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BIPAI
HISTORY AND SCOPE

“I am extremely honored and proud of BIPAI’s accomplishments in its first 20 years. BIPAI is committed to its vision and mission and the people it serves despite the ongoing challenges presented by the COVID-19 pandemic and any other issues the future might bring. We have a strong foundation and a team of dedicated experts willing to care for those in need and to support and train others to do the same.”

Michael Mizwa
Chief Executive Officer

Baylor College of Medicine International Pediatric AIDS Initiative (BIPAI) at Texas Children’s Hospital is the largest care and treatment network based at an academic institution supporting programs for HIV-infected and -affected children in the world. BIPAI consists of a network of nine independent, non-governmental organizations (NGOs) operating 14 Centers and Satellite Centers of Excellence that provide comprehensive outpatient care for more than 350,000 children and families worldwide. Over the past 20 years, BIPAI has also evolved its mission beyond HIV to include comprehensive health programs designed to work within the local health systems and improve maternal and child health outcomes. BIPAI provides technical assistance to its network to ensure the highest level of quality care and treatment, education and training for health professionals, and operational research to improve patient care.
BIPAI Network Statistics

- **Budget (USD)**
- **Health professionals trained around the world since 2003**
- **Patients in care**
- **Patients enrolled on antiretroviral therapy**
- **Staff Members**

The data reported covers our work during the 2020 fiscal year (July 1, 2019-June 30, 2020).
It is my honour to welcome you to read our annual report. The annual report highlights achievements in providing paediatric health care including HIV/AIDS, TB, other childhood conditions and psychosocial services for the people of Tanzania.

The programme reached a thousand children and their families with testing, treatment, and educational services during the reporting period as part of our goal to meet the UNAIDS 95-95-95 objective.

We would not be able to achieve so many things without the financial support from our donors, the collaboration of community leaders and host institutions, and the tremendous commitment of the Baylor-Tanzania staff to strengthening the health system and improving the health of children and adolescents infected and living with HIV/AIDS in the Lake and Southern Highland Zones and beyond.

Our innovative model of family-based health care and support services is rapidly increasing the impact we have on paediatric HIV and related conditions. We treated more than a total of 2700 patients this year, including tuberculosis and malnutrition clients. HIV case-finding initiatives tested more than 5558 children and caregivers in the operational zones of Baylor-Tanzania, not including many thousands more who were tested at the sites we mentor clinically.

While we take time to celebrate successes, we recognize there is much work ahead, ever reminding us to remain diligent in our cause—always learning and keeping long-range goals in focus. In the core areas of prevention, treatment, education, and community strengthening, Baylor-Tanzania has implemented robust and effective programmes that have reached not only individuals but families and even whole communities.

Our success would not be possible without the support of the Tanzanian government through the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC), President’s Office Regional Administration Local Government, the United States Agency for International Development (USAID) through the United States President’s Emergency Plan for AIDS Relief (PEPFAR); United Nations Children’s Fund (UNICEF) and BIPAI. Our strong appreciation also goes to our official collaborative partners at the Mbeya Zonal Referral Hospital and Bugando Medical Centre—as well as local government authorities, organizations, partners, and communities that continue to support our efforts.

I am happy to present our 2020 annual report, and I hope you will all enjoy reading it.

Sincerely,
Lumumba Mwita, MD, MMED
Executive Director
MISSION

To provide high-quality, high-impact, ethical pediatric and family-centered health care, health professional training, and clinical research focused on HIV/AIDS, tuberculosis, malaria, malnutrition, and other conditions impacting the health and well-being of children and families.

VISION

To be the model of pediatric excellence, empowering health professionals and communities to ensure sustainable, superior pediatric care, enabling healthy and fulfilling lives for the children of Tanzania and their families.
Baylor College of Medicine Children's Foundation-Tanzania (Baylor-Tanzania) is a patient-centered, pediatric HIV prevention and treatment program founded in Dar es Salaam, Tanzania, on February 5, 2009 as a local non-governmental organization with the goal of provision of high quality care for children and adolescents with HIV/AIDS, tuberculosis (TB) and malnutrition. Baylor-Tanzania later opened two Centers of Excellence (COE) in 2011 - The Baylor College of Medicine-Abbott Fund Children's Clinical Center of Excellence in Mbeya on the campus of the Mbeya Zonal Referral Hospital and the Baylor College of Medicine-Bristol-Myers Squibb Children's Clinical Center of Excellence in Mwanza at Bugando Medical Center. Baylor-Tanzania provides comprehensive pediatric and family-centered HIV/AIDS care and treatment services for HIV-infected children, adolescents and their family members, including provision of TB, malnutrition and reproductive health services and comprehensive psychosocial support.

Baylor-Tanzania established a Public Private Partnership in 2008 with the United States Agency for International Development (USAID) and the Baylor College of Medicine International Pediatric AIDS Initiative (BIPAI) and in collaboration with the Government of Tanzania Ministry of Health, Community Development, Gender, Elderly and Children (MOHCDGEC) in support of “Scaling Up Family-Centered Pediatric HIV/AIDS Prevention, Care and Treatment Services in the Lake and Southern Highlands Zones of Tanzania.” The collaboration had the overall goal of contributing to the reduction of HIV/AIDS-related morbidity and mortality among infants, children and adolescents in Tanzania. Baylor-Tanzania has continued this productive collaboration with USAID to date and has also established major partnerships with the United Nations International Children's Emergency Fund (UNICEF), the SeriousFun Children's Network, the Global Hematology-Oncology Pediatric Excellence (HOPE) program at Baylor College of Medicine/Texas Children's Hospital, and the Texas Children's Global TB program.

Baylor-Tanzania works to scale up high-quality, comprehensive pediatric and family centered HIV/AIDS care and treatment through prevention of disease, recognizing and responding to their vulnerable patient’s unique needs, promoting health system strengthening in the Lake and Southern Highland Zones and empowerment and promotion of living positively with HIV.
Baylor-Tanzania achieved the following milestones between July 1, 2019 – to June 30, 2020

**KEY NUMBERS**

- **5558** People tested for HIV
- **219** People tested HIV positive
- **358** People started on anti-retroviral therapy (ART)
- **2712** Patients currently on ART
- **415** HIV exposed infants receiving care at the COEs

**Adolescents (ages 10-19) receiving sexual reproductive services**

- **635**

**Percentage of HIV positive adolescents (age 10-19) in Teen Club**

(1024 adolescents registered in teen club/1525 active adolescents in care)

- **67%**

**Healthcare workers trained in clinical attachment program**

- **108**

**Treated for malnutrition**

- **817**

**Treated for TB**

- **197**

**Orphans and vulnerable children supported**

- **1493**

**Home visits conducted**

- **146**
Baylor-Tanzania continues to offer comprehensive and state-of-the-art TB prevention, case finding that includes a robust community program utilizing the unique expertise of individuals who were previously treated for TB and treatment for children and adolescents in the Lake Zone (LZ) and Southern Highland Zone (SHZ). Baylor-Tanzania also has leading roles and voices on the national child TB treatment working groups and is actively involved in several TB research studies looking at the performance of novel TB diagnostic tests in children.

Baylor-Tanzania continues to offer multidisciplinary palliative care to children and adolescents with life limiting effects of HIV/AIDS. This unique program provides patients with evidence-based medical care including symptom management, comprehensive patient focused psychosocial care that includes the opportunity to participate in a wish-making program and multidisciplinary home visits. Baylor-Tanzania had the opportunity to present their palliative care program at the 6th International African Palliative Care Conference in Kigali, Rwanda.

Baylor-Tanzania successfully hosted the 21st Annual Baylor International Pediatric AIDS Initiative Network Meeting in Johannesburg, South Africa.

In collaboration with UNICEF, Baylor-Tanzania is working to mitigate the impact of COVID – 19 on children, adolescents and pregnant and breastfeeding HIV + women. This program will help ensure that essential HIV services are not disrupted during the pandemic and that healthcare workers and patients have the supplies needed to stay safe.
Baylor-Tanzania offers a comprehensive array of preventive services for HIV, TB, malnutrition, and common childhood and adolescent illnesses.

**HIV**
Baylor-Tanzania provides pregnant and breastfeeding mothers and their infants with medications to prevent the infants from acquiring HIV from their mothers. Baylor-Tanzania also offers post-exposure prophylaxis medications to protect HIV negative children and adolescents who are exposed to HIV through sexual assault or needle stick injuries.

**TB**
Every child and adolescent undergoes TB screening upon arrival to Baylor-Tanzania clinics, and all HIV + children and adolescents are offered six months of TB prophylaxis medicine. TB is also prevented through strong infection control efforts in schools and communities, such as the tracing and testing of contacts of those with a smear-positive TB case.

**Reproductive Health**
We offer reproductive health counseling and services to reduce the spread of sexually transmitted infections (STI) and to decrease unwanted pregnancies. Services include weekly “Teen Talks” to teach adolescents about living positively with HIV, screening and treatment for STIs, and access to reproductive and child healthcare in a safe, confidential environment.

**Other Prevention**
All children and adolescents attending Baylor-Tanzania COEs undergo regular monitoring of their growth, nutrition and development and receive routine vaccines against serious illnesses. Fourteen-year-old girls are eligible to receive the human papillomavirus vaccine. Children and adolescents are screened for violence and the Baylor-Tanzania team advocates for child protection. Mental illnesses such as depression and anxiety are prevented through robust peer support groups, empowerment and stigma reduction efforts, and adolescent-friendly services.
HIV Care

Baylor-Tanzania utilizes a multidisciplinary patient-first approach that simplifies and adapts treatment services to our patients’ needs so that every person receives the care and support needed to thrive. Baylor-Tanzania’s experts ensure that each child and adolescent is given the correct antiretroviral regimen and dosage. After starting antiretroviral therapy, the Baylor-Tanzania team focuses on achieving viral suppression and immune system restoration for each patient. However, for those who don’t achieve viral suppression, Baylor-Tanzania works diligently to identify the reasons why, and then works to develop a strategy to resolve the issues. Baylor-Tanzania is a national leader in innovative programs that offer peer support, family assistance, and personal empowerment to create effective practices that are essential to achieving sustained treatment success.

Beyond HIV Care

The children and adolescents who attend Baylor-Tanzania COEs have complex illnesses and needs. To provide our patients with comprehensive care, Baylor-Tanzania has developed programs to address many common conditions. Clinicians working at Baylor-Tanzania treat children and adolescents infected with TB, including those with drug resistant TB. Baylor-Tanzania has an array of nutrition services including treatment of those with moderate and severe acute malnutrition using therapeutic foods, weekly nutrition classes including cooking demonstrations and food support for those with economic insecurity. Patients with life-limiting conditions are eligible to participate in Baylor-Tanzania’s multidisciplinary palliative care program which includes medications and equipment to ease pain and provides social support to minimize financial burdens. Patients receiving palliative care are also eligible to participate in a wish-making program in which they select a small, desired toy or item.
Recognize and Respond Spotlight Project: Humanitarian response to mitigate the impact of COVID-19 on children, adolescents, and pregnant and breastfeeding women living with HIV in Mbeya, Iringa, Njombe and Songwe region.

**Funder:** UNICEF

**Timeline:** May 2020 to November 2020

**Location:** Mbeya, Iringa, Njombe, Songwe regions

**Beneficiaries:** 1,754 adolescents living with HIV, 200 care givers, 80 healthcare workers, 80 peer mothers, 600 pregnant and breastfeeding women.

**Objective:** The project will focus on key locations which have a higher population density, are on major transport routes and have a high number of adolescents and pregnant women living with HIV. The project will ensure continuity of essential services for adolescents living with HIV and will provide healthcare workers, peer mothers, adolescents living with HIV and HIV + pregnant and breastfeeding women with kits containing supplies to protect them from COVID–19 infection.

**Strategies:**

1. Ensure comprehensive pediatric and adolescent care is integrated into HIV-care during the COVID-19 pandemic.
2. Assist essential health facilities with infection-control measures and provide adolescents living with HIV with hygiene supplies such as soap, hand sanitizer and sanitary pads.
3. Provide personal protective equipment (PPE) and education about COVID-19 to healthcare workers in reproductive child health clinics (RCH). Provide PPE for adolescents living with HIV, peer mothers and community healthcare workers.
4. Integrate COVID–19 safety planning into community ART programs for adolescents living with HIV.
Children and adolescents living with HIV face many social challenges that can make them vulnerable to poor clinical outcomes. Baylor-Tanzania’s social work department assesses children and adolescent’s needs during clinic visits, home visits and family meetings to provide targeted support and linkages with community-based organizations. Caregivers can join support groups where they receive coaching on how to disclose a child’s HIV status and how to help them with adherence. For families with severe food insecurity, Baylor-Tanzania offers “Shamba Darasa,” a backyard vegetable-growing program, as well as a three month intensive food security alleviation program. Families who participate in the programs learn gardening and cooking skills, allowing them to meet their nutritional needs while improving their economic situation.

Adolescent girls have the opportunity to join a program called “Tanzanite Girls.” These interactive sessions cover a variety of topics, including life skills, self-awareness, gender-based violence and violence against children, puberty, hygiene, children’s rights and the consequences of early pregnancy. For adolescents who are out of school, we offer income-generating activities at our clinic via low-cost programs such as “Stitch by Stitch” and “Bead by Bead,” which impart practical skills like sewing and beading. After graduating from the program, participants receive a certificate and are ready to support themselves or find employment at shops in town. “Benki Yetu” (Our Bank) is a peer-led program in which adolescents learn financial management skills, such as how to receive and use micro-financing. Baylor-Tanzania’s array of best-practice adolescent support programs such as Teen Club, overnight camps, and peer-to-peer linkages, empower adolescents to live positively with HIV.

Older adolescents attending the COEs can join Baylor-Tanzania’s vibrant peer educator program. To participate in the program, adolescents must demonstrate that they are living positively with HIV. They should have good adherence to their medications, have achieved viral suppression, and have good communication skills. Peer educators work alongside adolescents attending the COEs and provide them with one-on-one counseling sessions, health talks and accurate HIV education. Between July 1, 2019 to June 30, 2020 peer educators were able to reach more than 400 adolescents during educational sessions and provided one-on-one counseling to over 200 adolescents. Peer educators were also able to work together with the COE nurses to reach more than 150 adolescents with accurate reproductive health information during reproductive health educational sessions.
Empowerment Spotlight Project: Comprehensive community-based ART strategies to support adolescents living with HIV and their families in Njombe region.

**Funder:** UNICEF

**Timeline:** May 2020 to November 2020

**Location:** Njombe Region

**Beneficiaries:** 3,302 Adolescent boys and girls 10-19 years living with HIV and their caregivers

**Objective:** Reduced AIDS related morbidity and mortality among adolescent girls and boys in target councils in Njombe region.

**Strategies:**

1. Differentiated service delivery models for adolescents will be scaled up including facility and community-based options. Facility based options will include a fast track system for ARV pick up, caregiver refills of ARVs and facility-based group refills which will include peer group sessions. Community based options will include group refills provided by community health care workers during community outreach activities.

2. A reference guide to help healthcare workers better support adolescents at risk of poor treatment outcomes will be developed in collaboration with UNICEF and the Ministry of Health. After the guide is developed, Baylor-Tanzania will support facilities with offering enhanced adherence counseling and psychosocial support.

3. Baylor-Tanzania will work closely with social welfare officers to ensure that adolescents in need are linked with the resources Tanzania’s social welfare system can provide.

4. Baylor-Tanzania will actively engage young people living with HIV. Baylor-Tanzania will train young people to be treatment supporters and peer counselors who can reach the needs of adolescents living with HIV in their communities.
Baylor-Tanzania’s health systems strengthening work leverages one of our greatest strengths to improve health systems across Tanzania – our multidisciplinary team of pediatric experts. Baylor-Tanzania collaborates with the Pediatric HIV and TB working groups of Tanzania to develop and review national treatment guidelines. Baylor-Tanzania welcomes classes of healthcare providers from around the country to participate in an intensive, hands-on, pediatric HIV, TB and malnutrition training course. They attend lectures from our pediatric experts and get hands-on experience taking care of children with real-time feedback. They leave with improved competency in pediatric care, a specialized pediatric HIV handbook and a 24-hour hotline to call for clinical questions. Baylor-Tanzania also teaches medical and nursing students, pharmacy staff, counselors, and residents from both the Tanzanian and international education systems, bringing them to our clinic to learn best practices in HIV, TB, and malnutrition care. Baylor-Tanzania physicians, nurses, counselors, and support staff visit each of our outreach sites quarterly. Baylor-Tanzania reinforces best practices in pediatric HIV and TB care, identifies areas for improvement, and helps providers in the Lake and Southern Highlands Zones provide excellent, evidence-based HIV, TB, and general pediatric care.

**Health Systems Strengthening Spotlight Project:** Improving the quality of care and support of severely malnourished children in Mbeya and Songwe regions.

**Funder:** UNICEF

**Timeline:** June 2019 to September 2020

**Location:** Mbeya and Songwe Regions

**Beneficiaries:** Children under the age of 5 years

**Objective:** Improved availability of malnutrition treatment at health facilities through technical assistance and quality improvement at local government healthcare facilities.

**Strategies:**

1. Baylor-Tanzania will visit health care facilities every quarter and provide on the job mentorship and quality improvement coaching, with a focus on childhood malnutrition treatment protocols.

2. Baylor-Tanzania will work with healthcare facilities to improve their management of therapeutic foods, both quantifying how many supplies they have available and helping them to effectively navigate the supply chain.

3. Baylor-Tanzania will help healthcare facilities better collect and report data related to childhood malnutrition, which in turn can help these facilities better understand the problems facing the communities they serve.
Scholarly Activity

Baylor-Tanzania has active research in the following areas:

- Retrospective studies of clinical activities and outcomes
- Tuberculosis clinical outcomes
- Tuberculosis stool-based diagnostic assay
- Tuberculosis blood-based DNA methylation diagnostic assay
- NIH-funded study of the evaluation of novel stool and blood-based TB diagnostic tests in children and adolescents in Mbeya, Tanzania
- Partnership with Henry M. Jackson Foundation Medical Research International (HJFMRI) for Mbeya COE to be a study site in their “Prevalence of, and factors associated with, virologic suppression and drug resistance in HIV positive children and adolescents on antiretroviral therapy in Tanzania (RV 517)”
- Partnership with HJFMRI for Mbeya COE to be a study site in their “African Cohort Study (AFRICOS) Youth Cohort Study - Protocol RV 329”

Published research between July 1, 2019 - June 30, 2020 includes:


The 21st Annual BIPAI Network Meeting took place from November 18 – 22, 2019, and was hosted by Baylor-Tanzania. The meeting was held at the Kopanong Conference Center in Johannesburg and welcomed over 100 participants from 10 BIPAI sites: Tanzania – Mwanza and Mbeya, Malawi, Lesotho, Eswatini, Botswana, Angola, Romania, Colombia and Argentina. This year’s meeting focus was “Pushing Limits: Setting the Standard for Maternal and Child Health,” and featured four themes:

1. Putting Patients First: Patient-centered care and child/adolescent-friendly services are the foundation of BIPAI activities, and are crucial for success in our settings. This theme showcased unique and innovative activities and programs that embraced a “patient-first” approach, and that involved patients from initiation to implementation and evaluation.

2. Silver Linings: Both the successes and failures of programs and activities at BIPAI sites provide valuable lessons for improvement and growth. Sharing experiences on programs and activities that did not go as planned, or were not as successful as hoped, are key to a balanced, honest self-assessment that can spark a renewed invigoration for continued network and professional growth.

3. If These Walls Could Talk: This theme showcased experiences of unique efforts, programs and activities that demonstrated the unique spirit of innovation and thinking outside-the-box to identify activities that can be scaled up to other sites to improve patient services and outcomes.

4. Into the Great Wide Open: The last theme focused on the experiences of programs and activities that occurred outside of the Center of Excellences (COEs) and primary clinical sites and showed us how BIPAI sites implemented incredible efforts across their countries on a grand scope, transformed care and were recognized as national and international leaders.

The meeting participants enjoyed 43 oral presentations and 77 posters from the BIPAI network. Additionally, we were proud to have several outside speakers join the meeting including the current director of Cape Town's Desmond Tutu HIV Centre and former president of the International AIDS Society (IAS), Dr. Linda-Gail Bekker. To top it all off, each day the participants were entertained with Tanzanian cultural videos and music and evening entertainment activities, each with a Tanzanian flavor. Baylor-Tanzania, along with its Houston counterparts, worked hard to put together an educational and enjoyable meeting for everyone involved. The positive feedback received from participants shows us that our efforts paid off!
The COVID–19 pandemic has impacted healthcare facilities across the globe and Baylor-Tanzania is no exception. To ensure the safety of Baylor-Tanzania’s vulnerable patients and families, and to keep Baylor-Tanzania staff safe, several changes were implemented at the COEs. Teams began frequent disinfection of high-touch surfaces in the COEs and provided staff with PPE to wear while seeing patients. All who entered the facility – staff, visitors and patients – were screened for symptoms and those with symptoms suggestive of COVID–19 were directed to a special isolation area to be evaluated safely. To reduce patients’ risk of acquiring COVID–19, staff made sure that all patients who were eligible to receive multiple months of medication were able to do so, decreasing the number of times patients had to travel to visit the clinics. The COEs also implemented social distancing in the waiting and reception areas with marked areas on the
floor to ensure patients and staff remained two meters apart whenever possible. Social distancing efforts have impacted some of the COE’s psychosocial adolescent support groups such as teen club, sexual reproductive health education sessions and peer–to-peer support groups which had to be canceled. Healthcare training activities and meetings with partners also had to be canceled to avoid large group gatherings which could spread the virus. Sputum inductions for patients with symptoms suggestive of TB were no longer performed at the COEs to keep staff and patients safe. However, TB diagnosis was still possible utilizing other diagnostics such as chest X-ray, skin tests and clinical algorithms.

While Baylor-Tanzania worked hard to address the new challenges of the COVID–19 pandemic and received excellent support from the BIPAI network, worries and challenges still existed for Baylor-Tanzania patients and staff. Parents expressed worries about potentially exposing their children to the virus at the COE and clinic attendance declined as a result. Missed clinic visits can result in missed opportunities to diagnose opportunistic infections and treatment failure and a missed chance to intervene and address these issues before they become life threatening. Patients who were members of Baylor-Tanzania’s many support groups were also impacted due to group cancelations and poor attendance. And ensuring adequate ART supply to allow patients to receive multiple months of medication was a challenge.

Healthcare workers also experienced challenges due to the pandemic – mentorship and training opportunities were limited due to social distancing efforts and travel restrictions. Lastly, despite Baylor-Tanzania’s efforts to scale up infection control efforts, staff still felt worries and stress about their own risks of infection with COVID–19.

Despite the unprecedented difficulty of the COVID-19 pandemic, Baylor-Tanzania staff and patients were able to successfully adapt to the new challenges. Specifically, Baylor-Tanzania’s staff and patients’ unique experiences addressing the HIV/AIDS epidemic gave them the resilience and resourcefulness they needed to find solutions to the new problems posed by the COVID-19 pandemic. And Baylor-Tanzania’s organizational flexibility allowed the program to rapidly make changes to keep staff and patients safe. As the COVID-19 pandemic continues to develop, Baylor-Tanzania will utilize their personal and organizational skills to keep addressing the new challenges in the months and years ahead.

Baylor-Tanzania staff wearing uniforms and protective gear
Case identification is the first step to ensure children and adolescents living with HIV can achieve healthy lives. However, identifying children and adolescents living with HIV can be a challenge. These vulnerable individuals may be orphaned and living with alternative caregivers. Concerns about stigma and worries about what treatment is available may demotivate caregivers to get their children tested. And families may not realize the importance of testing all siblings of a child who is HIV+. Index testing is testing contacts of a person who is HIV+ such as children, siblings or sexual partners and can be a useful tool to identify people who are HIV+, but do not yet know their status.

Baylor-Tanzania recognized the importance of utilizing index testing as a tool to identify vulnerable HIV+ children and adolescents and worked to scale up knowledge among healthcare workers about the importance of index testing. Baylor-Tanzania was able to utilize this tool to successfully identify many new children and adolescents and link them with life-saving care. Baylor-Tanzania improved collaboration with adult HIV care facilities to ensure that every adult who tested positive was linked with a team who visited them in their home and tested their children. Baylor-Tanzania also gave adults the opportunity to have their children tested at the location that worked best for them – either at the COE or in their homes.

At the Mwanza site, prior to implementing index testing, it was typical to have only 1-2% of those tested be diagnosed as HIV+. After implementing the program, however, 10-15% of those tested were found to be HIV+ and many more patients were identified and linked to care (Table 1). Similarly, at the Mbeya site, testing data from January thru March 2020 demonstrated that a high percentage of positive patients were identified and linked to care (Table 2).
After Baylor-Tanzania recognized the success of their index testing efforts, the team began preparations to scale up index testing in Mbeya City. Baylor-Tanzania is currently collaborating with other partners in Mbeya City to identify more children and adolescents living with HIV and link this vulnerable group with life-saving care.

### Table 1

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of clients tested</th>
<th>Tested of positive clients</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Before starting index testing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January 2019</td>
<td>112</td>
<td>11 (9%)</td>
</tr>
<tr>
<td>February 2019</td>
<td>125</td>
<td>2 (1.2%)</td>
</tr>
<tr>
<td>March 2019</td>
<td>109</td>
<td>2 (1.8%)</td>
</tr>
<tr>
<td>April 2019</td>
<td>93</td>
<td>2 (2.2%)</td>
</tr>
<tr>
<td><strong>After starting index testing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 2019</td>
<td>114</td>
<td>19 (16.7%)</td>
</tr>
<tr>
<td>June 2019</td>
<td>176</td>
<td>8 (4.5%)</td>
</tr>
<tr>
<td>July 2019</td>
<td>211</td>
<td>25 (11.8%)</td>
</tr>
<tr>
<td>August 2019</td>
<td>175</td>
<td>19 (10.8%)</td>
</tr>
</tbody>
</table>

### Table 2

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Number of clients tested</th>
<th>Number of positive clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility (Baylor) provider initiated testing (PITC)</td>
<td>213</td>
<td>24 (11%)</td>
</tr>
<tr>
<td>Facility (Baylor) index testing</td>
<td>27</td>
<td>2 (8%)</td>
</tr>
<tr>
<td>Facility (Baylor) sexual partner testing</td>
<td>26</td>
<td>10 (38%)</td>
</tr>
<tr>
<td>Community index testing</td>
<td>131</td>
<td>41 (31%)</td>
</tr>
<tr>
<td>Home based care worker facilitated community testing</td>
<td>34</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>
In December 2019, Baylor-Tanzania had the unique opportunity to prepare and host the World AIDS Day event in Mwanza. Baylor-Tanzania worked closely with Tanzania Commission for AIDS (TACAIDS), national and local government authorities and other partners in the Lake Zone to ensure that the event was a success. Baylor-Tanzania had the opportunity to share best practices in adolescent care and to highlight the comprehensive care model of the COE. Adolescents living with HIV who receive care at the Mwanza COE also had the opportunity to participate in the commemoration of the special day. By participating, Baylor-Tanzania was able to share their tireless contribution to the fight against HIV/AIDS with the community of Mwanza.

During the commemoration, Baylor-Tanzania had the opportunity to meet the guest of honor, the Honorable Jenista Joakim Mhagama (MP), who is the Minister of State in the Prime Minister’s Office responsible for policy, parliamentary affairs, labor, employment, youth and the disabled. TACAIDS organized a parallel national HIV/AIDS symposium meeting where Baylor-Tanzania had the opportunity to present abstracts describing the Jitambue Club Program, a group that helps adolescents living with HIV to achieve viral suppression, and the Tanzanite Girls Program, which supports adolescent girls and young women living with HIV to achieve their life goals.
G.P. is an 18-year-old HIV+ girl currently working as a teen leader and a peer educator for Baylor-Tanzania Mwanza clinic, a role she has had since January 2020. When she was 14 years old, she was living with her aunt, who was her primary caretaker, and her uncle. Due to marital problems, her aunt moved out of their home and didn’t return until two years later. G.P. was left alone during that time with only occasional visits from her neighbors. During this time she did not have an adult or caretaker to make sure she was taking her medications. She had a hard time remembering to take her ART and show up to clinic appointments. Overall, she was struggling.

In June 2017, she had a high viral load of 261,648 copies/ml. After she received that unwanted result, she had several adherence sessions with counselors and social workers at the COE. As time passed she had several additional high viral load results, throughout 2018 and into 2019. In January 2019, she told the COE team that she had not been taking her ART very often, which was contributing to her many high viral load results.

Just a few months later she was enrolled in the Jitambue Club Program, and the COE team was able to contact her aunt, who was living far away in Geita, located on the other side of Lake Victoria. Thankfully, her aunt responded and came with G.P. to all six sessions of the Jitambue Club Program. During the sessions, G.P. had the opportunity to meet with other participants who shared their experiences, challenges and solutions. After graduating from the Jitambue Club Program in July 2019, she checked her viral load and saw some improvement. She was very pleased with the results and promised to continue working on what she had learned in the Jitambue sessions.

G.P. was interested in becoming a teen leader working in the Jitambue Club Program but first she had to meet the criteria of having good adherence, and of having an undetectable viral load result (less than 1000 copies/ml). Finally, in September 2019, G.P. checked her viral load and had a result of 243 copies/ml. She was so excited to have achieved her goal of a viral suppression. Now she is a role model to all current Jitambue participants who are struggling with adherence and having high viral loads. She supports other adolescents during these sessions and in other adolescent clubs in the Lake Zone.
Teamwork divides the tasks and multiplies the success – Milestones of HIV+ adolescent girl

Diana Mwakyusa is a 13-year-old girl diagnosed with HIV in August 2019. She was referred to the Baylor-Tanzania Mbeya COE by a health care provider who was trained at the Baylor-Tanzania Mbeya intensive pediatric HIV education program. This person recognized that Diana needed specialized care.

Diana is the youngest child in her family. Her mother died when she was an infant and she was raised by her father. Diana and her father live in a rural part of Mbeya, which is almost 50 km from Mbeya town center, and their home is isolated from the rest of the community. She and her father live together in a single-room grass thatched hut with poor ventilation. They do not have a toilet and must go to the bathroom in the bushes. There is no clean water nearby and sometimes, they are not able to eat three meals a day. Even though Diana was sick, she still helped doing house chores and caring for herself.

In August 2018, Diana began getting sick. Her father tried to get medical care for her, visiting both traditional healers and other medical facilities, even though it was expensive for him to take Diana to these clinics. Eventually, he took her to a health clinic where she met a healthcare worker who tested her for HIV. After she was found to be HIV+ with many complications, she was referred to the Baylor-Tanzania Mbeya COE for care.

Diana was very sick when she arrived at Baylor-Tanzania Mbeya. She had severe malnutrition and only weighed 15 kg. Her CD4 count was 0 cells/mm³, and she had persistent diarrhea and oral sores. She was also evaluated by the social worker who saw that Diana was not attending school and that her father had given up hope that she would survive.

The Baylor-Tanzania Mbeya multidisciplinary team joined efforts to help Diana. She started anti-retroviral medications and received treatment for her diarrhea and malnutrition. The social work department was able to give her family food support and clothing through the Baylor-Tanzania Mbeya COE’s donation program. The Baylor-Tanzania Mbeya COE’s “Back to School” program worked diligently to help Diana return to school by helping her family navigate the complex educational system to re-enroll Diana and by providing her with school uniforms and books.

She had regular home visits so healthcare workers could see how Diana and her father were coping at home. Diana’s father received psychosocial support to help him cope with caring for Diana and her complex medical needs. She is now doing much better. She is taking her medicines well, weighs 25 kg and her CD4 is up to 214 cells/mm³! Diana has returned to life and really appreciates the efforts of the Baylor-Tanzania Mbeya team. In the coming months, the Baylor-Tanzania team will continue to support Diana and her family through home visits, school materials and food support. The Baylor-Tanzania team was also able to help Diana’s father with home gardening materials which will help provide them with food and income. And in the future, the Baylor-Tanzania team would love to help support the renovation of Diana and her father’s home to install proper sanitation.
Diana and her family

Diana at home

Diana’s Home

Diana and her father being visited by Baylor-Tanzania Mbeya team

Diana and her family
Quotes from community members

“Dear Baylor-Tanzania Mwanza COE team members, you gave me transport from Sengerema, you gave me free medicine, you treated my grandson and you supported me with food. You have given me a new smile. I’ll not forget you, I’ll pray for you and I’ll testify to others. Asante sana Asante sana ubarikiwe (Thank you very much and be blessed).”

Grandmother of Isack Safari

“Let me cry because of happiness that I have, my grandson was about to die when his mom died two weeks after delivery but you saved his life. Baylor-Tanzania is a place of hope, be blessed!”

Grandmother of Jackson Ray
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- United States Agency for International Development
- United Nations International Children’s Emergency Fund
- Bugando Medical Centre
- Mbeya Zonal Referral Hospital
- SeriousFun Children’s Network
- Baylor College of Medicine International Pediatric AIDS Initiative
- Global Hematology-Oncology Pediatric Excellence (HOPE) program at Baylor College of Medicine/Texas Children’s Hospital
- Baylor College of Medicine Global Childhood TB Program