I-TECH supported Partner Notification Services, HIV testing, National Quality Improvement, Laboratory Systems Strengthening and TA to the MOH on DHIS2.

ACHIEVEMENTS

- ✓ Supported a real-time SMS-based reporting system that utilizes a toll-free for rapid interpretation and remediation of service delivery challenges related to HIV testing services (HTS), HIV care & treatment, PMTCT, and TB.
- ✓ Developed and maintain the national TB patient-level health information management system based on the OpenMRS platform to increase efficiency in identification, care, and treatment of TB patients.
- ✓ Conducted index testing/assisted partner services (APS), a key strategy to identify and support those most at risk of acquiring HIV; services included elicitation of sexual contacts and biological children, counseling on risk reduction and disclosure to sexual contacts, safe and ethical index testing/APS processes including intimate partner violence screening, passive and active notification by health care workers, HIV testing and counseling, and linkage to pre-exposure prophylaxis (PrEP) and/or HIV treatment.
- ✓ Established a “warm line” for making HIV testing appointments and addressing queries regarding HIV testing services.
- ✓ Implemented DREAMS program at 41 facilities in two districts (Gaborone and Kweneng East); initiated a toll-free “warm line” for AGYWs to assist with queries related to HIV testing and counseling, DREAMS enrollment, and general health and well-being.
- ✓ Worked to strengthen external quality assurances (EQA) for HIV-related testing by conducting regular on-site proficiency testing support visits, conducting competency assessments and carrying out CQI activities at 22 I-TECH supported labs (45% of the labs in the country).
- ✓ Through work on the National Data Warehouse, ensured the availability of strategic information to monitor progress toward reaching epidemic control, with particular focus on Treat All, linkages to care, and HIV clinical cascade for 95-95-95 care continuum.



2016-2021



I-TECH enrolled more than **2,200** adolescent girls and young women into the DREAMS program

SUCCESS HIGHLIGHT

I-TECH Botswana supported testing sites across 12 PEPFAR-supported districts. Various strategies were implemented to reach the case identification target, including index testing, self-testing, TB testing, and STI testing, a focus on men, and after-hours testing. Twenty-four-hour testing services were also implemented across high-volume hospitals that provide accident and emergency services. In total, I-TECH tested 693,980 people in Botswana, of which 39,520 were positive. One highly successful intervention that was launched was the “Men Only” services corners at 10 high-volume facilities. The service was aimed to encourage HIV testing for men and provide privacy, convenience, and confidentiality. Additional services included HIV treatment initiation, antiretroviral (ARV) refills, STI screening, TB screening and referral, and general health screening such as blood pressure, body mass index, etc. In COP19, the 10 “Men Only” clinics contributed over 50% of overall male case ID, with yield/positivity as high as 10%.

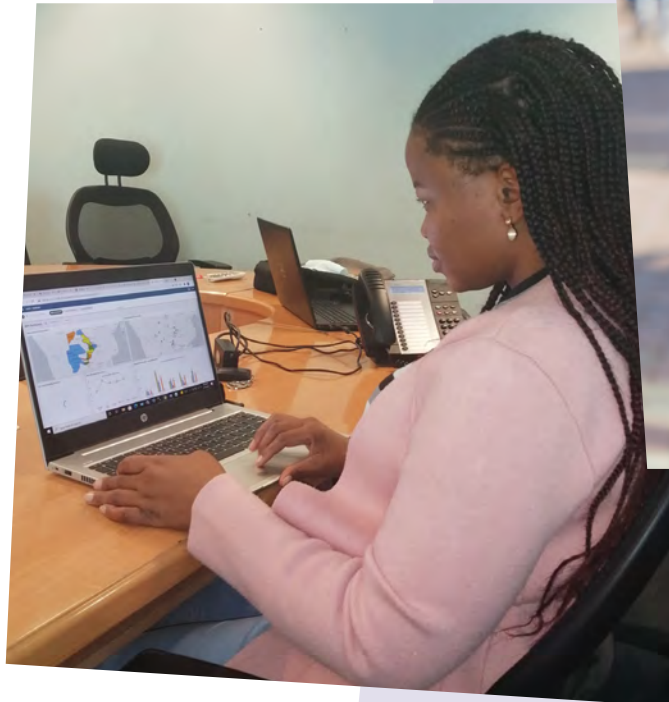


2021-2022

In 2021-2022, I-TECH supported national quality improvement, infection prevention and control (IPC) trainings, and enhancing DHIS2 for better monitoring of HIV clinical cascade and MPRs.

ACHIEVEMENTS

- ✓ Provided technical assistance at the national level to improve HIV care and treatment, TB/HIV, and HIV testing and counseling programs through CQI activities.
- ✓ Developed a DHIS2-based proficiency testing tracking system for laboratory HIV tests; enhanced DHIS2 to serve as the monitoring and reporting system for MOH programs (HTS, ART, PMTCT and cervical cancer) and Minimum Program Requirements (MPR) reporting.
- ✓ Developed the national COVID-19 vaccination portal, including the application for generating the QR code that enables COVID-19 vaccination certificates.
- ✓ Developed self-paced e-learning IPC training modules for front line HCWs.



2021-2022

SUCCESS HIGHLIGHT

The scale-up of HIV treatment programs in Botswana has resulted in a reduction in HIV-related morbidity and mortality; however, the retention of patients in HIV treatment remains a challenge. In October 2020, Lerala Clinic had 1,754 clients enrolled in HIV treatment, but 133 of those clients had no documented interaction with the clinic for over a year, resulting in those clients being put on treatment interruption status. To address these challenges at Lerala Clinic, I-TECH helped to build the capacity of health workers through training and mentoring lay counselors on follow-up registers. I-TECH also institutionalized routine data review meetings and data audits, and initiated collaboration between the clinic and community-based organizations (CBOs) to better identify and track clients with treatment interruption status. As a result of the interventions, the number of clients with interruption status at Lerala Clinic was reduced from 133 to 23 in 3 months. A total of 110 clients were identified



and brought back to treatment. Of the clients re-engaged in treatment, 75 (68%) were men. To help track clients' treatment status more efficiently, I-TECH also supported the implementation of a routine data-driven tracking system utilizing existing facility-based resources.

I-TECH BOTSWANA PUBLICATIONS — 2013 TO PRESENT

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Continued

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