26TH NETWORK MEETING

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Baylor Black Sea Foundation

HOST: BAYLOR BLACK SEA FOUNDATION

3-7 NOVEMBER 2025 | JOHANNESBURG, SOUTH AFRICA

Baylor College of Medicine

BAYLOR GLOBAL HEALTH

Texas Children's®
Global Health Network

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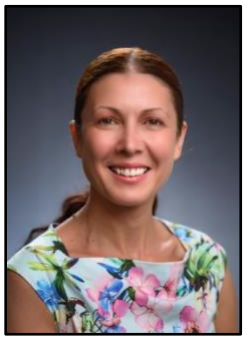
Welcome Letter



Dear All,

On behalf of the Baylor Black Sea Foundation team, it is my great pleasure to warmly welcome you to the **26th Texas Children's Global Health Network Meeting**. We are honored to host this year's gathering and deeply grateful to our Houston colleagues for their close partnership in preparing a dynamic program.

This year's theme, **"Innovating Under Pressure: Creative Solutions Amid Resource Constraints,"** reflects our shared commitment to advancing healthcare delivery even in the most challenging contexts. The agenda is designed to foster meaningful exchange across key areas including HIV and tuberculosis innovation, maternal and neonatal health, adolescent care, quality improvement, and systems strengthening. Through workshops, oral and poster abstracts, and interactive discussions, we will explore topics such as the use of artificial intelligence in low-resource settings, holistic wellness for healthcare providers, navigating funding challenges, and strategies for cohesive collaboration when resources are limited.

We are especially excited to highlight voices from across our Network through oral abstract sessions and panel discussions, while also engaging in forward-looking conversations about sustainability and resilience. Beyond formal sessions, we look forward to strengthening the bonds that unite our Network through cultural exchange and moments of reflection.

Your active participation is essential to the success of this meeting. Together, we can harness creativity, solidarity, and determination to shape solutions that improve lives worldwide. A heartfelt thank you to each of you for your dedication, and to the Texas Children's Global Health team for their steadfast support in organizing this convening.

With gratitude,

Ana-Maria Schweitzer

Ana-Maria Schweitzer
Executive Director
Fundația Baylor Marea Neagră (Romania)
Baylor Black Sea Foundation

Conference Theme Overview

The theme of this year's Network Meeting, **"Innovating Under Pressure: Creative Solutions Amid Resource Constraints,"** highlights the resilience and creativity that drive our Network forward. Faced with global health challenges such as HIV, tuberculosis, maternal and child health, and emerging non-communicable diseases, we continue to pioneer approaches that maximize impact with limited resources. This meeting emphasizes collaboration, knowledge-sharing, and innovation, showcasing how diverse teams across the Network harness ingenuity, strengthen health systems, and deliver high-quality care in the most resource-constrained environments.

Conference Information

Scan QR to join the Plenary Microsoft Teams meeting

Location: Kopanong Hotel & Conference Centre, 243 Glen Gory Rd, Norton's Home Estates, Benoni, 1501, South Africa. Hybrid (In-person/Virtual).

Dress Code: Smart business casual.

Electricity: Load shedding may occur, but the hotel has a generator. Emergency lighting is available in all rooms.

Internet: Wi-Fi is available in meeting rooms, the lobby, and some guest rooms. Please limit use of Wi-Fi for streaming content such as videos or music to allow enough bandwidth for the conference.

Code of Conduct: Follow your Foundation's Code of Conduct. Professionalism is required.

Airport Shuttle: Meet the shuttle at O.R. Tambo Airport behind the InterContinental Hotel. If delayed, please contact:

- **Ms. Faith Biyela** (driver) - Phone: **+ 27 78 536 9895**; WhatsApp: **+27 71 398 9939**
- **Ms. Ratania Green** - WhatsApp: **+1 713 253 1849**
- **Dr. Brodus Franklin** - WhatsApp: **+1 281 799 5985**

Emergencies: **If for any reason you access emergency response services, remember to notify the Houston team as soon as possible.**

- **Important Contacts:** During the event, please use WhatsApp to reach the Romania and Houston host teams.
- Nationwide emergency (police): 10111
- Johannesburg Emergency Services: 011 375 5911 (International format: +27 11 375 5911)

Name	Title	Contact Number
Monica Frangeti	Financial Manager, Baylor Black Sea Foundation	+40 728 183 955
Cristina Marinescu	HR Officer, Baylor Black Sea Foundation	+40 721 869 896
Mihaela Bogdan	Program Manager, Baylor Black Sea Foundation	+40 735 553 045
Stefania Mihale	Program Manager, Baylor Black Sea Foundation	+40 735 553 044
Sanda Gabriela Murtaza	PR specialist, Baylor Black Sea Foundation	+40 735 511 078
Septa Negivan	Nurse, Baylor Black Sea Foundation	+40 735 553 052
Adam Gibson	Assistant Director, Texas Children's Global Health	+1 713 377 2802
Taylor Napier-Earle	Manager, Texas Children's Global Health	+1 713 410 6118
Heather Haq	CMO, Baylor Global Health	+1 608 466 0252
Bridgette Naik	Business Operations Director, Baylor Global Health	+1 832 266 8929
Brodus Franklin	Project Analyst, Texas Children's Global Health	+1 281 788 5985
Ratania Green	Senior Coordinator, Baylor Global Health	+1 713 253 1849
Cathy Namagambe	Senior Coordinator, Baylor Global Health	+1 713 444 1946

Agenda

Day	Event
Monday, 3 November	Executive Directors Forum (Invitation only) *Delegate Registration* Moderator Orientation (Invitation only) **Welcome Reception & Dinner**
Tuesday, 4 November	**Welcome & Official Opening: State of the Network** **Navigating Foreign Funding Cuts: Insights from Executive Directors** **Workshop:** Work Smarter, Not Harder: Practical AI for Everyday Healthcare in Low-Resource Settings **Oral Abstracts & Discussion:** Adolescent HIV Care and Quality Improvement: Empowering Youth and Communities **Oral Abstracts & Discussion:** Technology and Systems Innovation: Driving Efficiency and Sustainability in Global Health **Workshop:** Healing the Healers: Building Holistic Wellness and Coping with Secondary Trauma **Quality Improvement Community of Practice (QI CoP) Meeting** **Global Health Café: A Taste of Collaboration**
Wednesday, 5 November	**Workshop:** Navigating Difficult Conversations and Enhancing Clinical Care Through Effective Communication Skills **Oral Abstracts & Discussion:** Maternal, Neonatal, and Reproductive Health: Advancing HIV Care and Prevention **Poster Session 1** **Oral Abstracts & Discussion:** Expanding Horizons: Cross-Cutting Health Challenges and Innovations in Care **Workshop:** Smash the Silos! Working Cohesively When Resources are Tight **Clinical Chin Scratchers: Navigating Common but Complex Clinical Conundrums**
Thursday, 6 November	**Workshop:** Abstract to Publication **Oral Abstracts & Discussion:** Quality Improvement in Action: Strengthening Systems and Services Across Contexts **Poster Session 2** **Workshop:** Understanding How Thoughts, Feelings, and Actions Affect Patient Care: Using the Cognitive Behavioral Therapy (CBT) Triangle **Oral Abstracts & Discussion:** Innovations and Challenges in HIV Prevention, Treatment, and Resistance **Charting the Future: Closing Session of the 26th Network Meeting** **Network Meeting Overall Evaluation** **Group Photo** **Cultural Dinner, Dance, & Awards**
Friday, 7 November	**IAS Updates** **Workshop:** HIV Drug Resistance Basics for Clinical Providers

Detailed Agenda

Day	Time		
Monday, 3 November	9:00 - 16:00		
	16:00 - 16:30	**Delegate Registration** (Conference Center Lobby Area)	
	16:30 - 17:00		
	17:00 - 18:00		***Moderator Orientation** (Room: Cycad 4)
	18:00 - 20:00	**Welcome Reception & Dinner** **Speakers:** Mr. Michael B. Mizwa; Ms. Monica Frangeti (Mapogong Center)	

*Invitation only

Day	Time	
Tuesday, 4 November	7:00 - 8:00	**Breakfast**
	8:00 - 8:15	
	8:15 - 9:15	†‡**Welcome & Official Opening: State of the Network** **Speakers:** Mr. Michael B. Mizwa; Ms. Monica Frangeti, Mr. Karol Kras Meeting Reminders **Energizer**
	9:15 - 10:15	†‡**Navigating Foreign Funding Cuts: Insights from Executive Directors** **Speakers**: Dr. Mogomotsi Matshaba, Ms. Ana María Galvis, Ms. Khosi Dlamini, Dr. Lineo Thahane, Ms. Phoebe Nyasulu, Dr. Lumumba Mwita, Dr. Dithan Kiragga **Moderators**: Mr. Michael B. Mizwa; Dr. Heather Haq
	10:15 - 10:30	**Tea Break**
	10:30 - 12:00	†‡**Workshop**: Work Smarter, Not Harder: Practical AI for Everyday Healthcare in Low-Resource Settings **Moderator**: Ms. Nkosibonile Nkambule
	12:00 - 13:00	**Lunch**

Tuesday, 4 November	13:00 - 14:00	**Energizer** †‡**Oral Abstracts & Discussion**: Adolescent HIV Care and Quality Improvement: Empowering Youth and Communities Abstracts (8): 64, 66, 111, 141, 164, 170, 174, 193 **Moderators**: Dr. Jacqueline Kanywa- Balungi, Dr. John Farirai	
	14:00 - 15:15	†‡**Oral Abstracts & Discussion**: Technology and Systems Innovation: Driving Efficiency and Sustainability in Global Health Abstracts (8): 60, 104, 126, 156, 181, 183, 211, 219 **Moderators**: Dr. Julie Gastier-Foster, Ms. Stefania Mihale	
	15:15 - 15:30	**Tea Break**	
	15:30 - 16:30	†‡**Workshop**: Healing the Healers: Building Holistic Wellness and Coping with Secondary Trauma **Moderators**: Ms. Shalom Mangwa, Mr. Evan Hall, Ms.Happiness Minja, Dr. Evance Mgeyi, Dr. Lilian Komba	
	16:30 - 17:30	**Quality Improvement Community of Practice (QI CoP) Meeting**	*Global Health Café Booth Set Up*
	17:30 - 18:00		
	18:00 - 20:00	**Global Health Café: A Taste of Collaboration** (Dinner & Network Showcase)	

†Teams Webinar Available (https://bit.ly/GHNWM2025)
‡Spanish and Romanian Translation Available

Wednesday, 5 November	7:00 - 8:00	**Breakfast & Poster Hanging**
	8:00 - 8:15	
	8:15 - 9:45	**Energizer** †‡**Workshop:** Navigating Difficult Conversations and Enhancing Clinical Care Through Effective Communication Skills **Moderators:** Ms. Stefania Mihale, Ms. Mihaela Bogdan, Ms. Sewelo Sosome, Dr. Elizabeth Rodriguez, Dr. Khanh Linh Nguyen
	9:45 - 10:45	†‡**Oral Abstracts & Discussion:** Maternal, Neonatal, and Reproductive Health: Advancing HIV Care and Prevention Abstracts (8): 68, 88, 93, 129, 146, 190, 192, 207 **Moderators:** Dr. Chikondi Chiweza, Dr. Eunice Ketangenyi
	10:45 - 11:00	**Tea Break**

Wednesday, 5 November	11:00 - 12:00	**Poster Session 1** (Room: Cycad 1-2-3)
	12:00 - 13:00	**Lunch**
	13:00 - 14:00	**Energizer** †‡**Oral Abstracts & Discussion**: Expanding Horizons: Cross-Cutting Health Challenges and Innovations in Care Abstracts (8): 65, 79, 85, 97, 101, 116, 147, 186 **Moderators**: Dr. Mabene Tsotako, Dr. Josephine Denise Birungi
	14:00 - 15:30	†‡**Workshop:** Smash the Silos! Working Cohesively When Resources are Tight **Moderators:** Dr. Elizabeth Davis, Dr. Florence Anabwani-Richter
	15:30 - 15:45	**Tea Break**
	15:45 - 17:00	†‡**Clinical Chin Scratchers: Navigating Common but Complex Clinical Conundrums** **Speakers**: Dr. Rankin Kachingwe, Ms. Kholiwe Mbhamali, Dr. Kelvin Jobo, Dr. Ludo Molwantwa, Dr. Laone Tshweneetsile **Moderators:** Dr. Jacob Todd, Dr. Miriam Abadie, Dr. Teresa Steffy, Dr. Elizabeth Maidl, Dr. Alia Fikry
	17:00 - 18:00	
	18:00 - 19:00	**Dinner**

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‡Spanish and Romanian Translation Available

Thursday, 6 November	7:00 - 8:00	**Breakfast & Poster Hanging**
	8:00 - 8:15	
	8:15 - 9:45	**Energizer** †‡**Workshop**: Abstract to Publication **Speakers**: Dr. Heather Haq, Dr. Shubhada Hooli, Dr. Morgan Sekou
	9:45 - 10:45	†‡**Oral Abstracts & Discussion**: Quality Improvement in Action: Strengthening Systems and Services Across Contexts Abstracts (8): 55, 128, 130, 140, 155, 198, 204, 223 **Moderators**: Dr. Tamanda Hiwa, Dr. Dithan Kiragga
	10:45 - 11:00	**Tea Break**

Thursday, 6 November	11:00 - 12:00	**Poster Session 2** (Room: Cycad 1-2-3)
	12:00 - 13:00	**Lunch**
	13:00 - 14:30	†‡**Workshop**: Understanding How Thoughts, Feelings, and Actions Affect Patient Care: Using the Cognitive Behavioral Therapy (CBT) Triangle **Moderators**: Dr. Lilian Komba, Dr. Evance Mgeyi, Ms. Happiness Minja
	14:30 - 14:45	**Tea Break**
	14:45 - 15:45	†‡**Oral Abstracts & Discussion**: Innovations and Challenges in HIV Prevention, Treatment, and Resistance Abstracts (8): 56, 57, 72, 86, 153, 209, 215, 216 **Moderators**: Dr. Patricia Rhoda Ntege Nahirya, Dr. Carrie Cox
	15:45 - 16:15	†‡**Charting the Future: Closing Session of the 26th Network Meeting** **Network Meeting Overall Evaluation**
	16:15 - 16:30	**Group Photo**
	16:30 - 18:00	
	18:00 - 21:00	**Cultural Dinner, Dance, & Awards** *(Cultural dance and attire are optional)*

†Teams Webinar Available (https://bit.ly/GHNWM2025)
‡Spanish and Romanian Translation Available

Friday, 7 November	7:00 - 8:00	**Breakfast**
	8:00 - 8:15	
	8:15 - 8:45	†‡**IAS Updates** **Speakers**: Dr. Patricia Nahirya, Dr. John Farirai
	8:45 - 10:15	†‡**Workshop**: HIV Drug Resistance Basics for Clinical Providers **Moderators**: Dr. Katherine R. Simon, Mr. Alick Mazenga, Dr. Miriam Abadie, Dr. Carrie Cox
	10:15 - 12:00	
	12:00 - 13:00	**Lunch / Departures**

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‡Spanish and Romanian Translation Available

Oral Abstract Schedule

Session	ID #	Abstracts	Presenter
Adolescent HIV Care and Quality Improvement: Empowering Youth and Communities **Tuesday, 4 November** 13:00 - 14:00	**64**	Tanzanite Girls program: Empowering Adolescent Girls Living with HIV in Mwanza Tanzania	Eunice Ketangenyi
	66	Strength Through Empowerment: Lived Experiences of Adolescents Independently Accessing HIV Treatment at Baylor Foundation Lesotho, Mokhotlong Satellite Centre of Excellence (SCOE)	Matheo Ndaule
	111	Empowering Persons Living with HIV Networks and Data Use to Reduce Antiretroviral Therapy Interruptions in Mid-Western Uganda using a Community-Led Quality Improvement Approach.	Antony Kugonza
	141	Improvement In Completion of TB Preventive Therapy Among People Living with HIV In Phalombe District, Malawi: A CQI Project	Benjamin Jere
	164	Integrating Psychosocial Support and Smart Agriculture to Empower HIV-Positive Youth: The Wise Youth Program at Maseru COE, Lesotho	Isaac Andreas Boy
	170	Optimising Client-Centred Care through a Quality Improvement Coach Certification Program: Learnings from Eastern Uganda.	Richard Kyakuwa Jjuuko
	174	Parental Loss, Mental Health, and HIV Outcomes of Orphaned Adolescents Living with HIV at Baylor Children's Foundation Malawi	Emily Mwase
	193	Exploring Successes and Challenges of Transitioning Adolescents from pediatric to Adult HIV Care at Baylor Foundation Malawi Centre of Excellence	Tamanda Hiwa

Session	ID #	Abstracts	Presenter
Technology and Systems Innovation: Driving Efficiency and Sustainability in Global Health **Tuesday, 4 November** 14:00 - 15:15	**60**	Leveraging eCBSS Data for Geospatial Mapping of Tuberculosis Hotspots and Optimizing the Integrated TB Case Finding (CAST+) Intervention in Eastern Uganda	Clark Joshua Brianwong
	104	A digital training package leads to improved clinical outcomes in Malawi's index case testing program: A cluster randomized controlled trial	Tapiwa Tembo
	126	Empowering Data-Driven HIV Programming in Malawi; A Case Study of real-time data automation and utilization with Power BI dashboards	Albert Kaonga
	156	HIV Innovation in a Pinch: Utilizing Open Access Tools to Decrease Work Loads and Improve Efficiencies in a Resource Limited Setting	Miriam Abadie
	181	Safeguarding ART Continuity Amid National Supply Chain Disruption: A Rapid Last-Mile Logistics response for PNFP Facilities in Eastern Uganda	William Mutabaazi
	183	The Impact of the USAID stop work order on providing HIV testing services to pregnant women in Malawi	Peter Nyasulu
	211	Machine-Learning-Optimised Partner Index Testing in Lesotho: A Cost-Effectiveness Analysis Integrating LePHIA, DHS and Programme Data	Tseliso Marata
	219	Evaluation of Digital Data Collection Tools on Monitoring and Reporting Health Programs Lesotho	Tseliso Marata

Session	ID #	Abstracts	Presenter
Maternal, Neonatal, and Reproductive Health: Advancing HIV Care and Prevention **Wednesday, 5 November** 9:45 - 10:45	**68**	Improving Neonatal Outcomes Through Kangaroo Mother Care: Implementation Experience from Area 25 Community Hospital, Malawi	Mwayi Kazembe
	88	Optimizing PrEP uptake Among Pregnant and Breastfeeding Women: Best Practices and Lessons from Baylor Foundation Malawi Tingathe Program Supported Facilities Across Five Districts in Malawi from 2022- 2025.	Joseph Magaleta
	93	Scale-up of Human Papilloma Virus (HPV) Triage for Cervical Cancer Screening for Women Living with HIV in Mangochi District, Malawi	Chisomo Imfaitenga
	129	Between Facts and Myths: Assessing HIV Knowledge Gaps Among Youth in the Sauti Ya Vijana Program	Lilian Komba
	146	Evaluation of Hepatitis B Testing Coverage and Yield Among Pregnant Women Accessing Antenatal Care Services in Five Districts in Malawi	Victor Guzani
	190	Mother to Child Transmission of HIV: A Descriptive Study of HIV Positive Infants Diagnosed in Public Health Facilities in Eastern Uganda Between January 2022 and December 2024.	Charles Amaku
	192	Determinants of Detectable Viral Load Among Pregnant and Breastfeeding Women in Routine HIV Care and Prevention at Baylor Centre of Excellence, Mwanza, Tanzania	Evance Mgeyi
	207	Engaging peers and district-led mentorships to accelerate HIV, Syphilis, and Hepatitis-B testing among pregnant women attending ANC1 at 156 health facilities in Rwenzori, Uganda.	Mary Mugabekazi

Session	ID #	Abstracts	Presenter
Expanding Horizons: Cross-Cutting Health Challenges and Innovations in Care **Wednesday, 5 November** 13:00 - 14:00	**79**	SCALE-ing Hope in Kayunga: Transforming Sickle Cell Care from Birth Onward through a Health Systems Strengthening Model	Angella Mirembe
	85	Diagnostic Stewardship as a Catalyst for AMR Control Strategies: Lessons from Uganda in Optimizing Test Utilization and Antibiotic Use	Robert Majwala
	97	Struggle for Dignified Pediatric Palliative Care in Rural Botswana	Sewelo Sosome
	101	Transforming Drug Resistance Tuberculosis Care: Success of a Fully Ambulatory Model During a Tuberculosis Outbreak in Namisindwa district, Uganda	Clark Joshua Brianwong
	116	Shadows That Linger: Psychological and Cultural Dimensions of Maternal Grief After Pediatric Palliative Loss in Botswana	Sewelo Sosome
	147	Retrospective Study Assessing Hypertension Prevalence and Associated Risk Factors among Adolescent and Young Persons Living with HIV in the Post-COVID-19 Period at Baylor Foundation Uganda Center of Excellence.	Victoria Ndyanabagi
	186	Integrating lay health worker-supported blood pressure screening into routine HIV care identifies people with hypertension and links them to care at health facilities in Malawi	Alick Mazenga

Session	ID #	Abstracts	Presenter
Quality Improvement in Action: Strengthening Systems and Services Across Contexts **Thursday, 6 November** 9:45 - 10:45	**55**	Enhancing comfort and support for paediatric cancer patients and their guardians through clean and safe Hospital Environments: A Quality Improvement Initiative at Kamuzu Central Hospital, Malawi	Memory Sebantini
	128	Viral Suppression Among Children and Adolescents Living with HIV (CALHIV) in Eastern Uganda: The Applications of Selected Components of Chronic Care Model (CCM) to Improve Viral Suppression in Challenging Age Sub-population.	Charles Amaku
	130	Enhancing Voluntary Medical Male Circumcision Service Quality in Mubende Region, Uganda: A Local Government-Led Approach	Henry Kalungi
	155	More Than a Pilot: Lesotho QI Basics Course Takes Flight	Retselisitsoe Mahlaha
	198	Expert Consensus on Quality Measures for the Management of Severe Malaria Complications in Children Under Five in Sub-Saharan Africa: A Modified Delphi Study	Elizabeth Davis
	204	Innovation in Data Management for Social Impact: How Baylor Colombia Foundation Revolutionizes Its Processes and Expands Its Reach	Diego Salguero Mendivelso, Maritza Medina Ramirez
	223	Scaling Up Quality Improvement Amid Resource Constraints: Leveraging Technology, Local Expertise, and Inter-Network Collaboration for Impact	Florence Anabwani

Session	ID #	Abstracts	Presenter
Innovations and Challenges in HIV Prevention, Treatment, and Resistance **Thursday, 6 November** 14:45 - 15:45	**56**	Integrase Inhibitor Resistance Among Children, Adolescents and Young People Living with HIV in Sub-Saharan Africa: A Descriptive Case Series from 4 Pediatric HIV Centers of Excellence	Katie Simon
	57	Prevalence and Factors associated with Dolutegravir resistance among Children and Adolescents living with HIV in Mid-Western Uganda: A Cross-Sectional Analysis.	Antony Kugonza
	72	U=U: A Simple Equation Changes Patients' live - Baylor Clinic of Excellence, Constanta, Romania	Gabriela Murtaza
	86	Integration of Targeted Next Generation Sequencing (tNGS) into Routine Diagnostic and Clinical care: Lessons learnt from Eswatini.	Debrah Vambe
	153	Using Non-Communicable Diseases' Champions to Improve Screening and Management in HIV Settings: Lessons learnt from Baylor Fortportal-Mubende Program.	Henry Kalungi
	209	Increasing Pre-exposure Prophylaxis (PrEP) Methods to Widen Choice for Users in Lesotho: Cabotegravir Long-Acting Injectable Introduction	Mabene Tsotako
	215	Temporal Effects of community-based PrEP initiations: An Interrupted Time Series analysis.	Motlatsi Letsika
	216	Psychological impact of the temporary United States Government suspend-work order, on people living with HIV and health care workers in Mokhotlong.	Makatleho Sejana

Poster Sessions

Poster Session 1

Wednesday, 5 November 2025

Category	Posterboard #	ID#: Title	Presenter
Category 1: HIV Program Implementation & Outcomes	1	30: Reducing Interruption in Treatment among People Living with HIV Through an Integrated Approach: Lessons from Mid-Western Uganda	Henry Kalungi
	2	59: Significant Decline in Rates of HIV-Related Cancers in Malawian Children with Widespread Access to Antiretroviral Therapy, 2010-2024	*No Presenter*
	3	70: Conclusions after 8 Years of BCG Vaccination Project for HIV-Exposed Children at Baylor Romania – 2017-2025	Stefania Mihale
	4	82: Transition from DBS to Plasma collection for VL monitoring in rural Phalombe, Malawi: preliminary lessons from real-world implementation.	Alick Mazenga
	5	83: A Systematic Approach to Improve HIV Prophylaxis Uptake in High-Risk Infants at a Rural Health Facility in Phalombe District.	Carrie Cox
	6	105: Assessing fidelity to index case testing protocol in a cluster Randomized Controlled Trial to improve HIV case finding	Tapiwa Tembo
	7	108: Retention in HIV care at a health facility severely impacted by Cyclone Freddy in Phalombe District, Malawi: A look 18 months post-cyclone	Katie Simon
	8	119: Optimizing Tuberculosis Testing Through Usage of Novel Screening Approaches in Children and Adolescent Living with HIV (CALHIV) at Baylor Malawi COE Clinic	Chisomo Kutengule
	9	133: Assessing the effects of the COVID-19 pandemic on PMTCT Outcomes at an HIV Clinic in Kampala, Uganda	Elizabeth Maidl
	10	163: Young Mothers Support Group at Baylor Foundation Lesotho COE: A Scalable Model for Psychosocial and Economic Empowerment in HIV Care	*No Presenter*
	11	172: Evaluating the Impact of a Support Group Initiative on Virologic Suppression in Children Under Five Living with HIV at the Baylor Malawi COE	Kelvin Jobo

Category	Posterboard #	ID#: Title	Presenter
Category 2: Adolescent HIV Prevention and Empowerment	12	63: Empowering Adolescent Girls Through Integrated SRHR and HIV Care in Mwanza, Tanzania	Eunice Ketangenyi
	13	89: Intellectual Disability: A Gap in Reaching HIV Epidemic Control Amongst Adolescents and Young Adults at Baylor (BBCCCOE), Gaborone, Botswana	Evan Hall
	14	92: Evaluating the Impact of Community-Based ART Distribution on Teen Club Clinic Attendance among Adolescents Living with HIV: A Case Study in Salima District	Albert Kaonga

	15	152: Age of Full Disclosure Among Adolescents Living with HIV at Botswana-Baylor Children's Clinical Centre of Excellence (BBCCCOE)	Linh Nguyen
	16	154: An Integrated Community-Based HIV Prevention and Treatment Initiative for Adolescent Girls and Young Women in Lesotho.	*No Presenter*
	17	176: Equipping Adolescents with Cooking Skills through Cooking Demonstrations at Teen Clubs	Rankin Kachingwe
	18	196: Adolescent HIV prevention and SRH Empowerment: Building Resilience and Creating Opportunities for AGYW in Songwe region, Tanzania (aHERO Project).	Evance Mgeyi
	19	212: Engaging Young People as Community Healthcare Providers to Increase Reach and Access of HIV prevention, Care and Treatment Services to the "Missing Populations".	Motlatsi Letsika
	20	213: Exploring the Impact of Evidence-Based Interventions on HIV Prevention Uptake Among Adolescents, Young People, and Men in Lesotho	Motlatsi Letsika

Category	Posterboard #	ID#: Title	Presenter
Category 3: Pediatric Oncology, Palliative Care, & Community Health	**21**	94: Whispers of the Beyond: Exploring the Spiritual Experiences of Children Nearing End-of-Life with a Cancer Diagnosis in Botswana	Sewelo Sosome
	22	96: Anticipating Loss: The Critical Role of Palliative Care Clinics in Navigating Anticipatory Grief and End-of-Life Adjustment for Patients and Families	Sewelo Sosome
	23	98: Bridging Ethical Tensions: Negotiating Consent and Compassion using Routine Palliative care counselling in Mitigating Caregiver resistance to Pediatric End of life support in Botswana	Sewelo Sosome
	24	115: Learning Interrupted: The Educational and Psychosocial Impact of Paediatric Cancer Treatment in Botswana – A Clinical Social Work Perspective	Sewelo Sosome
	25	144: Translating and Validating a Caregiver Stress Tool to Address Family Stressors and Prevent Treatment Abandonment in Malawi	*No Presenter*
	26	145: A Decade of Retinoblastoma Care in Lilongwe, Malawi (2015–2025): Outcomes and Challenges.	*No Presenter*
	27	150: Assessing Paediatric HIV Knowledge Among Medical Interns Rotating at Botswana-Baylor Children's Clinical Centre of Excellence (BBCCCOE)	Elizabeth Rodriguez
	28	169: Catalyzing Change: The Impact of the D43 Siyakhula Child Health Applied Research Training Approach on Pediatric TB/HIV Research and Capacity Building in Eswatini	Nontobeko Dlamini
	29	182: Planting Sustainability by Empowering Households with Fruit Trees, Vegetable Seeds, and Watering Cans.	Hazel Lakudzala
	30	206: Innovative Aquaponics for Food Security in Indigenous Wayuu Communities of La Guajira, Colombia	Rafael Arrieta Jimenez

Category	Posterboard #	ID#: Title	Presenter
Category 4: Technology-Enabled Care Optimization	31	58: Weather-Informed Electronic Scheduling System to Improve Clinic Attendance and Retention of Care in Eswatini.	Phumzile Dlamini
	32	123: GIS Informed Targeting to Optimize HIV Case Finding in Eastern Uganda	Clark Joshua Brianwong
	33	134: Utilizing Health Information Systems (HIS) to increase quality data availability and access for the HIV/AIDS epidemic response in the Bunyoro Region	Antony Kugonza
	34	135: Building Resilient and Efficient Laboratory Systems Through the Technical Assistance Teams Strategy at Public Health Facilities in the Fort Portal, Mubende and Bunyoro Regions, Uganda	Henry Kalungi
	35	175: Performance Evaluation of GeneXpert HIV-1 Viral Load Assay Against COBAS 5800 in a Clinical Laboratory Setting	Bhekisisa Mavimbela
	36	180: Enhanced HIV Testing Services Data Management through ScanForm Technology in Malawi.	Albert Kaonga

Poster Session 2

Thursday, 6 November

Category	Posterboard #	ID#: Title	Presenter
Category 5: Quality Improvement Initiatives	1	14: Improving Compliance with Healthcare Waste Segregation at Mengo Hospital, Kampala, Uganda Feb-July 2024	Robert Majwala
	2	53: Quality Improvement Initiative to Strengthen Referral for Pediatric Cancer Patients Through Training, Mentorship, and Establishment of WhatsApp Consultation Platform in Lilongwe, Malawi.	*No Presenter*
	3	61: Digitization of Tuberculosis Data Through a Quality Improvement Approach: Implementation of the Electronic Case-Based TB Surveillance System in 155 Health Facilities in Uganda	Clark Joshua Brianwong
	4	71: Optimising Community-Based Cervical Cancer Treatment Among Women Living with HIV aged 25-49 years Diagnosed with Cervical Pre-Cancerous Lesions in Bunyoro Region, Uganda.	Antony Kugonza
	5	80: Improving Routine VL Result Timeliness from Kamuzu Central Hospital to Baylor Malawi Centre of Excellence	Dereck Phiri
	6	84: Improving Maternal HIV Re-Testing Coverage at Critical Time-points during Pregnancy and Postpartum in Rural Uganda: A District-Led Quality Improvement Initiative	Antony Kugonza
	7	106: Interventions to Improve Data Capture for Point of Care Viral Load and Early Infant Diagnosis in a National Data System: A Case of Baylor Foundation Uganda COE	Jacqueline Balungi Kanywa
	8	122: Tripling TB Case Detection among PLHIV: A Quality Improvement Initiative Optimising C-Reactive Protein and Symptom-Based Screening in Eastern Uganda	Clark Joshua Brianwong

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	18	143: Optimizing viral suppression among non-suppressed PLHIV in the Bunyoro region through implementing an integrated community service delivery model.	Richard Kyakuwa Jjuuko
	19	160: Integrated Disease Management: Exploring the TB-HIV Nexus Among Ugandan Children and Adolescents	Jacqueline Balungi Kanywa
	20	162: Resilient Continuity: Relocating Adolescent Services from Queen Mamohato Memorial Hospital to Maseru Centre of Excellence (COE)	Mookho Masotsa
	21	194: Advancing Health Outcomes for HIV and Non-Communicable Disease Patients through Integrated Chronic Care Clinics: Lessons from Bunanpongo HC III and Bufumbo HC IV	Clark Joshua Brianwong
	22	195: Application of Precision Targeting Strategy to Enhance Identification of HIV and TB Cases in High-Risk Rural Uganda: Lessons from Bulambuli District.	Clark Joshua Brianwong
	23	199: Impact of Highly Engaged Community Advisory Board (CAB) on Research and Health Awareness in the Community: The Baylor Foundation Uganda's (BFU) Experience	Victoria Ndyanabagi
	24	217: Integration of HIV/TB and Non-Communicable Diseases (NCDs) Using a Primary Health Care Approach	Makatleho Sejana

	25	221: Seasonality Analysis of PrEP Enrollment and ANC Attendance: Strategic Insights for Enhanced HIV Prevention Programming	Tseliso Marata
	26	222: Resuscitating the Health Centre Advisory Committee at St Peters Health Centre; The Importance of Community Involvement in Health Systems Strengthening	Makatleho Sejana, Mabene Tsotako

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Category 7: Cervical Cancer & Reproductive Health	**27**	12: Bridging the Gap through Providing Targeted Community Outreach Mobile for Cervical Cancer Screening and Treatment Among High-Risk Women	Philisiwe Dlamini
	28	13: Integrating Psychosocial Care into Early Cervical Cancer Prevention at Community Outreach Mobile Clinic: Focus on Positive Precancerous Lesions	Philisiwe Dlamini
	29	73: Prevalence of High-Risk Human Papillomavirus for Cervical Cancer and Associated Factors Among HIV-Positive Women at Kagadi Hospital, Kagadi District.	Antony Kugonza
	30	177: Supporting Menstrual Hygiene Management for Adolescent Girls	Emily Mwase
	31	201: A Cross-Sectional Review of VIA Negative, HPV Positive Cervical Screening Results at Baylor Foundation Eswatini COE	Wonder Nxumalo
	32	205: Bridging Cultures to Enhance Contraceptive Acceptance: The Case of Subdermal Implants among Wayuu Women in La Guajira	Rebeca Vanegas Lopez
	33	210: Targeted Screening for Cervical Cancer: Introduction of Human Papilloma virus (HPV) testing at Baylor – Maseru COE	Mabene Tsotako
	34	218: Primary prevention of Cervical Cancer through HPV vaccination in Butha-Buthe, Mokhotlong and Maseru COE.	Makatleho Sejana

Participants

First name	Last Name	Title	Email
Botswana			
Mogomotsi	Matshaba	Executive Director	matshaba@bcm.edu
John	Farirai	Associate Director	jtfarirai@baylorbotswana.org.bw
Evan	Hall	Princeton in Africa Fellow	evanjdhall@gmail.com
Shalom	Mangwa	Laboratory Scientist	Smangwa@baylorbotswana.org.bw
Clins	Mmunyane	Nurse Prescriber	cmmunyane@baylorbotswana.org.bw
Ludo	Molwantwa	Acting Director PHO	Lmolwantwa@baylorbotswana.org.bw
Khanh Linh	Nguyen	GH Resident	khanh.nguyen@bcm.edu
Elizabeth	Rodriguez	GH Resident	elizabeth.rodriguez2@bcm.edu
Tinaye	Seosenyeng	Pharmacist	tinayes@baylorbotswana.org.bw
Sewelo	Sosome	Social Worker	sewelos@baylorbotswana.org.bw
Laone	Tshweneetsile	Medical Officer	ltshweneetsile@baylorbotswana.org.bw
Colombia			
Ana Maria	Galvis Serrano	Executive Director	Directora@fundacionbaylorcolombia.org
Maritza	Medina Ramirez	Accounting and financial coordinator	Administrador@fundacionbaylorcolombia.org
Rafael	Arrieta Jimenez	Productive Project Coordinator	ProyectosProductivos@fundacionbaylorcolombia.org
Michel	Castaño Muñoz	Nutritionist	Nutricion3@fundacionbaylorcolombia.org
Diego	Salguero	Official information	oficialinformacion@fundacionbaylorcolombia.org
Rebeca	Vanegas Lopez	Head nurse	Enfermeria2@fundacionbaylorcolombia.org
Eswatini			
Makhosazana	Dlamini	Executive Director	khosi.d@baylorfoundationeswatini.org
Florence	Anabwani	Clinical Director	florence.a@baylorfoundationeswatini.org
Miriam	Abadie	GHC	miriam.abadie@bcm.edu
Philisiwe	Dlamini	Program Manager	philisiwe.d@baylorfoundationeswatini.org
Sandile	Dlamini	M&E Manager	sandile.d@baylorfoundationeswatini.org
Phumzile	Dlamini	Global TB Senior Research Manager	phumzile.d@baylorfoundationeswatini.org
Bhekisisa	Mavimbela	Laboratory Technician	bhekisisa.m@baylorfoundationeswatini.org
Kholiwe	Mbhamali	Staff Nurse	kholiwe.m@baylorfoundationeswatini.org
Babongile	Nkala	Global TB Senior Research Manger	babongile.n@baylorfoundationeswatini.org
Nkosibonile	Nkambule	Staff Nurse	nkosibonile.n@baylorfoundationeswatini.org
Wonder	Nxumalo	Staff Nurse	wonder.n@baylorfoundationeswatini.org

Lesotho			
Lineo	Thahane	Executive Director	lthahane@baylorlesotho.org
Andreas Boy	Isaac	Medical Director	aisaac@baylorlesotho.org
Motlatsi	Letsika	Project Manager	mletsika@baylorlesotho.org
Retselisitsoe	Mahlaha	Pharmacist	rmahlaha@baylorlesotho.org
Tseliso	Marata	Strategic Information Lead	tmarata@baylorlesotho.org
Matheo	Ndaule	Social Worker	mndaule@baylorlesotho.org
Makatleho	Sejana	Health Systems Strengthening Advisor	msejana@baylorlesotho.org
Teresa	Steffy	GHC	tfsteffy@bcm.edu
Mabene	Tsotako	Technical Director	mtsotako@baylorlesotho.org
Malawi			
Phoebe	Nyasulu	Executive Director	pnyasulu@baylor-malawi.org
Tamanda	Hiwa	Clinic Director	thiwa@baylor-malawi.org
Chikondi	Chiweza	Maternal & Neonatal Medical Director	cchiweza@baylor-malawi.org
Katie	Simon	Tingathe Program Medical Director	ksimon@tingathe.org
Tapiwa	Tembo	Scientific Investigator	ttembo@tingathe.org
Aubrey	Chirwa	Senior ICT Officer	achirwa@baylor-malawi.org
Carrie	Cox	Senior Medical Advisor	ccox@tingathe.org
Alia	Fikry	GHC	alia.fikry@bcm.edu
Victor	Guzani	Monitoring & Evaluation Officer	vguzani@tingathe.org
Chisomo	Imfaitenga	Advanced HIV Disease Provider	cimfaitenga@tingathe.org
Benjamin	Jere	Assistant Data Officer	bjere@tingathe.org
Morgan	Jibowu	Postdoctoral Associate	morgan.jibowu@bcm.edu
Kelvin	Jobo	Clinical Officer	kjobo@baylor-malawi.org
Rankin	Kachingwe	Clinical Officer	rkachingwe@baylor-malawi.org
Deborah	Kamlongera	Obstetrician / Gynaecologist	dmzikamanda@baylor-malawi.org
Albert	Kaonga	Senior M&E Officer	akaonga@tingathe.org
Mwayi	Kazembe	Medical Officer	mkazembe@baylor-malawi.org
Chisomo	Kutengule	Lab Coordinator	ckutengule@baylor-malawi.org
Hazel	Lakudzala	Clinic Receptionist	hlakudzala@baylor-malawi.org
Alick	Mazenga	Psychosocial & Research Services Mgr	amazenga@tingathe.org
Daniel	Muller	GH Resident	mailto:daniel.muller@bcm.edu
Emily	Mwase	Social Worker	emwase@baylor-malawi.org
Peter	Nyasulu	District Coordinator	peternyasulu@tingathe.org
Brigid	O'Brien	GHC	Brigid.O'Brien@bcm.edu
Dereck	Phiri	Laboratory Technician	dphiri@baylor-malawi.org

Memory	Sebantini	Assistant PHO Nurse leader	msabantini@baylor-malawi.org
Romania			
Monica	Frangeti	Financial Manager	mfrangeti@baylor-romania.ro
Cristina	Marinescu	HR officer	hr@baylor-romania.ro
Mihaela	Bogdan	Program Manager	mbogdan@baylor-romania.ro
Stefania	Mihale	Program Manager	smihale@baylor-romania.ro
Gabriela	Murtaza	PR specialist	pr@baylor-romania.ro
Septa	Negivan	Nurse	nseptar@baylor-romania.ro
Tanzania			
Lumumba	Mwita	Executive Director	lmwita@baylorfoundationtanzania.or.tz
Eunice	Ketangenyi	Deputy Techinical Director/LZ	eketang@baylorfoundationtanzania.or.tz
Lilian	Komba	Deputy Techinical Director/SHZ	lkomba@baylorfoundationtanzania.or.tz
Evance	Mgeyi	Regional Program Officer	emgeyi@baylorfoundationtanzania.or.tz
Happiness	Minja	Peer Educator	hminja@baylorfoundationtanzania.or.tz
Uganda			
Dithan	Kiragga	Executive Director	dkiragga@baylor-uganda.org
Jacqueline	Kanywa- Balungi	Clinic Manager	jbalungi@baylor-uganda.org
Charles	Amaku	Pediatric & Adolescent Officer	camaku@baylor-uganda.org
Josephine	Birungi	Director Medical Programs	dbirungi@baylor-uganda.org
Joshua	Clark	TB/HIV Specialist	jbrianwong@baylor-uganda.org
Richard	Jjuuko	QI & Performance Manager	rjjuuko@baylor-uganda.org
Henry	Kalungi	VMMC/IPC Coordinator	hkalungi@baylor-uganda.org
Loiusa	Kiggwe	PR, Advocacy & Communications Mgr	lkiggwe@baylor-uganda.org
Antony	Kugonza	Community M&E Officer	kantony@baylor-uganda.org
Elizabeth	Maidl	GHC	maidl@bcm.edu
Robert Kaos	Majwala	Project Manager, GHS	rmajwala@baylor-uganda.org
Angella	Mirembe Nanteza	Paediatrician	amirembe@baylor-uganda.org
Mary	Mugabekazi	HTS/PMTCT coordinator	mmugabekazi@baylor-uganda.org
William	Mutabaazi	Mgr, Supply Chain Management	wmutabaazi@baylor-uganda.org
Patricia	Nahirya	Research Director	pnahirya@baylor-uganda.org
Kobusingye	Ndyanabangi	Study Medical Officer	vndyanabangi@baylor-uganda.org
Jennifer	Zungu Mugisha	Director, Global HOPE (Uganda)	jzungu@jcrc.org.ug
Ukraine			
Karol	Kras	Consultant	karolmkras@gmail.com

USA			
Michael	Mizwa	Director, TCGHN and CEO, BCMGH	mmizwa@bcm.edu
Adam	Gibson	Assistant Director, TCGHN	abgibson@texaschildrens.org
Julie	Gastier-Foster	Medical Director of Global Pathology	jxgastie@texaschildrens.org
Taylor	Napier-Earle	Manager, Global Health	tlnapier@texaschildrens.org
Bridgette	Naik	Director, Business Operations	bcnaik@bcm.edu
Heather	Haq	Chief Medical Officer	Heather.haq@bcm.edu
Sue	Torrey	Associate Professor	susan.torrey@bcm.edu
Brodus	Franklin	Project Analyst, Global Health	bafrankl@texaschildrens.org
Ratania	Green	Senior Coordinator, Business Ops	ratania.green@bcm.edu
Cathy	Namagambe	Senior Coordinator, Business Ops	Cathy.Namagambe2@bcm.edu
Carlton	Mamo	Intern/Aide	Carlton.Mamo@bcm.edu
Elizabeth	Davis	Assistant Professor	elizabeth.davis2@bcm.edu
Shubhada	Hooli	Assistant Professor	hooli@bcm.edu
Stephanie	Marton	Associate Professor	marton@bcm.edu
Nadia	Rahman	Monitoring and Evaluation Consultant	nadia.rahman@bcm.edu
Neha	Dhawan	GH Resident	neha.dhawan@bcm.edu
Sara	Yasrebi	GH Resident	Sara.yasrebi@bcm.edu
Nicolas	Flores	GH Resident	Nicolas.Flores@bcm.edu
Kia	Quinlan	GH Resident	Kia.quinlan@bcm.edu

Oral Abstracts

Adolescent HIV Care and Quality Improvement: Empowering Youth and Communities

64: Tanzanite Girls program: Empowering Adolescent Girls Living with HIV in Mwanza Tanzania

Eunice Ketang'enyi, Douglas Mayaya, Nicholaus Martine, Lumumba Mwita

Background: Adolescent girls and young women (AGYW) aged 12 to 17 living with HIV in Tanzania face layered challenges that compromise their wellbeing, including pervasive stigma, limited access to adolescent-centered health services, and psychosocial vulnerabilities. While national HIV efforts have advanced, many programs fall short in addressing the unique developmental and emotional needs of AGYW. A situational analysis revealed that clinics in regions like Mwanza lack comprehensive adolescent sexual and reproductive health (SRH) and psychosocial services, highlighting a critical gap. In response, the Tanzanite Girls Program was introduced, adapted from a proven model developed by Baylor Botswana. This initiative aims to empower AGYW with life skills, promote self-worth, and foster supportive environments—through enhanced communication with caregivers—to improve long-term health and resilience.

Program Description: The Tanzanite Girls Program is delivered through structured, interactive sessions at Baylor's Centers of Excellence in Tanzania. Designed for adolescent girls and young mothers living with HIV, the program offers a safe, inclusive space to explore personal, emotional, and health-related challenges. Sessions cover life skills, puberty, menstrual hygiene, early pregnancy, relationships, gender-based violence, and sexual health, with a strong emphasis on psychosocial support. Through storytelling, discussions, and peer mentorship, the program builds emotional resilience, self-awareness, and communication, reducing isolation and promoting solidarity. Caregiver engagement strengthens family bonds, and participants are trained to recognize and respond to abuse. The program is culturally and linguistically adapted to local contexts.

Evaluation and Outcomes: Over four years, the Tanzanite Girls Program has reached 573 adolescent girls, with clear signs of positive change. Participants report greater self-confidence, improved emotional wellbeing, better communication with caregivers, and stronger adherence to ART. There has also been a noticeable increase in SRHR service uptake. Many girls have returned as peer mentors, reinforcing a cycle of leadership and community impact. These outcomes, gathered through participant surveys, facilitator feedback, and observational data, support global evidence on the power of psychosocial interventions in improving the health and social outcomes of HIV-affected youth.

Lessons Learned: Creating safe, inclusive spaces where girls can share freely has been vital in building trust, resilience, and a sense of belonging. The peer-led model has deepened engagement and promoted community ownership. However, challenges remain in ensuring quality as the program grows—particularly in training new facilitators and sustaining mentorship. Strengthening data systems for long-term tracking is also a priority.

Next Steps: The program aims to expand to more underserved areas and integrate modules on digital literacy and economic empowerment to address emerging needs. Stronger partnerships with government, civil society, and youth networks will support institutionalization and scale-up. With modest investment and community-driven momentum, Tanzanite Girls offers a sustainable, adaptable model for supporting adolescent girls living with HIV in Tanzania and beyond.

66: Strength Through Empowerment: Lived Experiences of Adolescents Independently Accessing HIV Treatment at Baylor Foundation Lesotho, Mokhotlong Satellite Centre of Excellence (SCOE)

'Matheo Philadel Ndaule, Shubhada Hooli, Dr. Patrice Zinga Kiuvu, Mpho Lehloma, Dr Mamello Sekese, Dr Lineo Thahane

Background: Adherence to antiretroviral therapy (ART) is essential for achieving viral suppression and improving health outcomes among adolescents living with HIV. However, in rural Lesotho, many adolescents continue to face major adherence challenges due to psychosocial issues such as orphanhood, caregiver instability, and food insecurity - factors that increase the risk of treatment failure. At the BCMCF-L Mokhotlong SCOE, the incorporation of empowerment counselling into ongoing adherence counselling has led to significant improvements. Adolescents, regardless of consistent treatment support, are now showing better outcomes, with current program data reflecting 98% adherence and 93% viral suppression among the adolescents.

Methodology: A prospective qualitative study was conducted to understand the lived experiences of HIV-positive adolescents who have been empowered to self-manage ART in the absence of consistent treatment support. **Semi-structured interviews and focus group discussions** were used to collect data from 31/127 adolescents who took part in both interviews and discussions. Participants were purposively selected based on the following criteria: aged 10–19 years, living with HIV, currently on ART, and empowered to independently self-administer medication for over six months.

Interviews and discussions were held in a safe, confidential setting using flexible guides and Sesotho to explore participants' lived experiences post-empowerment, focusing on changes in their well-being, decision-making, challenges faced, strategies used, sources of empowerment, and treatment ownership. Translations and transcriptions then followed. Thematic analysis was used to identify recurring patterns, themes, and insights from the narratives, allowing for a comprehensive understanding of the adolescents' lived experiences and perspectives.

Results:

- **Empowerment Drives Autonomy**: Post-empowerment, adolescents reported greater confidence in managing their treatment, with improved decision-making around medication, appointments, and daily responsibilities. They expressed a stronger sense of accountability and ownership over their health, viewing ART adherence as a personal commitment rather than a duty. Many also noted a positive shift in their overall well-being, feeling more in control, motivated, and hopeful about their future. Empowerment not only enhanced their treatment habits but also positively impacted their lives in general.
- **Psychosocial Support is Critical**: Despite lacking caregiver support, adolescents relied on empowerment counselling and strategies like alarms, peer support, and daily routine integration to maintain adherence. Learning from peers encouraged them, highlighting the potential for peer-led support systems.
- **Social Circumstances Still Affect Adherence**: Despite empowerment efforts, socio-economic factors such as poverty, food insecurity, and lack of transport continued to impact follow-up visits and adherence consistency.

Conclusion: Understanding the experiences of empowered adolescents was critical for strengthening adolescent-centered HIV care models.

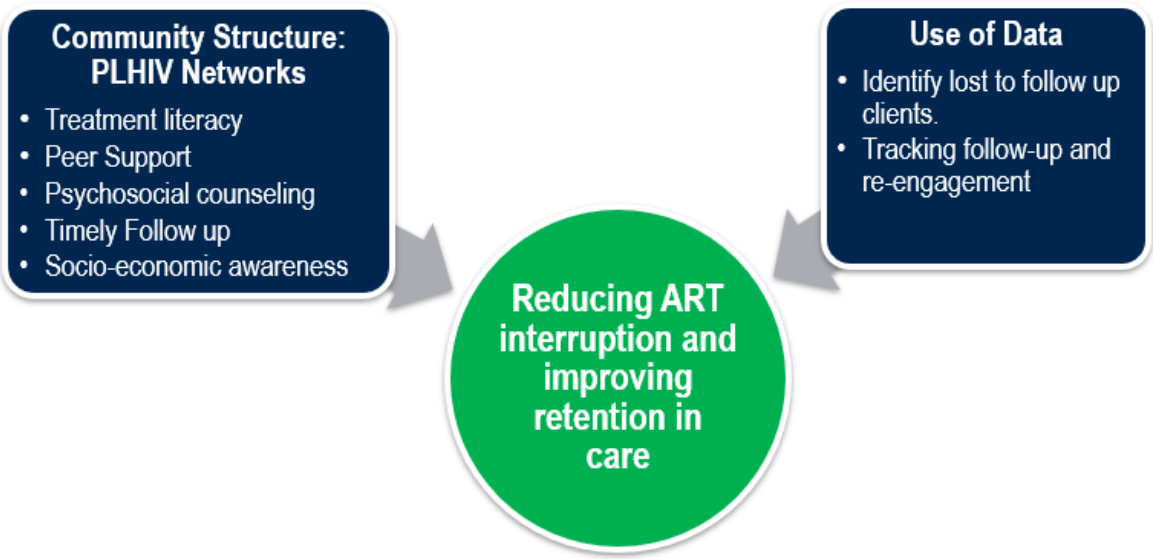
Recommendation: Incorporate empowerment counselling and peer-led interventions into adolescent care services at rural clinics. A structured program addressing socio-economic factors that affect HIV-positive adolescents is pivotal for their overall well-being.

111: Empowering Persons Living with HIV Networks and Data Use to Reduce Antiretroviral Therapy Interruptions in Mid-Western Uganda using a Community-Led Quality Improvement Approach.

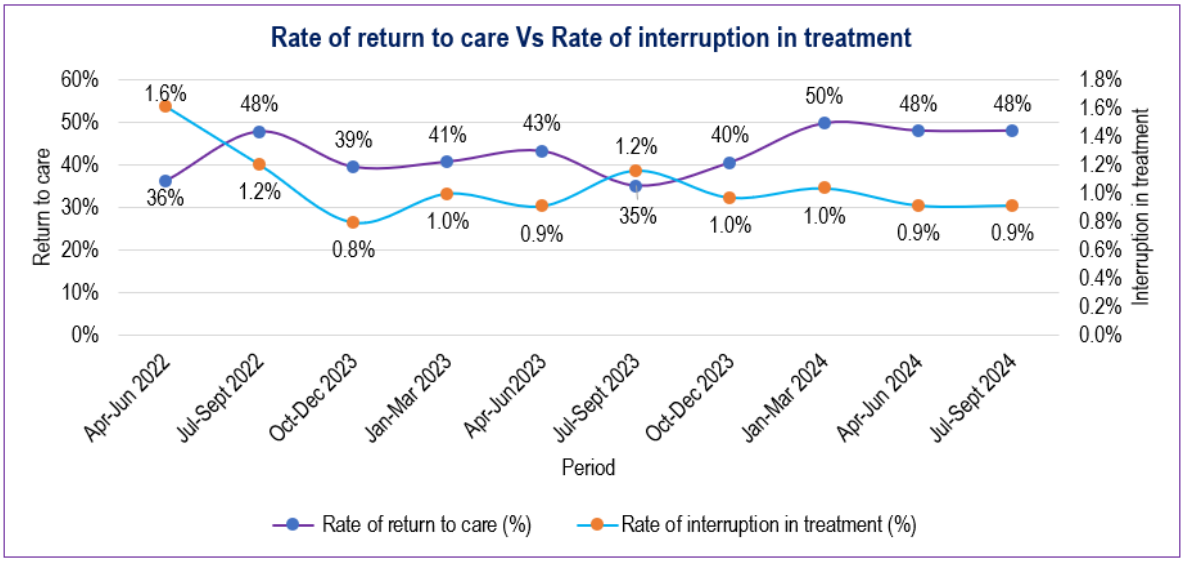
Antony Kugonza, Aston Mucunguzi, Deborah Mbulanyina, Esther Nassali, Richard Jjuuko Kyakuwa, Ronald Oceng, Emmanuel Tumwiine, Calvin Epidu, Betty Nsangi, Albert Maganda, Denise Birungi, Dithan Kiragga

Purpose: Antiretroviral therapy (ART) interruptions are a barrier to sustained viral suppression and epidemic control. By the end of June 2022, only 36% of clients that had interrupted ART were successfully re-engaged, with a treatment interruption rate of 1.6%. This suboptimal performance was associated with workplace relocation, lack of transport, limited psychosocial support, and weak follow-up mechanisms. We describe a quality improvement (QI) initiative that supported reduce treatment interruptions and improve re-engagement in care, in mid-western Uganda.

Methods: Between April 2022 to September 2024 a community-led intervention was implemented across districts in Mid-Western Uganda (Buliisa, Hoima, Kagadi, Kakumiro, Kibaale, Kikuube, Kiryandongo and Masindi), co-opting People Living with HIV (PLHIV) networks into existing work improvement teams (WITs) at 84/122 health facilities, with high ART interruptions. PLHIV networks deployed trained peers stationed at facilities to provide real-time psychosocial support, treatment literacy, socio-economic awareness and follow-up for clients at risk of, or who already interrupted ART. Using data from the Uganda Electronic Medical Records (EMR) system and community-sources, peers and facility staff collaboratively traced lost clients. WITs used journals and the Plan-Do-Study-Act (PDSA) cycles to address identified barriers and test solutions. Key performance indicators, including return-to-care rates and ART interruption rates, were tracked monthly.



Results: This facility-based, peer-led model led to steady improvements in retention. Return-to-care rates increased from 36% in Apr-Jun 2022 to 50% by Jan-Mar 2024, while ART interruption rates dropped from 1.6% in Apr-Jun 2022 to a consistent 0.9–1.0% through financial year 2024. At facilities without the model, treatment interruption rates remained high (2.1% in Apr–Jun 2022 and 1.7% in Jul–Sept 2023), while return-to-care rates were suboptimal, declining from 44% to 29% over the same period. Facilities with fulltime PLHIV peers achieved the most consistent re-engagement success, as peers provided tailored, immediate follow-up and strengthened links between clients and health services. Peer-facilitated support addressed key individual and structural barriers including fear, stigma, and mobility.



FY - Financial Year, Q1 - Quarter 1(October to December), Q2 - Quarter 2 (January to March), Q3 - Quarter 3 (April to June) Q4 - Quarter 4 (July to September)

Figure 1: A graph showing the rate of return to care vs rate of interruption in treatment in mid-western Uganda among facilities supported by PLHIV peers

Discussion: This approach demonstrated that integrating PLHIV networks into facility-based service delivery, supported by routine data, can effectively reduce treatment-interruptions. Key enablers included peer leadership, facility ownership, and improved EMR use. The model offers a scalable blueprint for similar high-burden, resource-limited settings. Limitations included initial inconsistencies in data use and varying peer engagement capacity across sites. Next steps include digitizing peer follow-up tools, strengthening community-facility feedback loops, and expanding the model to other high-priority regions.

141: Improvement In Completion of TB Preventive Therapy Among People Living with HIV In Phalombe District, Malawi: A CQI Project

Benjamin Jere, Felix Joshua, Alick Gwedeza, Francis Moyo, Robert Majoni, Gift Kaunda, Harold Mwareya, Alex Kabwinja, Elizabeth Wetzel, Carrie Cox, Katherine Simon

Purpose: People living with HIV (PLHIV) have a high risk of developing Tuberculosis (TB). Malawi has a high burden of TB/HIV co-infection with 45% co-infection rate in 2020. TB Preventive Therapy (TPT), an effective intervention to reduce morbidity and mortality, is recommended in Malawi National HIV treatment guidelines for non-pregnant people, newly diagnosed with HIV who have no signs of active TB disease as they initiate antiretroviral therapy. However, completion of prescribed TPT lags the 90% national target. In March 2022, national TPT completion rates were 40% however in Phalombe District, a rural district in southern Malawi, TPT completion rates were 23%. We describe a Continuous Quality Improvement (CQI) project that Baylor College of Medicine Children's Foundation - Malawi (BCMCF-M) Tingathe Program implemented across 14 health facilities, aiming to increase TPT completion to 60% by March 2023.

Methods: In March 2022, Phalombe district and site level staff conducted a root cause analysis and identified key barriers to TPT completion (Fig 1). Facility CQI teams comprised of Ministry of Health (MOH) and Baylor staff reviewed data with each Plan-Study-Do-Act (PSDA) cycle to identify new change ideas to address gaps. Three cycles were conducted over 18 months (Fig 2). At the end of each cycle, the interventions were evaluated for their effectiveness. De-identified data from electronic medical records were abstracted to track the number of new PLHIV initiated on TPT and the number who completed TPT within 6 months of TPT initiation.

Figure 1: Root Causes (Fishbone Analysis)

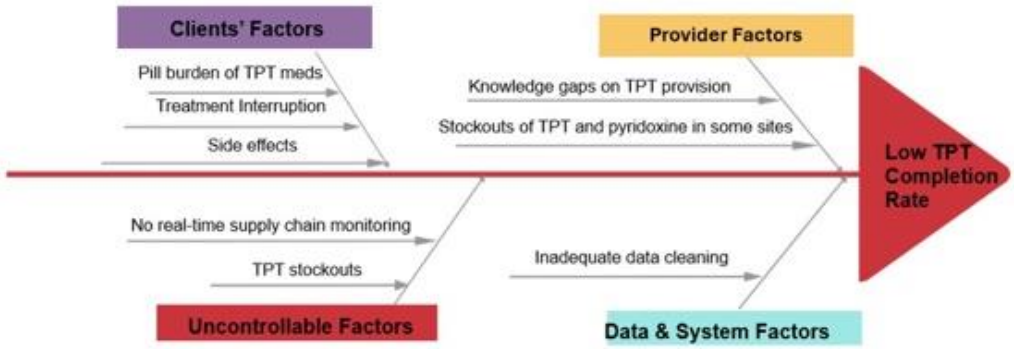


Table 1: Key Interventions (Change Ideas)

Barrier	Intervention
Pill burden concerns	Intensified health talks addressing pill burden concern
Provider knowledge Gaps	Mentorship for healthcare providers on TPT prescription.
Side effects	Intensive pre-treatment client screening to identify and prevent any possible side effects
Inadequate Data cleaning	Weekly EMR data cleaning + monthly TPT audits.
Stockouts	Real-time TPT stock monitoring via WhatsApp forum linking all facilities with district hospital pharmacist to streamline supply chain communication

Results: During the CQI intervention period, April 2022 – September 2023, TPT completion rates increased each cycle from 23% to 81%, exceeding the target (Figure 2). All fully functioning facilities reached the 60% completion target by the end of cycle 3 as 2 facilities severely affected by cyclone Freddy had significant service disruption and did not reach targets. More sites reached target at each cycle and by cycle 3, 4 sites exceeded national 90% target.

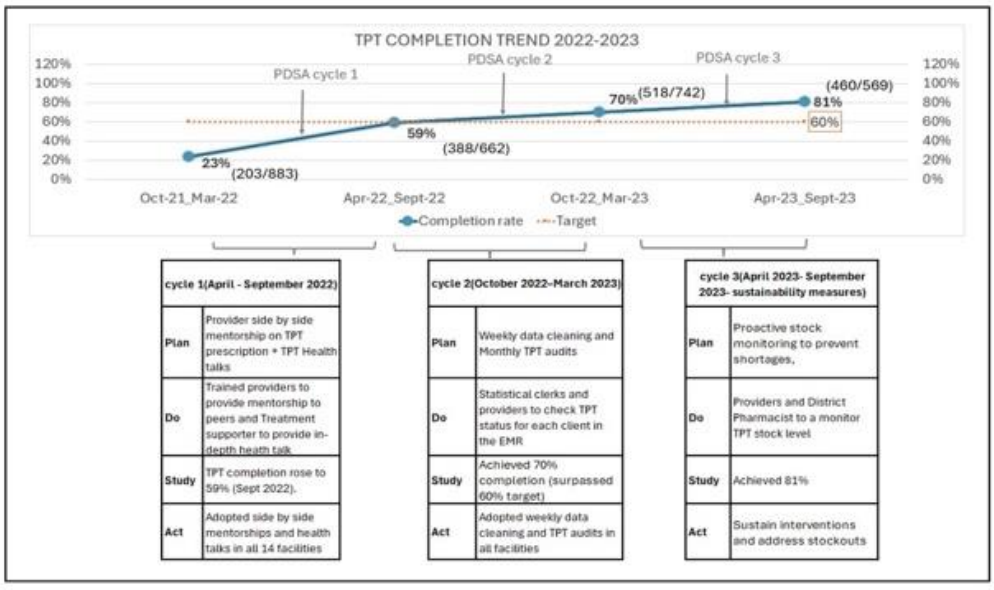


Figure 2. TPT Completion at 14 health facilities in Phalombe District, October 2021 - September 2023

Discussion: This CQI intervention improved TPT completion through regular data audits, structured mentorship, WhatsApp-based stock monitoring and improved client awareness through heath talks. With these improvements, overall completion rates after the 3rd cycle reached 81%. To address remaining gaps efforts to mitigate treatment

interruption are prioritized as 11% (60/569) of those not completing TPT had fallen out of care. Future efforts will prioritize identifying and supporting clients who may be at risk not to complete TPT and advocacy for district-level TPT buffer stocks to avoid stockouts. Systematic client tracking, provider capacity building, and real-time quality data utilization can substantially improve TPT completion rates.

164: Integrating Psychosocial Support and Smart Agriculture to Empower HIV-Positive Youth: The Wise Youth Program at Maseru COE, Lesotho

Mamosase Lerata, Mamokone Koetle, Hlompho Phasumane, Isaac Andreas

Background: According to UNICEF, HIV-positive youth in Lesotho face psychosocial challenges such as stigma, social isolation, and limited economic opportunities. These issues negatively affect mental health and treatment adherence. The Wise Youth Program was established at the Maseru Centre of Excellence (COE) to provide a supportive environment for HIV-positive youth. Its aim is to integrate psychosocial support with practical skills development, including smart agriculture, to enhance resilience, self-sufficiency, and social connectedness.

Description: The program hosts monthly peer-led support sessions for HIV-positive adolescents and young adults. In 2025, it introduced an agricultural component through collaboration with a student from Lesotho Agricultural College, who trained youth on potato and garlic planting using climate-smart, low-cost techniques. The sessions focused on sustainability and household-level food production. Additionally, the program identified members with entrepreneurial potential and launched small-scale coffee preparation and sweet-making projects. The initiative is volunteer-driven and relies on local partnerships, requiring minimal financial resources. Facilitators support implementation, logistics, and mentorship.

Evaluation and Outcomes: Program evaluation focused on early engagement metrics and participant feedback. Among 25 regular members, over 80% engaged in agriculture or enterprise sessions. Participants reported improved confidence, emotional well-being, and reduced stigma. Coffee and sweet-making projects are in the development stages with plans to explore local markets. Informal feedback emphasized the therapeutic and practical value of agriculture-based activities. Although long-term data is pending, early outcomes suggest the program supports both mental health and livelihood readiness.

Lessons Learned: Combining psychosocial support with hands-on agricultural training increased youth participation and engagement. Low-resource implementation, community partnerships, and peer-led facilitation made the program accessible and adaptable. Key challenges included limited startup capital and ongoing technical support needs. Successes included strong group cohesion, skill acquisition, and the emergence of individual talents. Youth appreciated learning skills they could immediately apply in their daily lives.

Next Steps: Future plans include scaling up the agriculture component with additional training, expanding enterprise activities, and monitoring outcomes related to mental health, treatment adherence, and income generation. The program seeks to secure resources for project expansion and long-term sustainability. Given its success in a low-resource setting, this model could be replicated in other communities supporting HIV-positive youth across the region.

170: Optimising Client-Centred Care through a Quality Improvement Coach Certification Program: Learnings from Eastern Uganda.

Andrew Katawera, Jennifer Bakyawa, Richard Jjuuko, Esther Nambala, Ibrahim Kirunda, Alex Kakala, Winnie Akobye, Alexander Mugume, Dithan Kiragga

Background: Coaching and mentorship are essential health systems strengthening tools to building human resource capacity, leadership and sustainability of HIV, Tuberculosis (TB), maternal and child health programs. In Uganda, the lack

of a standardised national Quality Improvement (QI) coach training curriculum and certification has resulted into inconsistent selection of coaches and mentors by the District Health Officers (DHOs) in the Eastern region, hence poor-quality mentorship, high attrition rates, limited QI knowledge, and non-functional Health Facility Quality Improvement Teams (HFQITs). The objective of this abstract is to demonstrate how a coach/mentor certification program was conducted in the 16 districts of Eastern Uganda.

Description: Between November 2023 and September 2024, Baylor Foundation Uganda (BFU) engaged 16 DHO's in Eastern Uganda to select 71 HIV/TB programme trainers (55% female). These were attached to 2-3 facilities as district QI coaches, and provided with a coach support package that included, an online QI course from the Global Health e-Learning Centre, a three-day QI mentorship/ coaching training curriculum, and three post-training guidance cycles with two national and three regional supervisors. Coach progress was evaluated through individual and site assessments using QI coach certification tools adapted from University of California, San Francisco (UCSF) and Uganda Ministry of Health (MoH) to evaluate HFQIT functionality across 34 quality system metrics tracked through an online Kobo Collect App.

Evaluation and Outcomes: Only 41 (58%) coaches completed the program. QI coach competence significantly improved from 50% to 65% ($P<0.001$). HFQIT functionality at 140 sites increased from 39% to 53% ($P<0.05$). Additionally, 150 QI projects were launched with 112 (75%) completed and 22 with performance reports - an increase from just 54 projects the previous year, with no report from the 44 completed.

Lessons Learned: The low coach completion rates underscore the need for appropriate coach selection and formal coach assignment. Ongoing guided supervision significantly enhanced coach confidence, competence and knowledge transfer, with corresponding increase in HFQIT functionality. Coach support provided opportunities for QI collaborative efforts evidenced by the higher number of initiated, completed and discussed QI projects. Post-training guidance was synched to routine health facility mentorships, demonstrating that coach support can be provided without additional costs. Online assessment tools saved printing costs and reduced data capture errors.

Next steps: BFU will collaborate with MoH Department of Standards, Compliance, Accreditation and Patient Protection for the final assessment and QI coach's certification, utilizing these steps to create a formalized coach certification program in Uganda.

174: Parental Loss, Mental Health, and HIV Outcomes of Orphaned Adolescents Living with HIV at Baylor Children's Foundation Malawi

Emily Mwase, Lusungu Lukhere, Chifundo Chigwenembe

Background: The loss of a parent is a deeply traumatic experience that can have lasting effects on psychological and emotional well-being of adolescents. For those living with HIV, the death of one or both parents creates another layer of vulnerability, often influencing their mental health and subsequent health outcomes. Understanding the intersection between bereavement, psychological health, and treatment adherence is essential for effective adolescent-focused HIV care. We explored the experiences of orphaned adolescents at Baylor Children's Foundation Malawi, focusing on their mental health, perception of their HIV status, and clinical outcomes.

Methods: This qualitative case study involved in-depth interviews with 35 adolescents aged 18 to 24 enrolled in HIV care at Baylor Children's Foundation Malawi who had lost one or both parents. Data collection focused on their emotional responses to parental loss, self-perception regarding HIV and ART adherence. Interviews were supported by chart reviews so as to assess clinical outcomes including viral load suppression, appointment adherence, and engagement in psychosocial support services.

Results: Findings revealed that losing a parent had deep psychological consequences, including depression, anxiety, and prolonged grief. Many adolescents reported that they usually feel abandoned, not understood, lonely, and are afraid that they will also die like their parents. These emotional challenges were compounded by stigma and limited emotional support from extended family or caregivers. Some expressed anger or blame towards their deceased parents for "passing on" HIV, which affected their acceptance of their HIV status.
One adolescent said, "why did they even bother to have children knowing they were sick" while another said "I wish the rest of my siblings also had HIV''

Conclusion: There is a strong link between parental loss and deteriorating mental health among HIV-positive adolescents, which can negatively affect treatment outcomes and It was also illustrated that targeted psychosocial interventions, especially grief counselling and peer support may play a vital role in helping orphaned adolescents cope with loss and maintain adherence to HIV care. Adolescents who feel emotionally supported are more likely to accept their HIV status and engage consistently with treatment services. There is an urgent need to integrate routine mental health screening and bereavement counselling into adolescent HIV care models. Strengthening family-based support systems, training caregivers, and scaling up peer-led support groups at Baylor can significantly enhance the resilience and health outcomes of orphaned adolescents living with HIV in Malawi and beyond.

193: Exploring Successes and Challenges of Transitioning Adolescents from pediatric to Adult HIV Care at Baylor Foundation Malawi Centre of Excellence

Menard Bvumbwe

Background: Transition process in HIV programs brings changes in treatment obligations, health care delivery models, and general patient care approaches. In addition to the physiological effects of the virus, adolescents grapple with challenges like identity development, independence, and complex social dynamics. Important gaps still exist in understanding challenges and successes related to the transition of adolescents living with HIV (ALHIV) from pediatric to adult care.

Methodology: This was a qualitative research study conducted in March 2025. It employed a phenomenological design aimed at investigating the challenges and successes associated with the transition of adolescents living with HIV, the lived experience. We also investigated changes in key clinical indicators after the transition such as ART adherence, viral suppression and overall health status.
We interviewed 19 fully disclosed young people living with HIV aged 20 years and older who underwent a transition program in the period spanning 2020 to 2024 at Baylor Foundation Malawi clinic, attended at least 3 education sessions in the transition program and were still in care at Baylor Foundation Malawi COE. In-depth interviews using open-ended questions were conducted with conveniently sampled participants.
The audio-recorded responses were transcribed and scripts recorded in Microsoft excel spreadsheets. Finally, themes were identified using text filtering.

Results: The study found that there was better understanding of HIV information, improved treatment self-efficacy, good adherence and viral suppression, better disclosure skills to romantic partners, better physical and mental health. However, the transition also met challenges such as inadequate client preparation for transition, communication problems, crash between school and transition clinic schedules, age differences between facilitators and participants, inadequate time for some education sessions, and transport constraints which may affect successful transition experience.

Conclusion: Well planned and executed transition programs can lead to better ART adherence and treatment efficacy, improved HIV disclosure skills to romantic partners, better mental health and coping skills, improved confidence and self-esteem, reduced self-stigma and better overall physical health.

Preparation for transition should be started way before the transition age. Structured, multi-phase transition programs that address both the medical and psychosocial aspects should be encouraged as they greatly improve transition processes. Healthcare systems should enhance the transition experience for adolescents living with HIV by getting them involved in the programming. The Baylor foundation Malawi transition model should be assessed for feasibility in smaller health facility settings.

Technology and Systems Innovation: Driving Efficiency and Sustainability in Global Health

60: Leveraging eCBSS Data for Geospatial Mapping of Tuberculosis Hotspots and Optimizing the Integrated TB Case Finding (CAST+) Intervention in Eastern Uganda

Joshua Brianwong clark, Diana Cherotin, Lwanga Zimwanguyiza Ssekiswa, Jennifer Bakyawa, Eddy Okwir, Frehd Nghania, Richard Jjuuko, Patricia Nahirya, Alexander Mugume, Dithan Kiragga

Background: The Ugandan Ministry of Health developed the CAST+ strategy to find missing Tuberculosis (TB) patients through a 5-day biannual, multi-disease, door-to-door community screening for TB, leprosy, HIV, malaria, malnutrition, antenatal care and immunisation status. The first nationwide campaign was conducted in September 2022, covering all villages. However, this intervention proved costly and yielded inconsistent results. In 2020, Uganda adopted the electronic case-based surveillance system (eCBSS) for TB surveillance, monitoring, and program reporting, which provides patient-level data on a standard cohort of TB treatment and place of residence. The team describes how eCBSS data was used to develop geospatial maps that define TB hotspots for targeted CAST+campaigns.

Description: Prior to the CAST+ campaign in March 2024, Baylor Uganda scaled up eCBSS to 93% (166 out of 178) of the Diagnostic and Treatment Units (DTUs) in the Bukedi and Bugisu regions and supported entry to 103% (6992 out of 6860) of the patient backlog. This data was then used to map TB hotspots using Geographic Information System technology, which were prioritised and actively screened during the CAST+ campaign in March 2024. A hotspot was defined as any village with more than two TB patients in the past year (March 2023 to February 2024).

Evaluation and Outcomes: We compared provider costs (including sample transportation, community health worker facilitation, and support supervision) incurred during the nationwide CAST campaign in September 2022 with those from the eCBSS-guided, targeted CAST+ intervention conducted in March 2024.

- The program achieved a 41% reduction in the unit cost of identifying a TB patient, dropping from $66 in September 2022 (blanket campaign) to $37 in March 2024 (hotspot-targeted).
- Overall expenditure declined from $50,678 to $5,783.
- The March 2024 campaign diagnosed and initiated treatment for 155 TB patients from 109 geospatially identified hotspots, achieving a yield of 2.0%, comparable to the 1.9% yield from 764 TB patients screened across all villages in September 2022

Lessons learnt: Utilising eCBSS data for geospatial mapping enables TB programs to accurately identify hotspots, pinpoint high-burden areas, and effectively guide resource allocation for targeted community TB interventions. Challenges included ensuring real-time data entry and the mismatch of village names with GIS shape files that required thorough data cleaning. However, the model demonstrated scalability and potential for adaptation to other disease programs or settings.

Next steps: Building on the pilot's success, this approach has been integrated into Uganda's national CAST+ strategy. Next steps include automating hotspot identification within eCBSS platform, enhancing district GIS capacity, and leveraging AI for dynamic, population-responsive TB mapping. Sustained investment in data entry, AI and GIS training, and decentralised microplanning are essential. The model offers a scalable and adaptable solution for efficient TB case detection in high-burden, resource-limited settings.

104: A digital training package leads to improved clinical outcomes in Malawi's index case testing program: A cluster randomized controlled trial

Tapiwa Tembo

Background: Training health workers is the most common implementation strategy in low- and middle-income countries. Offering training through digitized platforms offers a promising way of delivering in-service training with high fidelity, minimal clinical service interruption, and lower costs. However, the downstream clinical outcomes of such trainings have not been evaluated. The clinical impacts of a digital in-service training package were evaluated in Malawi's HIV index case testing program through the PRACTICE study (Package of Resources for Assisted Contact Tracing: Implementation, Costs, and Effectiveness).

Methods: A stratified cluster randomized controlled trial was conducted at health facilities delivering HIV index case testing in Machinga and Balaka, Malawi from July 2022-September 2023. Thirty-three clusters (health facilities) were randomly assigned in a 2:1 ratio to receive standard training (standard arm) or standard training plus a digital-based training (enhanced arm). The enhanced arm included 8 hours of individual asynchronous tablet-guided didactic teaching and role-modeling, 16 hours of small-group synchronous tablet-guided practice, one hour of one-on-one phone-based performance feedback, and eight 2-hour small-group quality improvement sessions over the course of the subsequent year. Trainees were lay health workers in Malawi's HIV index case testing program. Index clients were people living with HIV; contact clients were primarily their sexual partners and household members. Clinical outcomes, abstracted from national registers, included: rates of index client participation, contact client elicitation, contact client testing, contact client HIV diagnosis, and provision of HIV self-test kits for distribution to contacts. Negative binomial mixed-effects models estimated the impact of enhanced digital training on each outcome.

Results: Clusters were assigned to the enhanced (n=11) or standard (n=22) arms and analyzed in three-month increments (quarters). At each cluster in each quarter, a median of 270 index clients (interquartile range 210-440) were potentially eligible for index case testing services. Positive trends were observed for all indicators: index client participation (RR=1.22, CI: 0.93-1.60, p=0.1), contact client elicitation (RR=1.37, 95% CI: 1.10-1.71, p=0.006), contact client testing (RR=1.45, CI: 1.10-1.92, p=0.01), new HIV diagnosis (RR=1.28, CI: 0.94-1.76, p=0.1), and self-test kits provided (RR=2.29, 95% CI: 1.19-4.40, p=0.01).

Conclusions: An enhanced digital training positively impacted meaningful clinical outcomes in Malawi's index case testing program.

126: Empowering Data-Driven HIV Programming in Malawi; A Case Study of real-time data automation and utilization with Power BI dashboards

Albert Kaonga, Elizabeth Wetzel, Katherine Simon, Jemimah Nyirongo, Gomezga Chitsulo, Sangwani Longwe, Stephen Chu, Alex Kabwinja, Carrie Cox

Background: Having access to high-quality data enables implementation of responsive HIV programming that can be delivered with fidelity, monitored, and adapted to meet dynamic healthcare needs. Baylor College of Medicine Children's Foundation Malawi (BCMCF-M) Tingathe program supports 96 health facilities across Malawi and utilizes a robust data feedback loop process to support comprehensive HIV care and treatment services. Microsoft Excel was used to generate weekly dashboards graphically tracking key performance indicators, however this labor-intensive process had limitations, including difficulties handling large datasets, integrating multiple data sources, and lacking automation and real-time reporting. To address these challenges, we describe the adoption of an automated platform PowerBI, to streamline the data analytics process.

Description: BCMCF-M Tingathe's data feedback loop utilizes weekly and monthly data submitted via SurveyCTO by site-level data clerks to inform data-driven programming. For six years before transitioning to PowerBI, at least 10 monitoring and evaluation (M&E) officers spent at least 1 day each week manually downloading reports from SurveyCTO, cleaning and analyzing data and building dashboards in Excel, and emailing them to each district and health facility team. This work required report submission from all sites, sometimes causing delays. In June 2024 M&E staff underwent 5 days of PowerBI training, followed by a one-week hackathon to build program dashboards (figure 1) and create automated data cleaning and analytical procedures. Since July 2024, implementation of the fully automated process allowing submitted reports to be automatically exported and immediately viewable in web-based PowerBI dashboards is ongoing.

Evaluation and outcomes: PowerBI utilization resulted in a 100% reduction in the dashboard generation workload for the M&E staff responsible as all data cleaning and analytics were automated in real-time. Site specific delays in data submission no longer affected overall access to available data as dashboards auto populated with each submission.

Lessons learnt: BCMCF-M's transition to PowerBI from Excel has had a transformative impact on data management by facilitating rapid automated data cleaning and analytics to allow timely access to high-quality data for iterative programming. M&E staff time is now available for supportive supervision and quality improvement activities. The M&E team went through a steep learning curve as PowerBI was a new platform which the team had never used before. Program staff also find the dashboards more timely, accessible and usable to inform program modifications and guide quality improvement initiatives.

Next Steps: Continuing capacity building among M&E team on PowerBI capabilities is ongoing and M&E staff concentrate on orienting site level teams to better understand and use their data. Continued engagement with program staff will allow for development of further subgroup analysis and optimization. Organizations with high-frequency and high-volume reporting would greatly benefit from similar automation.

156: HIV Innovation in a Pinch: Utilizing Open Access Tools to Decrease Work Loads and Improve Efficiencies in a Resource Limited Setting

Sarah Perry, Miriam Abadie, Ryan Hartford, Clara Nyapokoto

Background: Eswatini National HIV Drug Resistance (HIVDR) Program began in 2014 initially relying on the use of the Baylor Eswatini electronic medical record (EMR) and an internal Excel database. As the program expanded to include adults and other facilities, a National HIVDR Committee began collecting programmatic data in another Excel database. Genotype requests were made through a paper-based system reliant on labor intensive data entry. As such, the HIVDR Committee began to explore tools to help simplify the national referral and tracking processes.

Description*:* The HIVDR committee began by consulting with colleagues familiar with using technologies to create data tools in resource limited settings. The committee was able to create a Google Form for genotype requests easily accessible to HIV clinicians with a data connection. Once filled, it automatically populates into a google sheet for data collection and the HIVDR committee secretary is notified. An automated summary card without personal identifiers is created for each genotype request. This card can then be shared over the HIVDR Committee WhatsApp group for approval or denial of requests. Voting is also done using a Google Form. The system was piloted at a few central clinics in Eswatini and adjusted based on user feedback before rolling it out nationally.

Evaluation and outcomes: The automated genotype referral system launched in Feb of 2025. To date the new system has received 49 genotype requests and 25 genotype results. As complex clients are entered, and preferences from committee members arise, the system is easily adjusted to capture all necessary information. No personal identifiers are shared over WA groups. The old system and new system for genotype requests has been combined in the same google sheet. New genotype results are entered by the HIVDR committee using a linked google sheet. Using Lookr studios,

another open access tool, all data is summarized real time on a dashboard and can be filtered for certain time frames, ages, or regions with the click of a mouse (Figure 1).

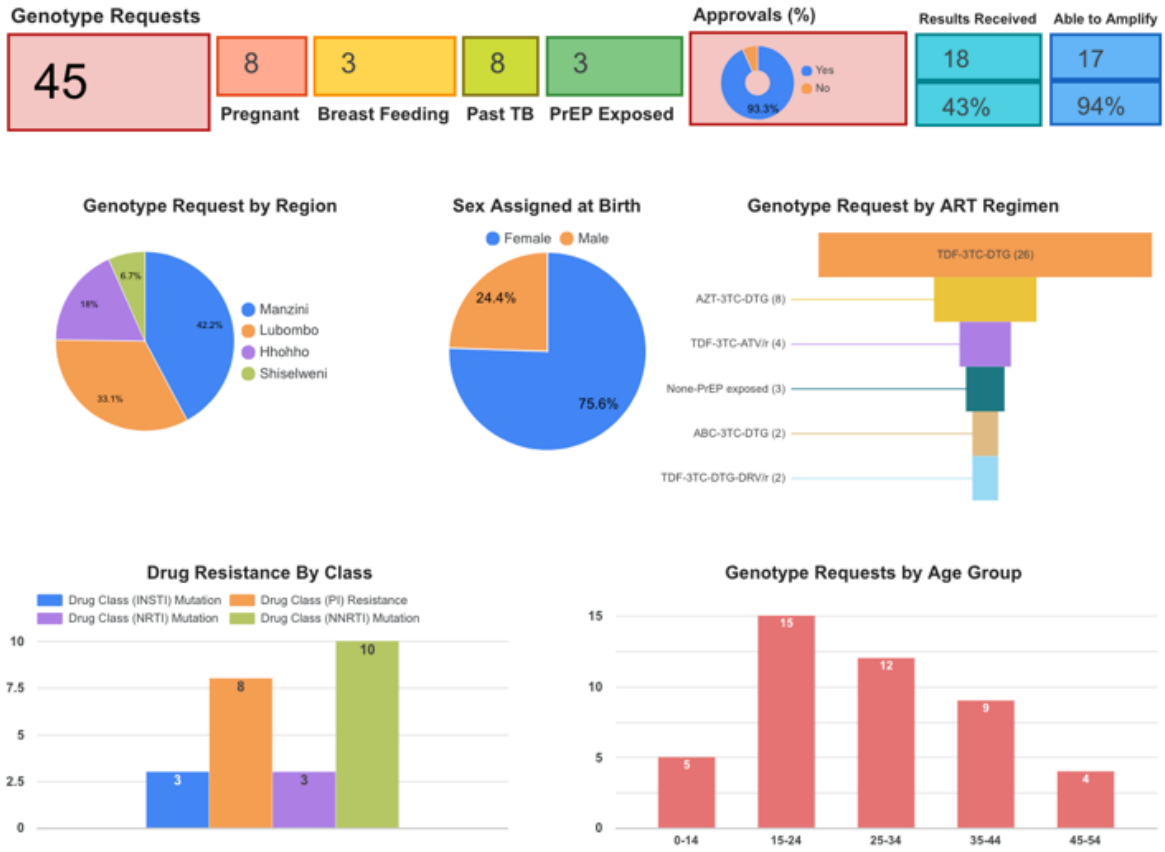


Figure 1. Sample dashboard using Lookr Studio

Lessons learned: The learning curve for adapting the tool has been steep. It has been important to quality check often during the merging of old and new databases. Simple coding for google sheets and early stages of dashboard development was made possible with the help from artificial intelligence tools like Claude.

Next Steps: The first step of automating the genotype requests has been complete. All old and new data is combined and currently populating a dashboard. Next step is to finalize the input of all old genotype results with the new google form. We look forward to sharing our form and dashboard with other country programs in need of a similar free digital solution to HIVDR.

181: Safeguarding ART Continuity Amid National Supply Chain Disruption: A Rapid Last-Mile Logistics response for PNFP Facilities in Eastern Uganda

William Mutabaazi, Richard Jjuuko Kyakuwa, Henrietta Lydia Nanyonjo, Leticia Namale, Dithan Kiragga

Background: In January - March of 2025, Uganda's private-not-for-profit (PNFP) health sector experienced a catastrophic disruption in supply continuity for life saving health commodities following a stop-work directive issued against Joint Medical Stores (JMS), the principal distributor of life-saving commodities to PNFPs. This halt in operations resulted in an acute stock-out crisis with 60% of these facilities experiencing prolonged unavailability of antiretroviral therapy (ART) and other essential diagnostic and treatment commodities for eight weeks (mid-January-May 2025). This abstract describes how Baylor Foundation Uganda (BFU) operationalized an emergency supply chain intervention

grounded in global best practices in last-mile logistics, supply chain management, and inventory realignment to support PNFP Facilities.

Description: Leveraging an agile distribution model, BFU rapidly coordinated with JMS, to implement a decentralized replenishment strategy using route-optimized delivery mechanisms, commodity tracking systems, and proof-of-delivery documentation in alignment with WHO-recommended good distribution practices (GDP).
Our target population was 105 PNFP facilities serving over 50,000 PLHIV located in the eastern regions of Karamoja, Bukedi, and Busoga.
A Taskforce was formed, and a series of stakeholder planning meetings were conducted, with BFU senior management, Ministry of Health (MOH), USAID, and JMS. An internal multidisciplinary taskforce comprising administrative, procurement, programmatic, and supply chain staff led the implementation. The process involved direct phone coordination and formal communication with district leaders, assignment of distribution teams per route, and daily updates to a central distribution tracker to ensure real time visibility and accountability. Digital tracking tools- Real time ART&TB related commodities Stock Status (RASS) were integrated into national platforms such as PIP and DHIS2 using HMIS 105-6 which ensured visibility and accountability throughout the supply chain.

Evaluation and Outcomes: The intervention successfully facilitated time-critical distribution of high-priority HIV and essential health commodities to 105 PNFP facilities of eastern Uganda. Using real-time delivery google tracker and optimizing WhatsApp group for updates, turnaround time from dispatch to confirmation of delivery, inventory reconciliation, and rapid restoration of service availability remained within 24hrs. Post-delivery verification reports confirmed 100% successful proofs of delivery.

Lessons Learned: Early stakeholder engagement, formation of a multidisciplinary taskforce, and the use of real time distribution tracking to ensure transparency and efficiency. The success of the initiative was driven by strong team spirit, clearly defined roles, and shared ownership among the Ministry of Health, implementing partners, district leaders, and facility staff. However, poor road infrastructure and challenging terrain limited access to remote health facilities, underscoring the need for contingency planning measures such as pre-positioning commodities or leveraging local transport alternatives.

Next steps: Future scale up will require investment in early planning, digital tools, and local capacity, offering a replicable solution for other resource limited or hard to reach settings.

183: The Impact of the USAID stop work order on providing HIV testing services to pregnant women in Malawi

Peter Nyasulu, pempho kanyenda, Geofrey Phiri, victor guzani, frazer tembo, elijah kavuta, tapiwa tembo, elizabeth wetzel, katie symon

Background: Globally,90% of the 5 million babies living with HIV in 2023 were from developing countries. Mother -to-child HIV vertical transmission can occur during pregnancy, delivery, or postpartum. With early detection and treatment, the transmission risk is reduced significantly. Since 2003 PEPFAR has supported HIV programming including HIV testing to reduce vertical transmission, however service delivery was disrupted, in January 2025 when the US government issued a stop work order (SWO) for all USAID implementing partners. We describe the impact of the SWO on HIV testing for pregnant women attending antenatal clinics (ANC) supported by Baylor College of Medicine Children's Foundation – Malawi (BCMCF-M).

Description: BCMCF-M supports the Malawi Ministry of Health with provision of HIV testing services in five districts. All pregnant women attending ANC are offered HIV tests. Women who test positive are linked to treatment and negative to prevention interventions. We analyzed de-identified routine program data from 94 supported health facilities to summarize the numbers and proportions of HIV tests offered to pregnant women at ANC from January to March 2024 before the SWO compared to January to March 2025.

Evaluation and Outcomes: A total of 65,641pregnant women attended ANC the period of January - March 2024 and same period in 2025). Before the SWO, 99% (35,685/35,597) of pregnant women were tested for HIV, and 362 (1.0%) were newly diagnosed as HIV-positive and 358 initiated on antiretroviral therapy (ART) with 99% linkage rate. During the SWO, 96% (29,956/28779) of pregnant women were tested for HIV, and 1.0% (276/28779) were diagnosed with HIV and 274 were also initiated on ART (99% linkage). Of 94 sites, 11 sites contributed about 2/3 of the drop in testing. 1200 pregnant women were untested for HIV in the first ANC visits during the SWO period. (Figure 1)

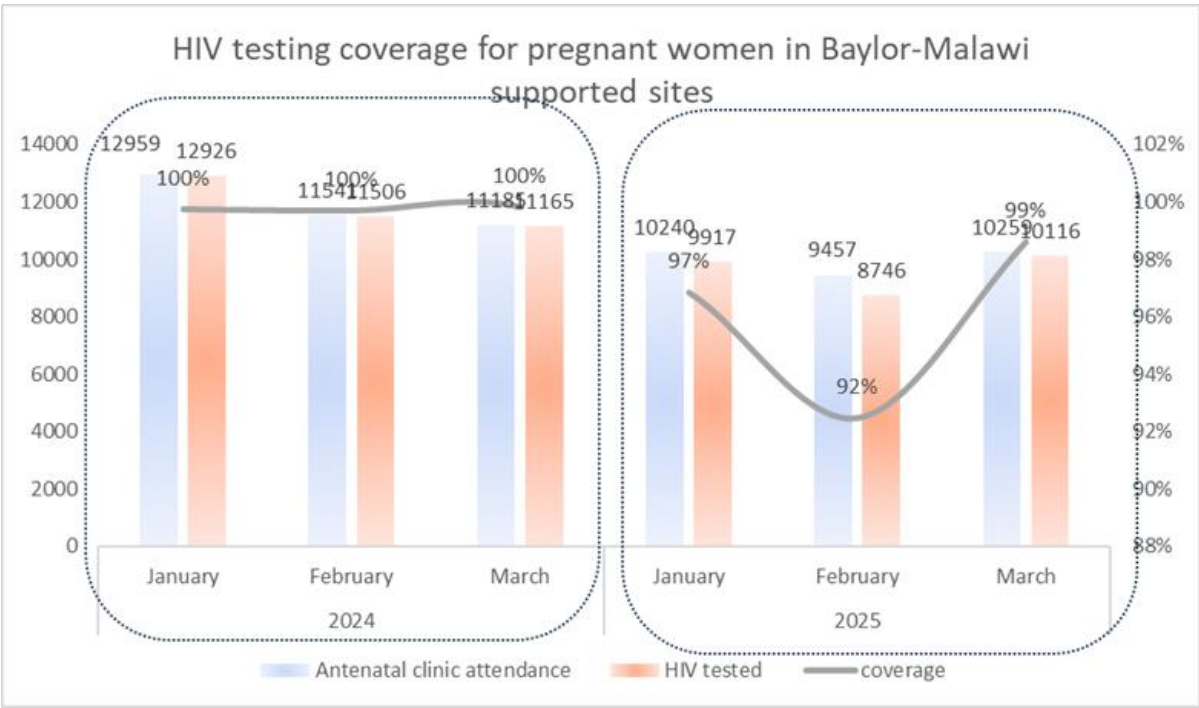


Figure 1: HIV testing coverage for pregnant women in antenatal clinic from 94 health facilities

Lessons Learned: HIV testing decreased at ANC during the SWO which left women not accessing testing and prevention services. This may be due to the reduction in the number of staff providing services including HIV testing.

Next steps: BCMCF-M has resumed operations and is working in collaboration with the Ministry of Health to identify pregnant women who were missed and need HIV testing services. There is an ongoing assessment of the impact of incidence among exposed babies while also focusing on capacity building and task sharing.

211: Machine-Learning-Optimised Partner Index Testing in Lesotho: A Cost-Effectiveness Analysis Integrating LePHIA, DHS and Programme Data

Tseliso Marata, Mahlompho Sojane, Mosa Molapo-Hlasoa

Background: Lesotho has one of the highest HIV prevalence at 18.3% for adults. Index testing of sexual partners has proven to offer a strategic route to the undiagnosed. However, evidence on its economic efficiency remains sparse. We evaluated cost effectiveness of the national index testing program by integrating population-based surveys, routine registers and machine learning driven optimization.

Methods: Monthly index testing aggregated data for 14,610 partners elicited between January 2020 and December 2024 were merged with district-level HIV prevalence, household wealth and urbanicity indicators from the 2020/21 Lesotho Population-based HIV Impact Assessment (LePHIA) and the 2018 Demographic and Health Survey (DHS). Partner level HIV positivity was modelled with three supervised ML algorithms: penalized logistic regression,

random forest and Extreme Gradient Boosting (XGBoost). Tenfold cross validation assessed discrimination by area under the receiver operating curve (AUC). Outputs from the best performing model fed an integer linear programming routine that allocated resources across visits to maximise new diagnoses within a fixed monthly envelope. Costs used, valued in 2024 US dollars were as follows: lay-counsellor US$330/month, driver US$275/month, vehicle running costs US$215/month, mobile communication US$30/month, professional supervision US$110/month, and 15% overhead. Facility-based provider-initiated testing (PITC) yields and unit costs extracted from published Lesotho studies served as the comparator. Outcomes included cost per person tested (CPT), cost per infection identified (CPI) and incremental cost effectiveness ratio (ICER) in cost per quality adjusted life year (QALY) gained. Deterministic and probabilistic sensitivity analyses explored parameter uncertainty. This study is covered under the BCMCF-L's umbrella protocol and does not use identifiable patient records.

Results: Random forest model achieved highest discrimination (AUC 0.79), outperforming XGBoost (0.78) and logistic regression (0.73). Relationship type, interval since index diagnosis and district prevalence were strongest predictors of partner positivity. Observed program output over five years was 729 partners tested and 179 new positives (24.5%) at a cost of US$65405, yielding CPT = US$90 and CPI = US$365.
PITC achieved 10.2% positivity with CPT = US$71 and CPI = US$695. Optimized deployment, redirecting 17% of field visits to high-risk contacts, raised positivity to 34.7% while cutting kilometers travelled by 18%, yielding CPT = US$75 and CPI = US$278. Optimized index testing dominated (lower cost, higher yield) and produced ICER of US$46 per QALY, far below Lesotho's per capita GDP benchmark (≈ US$1200).

Conclusions: An ML guided, optimally deployed index testing model can double partner notification efficiency in high prevalence settings. In Lesotho, it halves cost per infection relative to PITC and delivers QALYs at less than 5% of the conventional willingness to pay threshold. Embedding predictive dashboards and optimization algorithms within the community health worker platform presents a scalable pathway to accelerate progress toward the first 95 UNAIDS target.

219: Evaluation of Digital Data Collection Tools on Monitoring and Reporting Health Programs Lesotho

Makoa Domela, Matuke Mphaololi, Tseliso Marata, None Roto, Makarabelo Thoola

Background: The COVID-19 pandemic exposed significant gaps in health data systems. In response, Lesotho's Ministry of Health (MoH) adopted digital data collection tools to improve the monitoring and reporting of health programs. However, the effectiveness of these tools, particularly regarding data quality, timeliness, usability, and stakeholder perceptions, has not been adequately evaluated. This evaluation addresses this gap by assessing the influence of digital data tools on monitoring and reporting performance within the MoH. The objective was to evaluate effectiveness, identify implementation challenges, and understand stakeholders' experiences and perceptions.

Methods: A descriptive cross-sectional case study design was conducted in May 2025 within the MoH in Lesotho. Targeted the MoH staff and implementing partners involved in data processes, including nurses, doctors, data personnel, and program managers. A mixed-methods approach was used. Quantitative data were collected through structured questionnaires from 97 purposively selected participants, while qualitative data were obtained via in-depth interviews with 12 key informants. Quantitative data was analyzed using SPSS for descriptive and inferential statistics, including regression analysis. Qualitative data was thematically analyzed to supplement and contextualize quantitative findings.

Results: The findings revealed that 96% of respondents agreed that digital tools improved the timeliness and completeness of health data reporting. A strong positive relationship ($p < 0.01$) was found between digital tool usage and reporting efficiency (Mean = 1.385; SD = 0.547). However, 73% of respondents cited key challenges such as poor internet connectivity, limited training, and frequent system downtimes. Despite these barriers, 90% of participants expressed positive perceptions, noting enhanced accessibility, reduced paperwork, and improved coordination. While

data security concerns were minimal, participants emphasized the need to evaluate the sustainability of digital systems beyond the donor support.
Thematic analysis reinforced these findings, highlighting benefits such as improved efficiency, real-time data access, and quicker decision-making. Nevertheless, users reported concerns about systems interoperability and increased workload due to multiple platforms. Several expressed uncertainties about the long-term maintenance of digital systems once donor support ends.

Conclusions: Digital data collection tools have significantly improved monitoring and reporting of health programs in Lesotho, particularly in terms of timeliness, accuracy, and accessibility. However, infrastructure limitations and inadequate technical support continue to constrain their full potential. These findings offer valuable insights for digital health strategies in resource-limited settings.

Recommendations: To sustain and scale digital health gains, it is essential to strengthen infrastructure, provide continuous training, and incorporate user feedback into system design. Moreover, the long-term sustainability and integration of digital tools must be further explored to ensure continuity and resilience beyond emergency contexts and donor funding.

Maternal, Neonatal, and Reproductive Health: Advancing HIV Care and Prevention

68: Improving Neonatal Outcomes Through Kangaroo Mother Care: Implementation Experience from Area 25 Community Hospital, Malawi

Tiwonge Msonda, Tariro Chimhanda, Melvin Kunsembe, Mwayi Kazembe, Bernard Natoto

Background: Prematurity remains a leading cause of neonatal mortality in Malawi, which currently has a neonatal mortality rate of 19%(1). In response, the Ministry of Health is scaling up the implementation of Kangaroo Mother Care (KMC) to improve outcomes for low-birthweight (LBW) and preterm infants. At Area 25 Community Hospital, where 13% of deliveries are preterm, an increase in hypothermia-related neonatal deaths led to the establishment of a KMC ward, alongside targeted staff training and post-discharge follow-up clinics to support LBW infants.

Program Description: The KMC ward was initiated in June 2024 with the objective of providing continuous warmth, nutrition, and monitoring for LBW infants. Daily assessments, including vital signs and weight monitoring, follow up after discharge are conducted by a team consisting of a clinician, nurse, and patient attendant. Critical setup activities included staff training, securing a dedicated space and furnishing it with essential items such as beds, blankets, heaters, thermometers, desks, and storage cabinets. Staffing was structured to ensure 24-hour coverage, and standardized KMC protocols were introduced across departments. Data collection tools—including registers, feeding and monitoring charts, and clinic cards—were developed to support service delivery.

Evaluation and Outcomes: Program performance was evaluated over the first year using the following indicators: number of admissions, rates of hypothermia, in-hospital mortality, clinic attendance post-discharge, and number of healthcare workers trained. Data were extracted from clinical registers and the District Health Information System 2, then analyzed using Excel. Since its inception, the number of KMC admissions has steadily increased (Figure 1), reflecting high demand and community acceptance. Despite the continued challenge of hypothermia as evidenced by the increasing rates among admitted infants (Figure 2), no in-hospital neonatal deaths have occurred since the ward became operational.
A total of 50 nurses and 14 clinicians received training on LBW infant care in July 2024. Ongoing on-the-job training sessions have been conducted for new staff to reinforce clinical competencies.
A notable success story is C.Y, who had a birthweight of 1500 grams (g), and was admitted at four weeks of age with a weight of 1200g. After four weeks, he was discharged at 1880g. At four month post-discharge, he was followed up in clinic with a weight of 4950g with age-appropriate developmental milestones.

Lessons Learned: KMC is effective for reducing preventable neonatal deaths in low-resource settings. Persistent challenges at area 25 Community Hospital include hypothermia, limited bed space, and frequent power outages. However, strong community engagement and staff commitment have led to improved mortality and increased service utilization.

Future Directions: Plans include expanding ward space, introducing respiratory support for infants <1500g, ensuring nutritional supplementation for all LBW infants, and offering skill-building activities for mothers during their stay.

88: Optimizing PrEP uptake Among Pregnant and Breastfeeding Women: Best Practices and Lessons from Baylor Foundation Malawi Tingathe Program Supported Facilities Across Five Districts in Malawi from 2022- 2025.

Joseph Magaleta, Chrissy Kayuni, Fraser Tembo, Tapiwa Tembo, Elizabeth Wetzel, Katherine Simon, Carrie Cox

Background: In Malawi, the 2020 national guidelines recommend pre-exposure prophylaxis (PrEP) for people at high risk of incident HIV infection. Since its introduction, PrEP has provided a proven and effective method to help prevent HIV transmission among pregnant and breastfeeding women (PBFW). We describe lessons learned following the implementation of optimized interventions to increase access to PrEP services for PBFW at rural health facilities supported by Baylor Foundation-Malawi (BFM) in Malawi.

Description: BFM supported 74 health facilities across five districts to deliver PrEP services to PBFW, expanding from 51 facilities by the end of 2022 to 74 by September 2024. Activities included facility staff orientation and health talks delivered at entry points. In October 2023, BFM initiated interventions to increase PrEP uptake, including extending service delivery beyond ART clinics to Antenatal clinic (ANC), Outpatient Department and Under Five Clinics; on-the-job mentorship was provided to lay cadres and clinical staff, emphasizing supportive, non-judgmental care and escorting clients for seamless access. Additionally, staff conducted daily checks of referral documentation, scheduled PrEP providers, and identified designated service rooms. Monthly data reviews helped identify and address gaps. Facility staff conducted awareness, screening, referral, and initiation efforts. HIV prevention and care service delivery was disrupted in February and March 2025 due to a Stop Work Order issued by the US government.

Evaluation and Outcomes: Routine program data for PBFW initiated on PrEP from 74 health facilities from October 2022- March 2025 was evaluated. Figure 1 shows a slow increase in the number of PBFW started on PrEP from 2022 to September 2023, followed by an increasing trend from November 2023 to January 2025. There was then a decline from February to March 2025 which coincided with the disruption in the delivery of HIV prevention and care services.

Lessons Learned: Increasing the number of facilities alone is not sufficient to enhance access to PrEP services. More efforts are needed to optimize the uptake, including ongoing mentoring, orienting new staff, conducting health talks, performing referral checks, scheduling providers, ensuring dedicated service rooms, and conducting regular data reviews. Challenges balancing provision of HIV prevention services with the demands of critical clinical services during staffing shortages highlights the need for integration of PrEP service delivery within health services for sustainability

Next Steps: Next steps include further investigation to understand the factors leading to the low number of PBFW accessing PrEP from February to March 2025. We are also exploring factors that can contribute to functional PrEP integration to mitigate risks of service disruption including strategies to strengthen MOH leadership in the delivery of PrEP services.

93: Scale-up of Human Papilloma Virus (HPV) Triage for Cervical Cancer Screening for Women Living with HIV in Mangochi District, Malawi

Chisomo Imfaitenga, Florence Msosa, Golden Kang'oma, Fraser Tembo, Carrie Cox

Background: Cervical cancer remains the most common cancer among Malawian women of reproductive age. The primary cause is high-risk human papillomavirus (HPV). To improve early detection and treatment, Malawi's Cervical Cancer Prevention Programme (CECAP) adopted HPV triage in addition to Visual inspection with Acetic Acid (VIA) for women ages 25-49, in line with WHO recommendations in 2021. We describe ongoing implementation in Mangochi district, a rural setting where HPV testing remains limited.

Description: In June 2024 in coordination with the Ministry of Health and the District CECAP Coordinator, five facilities with lab capacity and VIA trained staff started HPV triage (see table 1). Implementation included: (1) Clinical and lab staff training on HPV specimen collection, processing, and result interpretation; (2) Delivery of HPV test kits, preservatives, cartridges and documentation tools; (4) facility staff sensitization meetings on HPV triage, (5) lay cadres mentorship on HPV referral and follow-up to maximize CECAP screening completion (6) intensified health talk frequency and updated CECAP/HPV script. On ART clinic days, eligible women receive group HPV sample collection instructions before self-collecting HPV samples privately in ~5 minutes. Lay health workers flag ART master cards, do phone/home tracing, fast track ART care and escort women to VIA.

Evaluation and Outcomes: Routine program data from June 2023 to May 2025 was evaluated. HPV triage started in June 2024 and 101 (SD 52) HPV tests done on average. HPV testing paused at all sites for a month, two facilities halted triage in Jan/Feb due to understaffing. Overall CECAP screening is described in Table 1. Of 1214 HPV DNA tests, 78% (949/1214) women completed CECAP screening. Nearly 1/3 of tests were HPV positive (32%, n=401/1214). About 1/3 of women with HPV+ results had VIA done (34%, n=136/401) and all 9 women with precancerous lesions were treated (n=8) or referred (n=1). Follow up is ongoing for remaining 265 women with HPV+ results who still need VIA.

	VIA ONLY PERIOD June 2023- May 2024			VIA and HPV PERIOD June 2024 - May 2025				
Facility	VIA screened only	HPV tests	Completed CECAP screening	VIA screened only	HPV tests	HPV negative	HPV POS VIA done	ompleted CECAP screening
Facility 1	1010	0	1010	354	542	343	97	440
Facility 2	225	0	225	28	255	181	19	200
Facility 3	74	0	74	48	123	79	12	91
Facility 4	405	0	405	229	92	64	5	69
Facility 5	95	0	95	40	202	146	3	149
Total	**1809**	**0**	**1809**	**699**	**1214**	**813**	**136**	**949**

Table 1: Cervical cancer screening with visual inspection with Acetic Acid (VIA) and HPV/DNA

Lessons Learned: Self-collected HPV testing expansion can utilize current staff if testing materials are available, however sustainability is difficult given human resource, cost and supply chain vulnerabilities. With HPV triage, CECAP-trained nurses focus on screening women with HPV+ results. However, total number of women screened does not necessarily increase with roll out of HPV triage as screening cannot be completed until HPV test results are known leaving women incompletely screened.

Next Steps: Intensifying focus on completing screening for women with HPV+ results. Ongoing mentorship for VIA providers and collaboration with lab staff to shorten HPV TAT aims to increase same day VIA completion. Consideration of HPV triage expansion to additional sites is ongoing based on available resources.

129: Between Facts and Myths: Assessing HIV Knowledge Gaps Among Youth in the Sauti Ya Vijana Program

Sekela Mwasumbi, Lilian Komba, Elizabeth Senkoro, Lumumba Mwita, John Galis, Dorothy Dow

Background: Accurate knowledge about HIV transmission and prevention is essential for effective HIV prevention strategies. Despite increased access to HIV-related information, myths and misconceptions remain common, especially among young people. We assessed baseline HIV knowledge among youth enrolled in the *Sauti ya Vijana* (SYV), meaning

"Voice of Youth" program. SYV is a psychosocial support and empowerment program for adolescents and young adults living with HIV in Tanzania, the program integrates mental health support, life skills development, and sexual health education to help youth navigate the complexities of living with HIV.

Methodology: A total of 690 participants completed a 20-item HIV knowledge questionnaire at baseline.
The questionnaire assessed HIV transmission myths, prevention practices, treatment related information. Responses were categorized as correct, incorrect, or "don't know". Descriptive statistics were used to analyze participant responses and overall knowledge scores were calculated as the percentage of correct responses.

Results: Participants demonstrated moderate HIV knowledge with mean score 60% (SD = 19), median 63% [IQR: 47–74]. Knowledge was highest among 90% of participants who correctly rejected the myth that HIV can be spread through sharing a glass of water and 89% recognizing that hot tubs do not pose a risk.
However, substantial misconceptions were evident particularly on effective prevention strategies and treatment concepts. Only 12% correctly understood that withdrawal does not prevent HIV, and 22% were aware of the risk of HIV transmission through oral sex. Furthermore, 58% responded "don't know" when asked about the effects of oil-based lubricants on condom efficacy. Regarding treatment, 80% correctly identified that people with fully suppressed viral loads cannot transmit HIV (U=U), but 17% incorrectly believed a preventive vaccine exists, and 6% believed viral suppression equates to a cure

Conclusion: Despite exposure to HIV education, these results reveal that significant misconceptions remain among youth living with HIV in understanding key modes of transmission, prevention methods, and treatment. These results highlight the importance of targeted, evidence-based health education and youth-centred interventions that addresses persistent myths as part of HIV prevention programming. The SYV program has incorporated interactive, peer led, and culturally sensitive learning approaches, that simplify complex concepts after the baseline results.
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146: Evaluation of Hepatitis B Testing Coverage and Yield Among Pregnant Women Accessing Antenatal Care Services in Five Districts in Malawi

Teferi Beyene, Elijah Kavuta, Victor Guzani, Gomezga Chitsulo, Gift Kaunda, Stephen Chu, Carrie Cox, Katherine R Simon, Tapiwa Tembo

Introduction: Hepatitis B virus (HBV) remains a significant global health concern, with an estimated 296 million individuals living with chronic infection. In Africa, the pooled HBV prevalence among pregnant women is estimated at 5.9%, representing a risk of vertical transmission ranging from 10-90%. Nearly 990,000 children in the region are newly infected annually, and without timely intervention, up to 90% may develop chronic infection increasing their risk of poor health outcomes. In November 2022, Malawi introduced opt-out HBV testing during antenatal clinic (ANC) as part of its strategy to prevent mother-to child-transmission of HBV. The phased rollout focused on expanding HBV testing at initial antenatal visits and enhancing linkage to care for women who tested positive. We describe HBV testing coverage and yield among pregnant women tested in five districts across central and southern Malawi.

Methods: Using de-identified programmatic data of ANC attendance, HBV test results and maternal age, we describe HBV yield among pregnant women tested at ANC at 95 health facilities between October 2022 and March 2025. Descriptive statistics were used to summarize testing coverage over time, overall yield, and positivity rates by age group. Associations between HBV positivity and maternal age were assessed using Chi-square tests with a 95% confidence interval.

Results: Between October 2022 to March 2025, a total of 272,722 pregnant women attended their first antenatal care visit. Of these, 221,979 (81%) were tested for HBV of which 3,611 (1.6%) tested positive.

HBV screening coverage increased from 13% (170/1,350) in Oct - Dec 2022 to 91% (27,773/30,685) in Jan – March 2025 with sustained high coverage (>90%) achieved by Oct-Dec 2023 and maintained (Fig 1). Despite increasing testing volumes, HBV positivity rates remained consistent around 2%, with an ~4-5-fold increase in absolute number of women diagnosed with HBV (Fig 1).

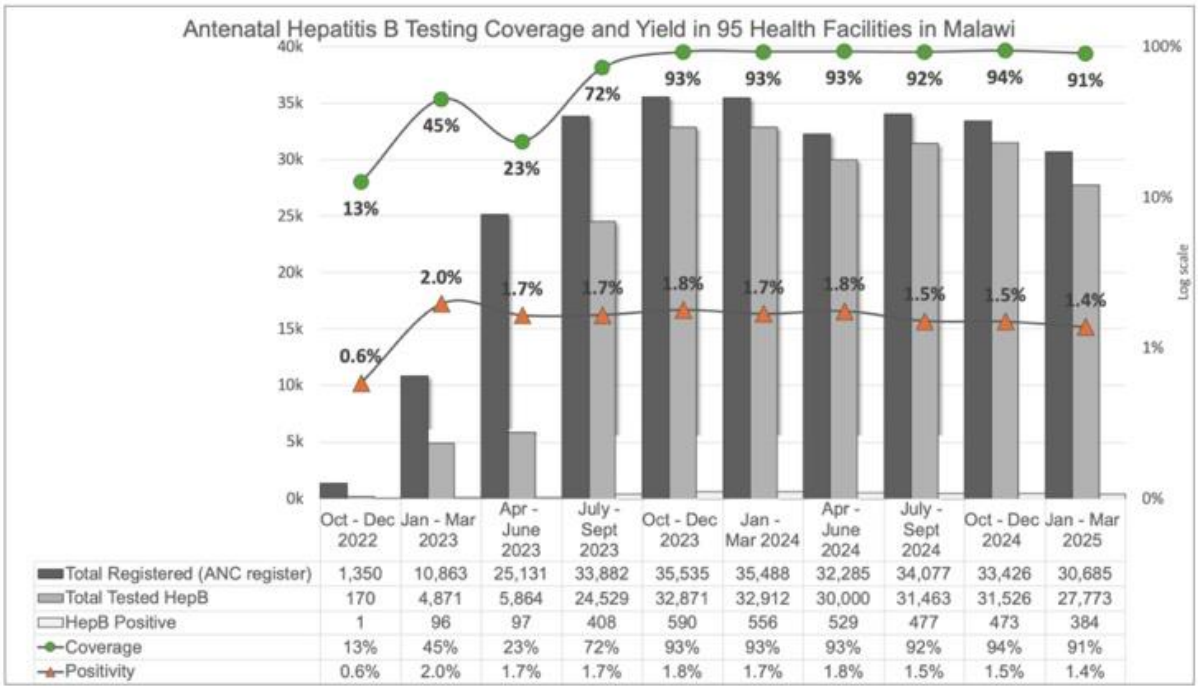


Figure 1 Hepatitis B Testing Coverage and Positivity Yield Among Pregnant Mothers in Their First Antenatal Care Visit

HBV positivity yield increased with maternal age, rising from 0.3% in adolescents aged 10-14 to a peak of 4.4% among women aged 45-49. Yield remained below 1% among women under 20, but steadily rose across older age groups, with a notable infection after age 24. The highest yields were observed in women aged 35 and above, with overlapping confidence intervals suggesting a consistent age-associated trend (Table 1). Chi-square analysis demonstrated a statistically significant association between maternal age and being diagnosed with HBV ($p < 0.05$).

Age Group	Total Tested (N)	Negative	Positive	HBV Positivity Yield (%)	95% Confidence Interval (CI)
10-14	620	619	1	0.3%	0% – 0.9%
15-19	61,815	61,594	221	0.4%	0.3% – 0.4%
20-24	73,894	73,060	924	1.3%	1.2% – 1.3%
25-29	39,954	39,018	936	2.3%	2.2% – 2.5%
30-34	25,891	25,105	786	3%	2.8% – 3.3%
35-39	14,814	14,263	551	3.7%	3.4% – 4%
40-44	4,136	3,976	160	3.9%	3.3% – 4.5%
45-49	690	660	30	4.4%	2.8% – 5.9%
50+	75	73	2	2.7%	0.7% – 9.2%

Table 1: Age-Stratified Hepatitis B Testing and Yield Among Pregnant Women in Malawi

Conclusion: These findings reflect notable improvements in antenatal HBV testing coverage over time. Age-related differences in HBV testing yield likely reflect the lasting impact of Malawi's infant hepatitis B vaccination program. Further investigation is needed to assess whether HBV-positive pregnant women are effectively linked to treatment and

whether their infants receive timely prophylaxis as part of continued progress toward eliminating mother-to-child transmission of HBV.

190: Mother to Child Transmission of HIV: A Descriptive Study of HIV Positive Infants Diagnosed in Public Health Facilities in Eastern Uganda Between January 2022 and December 2024.

Charles Amaku, Francis Mugenyi, Rachael Nakayima, Diana Twisa, Evelyn Bonet Acheptoris, Alex Onyege, Kizito Katulege, Patrick Serunjogi, Winnie Akobye, Alexander Mugume, Jane Nakawesi, Dithan Kirraga

Background: Over 95% of children <5 years living with HIV acquire HIV through Mother to Child Transmission (MTCT) in utero, during labor/delivery, and breastfeeding. In Uganda, the eastern region is among the top 5 regions with the greatest number of HIV positive infants (0 – 2 years), 257 HIV positive infants reported between January 2022 and December 2024.

To identify maternal and infant risk factors present at or before HIV diagnosis of these infants, we conducted a clinical chart audit of the Mother Infant Pairs (MIPs) using the Ministry of Health HIV positive infant audit form in order to inform program interventions for prevention of mother to child transmission of HIV in Eastern Uganda.

Methodology: We conducted clinical chart audit of 240 HIV positive infants diagnosed between January 2022 and December 2024 at 122 public health facilities in eastern Uganda between January 15, 2025 and February 15, 2025. Ministry of Health (MoH) HIV positive infant audit form was used to collect the data. The data was processed in Microsoft excel windows 11 and analyzed using Statistical Package for Social Sciences (SPSS). We summarized infant and maternal characteristics present at or before HIV positive diagnosis of the infant into frequencies and percentages.

Results: Out of the 240 HIV positive audit forms returned, 234 (97.5%) were usable and included in the statistical analysis. The infant median age at HIV positive diagnosis was 6.0 months, SD 4.98; maternal median age 28.0 years, SD 6.34; and maternal ART duration 5.0 months, SD 23.09. Majority of HIV positive infants, 129 (55.1%) were diagnosed at HC III, 178 (76.1%) tested at point of care, 206 (88.0%) diagnosed on 1st PCR test, and 98.9% with HIV confirmation tests were positive. Nearly half the infants, 105(46.7%) had home birth, only 49(20.9%) had early infant diagnostic test (2 months or earlier), less than a quarter 41(17.8%) received ARV prophylaxis at birth and the majority (80.9%) were reported to be exclusively breastfed. More than half infant mothers, 121 (53.8%) were diagnosed during breastfeeding of the infant, 136 (60.2%) initiated ART during breastfeeding of the infant, 123 (56.2%) had unknown sexual partner HIV status, 107 (49.1%) had reported missing taking their ARVs and significant proportion, 94 (43.7%) had been on ART for 3 months or less. Majority of the infant mothers, 62 (63%) with viral load test results had non-suppressed viral load results (>200 copies/ml).

Conclusion: The study revealed suboptimal access to PMTCT services to this cohort of patients, leading to MTCT of HIV. This calls for a deeper understanding of the root causes of this to guide the implementation of evidence-based interventions to prevent MTCT in the region.

192: Determinants of Detectable Viral Load Among Pregnant and Breastfeeding Women in Routine HIV Care and Prevention at Baylor Centre of Excellence, Mwanza, Tanzania

Joyce Mihayo, Neema Kipiki, Evance Mgeyi, Lilian Komba, Eunice Ketangenyi

Background: Maternal viral load suppression remains a cornerstone in the prevention of mother-to-child transmission (PMTCT) of HIV. The World Health Organization (WHO) recommends that pregnant and breastfeeding women living with HIV maintain viral loads below 50 copies/mL throughout the antenatal and postnatal periods to prevent vertical transmission and optimize maternal health outcomes. Despite the scale-up of antiretroviral therapy (ART) programs

across sub-Saharan Africa, including Tanzania, a significant proportion of women remain unsuppressed during pregnancy and lactation, undermining PMTCT gains.

This study aimed to identify clinical and demographic factors associated with detectable viral load among pregnant and breastfeeding women receiving HIV care at the Baylor College of Medicine Children's Foundation Centre of Excellence in Mwanza, Tanzania.

Methodology: This was a retrospective cross-sectional study analyzing routine clinical data from March 2022 to March 2024 for 227 HIV-positive pregnant and breastfeeding women at Baylor COE in Mwanza, Tanzania. Key variables included demographic, clinical, and treatment-related factors. Descriptive statistics and binary logistic regression were used to identify factors associated with detectable viral load (>50 copies/mL), with significance set at $p < 0.05$.
Results: Of the 227 participants included in the analysis, 82.4% were breastfeeding and 17.6% were pregnant, with a median age of 33 years. A large majority (93.4%) were categorized as clinically unstable, and 38% were in advanced WHO clinical stages (III or IV). Most clients (95.2%) were receiving first-line ART (TDF/3TC/DTG), with a mean treatment duration of approximately 100 months. Overall, 72.2% of the women achieved viral suppression, while 27.8% had detectable viral load (VL >50 copies/mL). Logistic regression analysis identified several factors significantly associated with detectable viral load. Clinical instability emerged as the strongest predictor ($p < 0.001$), with unstable clients showing substantially higher odds of virologic non-suppression. Clients in WHO stage III or IV were also more likely to have detectable VL compared to those in stage I ($p = 0.013$). A shorter ART duration defined as less than 12 months was significantly linked to detectable VL ($p = 0.021$), suggesting incomplete suppression among recently initiated clients. Additionally, missed or unscheduled clinic visits were associated with higher VL ($p = 0.034$), indicating adherence and retention challenges. Finally, clients who experienced delayed viral load monitoring, defined as six months or more since the last test had significantly higher odds of having detectable VL ($p = 0.018$).
Conclusion: A notable number of pregnant and breastfeeding women at Baylor-Mwanza had detectable viral load despite being in care. Key contributing factors included clinical instability, advanced HIV stage, recent ART initiation, missed visits, and delayed viral load testing. Addressing these gaps through improved adherence support, early ART initiation, and timely monitoring is vital to enhance maternal health and prevent mother-to-child HIV transmission.

207: Engaging peers and district-led mentorships to accelerate HIV, Syphilis, and Hepatitis-B testing among pregnant women attending ANC1 at 156 health facilities in Rwenzori, Uganda.

Mary Mugabekazi, Micheal Juma, Edgar Sserunkuma, Annet Zalwango, Richard Kyakuwa Jjuuko, Denise Birungi, Dithan Kiragga

Background: Ministry of Health Uganda (MOH) is committed to eliminating mother-to-child transmission (eMTCT) through the triple elimination of HIV, syphilis, and hepatitis B (HBV) during pregnancy, intrapartum partum and postpartum period. By 2024, the Rwenzori region with nine (9) districts and one (1) city had achieved 99% (29,090/29,153) HIV testing, 95% (27,735/29,153) syphilis testing and only 60% (17,529/29,153) hepatitis B (HBV) testing among pregnant women attending their first antenatal care visit (ANC1). These suboptimal HBV testing rates were associated with stock out of HBV test kits, non-targeted health education to mothers, and a knowledge gap on HBV testing among midwives. This abstract describes the role of peers and district-led mentorships in accelerating HIV, syphilis, and HBV testing among pregnant women attending ANC1 across 156 supported health facilities (HF) in this region.

Description: Between October 2023 to March 2025, data for pregnant women attending ANC1 at 156 BFU-supported facilities was analysed for HIV, syphilis, and HBV testing. Secondly, facilities scheduled health education sessions, assigned peer mothers health education topics, literacy materials, and supported linkage of mothers for HBV testing at the maternal child health (MCH). Through the engagement of the district-based eMTCT mentors from high-performing HF, midwives were supported to place timely orders for test kits, complete completion of the stock cards, and support

exchange learning visits to facilities performing better than others. Facility work improvement teams documented all processes in the documentation journals and held weekly discussions to test innovations.

Evaluation and Outcomes: Between October and December 2024, testing coverage among pregnant women attending ANC1 improved as follows:

- HIV testing increased from 96% to 100%
- Syphilis testing increased from 90% to 96%
- Hepatitis B testing increased from 43% to 80%

Lessons Learned: The peer-to-peer mentorship model enables same cadre transfer of knowledge and sharing of best practices. Peer mothers with the right information on triple elimination are a resource to offering routine client education to mothers, and quarterly PMTCT data review meetings facilitate performance sharing and cross-learning among midwives. Inconsistencies in the availability of testing commodities remained a critical factor for success, and this was mitigated through routine stock monitoring, timely ordering, and inter-facility and intra-district redistribution of testing commodities.

Next Steps:

- Focus and emphasis should be placed on the management of Hepatitis B-positive cases, especially in upcountry health facilities that lack easy access to treatment facilities for Hepatitis B.
- Further improve the testing volumes for HEP B to the same standards as HIV and Syphilis tests.
- Use this data to inform decisions on triple elimination performance in the region.

Expanding Horizons: Cross-Cutting Health Challenges and Innovations in Care

79: SCALE-ing Hope in Kayunga: Transforming Sickle Cell Care from Birth Onward through a Health Systems Strengthening Model

Angella Mirembe Nanteza, Josephine Denise Birungi, Ruth Namazzi, Patricia Nahirya Ntege, Anne Akullo, Philip Gitta Kasirye, Isaac Tumusiime, Sophia Nakitto, Dithan Kiragga, Susan Nabadda

Background: Sickle cell disease (SCD) is a leading cause of childhood illness and death in sub-Saharan Africa. To address delays in diagnosis and access to care, the SCALE Program was launched on 28 October 2024 in Kayunga District. The program aims to integrate essential, evidence-based SCD interventions into primary health care through enhanced newborn and infant screening, capacity building, mentorship in standardized care, timely initiation of treatment, and expansion of services to community and lower-level facilities.

Description: Using SCD and live birth data from DHIS2 to inform program design, the SCALE Program was implemented with three-year funding from the Bristol Myers Squibb Foundation through Texas Children's Global HOPE. Baylor Foundation Uganda (BFU), the local grant recipient, is implementing the program with the Ministry of Health Uganda (MOH), providing logistical support and program oversight. A specialist team from the National Health Laboratory and Diagnostic Services, Makerere University, Mulago SCD Clinic, and the Uganda Paediatrics Association mentored health workers of different cadres at Kayunga Regional Referral Hospital (KRRH). The team was trained on the essential SCD care package, point-of-care (POC) sickle scan screening using dried blood spots (DBS) and tracking key metrics through facility registers and DHIS2 dashboards. They later conducted community outreaches and trained staff at lower-level facilities to support decentralized care.

Evaluations and Outcomes: Since inception, 4,701 infants (including 2,024 newborns) have been screened. Screening at KRRH reached 98% among 755 live births, with a 38% (2,035) increase in total screenings in Quarter 2 (February to March 2025) compared to Quarter 1 (November 2024 to January 2025). Of 104 diagnosed infants, 94% (98) were promptly linked to care. By April 2025, 98.7% (823/833) of children living with SCD attending the clinic were on

hydroxyurea, compared to 94.5% at the end of Quarter 1. All eligible children received penicillin prophylaxis. Sixty health workers completed comprehensive SCD care training, reinforcing early diagnosis, management of complications, and genetic counselling. We screened 1,171 children in 21 community outreaches and identified 12 new Hb SS cases in the 0–2-year group, all linked to care. New SCD clinics have opened at Kangulumira and Bbaale Health Centre IVs.

Lessons Learned: The program shows that early diagnosis, timely treatment, and decentralized care can be achieved quickly. Ongoing mentorship and capacity building are essential for sustaining quality and expanding services. Integration into immunization and community health platforms enhances sustainability and could reduce SCD-related morbidity and mortality. A national data system is needed to support detailed tracking and inform policy and planning.

Next Steps: In Years 2 and 3, the program will expand to Lira and Mbale districts. Continued collaboration with MOH and manufacturers to reduce SCD commodity costs aims to ensure government ownership and sustainability beyond donor funding.

85: Diagnostic Stewardship as a Catalyst for AMR Control Strategies: Lessons from Uganda in Optimizing Test Utilization and Antibiotic Use

Ritah Namusoosa, Grace Najjuka, Ibrahimm Mugerwa, Benedict Kanamwanji, Morgan Otita, Michael Roger Eilu, Susan Nabadda

Background: Antimicrobial resistance (AMR) is a growing threat to public health and healthcare systems in Uganda, exacerbated by high infectious disease burdens, overuse of antimicrobials in both human and animal sectors, and limited access to diagnostic services. Most prescribing is empirical, with minimal use of lab data. We evaluated the integration and impact of diagnostic stewardship within the National AMR surveillance framework.

Description: The program was implemented through a tiered laboratory network, with Health Centre IIIs and IVs (HCIII/HCIV) and General Hospitals (GH) referring samples to Regional Referral Hospitals (RRHs) that served as microbiology hubs for culture and antimicrobial susceptibility testing. National Reference Laboratories provided confirmatory testing, quality assurance, and AMR coordination. Interventions included training, mentorship, supply of essential equipment, strengthening of specimen referral systems, standardizing diagnostic algorithms, and deploying WHONET for data analysis and clinician feedback. The program covered 14 AMR sentinel labs and 82 GHs across 15 health regions, led by multidisciplinary teams of clinicians, lab scientists, pharmacists, and microbiologists, and utilized national surveillance data.

Evaluation and Outcomes: We used a mixed-methods approach, combining data from the national AMR surveillance system and WHO-modified Point Prevalence Surveys (PPS) on antimicrobial use. Between the baseline (October 2022–September 2023) and post-intervention period (January–December 2024), use of gram stain in lower-tier facilities increased from 12% to 26% ($p = 0.014$). Culture referrals from lower-tier facilities to RRHs rose from 600 to 968 ($p = 0.047$). Culture uptake increased from <1% to 2.6% in RRHs and 4.3% in specialized institutes ($p = 0.039$). Antibiotic use rose from 95.6% to 97.9%, with access antibiotic use increasing (31.2% to 38.4%), watch-group use declining (54.3% to 46.1%), and reserve use increasing in specialized institutes (1.6% to 14.3%). Parenteral administration declined in GHs (87.5% to 74.2%) and specialized institutes (89.5% to 77.8%). Cultures rose from 26,304 (11% yield) to 39,233 (47% yield). *E. coli* showed >70% resistance to ceftriaxone, ciprofloxacin, and ampicillin; K. *pneumoniae* had 83% resistance to cefotaxime; *S. aureus* showed 88% resistance to penicillin G and 65% to oxacillin. There was a correlation between watch antibiotic use and resistance in low-culture-use facilities ($r = 0.74$, $p = 0.004$).

Lessons Learned: Improved test use and antibiotic prescribing, especially in lower-tier facilities, through mentorship, better sample referrals, and sharing local resistance data with clinicians. Despite supply delays and gaps in result sharing, even small lab improvements paired with regular feedback changed prescribing practices.

Next Steps: Scaling up the model country-wide, integrating stewardship indicators into routine monitoring, and creating a National AMR dashboard that links clinical, laboratory, and pharmacy data for real-time decision-making. This model is adaptable to other low- and middle-income countries with tiered health systems seeking to optimize antibiotic use and curb AMR.

97: Struggle for Dignified Pediatric Palliative Care in Rural Botswana

Sewelo Sosome, Thato Kaang, Obokeng Ramphaleng, Robert Kimutai, Mogomotsi Matshaba

Background: Pediatric palliative care in Botswana remains deeply challenged by systemic inequities, cultural misconceptions, and resource constraints. As outreach programs extend into rural communities, the grim realities faced by families of children with terminal illnesses expose structural deficits and psychological vulnerabilities. These families, already burdened by grief, confront logistical, emotional, and financial obstacles with little formal support.

Description: Despite national palliative care frameworks, rural Botswana lacks a robust home-based care system. Families face care without access to trained palliative care nurses, community health workers, psychological counselors, or reliable transportation. Operational ambulances are sparse, blood product shortages are routine, and rigid social welfare structures exclude many unemployed mothers from consistent financial aid. As biomedical interventions fade, families turn to traditional healers—both for hope and due to cultural familiarity—often straining already limited finances.
This study critically examines the lived realities of rural families caring for terminally ill children through the lens of palliative outreach visits. It interrogates the structural gaps in care delivery, cultural interpretations of palliation, and the emotional toll of dying outside institutional care settings.
A multi-method ethnographic approach was used during 12 rural palliative care outreaches involving interviews with 25 caregivers, 10 healthcare providers, and field observations. Data was analyzed using grounded theory and systems-thinking frameworks, integrating empirical data with culturally grounded analysis.

Evaluation and Outcomes: Outreach teams attempted symptom control, emotional support, and psychosocial education. Limited resources constrained the scope of care, often excluding transfusions or morphine due to stock-outs and stigma. Psychological interventions such as legacy-building, dream fulfilment for dying children, or bereavement planning were absent due to lack of trained staff and cultural discomfort with discussions around death.

Lessons learned: Families equated palliative care with abandonment, describing it as "when doctors give up." Breaking bad news without continued community-based support left families disoriented and spiritually distressed. Many feared administering morphine due to addiction myths. Mothers recounted borrowing money, selling belongings, or walking kilometres to clinics. Children died in pain, unprepared and without emotional closure. Outreach revealed the urgent need for psychosocial capacity-building, policy reform for inclusive welfare eligibility, and culturally aligned memory-making programs for dying children.

Next Steps: Palliative care outside hospital gates in Botswana is a fragmented, with some caregivers terming it as unsupportive and highlighting some level systemic neglect. Interventions must go beyond episodic outreach to establish community-integrated palliative networks, de-stigmatize pain management, fund family-centered social programs, and develop legacy-based psychological support. Only then can the promise of dignified, compassionate end-of-life care become a reality for all children—regardless of geography.

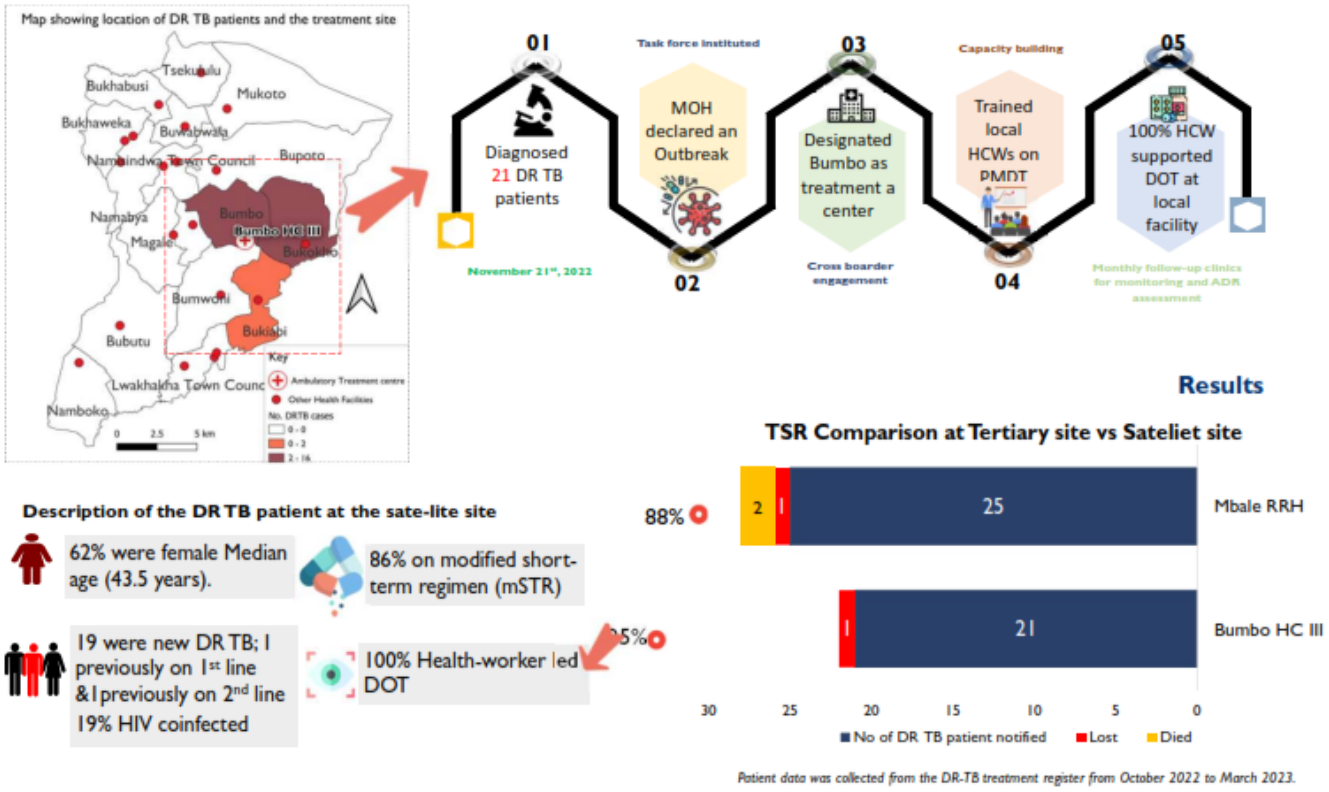
101: Transforming Drug Resistance Tuberculosis Care: Success of a Fully Ambulatory Model During a Tuberculosis Outbreak in Namisindwa district, Uganda

Joshua Brianwong Clark, Damalie Namuyodi, Lwanga Zimwanguyiza Ssekiswa, Winnie Akobye, Alex Mugume, Dithan Kiragga

Background: In Uganda, the management of drug-resistant tuberculosis (DR-TB) typically involves a mixed model, where patients begin treatment in tertiary hospitals and later transition to ambulatory care. After stabilisation, patients continue daily directly observed therapy (DOT) at local health centres and visit tertiary hospitals for monthly treatment monitoring and management of any adverse events. This study compares outcomes of DR-TB patients treated using a fully ambulatory care model at Bumbo Health Center III, Namisindwa, during an outbreak (October 2022 to March 2023) with the traditional mixed model.

Description: In November 2022, following 21 diagnosed cases of rifampicin-resistant TB, the Ugandan Ministry of Health declared a DR-TB outbreak in Namisindwa. A multidisciplinary response team was formed. Due to space constraints at the tertiary hospital, ambulatory treatment was initiated for all 21 patients, as recommended by the response team. Baylor Foundation Uganda, in collaboration with the Mbale Regional Referral Hospital programs, trained healthcare workers at Bumbo Health Centre to manage patients, ensuring 100% DOT. Monthly follow-up clinics were held for treatment monitoring, adverse events screening, and contact tracing. All patients were retained at Bumbo Health Center III for the full duration of care. Key resources included human resource reallocation, mentorship, job aids, and monthly follow-up clinics.

Evaluation and outcomes: Of the 21 patients treated at the satellite site, 62% were female, with a median age of 43.5 years. Most (90%) were newly diagnosed with TB; one had previously been treated with second-line drugs, and another with first-line drugs, and 19% were HIV positive, with three newly diagnosed. Modified shorter treatment regimens (mSTR) were used in 86% of patients, with all receiving health worker-led DOT. The treatment success rate at Bumbo was 95%, with one lost to follow-up, compared to 88% for patients treated at the tertiary hospital. Patient data was collected from the DR-TB treatment register from October 2022 to March 2023.



Lessons learnt: The ambulatory model effectively delivered high-quality DR-TB care during an emergency in a rural, resource-limited setting. Key enablers included rapid capacity building, strong community linkage systems, and localized decision-making. Challenges included initial community stigma and ensuring consistent drug supply. This model

demonstrated that with targeted support and adaptive planning, lower-level facilities can manage complex DR-TB care as effectively as referral hospitals.

Next steps: Following the success of the Bumbo pilot, Uganda's health Ministry operationalised five additional DR-TB treatment sites. This model represents a scalable, resilient approach for expanding DR-TB services in other high-burden, low-resource contexts. Future plans include cost-effectiveness analysis, digital adherence tools, psychosocial support, and sustainability assessments. Continued investment in training, data systems, and logistics is key. This approach supports Uganda's DR-TB decentralisation strategy and demonstrates the potential of community-based care models to improve treatment outcomes nationally.

116: Shadows That Linger: Psychological and Cultural Dimensions of Maternal Grief After Pediatric Palliative Loss in Botswana

Sewelo Sosome, Thato Kaang, Robert Kimutai, Mogomotsi Matshaba

Background: In the paediatric oncology and haematology unit at Princess Marina Hospital, Botswana, caregiving mothers endure prolonged, intimate, and emotionally taxing journeys with their terminally ill children. Following recent palliative losses, five mothers were admitted to Sbrana Psychiatric Hospital an outcome that underscores the silent, cumulative trauma endured in resource-limited settings where post-burial psychosocial support is either minimal or absent. These women not only lost their children, but also their sense of purpose, financial stability, and mental health equilibrium. While culturally rooted mourning practices are symbolically rich, their time-bound nature typically 3–4 days can truncate emotional processing and silence unresolved grief. Current social work interventions lack the bereavement specific, trauma-informed frameworks needed to address these complex emotional ruptures.
Description, Evaluation, and Outcomes: This study draws on qualitative insights from five bereaved mothers using the Psychosocial Distress Assessment Form (PDAF)—a semi-structured tool administered during home visits and grief follow-up sessions. Thematic analysis revealed multi-dimensional grief compounded by cumulative losses: economic (job loss), familial (relationship dissolution), parental (diminished caregiving capacity), and existential (eroded identity). Once active caregivers embedded in hospital routines, the mothers experienced a traumatic vacuum post-death. Cultural rituals, though comforting during the burial phase, did not offer sustained emotional scaffolding. With no NGOs or formal grief support structures, and minimal psychological debriefing, these women spiralled into severe distress requiring psychiatric intervention. Standard community social work referrals were largely ineffective due to the absence of grief-specialized, culturally competent care.

Lessons Learned:

1. **Grief is not linear:** The caregiving journey creates anticipatory grief, but the actual death evokes a qualitatively different psychological rupture often delayed and profound.
2. **Culture offers partial solace:** While traditional rituals acknowledge death, they fall short in addressing chronic emotional pain, especially when time bound.
3. **The care gap is systemic:** Once a child dies, there is no structured psychosocial follow-up, exposing caregivers to disenfranchised grief.
4. **Zero-cost, scalable interventions are possible:** Caregiver support groups, grief storytelling circles, memory making practices, and spiritual containment rituals.
5. **Palliative care preparation is underutilized:** Mothers should be prepared for death not just medically, but psychologically and spiritually.

Next Steps: To mitigate long-term psychiatric breakdown among grieving caregivers:

- **Integrate a structured "Post-Burial Debriefing Protocol"** into Pediatric palliative care units, with culturally responsive, group-based grief circles.
- **Train frontline social workers** in grief counselling using indigenous healing wisdom and trauma informed care.

- **Develop a caregiver led support model** using "Memory Mothers" (bereaved mothers trained to support others) as grief doulas.
- **Co-create zero-cost self-care tools** (e.g., guided grief journals, culturally aligned affirmation cards, home rituals) to support reflective healing.
- **Strengthen anticipatory grief work** by integrating psycho-spiritual counselling into palliative care.

147: Retrospective Study Assessing Hypertension Prevalence and Associated Risk Factors among Adolescent and Young Persons Living with HIV in the Post-COVID-19 Period at Baylor Foundation Uganda Center of Excellence.

Victoria Ndyanabangi, Cathbert Tumusiime, Lameck Kiyimba, Richard.K Jjuuko, Dithan Kiragga

Background: The 2022 consolidated guidelines for the prevention and treatment of Human Immune Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) in Uganda provided guidance for integrating hypertension (HTN) screening and management into routine service provision to persons living with HIV (PLHIV) in the post-COVID-19 period. This abstract demonstrates how Baylor Foundation Uganda (BFU) shifted from vertical disease management to an integrated clinical and public health care model that promotes universal access and social justice.

Methods: Between January 2022 and January 2025, a retrospective analysis was conducted using electronic medical records from the Baylor Uganda Clinical Center of Excellence. The study assessed the burden of hypertension among adolescents and young adults living with HIV and described associated risk factors, including age, sex, body mass index (BMI), mid-upper arm circumference (MUAC), HIV transmission mode, and smoking or alcohol use. Logistic regression identified predictors of hypertension, with significance set at $p<0.05$. Data were analyzed using STATA v17 under IRB-approved protocol H-26616.

Results: We analysed data from 776 clients; the majority were female (66.1%), with a median age of 14 years (IQR: 11–18). Nutritional status was largely favourable, with over 80% exhibiting a normal MUAC, and 61.1% (n=463) presenting with a healthy weight. Consensual sexual activity was the most reported mode of HIV transmission (56.9%). A vast majority (97.1%) reported no history of smoking, while nearly 2 in 10 disclosed a history of alcohol use. Notably, the prevalence of hypertension among these adolescents and young adults was 9.53% (95% CI: 7.66%–11.82%). In multivariable logistic regression analysis, individuals aged 15–19 years had significantly lower odds of hypertension compared to those 10–14 years (OR: 0.51; 95% CI: 0.27–0.95; p=0.034). Males were nearly twice as likely to have hypertension compared to females (OR: 1.98; 95% CI: 1.22–3.21; p=0.005). Clients who had been on ART for over 15 years had significantly higher odds of hypertension compared to those who spent five or fewer years on ART (OR: 4.29; 95% CI: 1.18–9.99; p=0.001). Other variables, including MUAC category, BMI status, infection route, smoking history, and alcohol use, were not significantly associated with hypertension.

Conclusion: The prevalence of hypertension highlights an emerging cardiovascular risk that calls for early clinical attention, especially in adolescent and young populations living with HIV, where traditional risk factors of hypertension are likely not prominent. Integrating routine blood pressure screening into youth-centred services might serve as an opportunity for early detection of hypertension-related complications among clients in this age group, especially those with longer duration on ART.

186: Integrating lay health worker-supported blood pressure screening into routine HIVcare identifies people with hypertension and links them to care at health facilities in Malawi

Carrie Cox, Victor Guzani, Alick Mazenga, Gift Kaunda, Stephen Chu, Katherine R Simon

Background: People living with HIV (PLHIV) are at risk of poor outcomes from cardiovascular disease. Integration of blood pressure (BP) screening into routine HIV care facilitates early detection of hypertension and linkage to treatment. Since 2022, Malawi HIV ART guidelines have recommended integrated BP screening for PLHIV 30+ years. Baylor

Foundation Malawi (BFM) has utilized community health workers (CHWs) since 2008 to help clients navigate longitudinal HIV care cascades in Malawi. We describe integration and scale-up of BP screening and referral into this continuum of HIV care.

Methods: Baylor Foundation Malawi supports delivery of HIV prevention, care and treatment services in 96 health facilities. Lay health workers (CHWs) were trained to deliver hypertension health education, to identify those eligible for BP measurement; to measure BP using automated cuffs; and to refer people with elevated BP (>140/90) or taking anti-hypertensive medication for clinical evaluation at ART. Automated BP cuffs were provided for use during ART clinic triage. Cluster-based CHW trainings included video demonstrations of BP measurement followed by practicals, modeled health talks on BP lifestyle modification, and use of a tally for tracking and reporting. Trained CHWs integrated screening into ART triage and tracked eligibility, BP results, and referrals. Routine program data was analyzed.

Results: BP screening integration began in February 2024 with 11% (n=10) sites reporting week 1, 49% (n=47) week 2, and 91% (n=86) by week 5 with 96% sites (range: 88-100%) consistently reporting from July. From February - 30 Nov 2024,106,837 blood pressures were measured, with 6.6% (n=7072) high BP (>140/90). Reported completed counseling sessions for people with high BP increased consistently from July 2024 (figure 1).

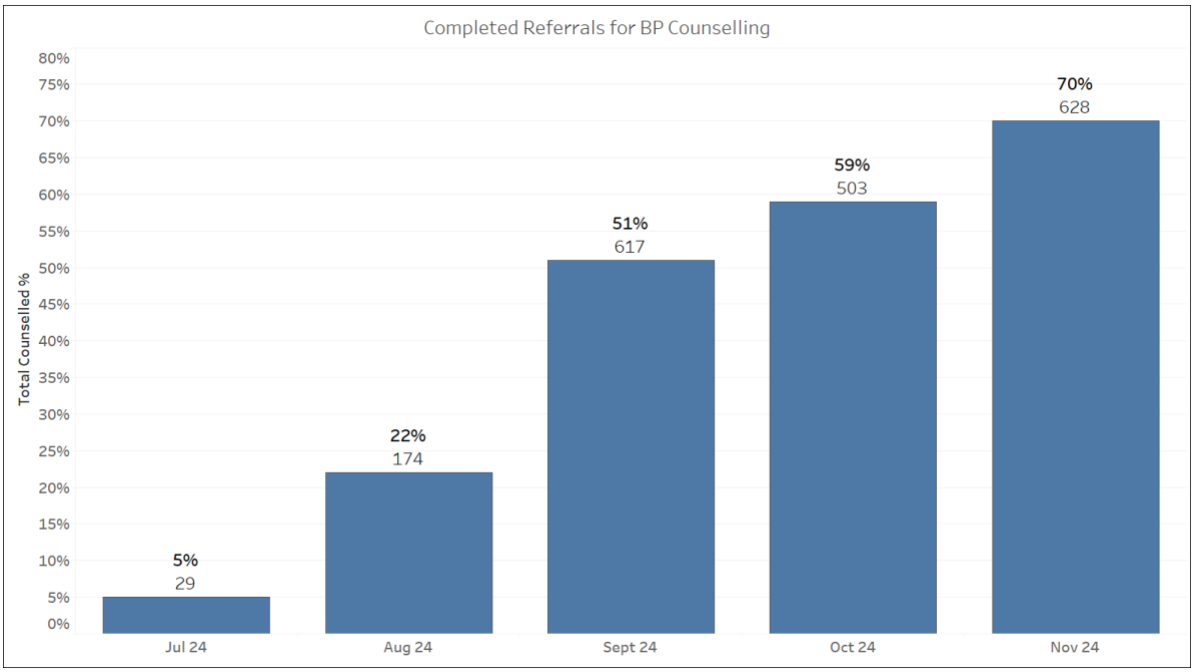


Figure 1

Conclusions: Leveraging a CHW-supported longitudinal care cascade for PLHIV to integrate BP screening in routine ART care is feasible and facilitates identification and linkage to care. Quantification of medical treatment linkage is underway.

Quality Improvement in Action: Strengthening Systems and Services Across Contexts

55: Enhancing comfort and support for paediatric cancer patients and their guardians through clean and safe Hospital Environments: A Quality Improvement Initiative at Kamuzu Central Hospital, Malawi

Memory Sabantini, Sellina Lemon, Tabitha Chimtengo, Florence Chilu, Jessie Sinkhonde

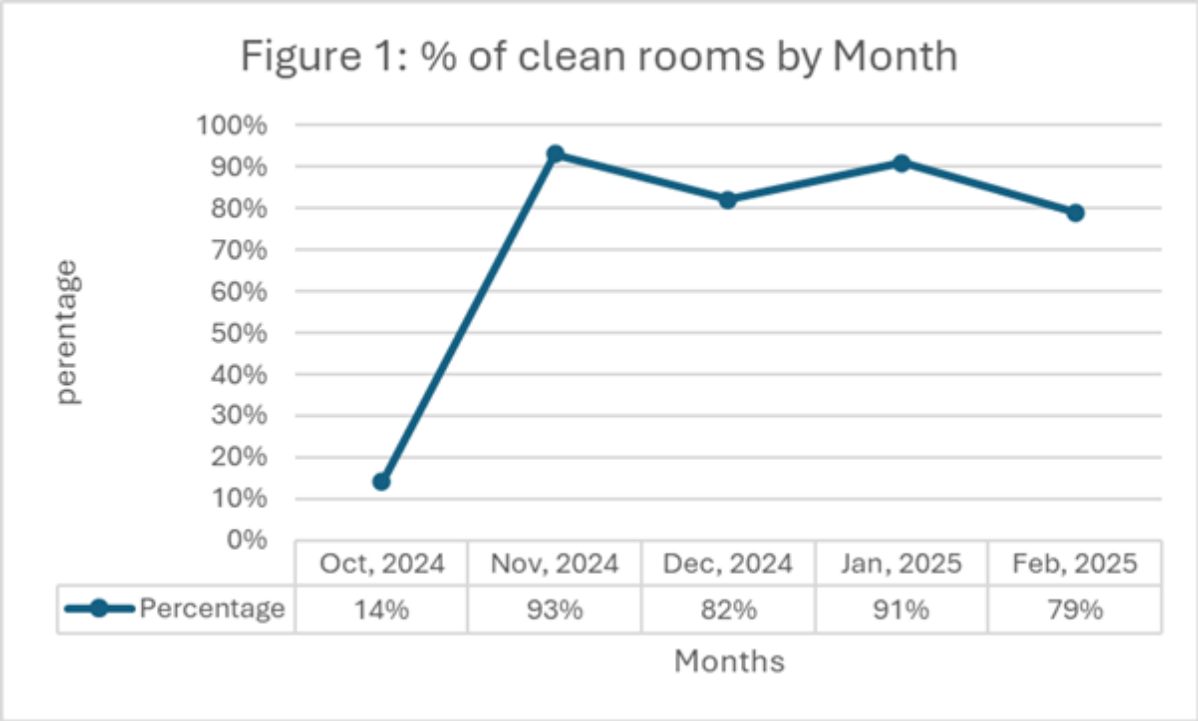
Purpose: Paediatric cancer treatment involves extended hospital stays, placing significant emotional and physical strain on patients and guardians. A clean, safe and supportive environment can significantly improve their comfort. Data

collected in October 2024 at Kamuzu Central Hospital Paediatric Oncology Unit revealed that only 14% of the rooms met the locally developed cleanliness and organisation standards, posing a significant risk for infection, safety and discomfort. This Quality Improvement (QI) project aimed to enhance the cleanliness and organisation of paediatric cancer patient rooms by 80% within five months. This would, in turn, create a more comfortable, supportive, and healing environment for both patients and their guardians.

Methods: The Unit is comprised of eight rooms, each with five to eight beds. A five-person team was established to oversee project activities, with defined roles. The team held meetings with the department and guardians to brief them on the project. Monthly meetings were conducted to review progress and plan next steps. Education sessions were conducted to emphasize cleanliness and guardians' role in maintaining a supportive environment. A locally developed scoring tool assessed cleanliness of patient rooms and overall patient environments. The tool measured patient and room cleanliness, organization, and equipment arrangement. Rooms scoring 90% or above were considered clean.

A guardian team lead was selected weekly per room to oversee cleanliness and incentives were provided for adherence to cleanliness standards. Patients received bath soap. Mackintosh sheets and diapers were supplied to bedwetting children. Small bins were emptied twice daily by guardians. Patient attendants were responsible for cleaning and organizing rooms, ensuring that equipment and personal belongings were orderly to minimise clutter. Data were collected and analysed monthly.

Results: Four months post-baseline, 86% of patient rooms met cleanliness and organization criteria on average, although monthly scores varied. After initial implementation, a 93% score was achieved in the first month. Following a decline in December 2024, roles were reassigned and additional activities implemented, resulting in a 91% score in January 2025. All activities were maintained through February 2025, which had the lowest score of 79%. Resource shortages and staffing challenges impacted some activities. Regardless, guardian satisfaction improved, with guardians feeling more involved and supported in maintaining the comfort and cleanliness of their child's environment.



Discussion: This QI project demonstrated that a structured approach to improving cleanliness and organization significantly enhances comfort for paediatric cancer patients and guardians. These findings highlight the importance of environmental interventions in paediatric oncology and provide a framework for ongoing hospital improvements. Despite resource constraints and some guardians' resistance, strong team coordination and departmental support were

key to success. The team plans to address remaining challenges and integrate the project into routine ward activities, with ongoing health education on cleanliness and organisation.

128: Viral Suppression Among Children and Adolescents Living with HIV (CALHIV) in Eastern Uganda: The Applications of Selected Components of Chronic Care Model (CCM) to Improve Viral Suppression in Challenging Age Sub-population.

Charles Amaku, Francis Mugenyi, Alex Onyege, Patrick Serunjogi, Kizito Katulege, Winnie Akobye, Alexander Mugume, Dithan Kirraga

Introduction: Children and Adolescents (0-19 years) Living with HIV (CALHIV) on Antiretroviral Therapy (ART) present challenges to achieving the UNAIDS third 95 by 2030. HIV viral non-suppression is highest among CALHIV and is associated with increased incidence of opportunistic infections, hospitalization and overall poor health outcomes. We implemented components of Chronic Care Model (CCM) to improve viral suppression among CALHIV on ART that had a suppression rates of 70.3% in Bukedi sub-region, Eastern Uganda between March-2024 and December-2024

Methodology: We conducted a review of Electronic Medical Records (EMR) and national viral load database to identify public health facilities that contributed to 50% of non-suppressed CALHIV. A multi-disciplinary team of healthcare providers profiled the non-suppressed CALHIV and provided self-management support of setting care goals, health literacy, strength-based counseling to address adherence barriers as a family. Healthcare providers received decision support through coaching sessions during joint clinical reviews of CALHIV at facilities and during home visits with senior district and project technical officers. For services delivery system, we revised provider roles, work scope, instituted recall system for patients with urgent care needs, planned patient visits, clinic flows, and sustained client follow-up plans. EMR and national viral load database were used to track patient care interventions and monitor viral load tests. We compared viral load suppression rates at baseline in March-2024 and end line December-2024 to determine if there was an improvement.

Results: Among the 370 CALHIV with an updated viral load result, the median age was 12 years and the viral suppression rate (<1,000copies/ml) was 70.3% at baseline. HIV viral suppression rate improved to 87.4% (348/398) by the end of intervention in the 10 facilities and the overall viral load suppression rate for the CALHIV in the sub-region improved from 71.5% (631/883) to 84.4% (893/1058).

Conclusion: Viral load suppression among CALHIV improved significantly, nearly to the national average for all age groups. Scaling up application of CCM that improves self-management, clinical decisions, care delivery systems and increase utilization of digital health information provides great opportunity to improve clinical outcomes of critical sub-populations and overall population.

130: Enhancing Voluntary Medical Male Circumcision Service Quality in Mubende Region, Uganda: A Local Government-Led Approach

Henry Kalungi, Evelyn Nabulime, Richard Jjuuko, Silaas Mutimba, Patrick Lubogo, Samuel Aheebwa, Annet Zalwango, Jane Nakawesi, Hilda Sekabira, Michael Juma, Denise Birungi, Dithan Kiragga

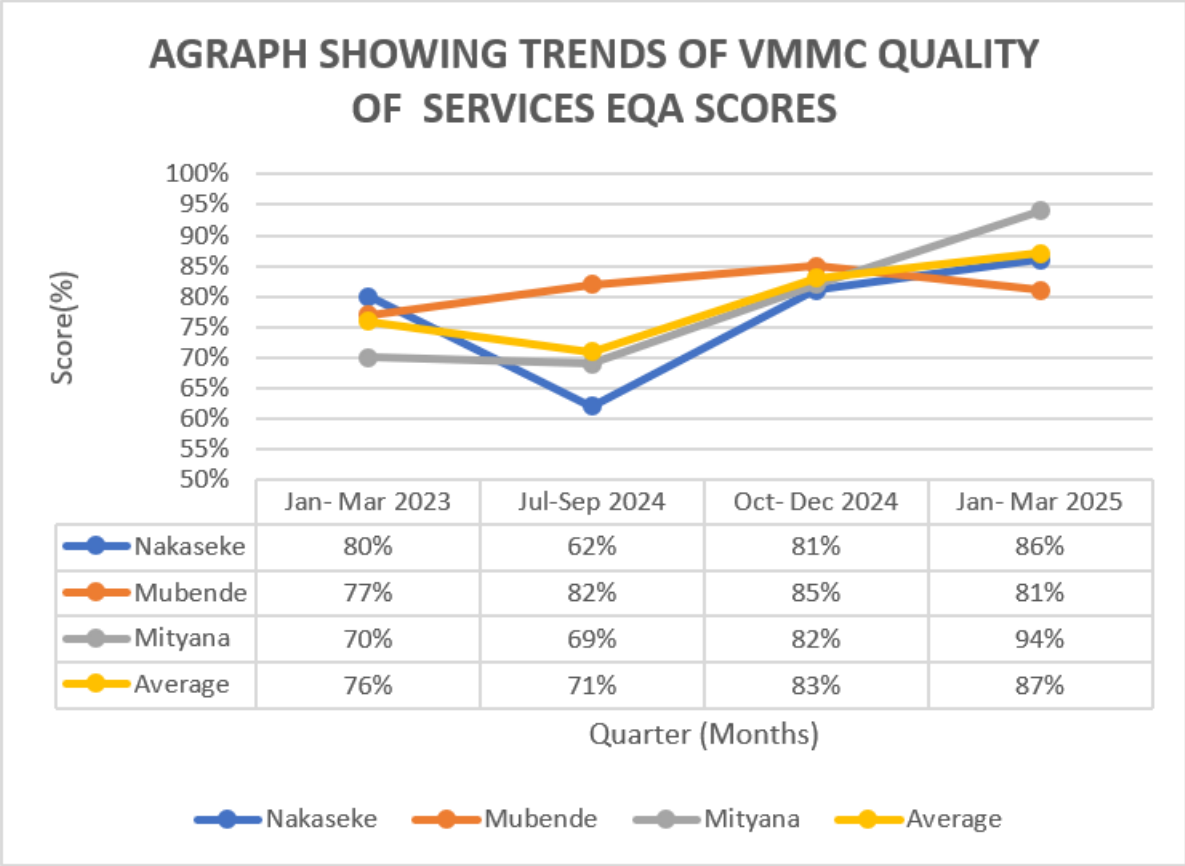
Background: Ministry of Health (MoH) Uganda adopted a national Safe Medical Circumcision policy that recommends provision of voluntary medical male circumcision (VMMC) services for all men. This is an important HIV combination prevention strategy that reduces the risk of HIV acquisition among circumcised men by approximately 60%. In Mubende, VMMC service quality was at 76% (74/98) in March 2023. This performance was associated with, engagement of roving VMMC teams of health care workers that were neither district residents nor district employed staff to offer VMMC services, making it hard to monitor and sustain the quality of services. We describe how Baylor Foundation Uganda

(BFU) supported districts to establish sustainable structures to provide and monitor VMMC quality services in three districts of Mubende region.

Description: Through the Fort Portal-Mubende project engaged district health officers (DHOs) of Mubende, Nakaseke and Mityaana to conduct a service quality assessment for VMMC services using an MOH approved tool. Results were analyzed and prioritized using a prioritization matrix based on what was important and easy to implement. Key gaps included limited trained personnel, outdated SOPs, inadequate logistics, poor IPC, weak post-op follow-up, and emergency response knowledge. District teams used VMMC data to develop micro-plans aligned with PEPFAR priorities. Interventions supported district-led planning, data-based site selection, and training of 20 health workers (7 circumcisers, 7 assistants, 6 counselors) in VMMC and 8 in emergency resuscitation. While working with the DHO's assigned VMMC focal persons at districts and facilities, BFU equipped 3 targeted facilities with VMMC equipment, SOPs and engaged MOH to accredit the facilities. District logistics focal persons reviewed VMMC logistics weekly to avert stock outs, while a BFU toll free number was provided to every circumcised male, for continued support, counselling, reporting of any adverse events (AEs) and follow up. Sites tracked service quality through weekly monitoring of improvement aims documented on journals, while testing innovations through plan-do-study-act cycles.

Evaluation and outcomes: VMMC service quality improved significantly, from 76% to 87% in Jan-Mar 2025. The local government-led model empowered districts to make decisions, with almost all VMMC services conducted by local health workers. AE occurrence remained below the national expected rate with a noticeable increase in service quality. Abrupt transfer of trained VMMC providers affects continuity of service since it renders teams incomplete, training a larger pool of VMMC providers closes this gap.

Figure 1: A VMMC EQA services assessment in Mubende region



	Jan- Mar 2023	Jul-Sep 2024	Oct- Dec 2024	Jan- Mar 2025
Nakaseke	80%	62%	81%	86%
Mubende	77%	82%	85%	81%
Mityana	70%	69%	82%	94%
Average	76%	71%	83%	87%

Lessons learned: The local government-led approach led to sustained gained of VMMC service quality. Continuous Quality Improvement (QI) models and close monitoring enabled significant improvement.

Next Steps: The program will scale up the local government led approach to other districts, support quarterly VMMC quality assessments and data use.

155: More Than a Pilot: Lesotho QI Basics Course Takes Flight

Retselisitsoe Mahlaha, Matheo Ndaule, Pelaelo Khali

Background: Quality Improvement (QI) in healthcare remains paramount as a critical tool that ensures quality services to beneficiaries. Baylor Foundation Lesotho rolled out the initiative through a step-down training model in 2024/5 across its Centre of Excellence (COE) and Satellite COEs (SCOEs). Educating staff on QI Basics (QIB) not only enhanced their capacity to identify and address service delivery gaps but also fostered a culture of continuous improvement, improving patient outcomes, efficiency, and collaborations.
The program aimed to:

- Equip healthcare teams with core QI competencies.
- Foster a culture of continuous improvement within the Foundation.

Methods:

1. Train-the-trainer approach: Graduates of the pilot QIB course led step-down sessions for colleagues at all sites.
2. Collaborative prioritization: Teams identified key areas for interventions through brainstorming.
3. Hands-on learning: Participants applied QI tools to real-world challenges in their departments.

Results: The QI basics step-down training achieved significant measurable outcomes across Baylor Foundation Lesotho sites:

1. High completion & engagement rates: >90% of staff at the SCOEs completed the training, demonstrating strong engagement and knowledge retention.
2. Immediate implementation: 100% of sites initiated at least one QI project addressing local priorities e.g. cervical screening rates and documentation accuracy.
3. Sustainable capacity building: The train-the-trainer model proved highly effective. 85% of facilitators reported increased confidence in leadership. QI activities upscaling, with some sites integrating QI into routine meetings. Peer-led sessions maintained consistent participation rates.

Successes:

1. Revitalized QI activities: Dormant projects resumed across sites.
2. Enhanced collaboration: Staff reported improved teamwork, idea-sharing, and volunteerism.
3. Capacity building: 100% staff participation in some sites; increased ability to use **QI tools**.
4. Structural impact: Establishment of local **QI committee** to oversee initiatives Foundation-wide.

Challenges:

1. Misperceptions: Some staff viewed QI as a "blame tool" rather than a solution-focused process.
2. Data quality concerns: Documentation errors led to skepticism about baseline metrics.
3. Complexity barriers: Indicators and tools required simplification for broader accessibility.

Lessons Learned:

1. Localization: Translation of materials into Sesotho and adaptation for lay cadres.
2. Inclusive design: Future iterations must include patients/caregivers.
3. Sustained engagement: Addressing cultural resistance by framing QI as a shared improvement goal.

Next Steps:

1. Simplification & translation: Streamlining content, providing Sesotho resources.
2. Expanded stakeholder reach: Developing a patient/caregiver module for informed engagement.
3. Strengthen data culture: Training teams on documentation standards to build trust in metrics.

Conclusion: The QIB course roll-out achieved its objective on quality service delivery, empowering teams to lead improvement projects and collaborate effectively. By addressing linguistic and complexity barriers, Baylor Lesotho can further democratize QI participation and sustain gains.

198: Expert Consensus on Quality Measures for the Management of Severe Malaria Complications in Children Under Five in Sub-Saharan Africa: A Modified Delphi Study

Shenila Lallani, Joyee Vachani, Krystle Bartley, Elizabeth Davis, Emily Hartford, Rishi Mediratta, Stephen Oguche, Sheila Owusu, Heather Haq

Background: Malaria remains a leading cause of mortality among children under five in low-and-middle-income countries (LMICs). Approximately 420,000 deaths occur annually in children under five due to complications of malaria, including cerebral malaria, severe anemia, and renal failure, with over 90% of these deaths occurring in sub-Saharan Africa (SSA).

Suboptimal quality of care contributes to preventable harm and mortality in LMICs. Quality measures (QMs), which systematically assess healthcare delivery, have facilitated improvements in pediatric care outcomes. In 2018, the World Health Organization (WHO) published QMs targeting many diseases with high morbidity and mortality in children under five. However, few QMs specifically address the management of severe malaria and its complications.
This study seeks to establish QMs for managing severe malaria complications in children under five admitted to tertiary hospitals in SSA.

Methods: We conducted a modified Delphi study using iterative survey rounds to achieve expert consensus. The study included three separate phases: expert panel (EP) recruitment, initial QM development, and the Delphi process.
EP recruitment: A call for nominations was distributed via global health listservs of major pediatric organizations, seeking frontline pediatricians with minimum 3 years' post medical school experience working in SSA.
QM Development: The research team drafted an initial set of 37 QMs for management of severe malaria complications in children. These QMs were derived from existing literature and modeled after WHO QMs for other pediatric diseases.
Delphi process:

1. Rounds 1-3: Using an online survey, panelists rated each proposed QMs as accepted, accepted with modifications, or rejected. Measures with ≥80% agreement were accepted, those with <50% were discarded, and those with 50-80% agreement were revised and re-evaluated by the EP in subsequent rounds.
2. Final Round: Experts evaluated the finalized QMs based on the National Quality Forum (NQF) criteria of importance, acceptability, usability, and feasibility.

Results: The EP included 14 frontline pediatricians from diverse SSA countries. Consensus was achieved on all 37 QMs within the three Delphi rounds. Of the 37 initial QMs, 11 required modification before acceptance. The final QMs were categorized into input, process/ output, and outcome measures, and address the four most common causes of severe malaria-related morbidity and mortality: severe anemia, cerebral malaria, hypoglycemia, acute kidney Injury (Table 1 – Final QMs with NQF Ratings).

Conclusion: This study successfully generated an expert consensus-derived set of QMs for the management of severe malaria complications, addressing a critical gap in pediatric malaria care. By establishing a more standardized framework to assess and improve clinical care, these QMs have the potential to reduce preventable mortality, enhance adherence

to evidence-based practices, and inform national and institutional QI initiatives. These measures will serve as a foundation for future implementation and research efforts, driving sustained improvements in pediatric malaria care.

204: Innovation in Data Management for Social Impact: How Baylor Colombia Foundation Revolutionizes Its Processes and Expands Its Reach

Diego Armando Salguero Mendivelso, Mireya Maritza Medina Ramirez

Purpose: In 2025, Baylor Colombia Foundation faced the challenge of overcoming years of fragmented information management, which hindered traceability, impact evaluation, and evidence-based decision-making. The project's purpose was to design and implement a comprehensive data management system that aligned its social mission with efficient technical administration. The main objective was to establish a common monitoring framework by defining key indicators in health, education, social determinants of health, and institutional management, thereby strengthening governance, transparency, and sustainability.

Methods: The intervention was structured around KoBoToolbox, a free, user-friendly, and accessible technological tool that ensures data security and facilitates in-field data collection. This tool was integrated with Power BI to create interactive visualizations and real-time monitoring through dynamic Score Cards. Over 87,000 historical records were cleaned, 28 key indicators were defined, and 25 staff members were trained, which significantly reduced the operational workload. Data validation was performed through automated processes and trend reviews, ensuring consistency and reliability. The implementation was supported by cultural change strategies, such as incorporating reporting obligations into employment contracts and documenting processes to ensure continuity.

Results: Between January and April 2025, data from 4,284 unique beneficiaries were systematized; institutional reports were automated; and a common framework for cross-sectional and longitudinal analysis was established. The new system improved transparency for funders and enabled faster, more evidence-based decision-making. The platform demonstrates potential for expansion to other organizations within Texas Global Health. Key environmental factors, such as openness to organizational change, access to low-cost technological tools, and the strategic use of platforms like KoBoToolbox, facilitated the project's success. However, gaps were identified, such as the need for specialized technical profiles from the outset to avoid cost overruns.

Discussion: Discussion: The project represented a significant advancement in institutional governance by integrating operational and strategic aspects. The standardization of indicators and the automation of reports strengthened accountability and optimized internal processes. Compared to other initiatives, the efficient and replicable use of accessible tools like KoBoToolbox was particularly noteworthy. Key limitations included reliance on technological skills and the need for an organizational culture geared toward data use. As next steps, a module for managing agreements and donations is being developed, with targets to increase income by 20% and expand the donor base by 15%, thereby consolidating a sustainable data-driven model.

Image 1

Image 2

223: Scaling Up Quality Improvement Amid Resource Constraints: Leveraging Technology, Local Expertise, and Inter-Network Collaboration for Impact

Florence Anabwani-Richter, Matheo Philandel, Nomazizi Maqalika, Tapiwa Tembo, Lindokuhle Dlamini, Phumzile Dlamini, Andrew Kunje, Richard Juuko, Stephen Olinga, Babongile Nkala, Constance Nyasulu, Jacqueline Balungi

Purpose: Persistent funding disruptions across sub-Saharan programmes threaten the consistency and quality of patient care. Donor reallocations, currency fluctuations, and post-pandemic austerity measures have shrunk operational budgets, compelling facilities to deliver higher-quality services with fewer inputs. Agile, resource-conscious solutions that harness innovation and partnership are therefore essential. We aimed to demonstrate how a multi-country Global Health Network (GHN) could leverage technology, local expertise, and inter-network collaboration to cascade Quality Improvement Basics (QIB) training and embed continuous quality improvement (CQI) in routine practice at minimal cost.

Methods: Four GHN sites; Lesotho, Eswatini, Malawi and Uganda, participated in this collaborative project from January to June 2025. Each site nominated two to four local QI experts certified in a pilot QIB course. From January to June 2025 the experts led on-site teams of 10–34 multidisciplinary staff. Core to the strategy was the rapid rollout of QI-basics curricula. Site QI experts designed four to six sessions, scheduled bi-weekly on Fridays to avoid disrupting patient care. The curriculum emphasized Plan-Do-Study-Act (PDSA) cycles, process mapping, and root-cause analysis. Technology was applied as a force-multiplier. Moderated virtual panels, interactive e-learning, and online breakout rooms linked dispersed teams without travel expenses, fostered real-time problem-solving, and created a living repository of tools. Texas Children's GHN experts joined remotely to coach teams and broker cross-site learning. Process indicators included training completion rates and number of facility-led QI projects launched. Outcome indicators tracked median laboratory turnaround time (TAT) and the proportion of clinical decisions supported by same-day test results.

Results: Across the network, >120 frontline staff (85% completion) finished the QIB curriculum and initiated 8 facility-specific QI projects. In Eswatini, median viral-load turnaround time (TAT) fell from 14 days to 1 day after introduction of point-of-care GeneXpert platforms and streamlined workflows, improving same-day clinical decision-making for unsuppressed patients, while sample-transport costs dropped by 20%. Participants reported heightened confidence in CQI tools and valued the peer-to-peer mentoring model.

Discussion: Inter-network collaborations virtually linking QI experts from the Texas Children's GHN unlocked pooled expertise, inspired change, and pushed context-specific solutions to scale through interactive virtual discussion sessions. Shared best practices allowed frontline teams to spot gaps early and implement targeted countermeasures to streamline care and advocate for real-time laboratory results, facilitating timely clinical decision making while optimizing resource use and lowering sample transportation costs. Intermittent internet connectivity occasionally disrupted virtual sessions and delayed data uploads, underscoring the digital divide that persists in rural facilities. Early results demonstrate sharper decision-making, shorter service turnaround times, and measurable gains in patient outcomes despite lean budgets. Adaptive technology, empowered local champions, and structured collaboration can drive substantial, measurable quality gains.

Innovations and Challenges in HIV Prevention, Treatment, and Resistance

56: Integrase Inhibitor Resistance Among Children, Adolescents and Young People Living with HIV in Sub-Saharan Africa: A Descriptive Case Series from 4 Pediatric HIV Centers of Excellence

Katherine R Simon, Duc T Nguyen, Kenneth Nobleza, Sandile Dlamini, Florence Anabwani-Richter, Tamanda Hiwa, Brigid O'Brien, Miriam Abadie, Jacqueline Balungi Kanywa, Naiga Fairuzi, Elizabeth Maidl, John Farirai, Abhilash Sathyamoorthi, Bilaal Wilson Matola, Clara M. Nyapokoto, Eleanor Namusoke Magongo, Nandita Sugandhi, Sarah Perry

Background: Introduction of dolutegravir (DTG)-based antiretroviral therapy (ART) for children, adolescents and young people living with HIV (CAYLHIV) has improved virologic suppression. Regional surveillance demonstrates the emergence

of HIV drug resistance (HIVDR) to Integrase Strand Transfer Inhibitors (INSTIs) in CAYLHIV at higher rates than in adults. We describe resistance patterns and associated clinical factors in CAYLHIV with documented INSTI resistance from pediatric HIV Centres of Excellence (COEs) in four countries in sub-Saharan Africa.

Methods: A multi-country retrospective review of electronic medical records from CAYLHIV 0-24 years olds with genotyping conducted before December 2024 identified clients with genotypically confirmed INSTI resistance. Genotypes were performed on dried blood spot and plasma specimens by regional laboratories in line with national and WHO guidelines. Drug resistance scores were calculated using Stanford HIVdb with resistance defined as a score ≥15. Data were reported as frequencies and proportions for categorical variables and median and interquartile range (IQR) for continuous variables.

Results: Genotyping results for 24 clients with INSTI resistance from COEs in Botswana (3), Eswatini (4), Malawi (4) and Uganda (13) were included; 63% (15/24) were male. At genotyping, mean age was 19.1 yrs (IQR 9.3, 20.6), median time on ART was 9.8 yrs (IQR 6.7, 14.3) with an average of 3.5 yrs on INSTI (2.3-4.8) for 23/24 CAYLHIV with known INSTI start date. Nucleoside reverse transcriptase inhibitor backbones at genotyping: 45.8% (11/24) TDF-3TC, 37.5% (9/24) AZT-3TC and 16.7% (4/24) ABC-3TC. CAYLHIV averaged 4 detectable viral loads (VL) (>1000 copies/ml) prior to genotyping with a mean (IQR) VL of 9,015 (IQR 3326, 34294) copies/mL at genotyping. Three (3/24; 12.5%) received antituberculosis treatment while taking INSTIs. The most common mutation was E138K mutation (10 samples), followed by G118R (7), S147G (6), N155H (6), T66A/I (5), G140A (3), Q148R (3), R263K (3), E138A (2) and G163R (2). Common major resistance mutation combinations were E138K + T66A/I + G118R and S147G + N155H (16.7% each) (Fig 1). DTG resistance scores were 9 (37.5%) high-, 9 (37.5%) intermediate-, and 1 (4.2%) low-level (Fig 2). Three CAYLHIV also had intermediate/high level resistance to protease inhibitors.

Conclusion: In this cohort of CAYLHIV, INSTI resistance was identified in 24 CAYLHIV enrolled in pediatric HIV COEs across four countries, with the most common mutation, E138K, associated with high level DTG resistance. Routine VL monitoring and genotyping for CAYLHIV with persistent treatment failure should be prioritized to guide treatment sequencing and HIVDR surveillance activities, even in resource-limited settings.

Fig 1: Integratse Inhibitor Mutation Combinations

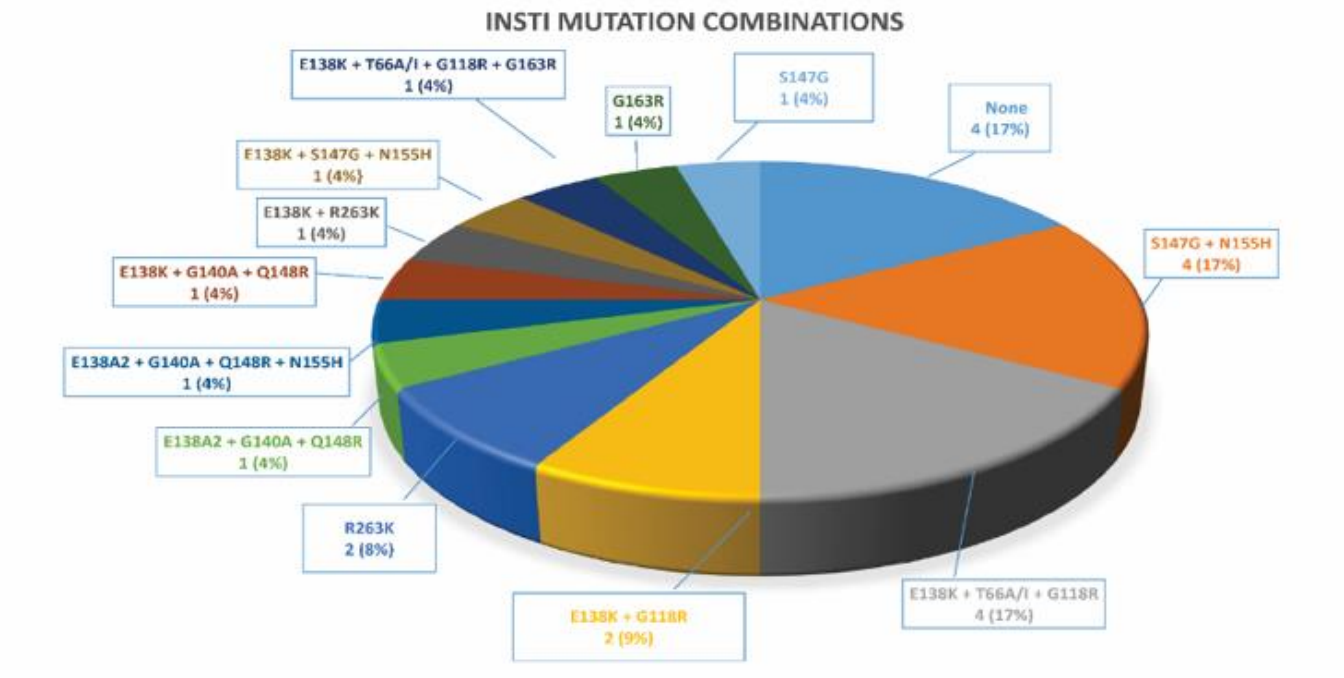


Figure 2: Levels of Resistance by Antiretroviral

Visual not available.

57: Prevalence and Factors associated with Dolutegravir resistance among Children and Adolescents living with HIV in Mid-Western Uganda: A Cross-Sectional Analysis.

Shafick Lubulwa, Epidu Calvin, Denise Birungi, Dithan Kiragga

Introduction: HIV drug-resistance (HIVDR) reduces efficacy of Anti-Retroviral Therapy (ART), thus WHO recommends routine surveillance for HIVDR. Clients with two-consecutive high-viremia results are eligible for HIVDR test under the 2022 Uganda ART guidelines. The Uganda National Laboratory-based Surveillance 2021-2022, showed dolutegravir (DTG) resistance at 6.6% among Children and Adolescents living with HIV (CALHIV) with high-vireamia (>1,000copies/ml) but didn't identify client-level factors. We estimate the proportion of CALHIV with DTG resistance at repeat viral load (VL) test and associated client-level factors.

Methodology: CALHIV aged 0-19years from 40 of the 95 ART Health facilities in Mid-Western Uganda with two-consecutive high-vireamia results and an amplified DTG resistance profile from the HIVDR database between Jan-2021 and Mar-2025 were downloaded as an excel file for this cross-sectional study. The extract included ART history, virologic profile, adherence barriers, clinical assessments and drug mutations. Missing data was added from Health facility client records. Resistance to Integrase-Inhibitor (DTG), Nucleoside-Reverse-Transcriptase-Inhibitors (NRTIs), Non-Nucleoside-Reverse-Transcriptase-Inhibitors (NNRTIs), and Protease-Inhibitors (PIs) was defined as presence of any major class mutation using the Stanford HIVDR database. Prevalence Ratios (PR) were used as measure of association. Factors associated with DTG resistance from previous studies and those with p-value <0.2 at bivariate-analysis were included in Logistic Regression model using Stata 14.0

Results: Of the 504 CALHIV eligible for HIV-DR test, 271(54%) had their plasma samples referred for HIV-DR testing. However, only 136(50%) of the tested samples had valid DTG resistance results; of whom 51% were males, median age was 13(IQR 12-14) years and 71% were ≥5years on ART. 44(32%) had no Resistance-Associated-Mutations (RAMs), 39(29%) had single-class RAMs, 35(26%) had dual-class RAMs, 18(13%) had triple-class RAMs but none had quadruple-class RAMs nor Darunavir RAM. The prevalence of different resistances was; DTG-27(20%), NRTI-59(43%), NNRTI-75(55%) and PIs-2(1%) despite having no CALHIV on NNRTI and PI based regimens. The commonest RAMs for DTG were E138K, G140S and Q148HRK while for NRTIs were M184VI, M41L and T215FY.
Of the 27 CALHIV with intermediate to high-level DTG resistance, 19(70%) were males, median age was 12(IQR 10-15) years and 63% were ≥5years on ART. Their backbone-regimens were TDF/3TC-12(44%), ABC/3TC-10(37%) and AZT/3TC-5(19%).
At bivariate analysis, the significant factors were males (0.99, CI 0.08-1.9, p-value 0.033), NRTIs resistance (1.63, CI 0.69-2.58, p-value 0.001) and 2-5years on ART (0.65, CI 0.39-1.69, p-value 0.2). At multivariant analysis, only NRTIs resistance (0.12, CI 0.26-2.28, p-value 0.014) was significant.

Conclusion: The prevalence of DTG resistance among CALHIV was high and associated with having NRTI resistance. This calls for strengthening of adherence support, early identification and management of CALHIV failing on NRTIs. There is need to improve access to HIV-DR testing by strengthening Laboratory infrastructure.

72: U=U: A Simple Equation Changes Patients' live - Baylor Clinic of Excellence, Constanta, Romania

Elena Melinte Rizea, Iuliana Costas, Alexandra Androne

Background: During the counseling sessions, the Baylor Black Sea Foundation (BBSF) team observed that 33% of PLWHA enrolled in care do not always manage to administer the treatment correctly (they miss doses or do not respect the time of administration) and have not had an undetectable viral level at 6-month intervals. Moreover, only 49% say that they have had a VL test in the last year and do not necessarily know the result of the test

Description: Between June 2023 and June 2024, the BBSF team conducted a U=U information campaign among beneficiaries. The counseling activity was carried out by two different teams – the medical and the psychosocial, using a standardized instrument accompanied by a visual support: a script to ensure that information is transmitted and collected in the same way. The aim was to transmit complete information about the conditions needed for the U=U. At the end of the counseling session, the psychologist/ nurse applied the "teach back" technique, to assess information retention. In case of incorrect or incomplete information, the process was repeated. The information was gathered in a common database, with data being registered in real-time, for high accuracy.

Evaluation and outcomes: At the end of the campaign, 717 beneficiaries were counseled on U=U. 79% were young people or adults, sexually active, in the age group 18-49 years. Of the total number of people counseled, 51% were men, and 93% declared heterosexual orientation. 45% of them were in a serodiscordant relationship.
Of the total number of people counseled, only 41% managed to correctly repeat all 3 criteria on the first attempt and 51% had never heard of U=U. Comparing the two groups, it is observed that there are no significant differences between the group of those who already had the information and those who did not know it in terms of information retention during the counseling session (chi-square 0.14, insignificant at a confidence interval of $p < .05$).
The information received during the counseling was appreciated by 72% of the beneficiaries as life-changing, while 19% claimed to understand the message, but were still afraid of transmitting HIV through unprotected sex.

Lesson learned: The concept of U=U is essential information for PLWHA, encouraging correct treatment administration, better adherence to HAART and normalizing sexual life in serodiscordant couples. By better-understanding aspects of transmission risks, patients can become more motivated towards better self-management of the disease and an improved quality of life

Next steps: As the results seem impactful, the team is taking into consideration routine U=U counseling every 18 months to help maintain engagement.

86: Integration of Targeted Next Generation Sequencing (tNGS) into Routine Diagnostic and Clinical care: Lessons learnt from Eswatini.

Debrah Vambe, Mangaliso Ziyane, Thulani Jele, Leonardo de Araujo, Sphiwe Ngwenya, Anna Mandalakas, Alexander Kay, Stefan Niemann, Sindisiwe Dlamini

Background: Eswatini faced a critical diagnostic gap in detecting rifampicin-resistant TB (RR-TB) due to a specific *rpoB* I491F mutation, first reported in 2015. The Xpert MTB/RIF test failed to identify this mutation, leading to 30% of RR-TB diagnoses being missed in 2009/2010, which increased to 58% by 2018. This highlighted a significant issue for the quality of multidrug-resistant/rifampicin-resistant TB (MDR/RR-TB) treatment, as current regimens could be compromised by undetected resistance. We present the implications of this mutation and the programmatic response.

Description: In 2019, a multidisciplinary team explored enhanced diagnostic options, agreeing on targeted next-generation sequencing (tNGS) as most promising, despite no WHO endorsement. A pilot project, supported by German MOH Research Center Borstel, was coordinated by Baylor Foundation Eswatini and Baylor College of Medicine. An MoU was signed between Eswatini and German Ministries of Health, and a protocol developed. The National TB Reference Laboratory underwent structural adjustments, repurposing its LPA lab to integrate tNGS and accommodate equipment like the iSeq100. Laboratory and DR-TB clinical teams were trained and sensitised. Implementation, delayed until 2021 due to COVID-19 and procurement challenges.An interim algorithm was developed to guide eligible samples for sequencing.

Evaluation and Outcomes: Initial laboratory tNGS runs often failed, but reduced to three by 2024 due to sustained technical support. The first 85 successfully sequenced samples in 2021 guided implementation. Of these, 61 mutations were identified; 38 (62%) were the *rpoB* I491F mutation. Crucially, 29 (76%) of these also showed additional Bedaquiline

and Clofazimine resistance, a major concern given bedaquiline-based regimens. The National TB Control Programme (NTCP) used these pilot results for clinical management, establishing a Clinical Advisory Committee (CAC) with clinical, laboratory, and public health expertise to guide treatment optimization (fig1). Follow-up of 37 patients showed that tNGS identified the *rpoB* I491F mutation in 46% of samples, leading to treatment adaptation for 73% of these patients and resulting in an 84% successful treatment outcome.

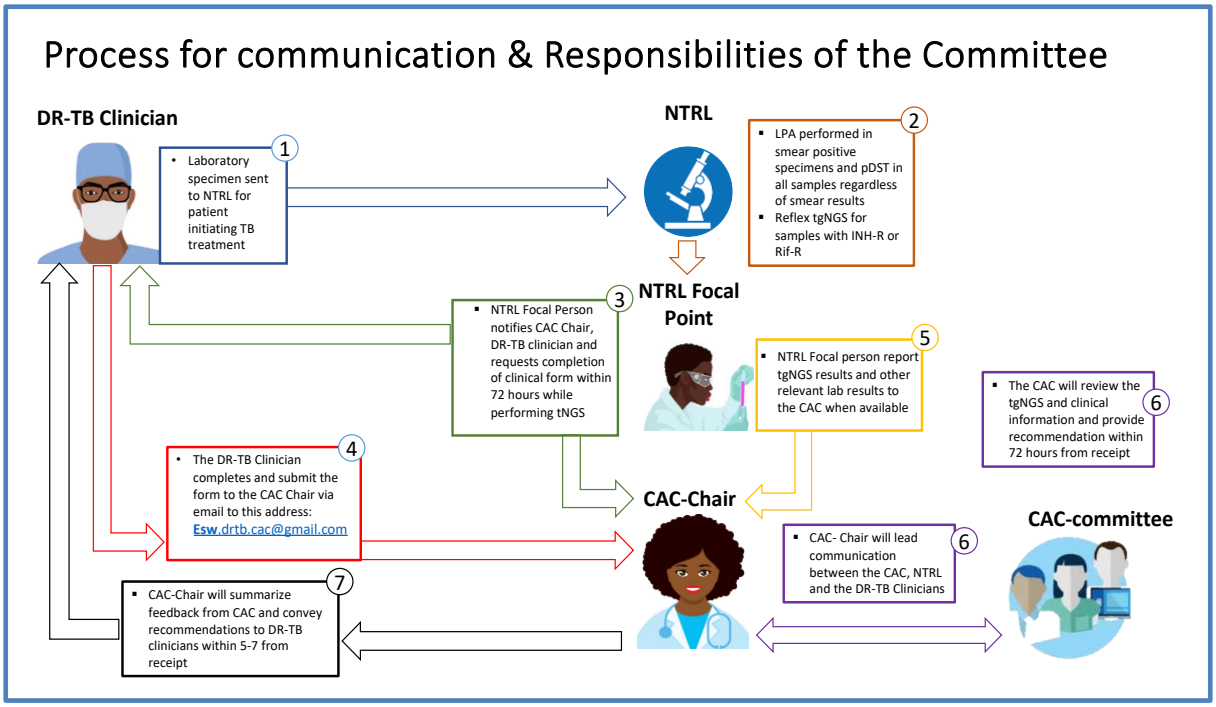


Fig 1: Clinical Advisory committee

Lessons Learned: The findings demonstrate that tNGS offers valuable advantages in managing drug-resistant TB in high-burden settings like Eswatini. The programme successfully identified the problematic *rpoB* I491F mutation and facilitated treatment adaptation, leading to high successful treatment outcomes. The unexpected high prevalence of bedaquiline resistance highlighted a critical need to reconsider current TB treatment regimens such as BPaLM/BPaL. As a result, Eswatini decided to incorporate tNGS into its National Diagnostic Algorithm (fig 2).

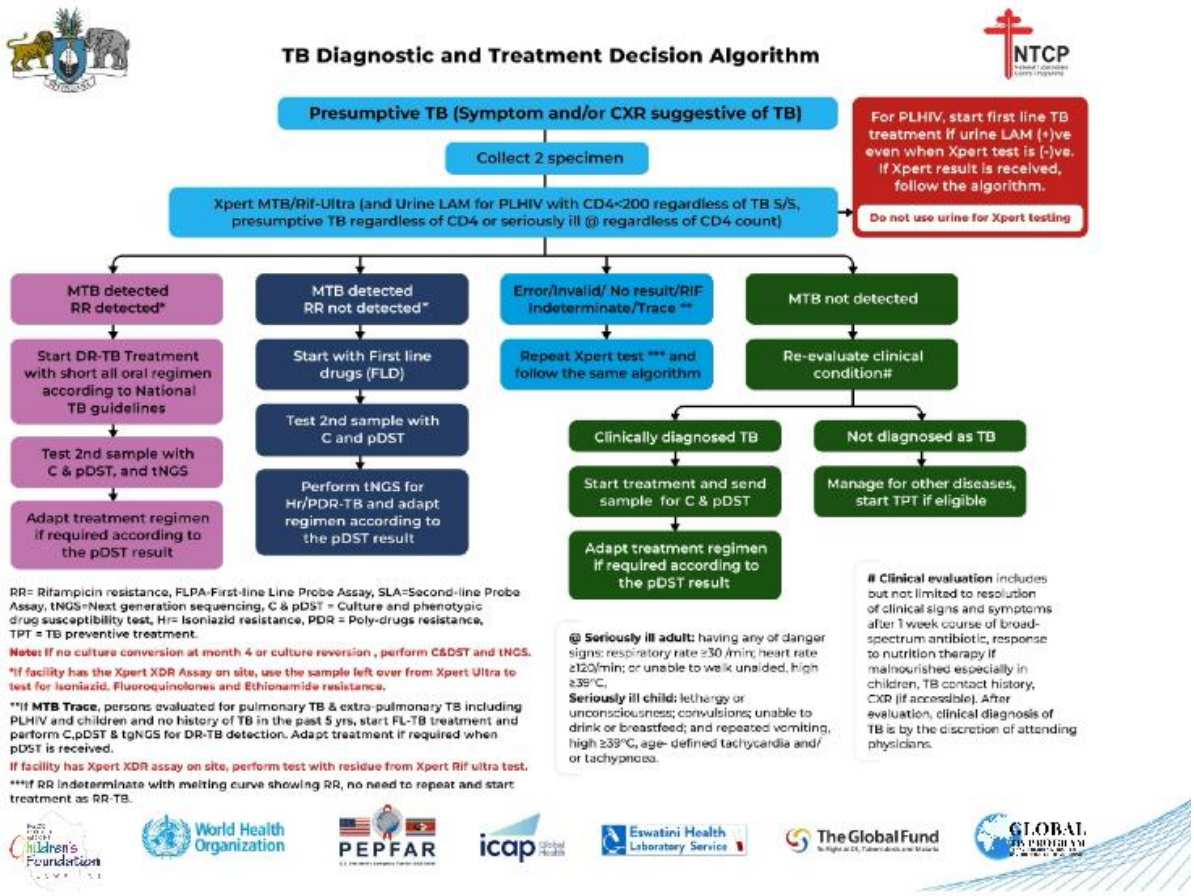


Fig 2: TB Diagnostic and Treatment decision Algorithm

Next Steps: Given the increasing prevalence of Bedaquiline resistance, the need for newer medicines is paramount. The success of widely recommended regimens like BPaLM necessitates robust surveillance for Bedaquiline resistance, with tools such as tNGS playing a crucial role. Future efforts will focus on strengthening patient care by further integrating and optimising tNGS use within the national program.

153: Using Non-Communicable Diseases' Champions to Improve Screening and Management in HIV Settings: Lessons learnt from Baylor Fortportal-Mubende Program.

David Damba, Michael Juma, Richard K. Jjuuko, Albert Maganda, Dithan Kiragga

Background: In pursuit of the UNAIDS 95-95-95 targets, there is increased need to integrate non-communicable diseases (NCD) care into HIV programming due to the growing dual burden of NCD and HIV epidemics which may compromise ART/HIV treatment outcomes. However, NCD-HIV integration faces implementation barriers in public health facilities in resource limited settings. This study presents best practices and lessons from Fort Portal-Mubende HIV program in midwestern Uganda.

Description: Baylor Foundation Uganda **(**BFU) started implementing an integrated HIV/NCD care program in 254 health facilities in 16 districts in the mid-western Uganda since January 2024. Interventions supported include stakeholder engagement meetings, provision of appropriate clinical instruments, job aides, data tools, and mentorship on screening, diagnosis and case management of Diabetes Mellitus (DM), Hypertension (HT), Mental Health (MH) and Alcohol/Substance (A/S) abuse. Biweekly data review meetings were conducted and NCD champions and community

structures were identified and engaged to provide adherence support, return missing clients, conduct health education, counseling, community sensitization of high-risk individuals. Data from PEPFAR databases was reviewed and compared the proportions of PLHIV aged above 15 years screened for NCD, diagnosed and treated between Jan-Mar 2024 and Jul-Sep 2024.

Evaluation and outcomes: Between January-March 2024 and July-September 2024, there was an overall increase in PLHIV screened for NCD conditions from 56% (56178/100842) to 80% (71975/90318), DM 49% (48984/100842) to 81% (73608/90318), HTN 49% (46343/94724) to 82% (73524/90318), MH 63% (62302/99414) to 79% (71296/90318), A/S 63% (62302/99414) to 77% (69473/90318). This was accompanied by a 72% increase in NCD cases identified from 3,159 to 5,443. HTN (1163 to 2942) and A/S (826 to1430) had the highest increase compared to DM (376 to 396) and MH (794 to 675). NCD case detection increased by 91% (1,165 to 2,222). The proportion of NCD cases treated or referred for management increased from 77.3% (2442/3159) to 93.1% (5070/5443). By the end of Sept 2024, 51% of cases were controlled on treatment. NCD champions played a role in demand creation, linkages, and peer support.

Lessons Learned:

- Leveraging on NCD champions and community structures played a critical role in educating, motivating and linking individuals thereby influencing the decisions for the target group to demand for NCD services which resulted into increased screening rates.
- Timely availability functional diagnostic and data tools was critical for effective NCD screening, case management and accurate reporting.
- Using a data driven approach helped to identify high-risk sub-populations, and tailoring interventions based on facility needs including addressing capacity gaps for health workers.

Next steps: Health service providers need to adopt these innovative strategies including NCD champions and community structures to increase demand and uptake of NCD services.

209: Increasing Pre-exposure Prophylaxis (PrEP) Methods to Widen Choice for Users in Lesotho: Cabotegravir Long-Acting Injectable Introduction

Mabene Tsotako, Mareitumetse Ramootsi, Mosa Molapo Hlasoa

Background: Pre-exposure prophylaxis (PrEP) involves taking antiretroviral medication to prevent HIV infection in individuals at high risk before exposure. In 2022, WHO recommended the addition of long-acting injectable Cabotegravir (CAB-LA) as a prevention method for people at substantial risk of acquiring HIV. Lesotho adopted this guidance and an addendum to the 2022 National ART Guidelines to include CAB-LA was developed in 2024. Three of the ten districts in Lesotho were chosen to pilot CAB-LA uptake, namely Mokhotlong, Leribe and Mohale's Hoek. BCMCFL supports the Ministry of Health (MOH) through the implementation of the LEADR project in two districts, including Mokhotlong. Mokhotlong district was chosen based on the presence of dam construction sites, with increased risk of HIV acquisition for the population living in the region. Three health facilities serving the population around the construction sites were chosen as pilot sites in the district: Mapholaneng Health Centre, St Martins Health Centre and Mokhotlong Hospital.

Description: Following the development of the addendum, BCMCFL through the LEADR project supported the training of providers from the chosen pilot health facilities on CAB-LA. This was followed by the implementation of CAB-LA uptake through screening for eligibility criteria including exclusion of HIV infection, exclusion of pregnancy, weight above 35kg and 18 years of age and above. Although CAB-LA is considered to be safe in pregnancy and during breastfeeding, these groups of clients are currently excluded in Lesotho. Clients are offered method choice counselling to make informed decisions. Eligible clients who choose CAB-LA with no contraindications are then given the first injection, with follow up in one month for the second injection and then bimonthly re-injections thereafter.

Evaluation and outcomes: A total of 91 clients were enrolled in the program between December 2024 and May 2025, with 70 (77%) reported to be still active across the 3 sites as at end May 2025. A slightly higher number of clients initiated on CAB-LA were female 48 (53%) compared to males at 43 (47%). Since implementation, none of the clients enrolled were reported to have seroconverted.

Lessons learned:

- Supportive supervision is vital following the implementation of a new strategy or product
- Ownership by the MOH from planning to monitoring program implementation is important especially when looking at sustainability beyond supporting projects

Next steps:

- Support the MOH joint-supportive supervision visits to the pilot sites to monitor progress and address challenges that hinder smooth program implementation
- Continue with mentorship to facilities staff and impart knowledge and skills on all the processes from counselling on method choice, screening for eligibility to offering PrEP and monitoring those on CAB-LA
- Support the MOH in the scale-up of CAB-LA uptake and the introduction of other PrEP choice methods beyond the pilot health facilities

215: Temporal Effects of community-based PrEP initiations: An Interrupted Time Series analysis.

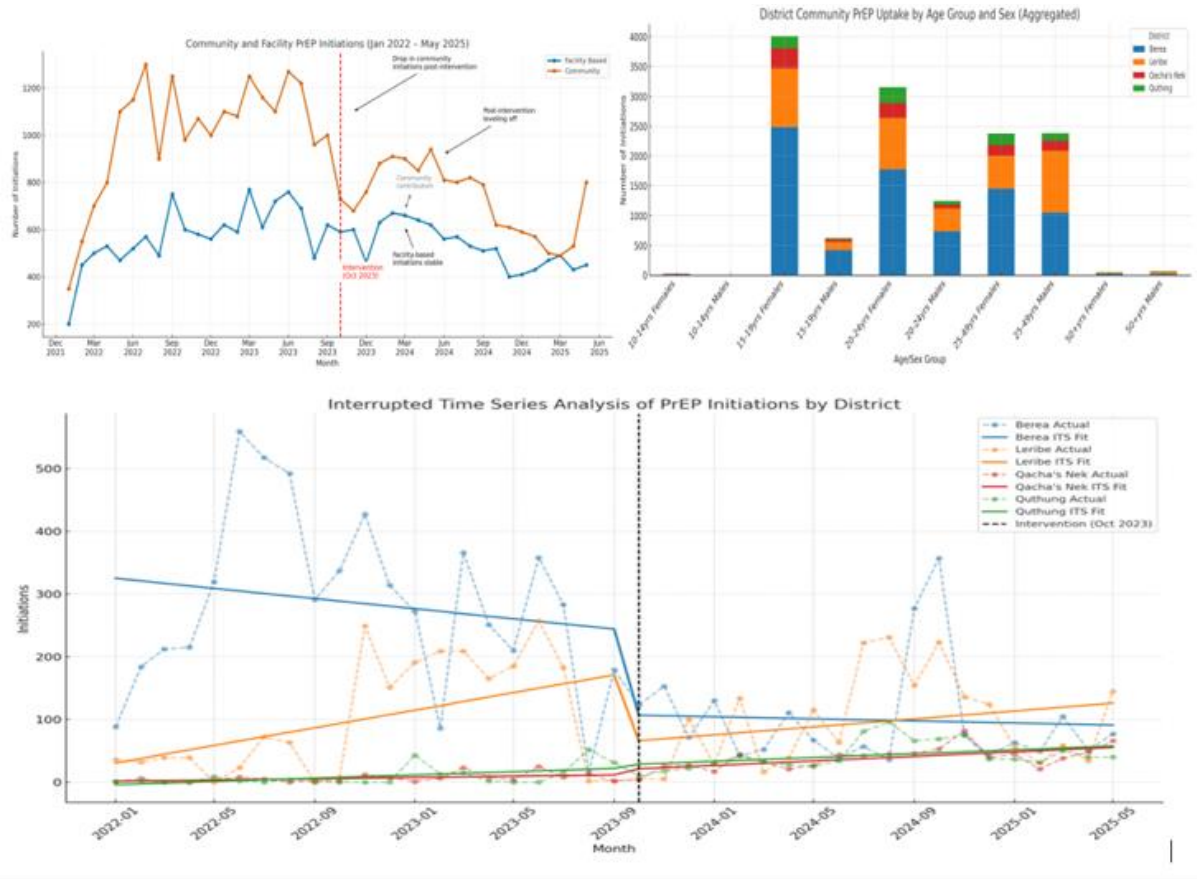
None Roto, Tseliso Marata, Mosa Molapo Hlasoa

Background: Interrupted Time Series focuses on understanding intervention lasting effect on the trend by tracking outcome before and after the intervention. Assessing whether changes in PrEP uptake are immediate or sustained over time helps determine the true effectiveness and potential for scale-up of community-based initiatives. This study intends to explore change in trend for Pre-Exposure Prophylaxis (PrEP) initiation uptake to inform targeted HIV prevention mobilization, messaging and demand creation strategies in the community.

Methods: We employed time series analysis using aggregated monthly data on new PrEP initiations from January 2022 to May 2025 from Ministry of Health DHIS2 and in-house DHIS2 (BASIDAC). The dataset includes community-based and facility-based PrEP initiation records from the districts of Berea, Leribe, Qacha's Nek, and Quthing. These districts represent the geographical location for the implementation of CDC-funded CoHip-SEC project, which is implemented simultaneously with another CDC-funded facility-based project.

Results: In the early stages of the transition period the project realized a performance drop, particularly in October 2023 to December 2023. The analysis revealed a notable improvement in community PrEP initiations from January 2024 to May 2024 and started to level off in June 2024 while facility initiations remained stable.
The distribution of PrEP uptake by age group and sex showed a consistent pattern across districts, with higher uptake among females compared to males in all age categories. Berea district recorded the highest uptake among females aged 15–24 years, contributing approximately 60% of PrEP consumption within this age group. In contrast, overall uptake in Quthing and Qacha's Nek was visibly lower, reflecting smaller contribution to total PrEP initiations across both sexes and age groups.

The project period initially realized a sharp decline in PrEP initiations, rather than the anticipated increase or sustained upward trend, highlighting challenges during the early stages of implementation. This performance varied by district. Qacha's Nek showed a gradual upward trend, indicating steady improvement. In contrast, Quthing exhibited a consistently low uptake with only subtle changes over time. Leribe experienced a modest upward trend, despite an initial level drop, while Berea saw a sharp decline in uptake, largely due to delayed implementation in that district. However, by March 2025, performance began to improve across most districts, reflecting intensified efforts to address earlier implementation gaps, logistical challenges, and low uptake.



Conclusion: The interrupted time series analysis demonstrates that community-based PrEP initiatives can lead to measurable improvements in uptake, though these effects may be delayed or uneven across districts due to logistical and implementation challenges. Differentiating between immediate and sustained effects provided insight into program responsiveness and stability. The findings underscore the importance of continuous support, district-specific adaptations, and targeted demand creation strategies to enhance the effectiveness and scalability of community-led HIV prevention interventions.

216: Psychological impact of the temporary United States Government suspend-work order, on people living with HIV and health care workers in Mokhotlong.

'Mareitumetse Ramootsi, 'Makatleho Sejana, 'Mabene Tsotako, Limpho Seeiso, Mosa Molapo-Hlasoa

Background: In May 2023, Baylor Lesotho launched the LEADR project in Butha Buthe and Mokhotlong districts. The project focused on direct service delivery of prevention, care and treatment of TB/HIV and non-communicable disease services, including healthcare worker (HCW) training, clinical mentorship, and supervision. However, in January 2025, a United States Government (USG) Executive Order on Foreign Aid Review led to a suspend-work order, halting all project activities and disrupting service delivery.
This suspension impacted approximately 1,500 USG-funded HCWs, many of whom lost their jobs or faced job insecurity. The funding cut disrupted access to medication, counselling, and peer support, increasing anxiety, uncertainty, and stigma among people living with HIV (PLHIV). HCWs experienced stress, demoralization, heavier workloads, and financial strain, threatening progress in managing HIV/AIDS, TB, and non-communicable diseases, and affecting the mental health of both providers and clients.

Methods: A qualitative, exploratory study was conducted using semi-structured, face-to-face interviews. A purposive sample included 22 PLHIV and 11 nurses. Interviews captured both verbal and non-verbal cues. Data were thematically analyzed.

Results: *"Recalling the prolonged illness, and frequent visits to the clinic was deeply distressing. Now that my viral load is suppressed, it was disheartening to hear that we may run out of medication. If I were to return to my previous health state, I believe I would not survive,"*

All 22 PLHIV participants voiced anxiety over ART unavailability; 11 said this fear motivated stricter adherence to treatment. Thirteen admitted to manipulating appointments to stockpile medication, reflecting desperation and revealing distrust in the health system. Three participants showed indifference, viewing shortages as opportunities for drug holidays, while six were unaware of the situation due to geographic or media isolation.

Two participants who self-disclosed being members of the Lesbian, Gay, Bisexual, Transgender, and Intersex (LGBTI) expressed abandonment after losing access to supportive, donor-funded services, intensifying their sense of stigma. All 11 nurses reported increased workloads following the LEADR team's exit. This led to reduced consultation time, incomplete documentation in paper and electronic systems, and suspension of services such as cervical cancer screening and COVID-19 vaccination. Initially overwhelmed and demoralized, some nurses considered resigning due to the misalignment between workload and compensation. Others responded by reorganizing tasks to maintain service delivery.

Conclusion: The findings reveal a dual crisis: emotional distress among PLHIV and operational strain on HCWs. There is a critical need for mental health support, integrated services, and contingency planning in the event of donor withdrawal. Policymakers must address misinformation, build resilience, and ensure sustainable healthcare service continuity.

Poster Presentations

Category 1: HIV Program Implementation & Outcomes

30: Reducing Interruption in Treatment among People Living with HIV Through an Integrated Approach: Lessons from Mid-Western Uganda

Hilda Sekabira, Gray Makkeni, Edgar Sserunkuuma, Michael Juma, Denise Birungi, Richard Jjuuko

Background: HIV continues to be a public health threat despite antiretroviral therapy (ART) considerably reducing morbidity and mortality among people living with HIV (PLHIV). PLHIV loss along the HIV care continuum evidenced by regular interruption in treatment (IIT) underpins the need to proactively monitor continuity on treatment to reduce IIT to meet the 2030 goals. The team set out to reduce IIT in Midwestern Uganda through an integrated approach.

Description: Between October 2023 and September 2024, we mapped clients by age, care points, and home addresses, attached them to Community Health Workers who were informed by the audit tool that flags services the patient missed, provided an integrated care package (Antiretroviral therapy drug refills, directly observed treatment services (ART DOTS), adherence support, intensive adherence counselling, Tuberculosis contact tracing, Tuberculosis Preventive Therapy refills, Viral Load sample collection and Assisted Partner Notification) at the health facility and/or community. We provided desk phones, airtime and phone call logs to facilitate pre- and post-appointment reminders, with the IIT Quality Improvement collaborative in six health facilities to inform and address the root causes.

Lessons Learned: Patient retention was sustained above 98% with an improved net loss to follow-up from -2.6% to -1.7% over time. A steady reduction of IIT was observed, from 2140 (2%) in Q1 (YR1) to 1769 (1%) in Q2 (YR2) (Fig 1). We noted pockets of high IIT among virally suppressed PLHIV (>95%) (Fig 2), evidence that IIT is not only among non-

suppressed PLHIV and implying that patients may not be lost from care. They may be reported as lost in one health facility but are new patients elsewhere.

Figure 1: IIT Trends in the FPM Region (Oct 2023 - March 2025)

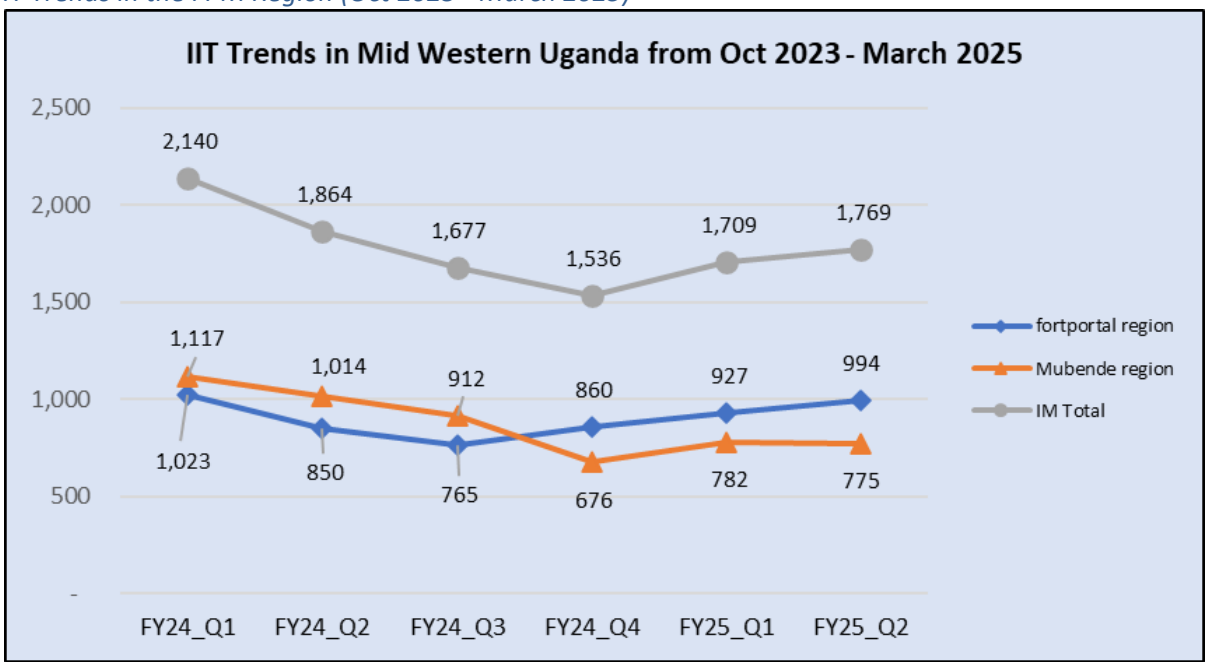
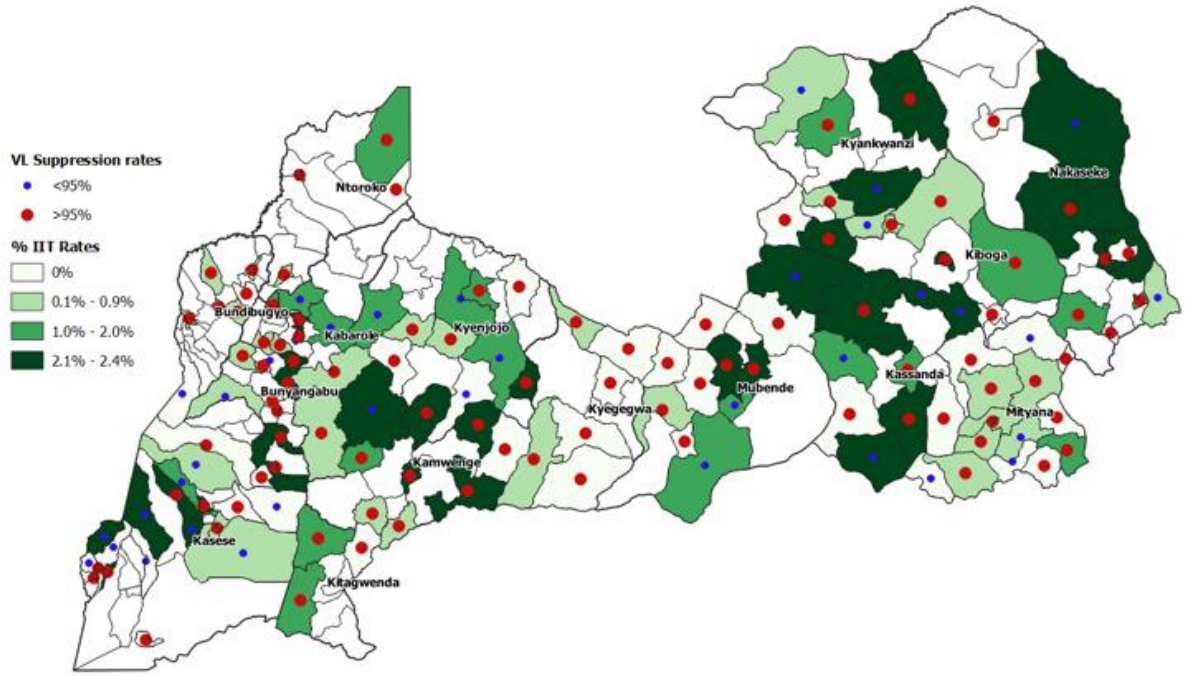


Figure 2: IIT and Viral suppression rates in the FPM Region (Oct 2023 - March 2025)



Conclusions and Next Steps: IIT has reduced over time and support to proactively track patients to ensure continuity on treatment should be routine. There is however need for an in-depth analysis to establish true IIT.

59: Significant Decline in Rates of Hiv-Related Cancers in Malawian Children with Widespread Access to Antiretroviral Therapy, 2010-2024

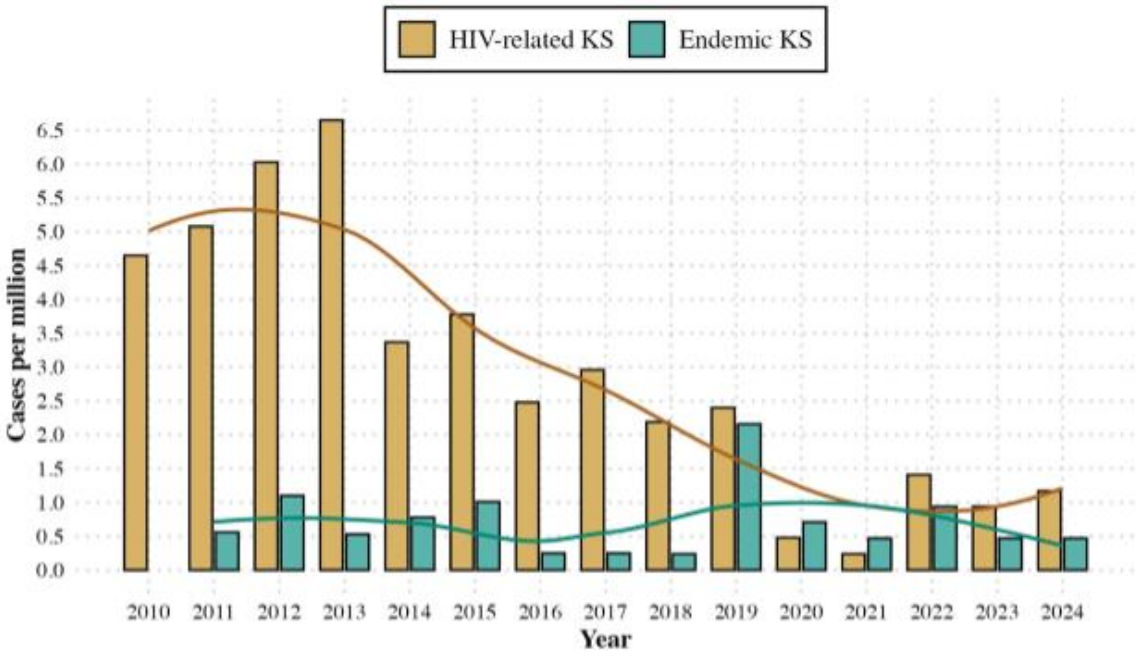
Fatsani Rose Manase, Mark Zobeck, William Kamiyango, Joseph Mhango, Atupele Mpasa, Rizine Mzikamanda, Nmazuo Ozuah, Kate Westmoreland, Joseph Lubega, Nader El-Mallawany, Carl E Allen, Michael E Scheurer, Casey L McAtee

Background and aims: Malawi has made significant progress reducing pediatric HIV infections and increasing Antiretroviral Therapy (ART) coverage. This study aimed to evaluate the effect of Malawi's nationwide ART scale-up program on the incidence of pediatric HIV-related cancers between 2010 and 2024.

Methods: A population-based cohort study of children aged 0-13 years was conducted in the fifteen northern and central Malawian government districts, representing 60% of the national population, to estimate cumulative incidence of HIV-related malignancies over time. Additionally, a sub-cohort of children living with HIV followed at Malawi's largest pediatric HIV clinic between 2010-2024 was used to identify risk factors for incident cancer. The study has IRB ethical approval.

Results: Between 2010-2024, 233 children with HIV-related cancers were identified, 89% of whom had Kaposi sarcoma (KS). The cumulative incidence of HIV-related KS decreased by 76% from 4.5 cases/million in 2010 (95%CI, 2.3-6.7 cases/million) to 1.1 cases/million in 2024 (95%CI, 0.1-2.1 cases/million), representing an average annual change of -15% (95%CI, -5%, -24%; p=0.002). During this period, KS fell from the fourth- to ninth-most common pediatric cancer diagnosed in northern and central Malawi. Throughout this period, 60% of children were ART-naïve upon KS diagnosis. Male sex (RR=1.4; 95%CI, 1.04-1.96; p=0.03) and older age at ART initiation (RR=1.07/year; 95%CI, 1.03-1.11/year; p<0.001) were associated with an increased risk of incident KS. ART initiation within the first year of life reduced the risk of KS by 69% (p<0.001). Other HIV-related cancers were rare during the study period (n=25), representing 1% of all cancers, most commonly being non-Hodgkin lymphoma (n=9) and acute leukemia (n=4).

Figure 1. Cumulative incidence of pediatric Kaposi sarcoma(KS) in northern and central Malawi



Conclusions: The incidence of pediatric HIV-related cancers, particularly KS, decreased significantly in Malawi following its successful ART scale-up program. Early initiation of ART is crucial for preventing HIV-associated cancers, the majority

of which continue to occur in children with as-yet undiagnosed HIV. Sustained HIV surveillance, prevention, and treatment programs remain essential.

70: Conclusions after 8 Years of BCG Vaccination Project for HIV-Exposed Children at Baylor Romania – 2017-2025

Stefania Mihale, Negivan Septar

Background: In Romania, BCG children vaccination is mandatory due to the high prevalence of TB. Vaccination for HIV-exposed children was introduced in Romania only in August 2016, for children between 2 months and 4 years, and only for children with test results showing HIV negative status.

Description: Baylor Black Sea Foundation (BBSF) began implementing this measure in 2017, through a project with Constanta Pneumology Hospital (delivers the BCG vaccination) and the Infectious Diseases Hospital (monitors exposed children). The vaccination can be performed in 2 steps for children with the first HIV negative evaluation at 2 months or in 3 steps for those with a delayed first HIV evaluation. The second group need a negative Tuberculine Skin Test (TST) result before the vaccination. Both the TST testing and BCG vaccination take place only at the local TB Clinic and only after making an appointment. Therefore, for children up to 3 months old, the circuit involves a single trip to the dispensary, for those older, it takes an additional visit. BBSF mediates the connection of parents between the two institutions, setting up appointments and monitoring vaccination termination.

Evaluation and outcomes: In 2017, 43 HIV-exposed children aged between 3 months and 4 years were successfully vaccinated. The circuit created with the two institutions has been working since then, so another 42 exposed children have been vaccinated to date. There were 5 refusals, and 14 children were not vaccinated due to various factors: distance, social background, transfer, etc. Another 12 children are in the process of getting the vaccine. Over time, vaccination has also been delayed by syncope related to the availability of the vaccine or TST.

Lessons learned: There is an excessive fragmentation of the BCG vaccination circuit that makes difficult accessing vaccination by the HIV-exposed children's families: too many trips and factors that can hinder vaccination (HIV test results, TST tests in stock, appointments, etc.). Without the intervention of the BBSF that connects the circuits between beneficiaries and institutions and ensures scheduling, continuous communication and case monitoring, many of the parents would have not vaccinated their children for BCG.

Next steps: A reassessment of the BCG vaccination circuit for children in Romania is needed. Children are medically monitored by the general hospital at birth, where "as a rule" all children are vaccinated with BCG. Subsequently, they are taken over by the Hospital for Infectious Diseases where they are monitored for 2 years. Ideally, vaccination could easily be carried out in one of the two institutions, thus shortening the vaccination circuit and increasing the percentage of vaccinated children.

82: Transition from DBS to Plasma collection for VL monitoring in rural Phalombe, Malawi: preliminary lessons from real-world implementation.

Bestone Tasokwa Msiska, Enock Mbalati, Innocent Damiano, Belito Madetsa, Carrie M Cox, Katie R Simon

Background: In Malawi, viral load (VL) monitoring is central to the national HIV treatment program, serving as the primary tool to assess treatment efficacy. Dried Blood Spot (DBS) has enabled sample collection at rural health facilities by lay health workers, as it does not require cold chain or immediate transport. In contrast, plasma sample collection requires professionals trained in venipuncture, cold chain infrastructure, and transport to a laboratory within 4 hours. In 2024, the Ministry of Health revised guidelines to transition high-burden facilities from DBS to plasma VL monitoring. This report describes implementation at two peri-urban facilities in Phalombe, Malawi.

Description: Transition involved staff training, client sensitization, and workflow modifications. A national two-day training in June 2024 engaged 12 providers (nurses, clinicians, and laboratory technicians). It covered sample collection, processing, transport, and documentation, and included an interactive workshop on integrating plasma VL monitoring into existing workflows. Daily health education talks supported clients' understanding and acceptance of venous blood collection. Plasma VL collection began in July 2024. Unlike DBS, which required one lay health worker for sample collection, documentation, and counseling, plasma required trained professional staff for venipuncture, with additional personnel on high-volume clinic days. DBS remained available for clients unable to provide plasma samples.

Evaluation and Outcomes: De-identified program data from February 2023 to January 2025 were reviewed to assess trends in sample types and turnaround time (TAT) pre- and post-transition. TAT was defined as the number of days between sample collection and laboratory testing. One-month post-transition (August 2024), 83% of VL samples collected were plasma samples; by January 2025, 75-91% of monthly VL samples were plasma, demonstrating sustained capacity. DBS TAT decreased from 13 to 10 days, while plasma TAT increased from 4 to 5 days.

Lessons learned: Plasma VL testing is feasible in peri-urban facilities with adequate laboratory and staffing capacity. Key enablers included targeted training, cross-sectoral collaboration, and access to an on-site molecular laboratory. Initial client resistance to venipuncture was mitigated through counseling and education. Sample rejections (initially up to 8 per month, reduced to 4 by January 2025) were attributed to incorrect sample collection and laboratory processing. Continuous mentorship was used to address these problems. Supply chain issues were mitigated by using standard needles and tubes or offering DBS as an alternative. DBS remained available for clients with challenging venous access.

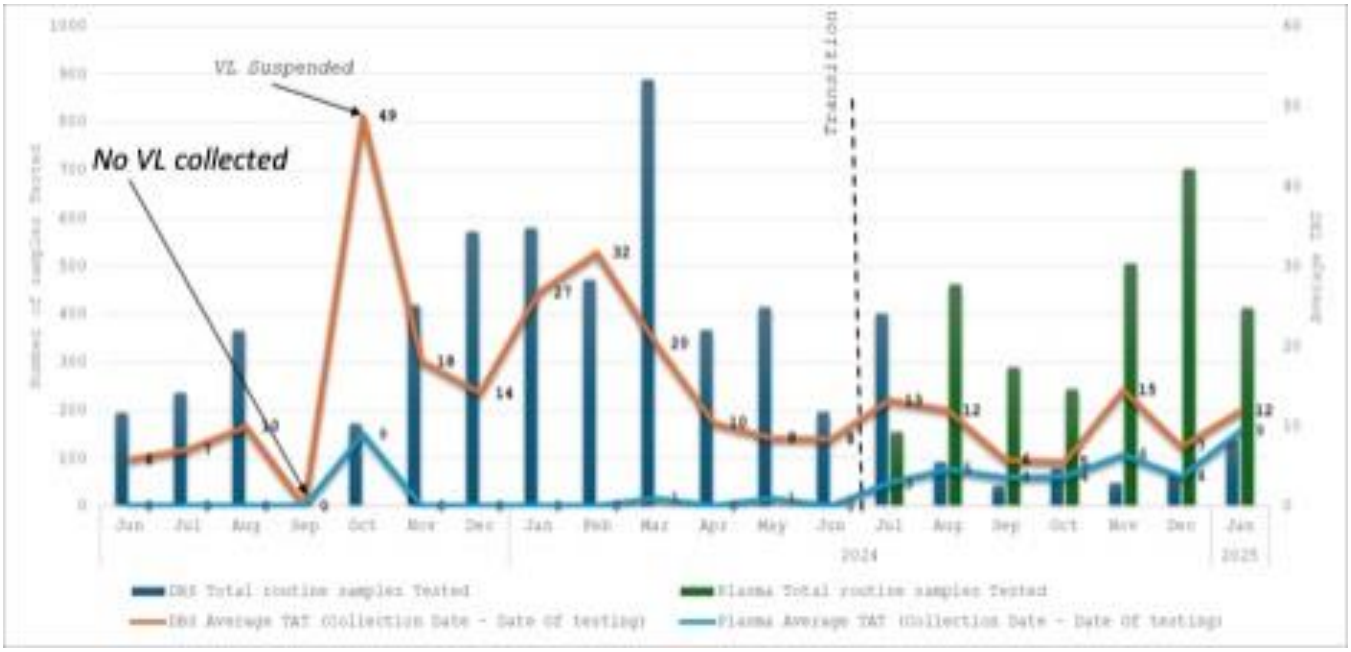


Figure 1. HIV viral load (VL) testing in Phalombe, Malawi, between June 2023 and January 2025. Samples were taken from either dried blood spots (DBS) or plasma. TAT (turnaround time) is defined as the number of days between sample collection and laboratory testing

Next Steps: Plasma VL collection selective expansion is planned for nearby facilities with cold chain access and trained personnel. Broader expansion to rural facilities remains challenging due to cold chain requirements. Continuous quality improvement and periodic training updates will be critical for sustainability and sample integrity.

83: A Systematic Approach to Improve HIV Prophylaxis Uptake in High-Risk Infants at a Rural Health Facility in Phalombe District.

Andrew Sulani, Fyson Nathan, Mphatso Namaona, Maxwell Maseya, Felix Kadzanja, Elizabeth Wetzel, Carrie Cox, Kathetine R. Simon

Background: Widespread access to antiretroviral therapy (ART) in Malawi has significantly reduced vertical transmission of HIV. However, most infant infections occur among those born to women living with HIV (WLHIV) with a high viral load during pregnancy or postpartum. Since 2022, Malawi's National ART guidelines recommend a risk-based approach to prophylaxis for HIV-exposed infants. Infants are classified as high-risk if they are born to women who initiated ART in their second or third trimester of pregnancy, experienced ART interruptions (> 60days) during pregnancy, or had unsuppressed viral load during pregnancy, delivery, or within four weeks postpartum. High-risk infants ≥ 3kg are prescribed 3-drug prophylaxis with Zidovudine-Lamivudine-Nevirapine (2P) while low-risk infants receive Nevirapine (NVP) alone. While most infants receive NVP, dispensation of 2P to high-risk infants at a small rural health facility in Phalombe remained suboptimal. To address this, we implemented an intervention to improve the uptake of 2P among high-risk infants from a baseline of 25% in Oct-Dec 2023 to 100% by July-Sep 2024.

Description: A baseline assessment revealed inconsistent risk screening due to limited provider and client awareness and lack of documentation tools. In response, clinicians and community health workers (CHWs) received on-the-job training and job aids on risk classification criteria. Screening roles were clarified, and clinic flow reorganized to ensure all antenatal clients were screened and their infants received prophylaxis according to risk category. A risk stratification tracking tool was introduced to document risk assessment and prophylaxis decisions consistently. CHWs conducted regular health talks to raise client awareness about receiving prophylaxis for their infants to prevent HIV transmission.

Evaluation and Outcomes: We reviewed de-identified program data from October 2023 to September 2024, including maternity registers, infant health records, and maternal ART records. At baseline (Oct-Dec 2023), of 20 infants registered, 4 were eligible for 2P but only 1 received 2P. Six months later, 100% of eligible infants received 2P (9/9) (figure 1).

Lessons Learned: The facility achieved 100% uptake of 2P prophylaxis among high-risk infants within 6 months, achieving 100% coverage (up from 25% at baseline). Success resulted from targeted strategies addressing key gaps: on-the-job training for clinicians and community health workers, implementation of a risk stratification tracking tool, clinic workflow reorganization, and regular health education talks for pregnant women. Strong team collaboration and clear role assignments further strengthened service delivery.

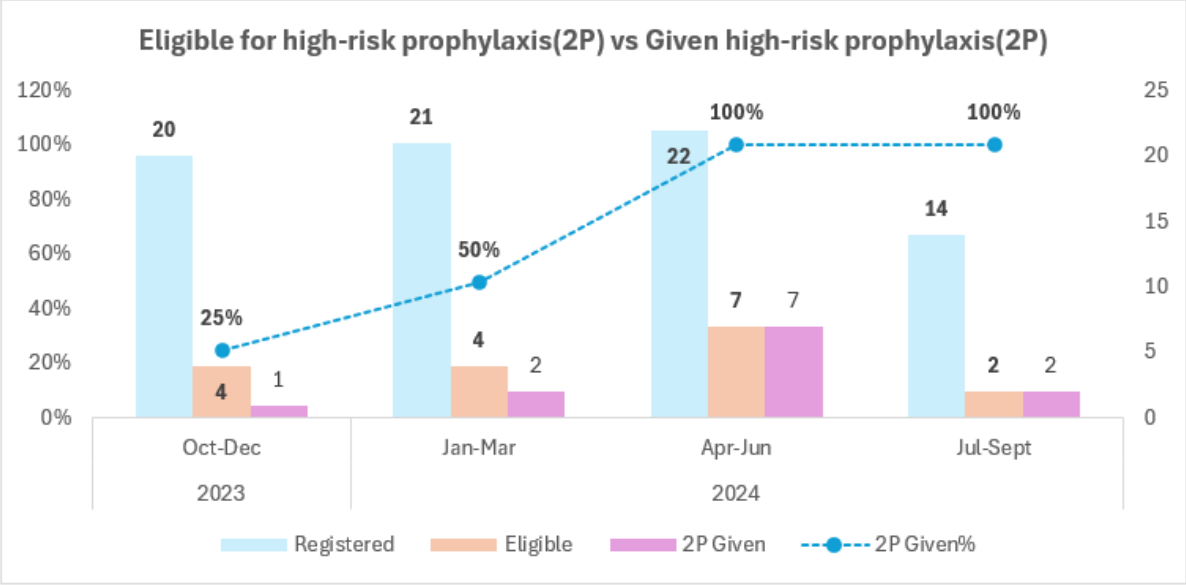


Figure 1. Infants eligible for 2P vs those who were given 2P.

Next Steps: Improving uptake of risk-stratified screening and prophylaxis provision for HIV-exposed infants was achievable through a series of simple interventions targeting pre-identified gaps. Its success shows how facility-level improvements can effectively prevent vertical HIV transmission. This approach can easily be leveraged to close gaps in provision of risk-stratified HIV prophylaxis at other health facilities experiencing similar challenges.

105: Assessing fidelity to index case testing protocol in a cluster Randomized Controlled Trial to improve HIV case finding

Tapiwa Tembo

Background: Index case testing (ICT) is an evidence-based intervention practice where health care workers (HCWs) counsel people living with HIV (index clients) to offer HIV testing services to their sexual partners and biological children. For ICT to be effective, it is important that fidelity, or the extent to which ICT is implemented as intended, is maintained. We evaluated whether an enhanced digital learning implementation strategy improved HCW fidelity to ICT counselling protocols.

Methods: We conducted a cluster randomized controlled trial in 33 clusters (i.e. health facilities) in Southeastern Malawi. Clusters were randomized 1:2 to the Enhanced and Standard arms. HCWs in both arms received centralized face-to-face training on ICT processes and protocols. HCWs in the Enhanced arm also received 23 hours of decentralized tablet-guided training through synchronous and asynchronous sessions. HCWs were observed counseling index clients anytime in the year after the blended learning training. We created a 15-item fidelity checklist to assess counseling quality and adherence to ICT protocols. At least 6 index client-HCW encounters were selected from each cluster and audio recorded. Audio recordings were coded independently by two analysts blinded to the study arm and averaged. Fidelity scores ranged from 0 to 100 percentage points, with higher scores indicating higher compliance with ICT protocols. Fidelity scores were compared between Enhanced and Standard arms using a linear model (normal distribution, identity link) fit with generalized estimating equations to account for correlated observations within health facilities.

Results: We enrolled 341 index clients, 124 (36.4%) in Enhanced and 217 (63.6%) in SOC arm. We observed and audio-recorded 341 index client-HCW encounters. The mean fidelity score was higher in the Enhanced arm (66.3; 95% CI: 62.8,

69.7) compared to the Standard arm (45.7; 95% CI: 42.8, 48.6). On average, HCWs in the Enhanced arm were 20.6 percentage points (95% CI: 16.1, 25.1) more compliant to the protocol than those in the Standard arm. The scores across the 15-items were significantly higher in the Enhanced arm.

Conclusion: The Enhanced training package substantially improved HCW fidelity to counseling index clients about reaching their sexual partners and biological children for HIV testing services. The blended training could support implementation of ICT with fidelity at scale in resource-constrained settings.

108: Retention in HIV care at a health facility severely impacted by Cyclone Freddy in Phalombe District, Malawi: A look 18 months post-cyclone

Katherine Simon, Victor Guzani, Robert Majoni, Felix Joshua, Alick Mazenga, Sam Sibakwe, Gift Kaunda, Stephen Chu, Carrie M Cox

Background: On March 14, 2023, a devastating cyclone struck Southern Malawi, causing extensive flooding and destruction resulting in displacement of many communities and service disruptions at health facilities. Over 65,000 PLHIV receiving care in Phalombe district were at risk of treatment interruption due to inaccessible roads, population displacement, damaged infrastructure and lost commodities. Mudslides completely destroyed Nkhulambe Health Centre. We describe the number of people receiving antiretroviral therapy (ART) at a severely affected facility prior to, immediately after and 18 months following the cyclone.

Description: In collaboration with Ministry of Health and other stakeholders, integrated emergency health services were provided in temporary structures and mobile clinics. Community health workers (CHW), clinical staff, and psychosocial counselors conducted health talks and counseling sessions to facilitate emergency ART refill access. Multi-month antiretroviral therapy (ART) prescribing was prioritized to minimize client visits, and clients were referred to nearby facilities or outreach clinics as needed. Psychosocial counselors received capacity building on care of disaster survivors; they subsequently provided phone- based and in person psychosocial support to clients and health workers; clients without phones utilized CHW phones for virtual counseling. Health services continued to be provided in temporary structures. We compared the number of people enrolled in HIV care at the end of the quarter preceding the cyclone (December 2022); following the cyclone (June 2023); and September 2024, 18 months post-cyclone.

Lessons learned: Following the cyclone, the cohort of PLHIV enrolled in care dropped to a low of 1,859 clients (55% of the pre-cyclone cohort). By end September 2024, the Nkhulambe cohort had returned to 3,059 clients (92% of the pre-cyclone cohort).

Conclusions/Next steps: Despite significant disruptions, a rapid, coordinated, multi-stakeholder response resulted in service continuation for the cohort of PLHIV at Nkhulambe HC following Cyclone Freddy. Client-centered approaches to ensure health services met clients' needs were critical to retention following natural disaster.

119: Optimizing Tuberculosis Testing Through Usage of Novel Screening Approaches in Children and Adolescent Living with HIV (CALHIV) at Baylor Malawi COE Clinic

Chisomo Kutengule, Adamson Munthali, Louis Kaluso Nyasulu, Durbbin Mulengwa, Mbongeni Dube, Alexander Kay, Debra Vambe, Anna Mandalakas

Introduction: Tuberculosis (TB) is one of the leading causes of death and remains a significant global health challenge (Yang Huafei et al, 2024). In 2023, an estimated 10.8 million people fell ill with TB worldwide, including 1.3 million children (WHO, 2025). The WHO recommends that CALHIV complete TB symptom screening at every clinical encounter and that a more accurate screening approaches are needed to optimally identify TB disease in CALHIV (Vonasek, B & Kay Alexander et al). In Malawi, TB GAPS study was launched in January 2024 and it brought along novel screening and

diagnostic tests for Mycobacterium tuberculosis (MTB). This write-up evaluates the novel screening approaches in optimizing TB testing in CALHIV.

Methods: Data was collected from January to December2023, pre-TB GAPS from the EMRx and Redcap and was compared with January to December 2024 data when TB GAPS was launched. TB screening pre-TB GAPS was done using standard WHO questions only while with TB GAPS study, screening was done using the WHO questions alongside the screening tests which are Lateral Flow Urine Lipoarabinomannan (LF-LAM), C-reactive protein and chest x-ray. Comparison was made on the total number of those screened and positive screens and proceeded to diagnosis. Univariate descriptive analysis was used to compare cumulative frequencies of outcomes and proportional differences between the two cohorts.

Results: In the year 2023, TB screening coverage was 89% and a total of 2,857 patients were screened for TB using the WHO screening questions out of which 149 were screened positive representing 5% positivity rate. While in 2024 TB screening coverage was 93% and a total of 2,884 clients were screened, out of which 366 were screened positive and proceeded to diagnosis phase representing 13% positivity rate.

Year	Screening Coverage (%)	Total Clients Screened	Clients Screened Positive	Positivity Rate (%)
2023	89%	2,857	149	5.2%
2024	93%	2,884	366	13.0%

Conclusion: Usage of the novel screening tools led to the doubling up in the number of clients that were screened and proceeded to diagnosis phase as shown above. This has led to improved TB cases detection and enhanced treatment initiation. Therefore, we recommend the use of the WHO screening questions together with the novel screening tests introduced by TB GAPS. This approach provides a scalable model for enhancing TB screening in diverse healthcare settings.

133: Assessing the effects of the COVID-19 pandemic on PMTCT Outcomes at an HIV Clinic in Kampala, Uganda

Elizabeth Maidl, Jacqueline Balungi Kanywa, Alexandra Njuba Meeme

Purpose: The COVID-19 pandemic significantly disrupted healthcare delivery globally, including Prevention of Maternal to Child Transmission (PMTCT) services in Uganda. At Baylor Foundation Uganda – Center of Excellence (BFU-COE), it was unclear how these disruptions impacted vertical HIV transmission. Mother-to-child transmission remains the primary source of pediatric HIV infections in Uganda, accounting for 18% of new cases. This project aimed to assess vertical transmission trends from 2019–2023 and identify risk factors and service delivery gaps to inform improvements. Baseline data from April–June 2024 showed a 2% vertical transmission rate, similar to the national pre-COVID rate of 2.8%.

Methods: This retrospective quality improvement project was conducted at BFU-COE, a high-volume HIV clinic in Kampala. A multidisciplinary team of clinicians, data officers, and nurse managers reviewed data from HIV-positive women (ages 15–49) and their infants enrolled in the PMTCT program between March 2019 and March 2024. Inclusion required completion of the PMTCT cascade (either a final negative HIV test at 18 months or a positive test result at any point). Data were extracted from electronic medical records and two audit tools: the Positive Infant Audit and the Root Cause Analysis form. Key measures included infant PCR results, maternal viral suppression, appointment adherence, and testing timelines. Trends were tracked over time using run charts.

Results: Data extraction and analysis are currently underway. We anticipate reviewing approximately 200 mother-infant pairs, with a focus on comparing vertical transmission rates before and after the onset of COVID-19 and identifying risk factors for HIV transmission. Preliminary observations have noted potential disruptions in care, such as delayed infant

testing and missed appointments, especially during COVID lockdown periods. These insights will guide the implementation of targeted interventions aimed at improving adherence, early infant diagnosis, and service continuity. Final results will include trends over time and contextual factors influencing transmission outcomes.

Discussion: The COVID-19 pandemic impacted PMTCT service continuity, exposing key vulnerabilities in care delivery. This project helped identify specific gaps and informed data-driven, locally relevant interventions. While transmission rates remained within national targets, improvements are needed in early testing, maternal adherence, and care engagement. Limitations include reliance on retrospective data and incomplete follow-up in some cases. Next steps include sustaining current interventions, integrating audit tools into routine care, and exploring scale-up of successful strategies across other PMTCT sites in the network.

163: Young Mothers Support Group at Baylor Foundation Lesotho COE: A Scalable Model for Psychosocial and Economic Empowerment in HIV Care

Mamosase Lerata

Background: Young mothers aged 30 and below living with HIV and ART face unique psychosocial and economic challenges. These include stigma, emotional exhaustion, lack of support, and the burden of managing treatment while raising children. In response, the Young Mothers Support Group was initiated at Baylor Maseru Clinic in April 2024; to provide a safe space for peer support and professional guidance. Its main goal is to empower young mothers to prioritize their health, adhere to ART, nurture self-love, and improve their parenting through emotional and informational support.

Program Description: The support group targeted HIV-positive mothers on ART, aged <30, with at least one child. Sessions were held quarterly and facilitated by a COE Social Worker, in collaboration with Karabo ea Bophelo (Donor Project) Social Workers, an Adolescent Clinic doctor, Adolescent Clinic psychologist, and the American Corner (A Partnership between the U.S. Embassy and the Government of Lesotho). Activities included sessions on Self-Awareness and Self-Love, Entrepreneurship Skills, Educational Opportunities, Holistic Well-being, and a festive celebration with program feedback. The group used existing resources and spaces, and adjustments were made for language and child-friendly environments to accommodate children <3 years of age.

Evaluation and Outcomes: At the end of 2024, the program was evaluated through participant feedback and focus group discussions facilitated after each session. Many participants initially reported feeling emotionally overwhelmed and unsupported due to financial struggles and strained relationships. After the third session, they expressed improved self-esteem, motivation, and hope. Several mothers began income-generating activities such as small-scale selling, while others explored online learning. The program helped participants regain their sense of identity, emotional stability, and confidence to plan for their future. While formal outcome data like income or school enrollment are still pending, qualitative evidence shows a strong emotional and psychosocial impact.

Lessons Learned: The program highlighted the importance of safe, consistent support for young mothers living with HIV. Emotional healing, peer bonding, and empowerment were key outcomes. High participation and positive peer influence were strengths. Challenges included inconsistent childcare and the long gaps between sessions. Involving peer mentors (Mom Navigators) emerged as a powerful strategy to build trust and relatability. Flexibility in scheduling and content delivery was essential for ongoing engagement.

Next Steps: To strengthen impact, sessions will shift from quarterly to monthly. A WhatsApp group will be launched for ongoing peer support. Plans include training for Mom Navigators, improving childcare support, and tracking ART adherence and maternal-child health outcomes over time. This adaptable model offers promise for replication in other high HIV-burden settings with limited psychosocial support.

172: Evaluating the Impact of a Support Group Initiative on Virologic Suppression in Children Under Five Living with HIV at the Baylor Malawi COE

Kelvin Jobo, Annie Mkusa, Patricia Adam

Background: Children living with HIV (CLHIV) under the age of 5 years (U5) have worse treatment outcomes and lower rates of virologic suppression than older children. Some pediatric centers have utilized resources to address the barriers faced by young children and their families. At Baylor-Malawi COE, a clinic tool was established, and group sessions were conducted every Monday focused on HIV/AIDS knowledge, drug administration challenges, relationship between client (child) and caregiver, assessing financial status, and sharing of experiences. This study aims to assess the impact of these support groups on U5 viral suppression.

Methods: Data of all children under the age of five with at least one viral load result were extracted from EMRx. Viral suppression rate was calculated prior to the start of the support groups and one year later. We excluded children who died, were lost to follow-up, or interrupted treatment.

Results: Prior to the start of U5 support groups, in December 2023, 73 U5 clients were active on treatment and 53 were virally suppressed (73%). After one year of support groups, in May 2025, 60 out of 75 were virally suppressed (80%). 3 children had rebound viremia.

Conclusions: The findings from this study highlight a promising impact of structured support groups on virologic suppression among children U5 living with HIV at the Baylor-Malawi COE. More interventions are needed to achieve desirable outcomes in U5 children who are still struggling to achieve viral suppression. Scaling up such initiatives could play a critical role in enhancing ART adherence and achieving long-term viral suppression in young children, ultimately supporting global HIV treatment goals

Category 2: Adolescent HIV Prevention and Empowerment

63: Empowering Adolescent Girls Through Integrated SRHR and HIV Care in Mwanza, Tanzania

Muzna Seif, Nicholaus Martine, Eunice Ketang'enyi, Lumumba Mwita

Background: Adolescent girls in sub-Saharan Africa—including Tanzania—continue to face a disproportionate burden of sexual and reproductive health (SRH) challenges, compounded by high vulnerability to HIV. Despite national and global efforts to expand access, adolescent-friendly SRHR and HIV services remain largely out of reach for many girls due to persistent financial barriers, long distances to health facilities, entrenched gender norms, and widespread misinformation about HIV. In Mwanza, a facility assessment revealed a stark service gap: only 15% of health clinics provided comprehensive SRHR and HIV services tailored to adolescents (Ndayishimiye et al., 2020). This limited coverage leaves a majority of girls underserved at a critical point in their development, undermining both their health and future opportunities. Addressing these systemic gaps is not only a public health imperative but also a matter of equity and social justice.

Method: This study engaged **320 adolescent girls, 120 healthcare providers, and 15 community stakeholders** in Mwanza through focus group discussions, in-depth interviews, and facility assessments. Researchers used participatory methods to identify challenges and co-develop strategies for service delivery improvement.

Results: The study identified significant gaps in SRHR knowledge, with only **35% of participants aware of contraceptive methods** and **21% understanding the importance of regular HIV testing**. Barriers such as stigma, financial costs, and transport challenges were prevalent. However, peer-led education programs showed a **60% increase in service uptake**, while SMS reminders led to a **35% improvement in appointment adherence**. Despite the availability of HIV testing, **5% of participants reported long waiting times** and poor infrastructure as deterrents.

Conclusion: A multi-sectoral approach involving health, education, and community stakeholders is essential to addressing these challenges. Training healthcare providers in adolescent-centered care, integrating SRHR education into school curriculums, and addressing systemic barriers such as transportation and affordability will create a supportive environment for adolescent girls. These strategies will empower young women to access comprehensive SRHR and HIV services, reducing their vulnerability and promoting better health outcomes.

89: Intellectual Disability: A Gap in Reaching HIV Epidemic Control Amongst Adolescents and Young Adults at Baylor (BBCCCOE), Gaborone, Botswana

Tinah Batsile, Sewelo Sosome, Abhilash Sathyamoorthi, Mogomotsi Matshaba

Background: It is essential to be able to deliver inclusive services and reach out to marginalized communities in order to achieve the UNAIDS 95-95-95 targets among all age groups and both genders. However, individuals with disabilities are often overlooked. This oversight is significant because over 1 billion people globally live with disabilities and a substantial portion are HIV-positive. In Botswana there are 55,347 people registered as living with disability which constitute about 3% of the population. At Botswana-Baylor Children's Clinical Centre of Excellence (BBCCCOE), there are 300 adolescents and young adults known to be living with a disability. According to Kuper et.al (2022), people living with disabilities often face challenges in accessing and adhering to HIV treatment due to service provision obstacles like healthcare workers' lack of knowledge and service demand such as limited autonomy and awareness about HIV care needs and accessible appropriate services.

Methods: The aim of this retrospective cross-sectional study was to appreciate the characteristics among adolescents and young adults living with intellectual disability and their ability to understand and demand HIV services. Individual interviews were conducted on a convenience sample of 30 adolescents at BBCCCOE living with an intellectual disability in 24-30th November 2024. Intellectual Disability was defined as any disability that affected the acquisition of knowledge and skills, in particular any of various neurodevelopmental conditions affecting intellectual processes, educational attainment, and the acquisition of skills needed for independent living and social functioning.
Results: A total of 30 adolescents and young adults (17 males [56.7%], 13 females [43.3%]) were identified. Of the 30, 26 (86.7%) mentioned that they relied on their caregivers for medication supervision. When asked about HIV transmission, only 8 (26.7%) understood all the modes of transmission. All 30 (100%) could not read and write at age-appropriate level and therefore relied on teacher aids at school. Among the 30, 27 (90.3%) knew about HIV but only (16%) knew how it affected their lives. All of them mentioned that they have never voluntarily requested for other prevention services and were told what to get by health workers.
Individuals with intellectual disabilities may have limited access to comprehensive sexual and HIV education due their inability to comprehend certain information this can lead to unsafe sexual practices therefore spreading the infection. However, this relationship would require further investigation using a larger sample across multiple sites.

Conclusion: Individuals with intellectual disabilities may have limited access to appropriate comprehensive sex and HIV education, which increases their vulnerability to HIV acquisition and management.
The use of tailored education programs, supportive communication strategies, and inclusive policies including technological innovations, such as telehealth would be potentially effective interventions to help address the existing gaps.

92: Evaluating the Impact of Community-Based ART Distribution on Teen Club Clinic Attendance among Adolescents Living with HIV: A Case Study in Salima District

Dalitso Mughogho, Blessings Kalimba, Alex Kabwinja, Carrie Cox, Katherine Symon, Albert Kaonga

Background: Adolescents living with HIV experience high rates of treatment interruption and treatment failure. Adolescent-centered responses to adolescent-specific challenges are critical. At a rural Health Center in Salima, nearly half of adolescents on ART reside over 15 kilometers away. Teens identified travel time, distance, safety, and cost as contributing to missing appointments, and often only guardians came alone to collect medication. We describe an adolescent-focused community-based ART distribution (CAD) model developed in May 2024 aiming to improve adolescent clinic attendance by bringing teen clubs closer to adolescents' homes.

Description: An Adolescent ART Clinic launched in May 2024 employs a modified teen club (TC) model held every twelve weeks at a CAD. The clinic provides ART refills, viral load sample collection, life skills education, psychosocial support, and health talks. Adolescents aged 10–19 who had completed full disclosure of their HIV status and were already active on ART were offered the option to enroll in the CAD model or continue care at the central facility. The clinic is supported by 3 clinical staff and 3 lay cadres from the central facility.

Evaluation and Outcomes: Routine program data was reviewed from May 2024 to April 2025 to assess attendance among adolescents enrolled in CAD teen club sessions. Among 30 adolescents invited to the initial CAD TC, 27 accepted. By April 2025, 31 teens were enrolled in the CAD TC. All teens enrolled in the CAD TC remain alive and active in care or transferred out as of April 2025, which is equivalent to those remaining in care at the central facility. At the 5 CAD TC sessions, 89% (109 of 133) of scheduled appointments were attended on time. Twenty missed visits were attended at the central facility before the next teen club, and 4 had treatment interruption but were back in care by April 2025.

Lessons Learned: Adolescent-responsive creation of a CAD TC is possible in a rural facility in Malawi. We noted that at the CAD, more teens attended in person instead of sending their guardians to collect medications, which allowed direct patient care and counseling, and teens could be engaged in education and peer-support activities. All teens at both the central facility and CAD TCs remained in care at the end of the year. Teens who missed appointments at the CAD were able to receive care at the central facility. Changing the clinic location did not overcome all attendance barriers, and comprehensive, ongoing support is needed to identify and mitigate outstanding attendance barriers.

Next Steps: Further analysis is ongoing to better understand the underlying factors affecting consistent attendance at the TC CAD clinic and ongoing work to make services as cost-effective as possible.

152: Age of Full Disclosure Among Adolescents Living with HIV at Botswana-Baylor Children's Clinical Centre of Excellence (BBCCCOE)

Oarabile Tome, Koketso Mokomane, Abhilash Sathyamoorthi, John Farirai, Mogomotsi Matshaba

Introduction: The disclosure of HIV statuses to adolescents is essential for successful long term treatment adherence, psychosocial development, and engagement in care. Full disclosure is defined as the point at which an adolescent is explicitly informed of their HIV-positive status, including knowing the name of the virus and understanding the purpose of lifelong treatment. Despite global recommendations for disclosure by the age of 12 years (WHO, 2011), many adolescents in Sub-Saharan Africa receive disclosure at a later time.
The aim of this study is to describe the age at which adolescents receive full disclosure and to assess gender-based differences in the timing of disclosure at Botswana-Baylor Children's Clinical Centre of Excellence (BBCCCOE).

Methods: A descriptive cross-sectional study was conducted using 2024 clinic data from the Botswana-Baylor Children's Clinical Centre of Excellence (BBCCCOE). A random sample of 200 fully disclosed adolescents (100 males and 100

females), aged 18–20 years, was selected. All patients in this age group were first listed in Microsoft Excel, and random numbers were generated and assigned to each individual. The list was then sorted by random number, and the first 100 males and 100 females were selected. Age at full disclosure was obtained from the Electronic Medical Record (EMRx). Specifically, the transition from partial to full disclosure is recorded by the clinician in the designated disclosure field.

Results: The most common age of full disclosure was 13 years, with notable gender variation: 35% being males and 26% females. Females were more likely to be disclosed earlier with 30% of them being disclosed by the age of 12 years, compared to only 16% of males. The oldest recorded disclosure occurred at 17 years of age and was a male.

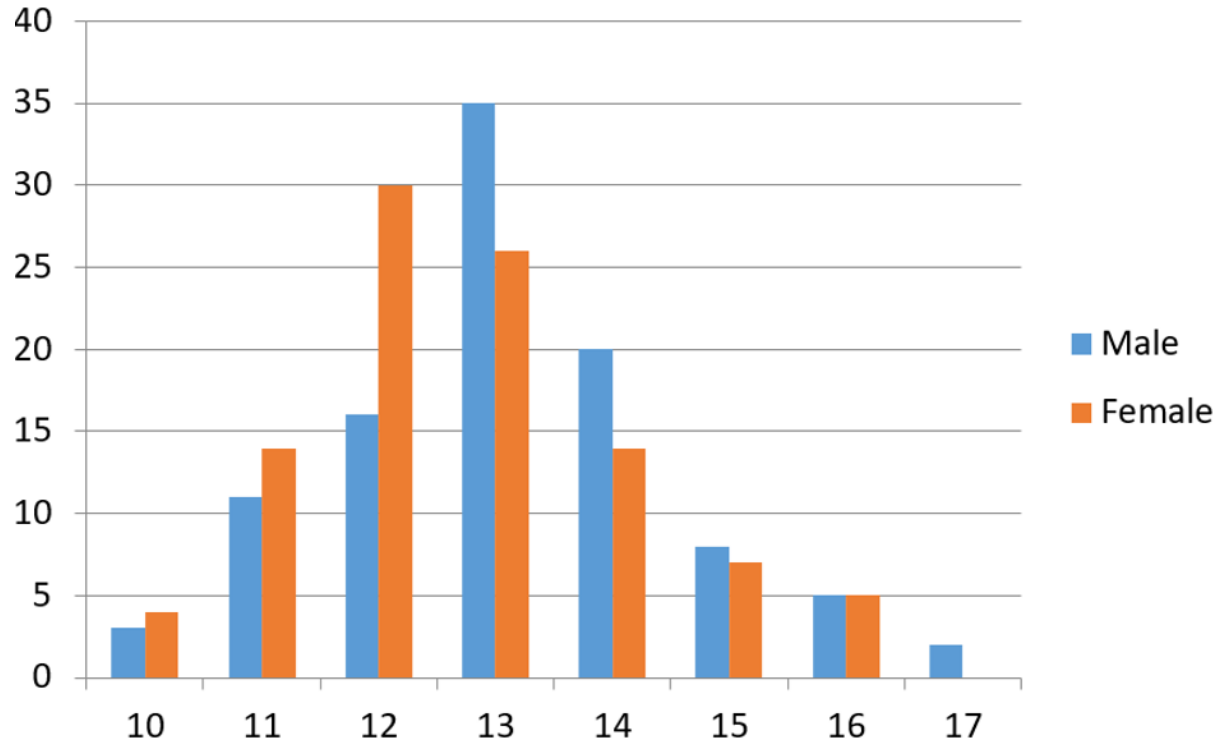


Figure 1: Bar chart comparing age of full disclosure by gender (N=200)

Conclusion: These findings appear to suggest that girls receive information on disclosure earlier on average than boys. This may reflect gender differences in emotional maturity and readiness for health-related communication, with girls often perceived as more emotionally prepared at younger ages. These results underline the need for gender-sensitive disclosure frameworks and earlier engagement with male adolescents to support timely psychosocial and treatment transitions.

154: An Integrated Community-Based HIV Prevention and Treatment Initiative for Adolescent Girls and Young Women in Lesotho.

Tiisetso Randy Motholo, 'Mamothello Motsamai

Introduction: Lesotho's adolescent girls and young women (AGYW) face the highest risk of HIV infection, so targeted interventions remain essential (Schwitters et al., 2022). Through the Ministry of Finance Project Management Unit (PMU), Baylor Foundation Lesotho implements the PROTECT (Provision of Prevention and Treatment for Young People) initiative, which provides community-based HIV prevention and treatment services for AGYW. The program unites proven HIV prevention methods with youth-friendly healthcare services to develop HIV resilience in young people.
Background: Lesotho currently has the second highest HIV prevalence worldwide since 15–24-year-old adolescent girls and young women represent 70% of all new HIV infections (Government of Lesotho, 2021). The PROTECT project operates in six districts: Leribe, Butha-Buthe, Mokhotlong, Thaba-Tseka, Qacha's Nek and Quthing. The main targets of

the program are to reduce new HIV infections among AGYW by 40% from 2022 to 2024; to increase viral suppression among HIV-positive AGYW to 90%; and to increase SRH service use by 50% through combined community-based interventions as per the National AIDS Commission, 2024.

Implementation: The PROTECT program provided services to 18,500 AGYW along with their 5,200 male partners across 120 villages throughout the three years. Key activities included:

- Biomedical: HIV self-testing, same-day antiretroviral therapy (ART) initiation, pre-exposure prophylaxis (PrEP), and voluntary medical male circumcision (VMMC) referrals.
- Behavioural: The CAMARA (Community Adherence Monitoring and Assistance) peer-led education program conducted 2,400 monthly sessions about ART adherence and SRH for AGYW.
- Structural: Linkage to post-gender-based violence (GBV) care and school-based condom distribution.

Lessons Learned: The CAMARA groups established AGYW control over their sexual health choices and adherence management and led to a viral suppression rate of 85% in September 2025 compared to the baseline 68% in December 2021 in the Leribe district.
The main obstacles during implementation were low male participation rates and poor daily PrEP adherence because of forgetfulness; in addition, stigma-related hesitancy restricted the number of new initiations.

Next Steps:

- The PROTECT project will scale up Peer Networks through CAMARA
- The project will work with youth influencers to produce social media content for PrEP promotion.
- The project will introduce SMS messaging for PrEP communication to enhance PrEP use and ongoing care.
- Policy Advocacy: The project works to establish AGYW representation on district health boards by training youth advocates for this purpose.

Conclusion: The PROTECT project demonstrates that AGYW and their sexual partners require specific prevention services which address their unique needs. Local strategies together with cultural influences and public health interventions reduce the effects of HIV on adolescent girls and young women (AGYW) who live in high-risk areas.

176: Equipping Adolescents with Cooking Skills through Cooking Demonstrations at Teen Clubs

Brenda Njete, Tendai Lupale, Susan Mhango

Background: Adolescence being a developmental period when lifelong habits around food, health, and independence begin to set, most teens, especially in underprivileged areas, lack access to basic cooking and nutrition education. In response to this gap, we decided to equip adolescents with the cooking skills by conducting practical cooking experiences within Teen Clubs.

Description: Baylor Children's Foundation Malawi implemented cooking demonstrations across the districts of Dedza, Ntchisi, and Mchinji during February and March of 2025. Cooking demonstrations reached nearly 800 adolescents, pregnant women, and young mothers, many of whom were malnourished. These activities targeted adolescents, pregnant women, and young mothers to encourage healthier eating habits and enhance nutrition knowledge. By showcasing locally available recipes and diverse cooking methods, the program promoted social and behavior change aimed at reducing reliance on processed foods, and encouraging dependency on locally organic available foods cultivated in the communities. The cooking demonstrations helped the adolescents to raise self-confidence and there were also empowered in meal preparation while also contributing long-term nourishment and local economic empowerment.

Lessons Learnt: Following the initiative, a significant shift was observed: 24 participants launched local cooking businesses, while others began selling nutritious juices, generating income and improving their families' well-being.

Health workers notified us in a follow-up that, malnutrition among participants decreased, and other families who once faced hunger and barriers to healthcare access reported enhanced health outcomes. This experience highlights the transformative power of practical nutrition education and skills-based economic empowerment in improving livelihoods and health for vulnerable youth. These cooking demonstrations also significantly improve health-seeking behavior among adolescents. It shows that addressing practical and emotional barriers in a culturally engaging way can bring positive change. Sometimes, warm meal, supportive environment can do wonders for the health of the public in underprivileged communities.

Next Steps: This abstract demonstrates how a simple, participatory approach can have multiple aspects on vulnerable adolescents' lives-nutritionally, economically, and emotionally. We hope to expand cooking demonstrations to communities with high rates of malnutrition and food insecurity, train most successful participants as peer educators to lead future sessions, create a sense of ownership, and inspire others through lived experience.

196: Adolescent HIV prevention and SRH Empowerment: Building Resilience and Creating Opportunities for AGYW in Songwe region, Tanzania (aHERO Project).

Neema Kipiki, Lilian Komba, Evance Mgeyi, Eunice Ketangenyi

Background: Adolescent girls and young women (AGYW) in Songwe region experience disproportionately high rates of HIV infection and adverse sexual and reproductive health (SRH) outcomes. Factors such as early sexual activity, gender-based violence, school dropouts, and limited access to adolescent-friendly health services (AFHS) contribute to these challenges. Cultural norms and socio-economic constraints further compound the issue, leading to persistently high teenage pregnancy rates. Although various efforts have been made to address these concerns, there has been a critical gap in consistent, peer-led support models—particularly for pregnant and breastfeeding adolescents. To address this need, Baylor Tanzania, in collaboration with UNICEF, initiated the aHERO Project. The program aims to reduce new HIV infections and promote SRH empowerment among AGYW aged 10–24 in three high-burden councils of Songwe region. The project's overall goal is to strengthen adolescent resilience, improve access to services, and establish sustainable community-based support systems.

Description: The aHERO Project employs a facility-linked, community-embedded model that combines biomedical, behavioral, and structural strategies. At its core is the Young Mother Mentor (YMM) model, which trains peer mentors to provide individualized support to AGYW—particularly young mothers—on HIV prevention, psychosocial wellbeing, and referrals to health, education, and economic services. Young Mothers Clubs and peer support groups offer safe spaces for mutual learning and empowerment. These efforts are reinforced through youth-led social behavior change communication (SBCC) using co-created messages delivered via local radio, schools, and digital platforms. The project also enhances institutional capacity by training healthcare providers and community health workers to deliver adolescent-responsive services using nationally approved tools and quality frameworks. Implemented in partnership with regional and council health authorities, the project targets more than 350,000 AGYW and 50,000 ABYM, creating a comprehensive ecosystem of adolescent support and empowerment.

Evaluation and Outcomes: Though still in its early stages, the project has a clear monitoring and evaluation framework. A consultant-led implementation research process will assess feasibility, impact, and scalability. Data will be drawn from service records, mentor reports, and participant feedback. Early signs of progress will include increased service utilization and health-seeking behaviors. Over time, the project aims to contribute to lower HIV incidence, improved maternal health outcomes, and greater economic resilience among AGYW.

Expected Lessons Learned and Next Steps: The project expects to generate insights on the value of peer mentorship, integrated services, and community involvement. These learnings will guide future program adaptation and sustainability planning. In the coming phases, efforts will focus on scaling activities, deepening government

partnerships, and embedding project components into local health systems. Long-term sustainability will be pursued through alignment with Comprehensive Council Health Plans, positioning aHERO as a replicable model across Tanzania.

212: Engaging Young People as Community Healthcare Providers to Increase Reach and Access of HIV prevention, Care and Treatment Services to the "Missing Populations".

Ntaoleng Mohlabane, Roto None, Mosa Molapo Hlasoa

Background: Lesotho has made significant progress towards the UNAIDS 95-95-95 targets with 95% of those infected aware of their status, 94% accessing anti-retroviral treatment (ART) and 98% of those on ART virally suppressed according to Lesotho 2024 National Estimates Report. However, gaps remain across specific populations, children, adolescents and young people (AYP) and men, also known as "the missing populations".
Lesotho has also seen a significant reduction (6%) in new HIV infections from 5,100 in 2022 to 4,800 in 2024, but AYP still contribute 38% to new infections yearly, which if not addressed can unravel the significant efforts Lesotho has made towards epidemic control.

Description: The CoHip-SEC project offers comprehensive integrated HIV prevention, testing and treatment services and sexual and reproductive health (SRH) services through a one stop shop approach and the beneficiaries are AYP, men, children and other vulnerable populations. Services are offered by professional service providers and Youth Mentors are recruited within the supported community councils and offered on the job training, mentorship and supportive supervision to ensure quality of services. They play an important role in provision of youth-friendly services, HIV testing and counselling services (HTS), mobilization and demand creation and SRH health services including condom promotion and distribution, offering evidence-based interventions (EBI's) aimed at reducing HIV risk among young people.

Evaluation and Outcomes: The program's effectiveness is measured quantitively through program indicators and by qualitative methods.
The contribution of the youth mentors here is compared by their six-month performance of HIV self- test and condom distribution against the overall program performance.
At the end of the semi-annual period FY25Q2, the Youth Mentors contributed 73% to the overall (38 895) performance of HIVST distribution more than the roving teams. Condom distribution is largely driven by Youth Mentors at 75% of the overall program achievement.

Lessons learned: Youth mentors are at an advantage of reaching the missing populations within their communities when compared to the roving professional teams. Therefore, they increase access, testing and linkage to HIV prevention and treatment services. One of the foreseeable limitations to the approach is the need for ongoing mentorship and supportive supervision which might be affected by the dwindling funding landscape if community health services are not prioritized. The most important insight from engaging Youth Mentors is that the communities themselves can increase access and reduce barriers to HIV testing and linkage to prevention and treatment.

Fig1 a) and b). HIVST distribution and condom distribution performance by professional counsellors, nurses and youth mentors for FY25Q1-Q2 in CoHipSEC project.

Next Steps: To advocate for the promotion of more community engagement of Youth Mentors services as providers in healthcare to reduce the gap of HIV services access in Lesotho.

213: Exploring the Impact of Evidence-Based Interventions on HIV Prevention Uptake Among Adolescents, Young People, and Men in Lesotho

Motlatsi Letsika, Mateka Justice Lehana, Ntaoleng Mohlabane, Mosa Molapo Hlasoa

Background: Although plausible gains have been achieved towards the UNAIDS 95 95 95 targets in Lesotho, adolescents and young people (AYP), continue to face disproportionate risks related to HIV (UNAIDS, 2023). Lesotho's current HIV prevalence is 18.5% according to the Lesotho National HIV estimates 2024, however, HIV incidence remains high among 15- to 49-year-old women (62%). Baylor Lesotho, through the CoHip-SEC project is implementing community-based comprehensive non-biomedical and biomedical prevention activities to support the government to sustain HIV epidemic control. Baylor implements targeted evidence-based interventions (EBIs) in the community aimed at reducing HIV risk among adolescents and young people in supported districts. This evaluation explored how EBIs - Community Norms Change (CNC) and Empowerment for Life and Action (ELA) modules, influence HIV prevention knowledge, attitudes, and service uptake among AYP and men in Leribe, Quthing, and Qacha's Nek districts in Lesotho.

Methods: Five focus group discussions (FGDs) with a total of 42 participants were conducted with young people enrolled in CNC and ELA sessions in the three districts. The demographic data of the participants is shown in the table below. One CNC group and four ELA groups participated in the FGDs. The discussions explored perceptions of HIV risk, access to prevention services, and barriers to service utilization. Qualitative data were thematically analysed to identify emerging patterns and contextual insights.

Results: Seven main themes emerged: (1) Increased awareness of comprehensive HIV prevention strategies including PrEP, PEP, and testing; (2) Structural and social barriers such as stigma, provider attitudes, myths, and religious or parental disapproval; (3) Increased service uptake influenced by exposure to peer-led education; (4) Perceived reduction of stigma within intervention groups but persistence in the broader community; (5) Strong peer support and empowerment to discuss sexual and reproductive health (SRH) and navigate life transitions; (6) gender-specific perspectives and the need for tailored male engagement strategies; and (7) Participant-led recommendations for expanding outreach to peers and communities beyond the group.

Age rage	Number of participants	Number of females	Number of males	Females (%)	Males (%)
15-19	19	18	1	95%	5%
20-24	9	7	2	78%	22%
25-29	9	8	1	89%	11%
30-34	4	4	0	100%	0%
35-39	1	0	1	0%	100%
Total	42	37	5	88,1%	11,9%

Conclusion: Evidence-based interventions such as CNC and ELA improve HIV prevention knowledge and service uptake among AYP in Lesotho. Future strategies should focus on community-level stigma reduction, engaging male peers, and expanding access beyond structured group settings to sustain impact. Effort to expand knowledge to and reach young people through peer-led mentors outside the groups can play vital role in reaching epidemic control.

Category 3: Pediatric Oncology, Palliative Care, & Community Health

94: Whispers of the Beyond: Exploring the Spiritual Experiences of Children Nearing End-of-Life with a Cancer Diagnosis in Botswana

Sewelo Sosome, Thato Kaang, Obokeng Ramphaleng, Robert Kimutai, Mogomotsi Matshaba

Background: In Botswana, children with terminal cancer often encounter profound spiritual experiences, particularly as they approach end-of-life. These experiences — dreams, visions, and perceived communications from ancestors — offer them comfort, guidance, and in some cases, a sense of healing. Rooted in indigenous spiritual belief systems, these experiences are often marginalized in biomedical palliative care models, despite their significance to patients and families. The dominant frameworks such as DSM-5 lack the cultural nuance to fully capture and respond to these phenomena, highlighting the need for African-centred therapeutic responses.

Description: Pediatric oncology in Botswana occurs in a complex socio-cultural matrix, where traditional healers, faith-based rituals, and ancestral beliefs hold central roles in how illness and death are understood. Therapists and healthcare providers often struggle to bridge the biomedical-spiritual divide, particularly when caregivers seek guidance from traditional and spiritual healers. This creates tension in care pathways, yet it also opens critical spaces for culturally affirming palliative interventions.
In therapeutic counselling sessions we explore the spiritual experiences of children nearing end-of-life, their reliance on ancestral communication for comfort and guidance, and how therapists and palliative teams can better advocate for integrating these practices into patient-centred care. It aims to critically assess family-centred therapeutic models that validate traditional healing and improve quality of life and emotional outcomes.
This qualitative inquiry draws on narrative interviews with adolescents in palliative care, their caregivers, traditional healers, and multidisciplinary palliative teams. Data was analysed thematically using an African centred helping strategy lens, incorporating frameworks from indigenous psychology, ubuntu philosophy, and critical spiritual care theory.

Evaluation and Outcomes: Interventions included family therapy sessions that facilitated open dialogue around ancestral beliefs, supported referrals for healer consultations when requested, and developed protocols to guide respectful collaboration between hospital teams and spiritual healers.In Psychosocial therapeutic intervention we used narrative therapy techniques to validate spiritual experiences without pathologizing them through DSM-5 criteria, thereby fostering psychological safety and cultural respect.
Children reported reduced existential distress after engaging in culturally meaningful rituals. Some expressed increased

emotional well-being following healer consultations, describing symbolic "healing" that, while not curative, offered closure. Families demonstrated greater satisfaction with care and were more engaged in treatment when spiritual beliefs were acknowledged and integrated.

Lessons Learned: It revealed that children nearing death often communicate with "the beyond" in ways that are spiritually and culturally coherent within Botswana's traditions. Recognizing and supporting these experiences through a family-centred, culturally grounded palliative approach enhances emotional outcomes and affirms dignity in dying. Therapists must act as cultural mediators and advocates, pushing beyond DSM-5 limitations to honor indigenous healing modalities.

Next Steps: By centering African spirituality and family narratives, palliative care becomes not only clinically effective but spiritually transformative.

96: Anticipating Loss: The Critical Role of Palliative Care Clinics in Navigating Anticipatory Grief and End-of-Life Adjustment for Patients and Families

Sewelo Sosome, Thato Kaang, Obokeng Ramphaleng, Robert Kimutai, Mogomotsi Matshaba

Background: In pediatric oncology, the transition from curative to palliative intent often ruptures the emotional fabric of caregiving. For mothers—often the primary caregivers—this shift triggers profound psychological distress, particularly as disease progression manifests through visible decline, rapturing tumours, wound care and cleaning, or uncontrollable pain. In Botswana, where cultural norms restrict open conversations about death, anticipatory grief remains an unspoken, internalized suffering.

Palliative care in Botswana remains stigmatized, perceived as surrender rather than support. Families oscillate between hope for a miracle and fear of witnessing their child's final breath. The prevailing cultural silence around pediatric death creates a psychological dissonance for caregivers, especially mothers, who endure repeated hospital admissions not only for clinical needs but also as psychological respite from the terror of their child dying at home.
This study explores how anticipatory grief manifests in caregivers of children with advanced cancer on palliative care, drawing from the stress-appraisal-coping model. It interrogates the effectiveness of Botswana's palliative care clinics in addressing this grief, and how culturally grounded psychological support can assist families in emotionally preparing for death.

Palliative care clinics offered structured psychosocial support including counseling, caregiver education, spiritual support, and routine psychosocial screening. Clinicians were trained to gently broach death-related topics using culturally attuned language. Support groups and preparatory sessions for caregivers were introduced, focusing on meaning-making, legacy work, and emotional regulation.

Methods: Using a mixed-methods approach, the study employed semi-structured interviews with 15 mothers and psychological screening tools including the Distress Thermometer and the Prolonged Grief-13 (PG-13) scale. Analysis applied empirical psychological theory and cultural anthropology frameworks, with attention to indigenous grieving practices and maternal caregiving norms.

Results: Findings reveal deep maternal fears tied to visible decline, helplessness in symptom management, and a crippling dread of the unknown moment of death. Mothers reported spiritual conflict—balancing hope with realism—and feelings of failure when treatment ceased. Those engaged in structured palliative interventions reported lower distress levels, greater acceptance, and improved ability to emotionally support their children. Yet, cultural barriers still impeded full engagement with anticipatory grief.

Conclusion: Anticipatory grief in Botswana's pediatric palliative care context is a complex interplay of cultural taboo,

maternal trauma, and spiritual hope. Palliative care clinics play a pivotal role in breaking silence and offering containment for grief that begins long before death. Psychological support must be embedded in culturally resonant practices, incorporating rituals, community support, and therapeutic education. A mother may never be fully prepared to witness her child's death—but with anticipatory grief support rooted in compassion and cultural sensitivity, she can be accompanied in her fear, and her sorrow honored with dignity.

98: Bridging Ethical Tensions: Negotiating Consent and Compassion using Routine Palliative care counselling in Mitigating Caregiver resistance to Pediatric End of life support in Botswana

Sewelo Sosome, Thato Kaang, Obokeng Ramphaleng, Robert Kimutai, Mogomotsi Matshaba

Background: In Botswana, as in many African contexts, cultural norms dictate silence around death, especially in conversations with children. Caregivers of pediatric oncology patients often resist end-of-life (EOL) counseling for children, believing that discussions about death will emotionally distress the child, invite despair, or even hasten death. This culturally rooted resistance presents an ethical and psychological dilemma for healthcare providers who are bound to honour caregiver autonomy while also witnessing the emotional isolation of children who are aware of their declining condition but are denied psychosocial support.

This study explores the ethical tension and psychological consequences of caregiver resistance to routine palliative counseling for children with cancer in a tertiary hospital in Botswana. Drawing from empirical data collected through semi-structured interviews with 25 caregivers, 10 pediatric oncology clinicians, and psychosocial observations of 15 pediatric patients on palliative care, this study illuminates the stark emotional costs of withholding EOL conversations. Theoretical frameworks such as Bowlby's Attachment Theory and Erikson's Psychosocial Stages of Development guide the analysis, revealing how children denied space to express fears experience heightened anxiety, emotional withdrawal, and increased familial disconnect.

Methods: When caregivers permit EOL counseling, children exhibit improved emotional regulation, more meaningful closure, and reduced separation anxiety, enhancing the family's overall grief trajectory. However, complete caregiver resistance often leads to unresolved family tension, disenfranchised grief, and complicated bereavement, especially in cases where children die without the opportunity to express final wishes or ask existential questions. Programmatically, the introduction of routine, age-appropriate palliative counseling integrated into the child's treatment trajectory improved caregiver buy-in when positioned not as "death talk," but as emotional support for living meaningfully with a life-limiting illness. Training sessions for staff on culturally sensitive communication, coupled with caregiver psychoeducation, gradually increased consent rates.

Results: The study recommends embedding routine palliative counseling as a standard of care, not contingent on caregiver consent alone, but approached through a rights-based framework that recognizes the child's psychological needs.

Conclusions: Policies must address this ethical grey area by balancing caregiver authority with child-centered psychosocial care. Further, culturally congruent interventions—such as storytelling, metaphor-based dialogue, and community-based grief rituals—are essential for fostering acceptance and reducing stigma around pediatric death discussions in Botswana.

115: Learning Interrupted: The Educational and Psychosocial Impact of Paediatric Cancer Treatment in Botswana – A Clinical Social Work Perspective

Sewelo Sosome, Tinah Batsile, Onkemetse Phoi, Mogomotsi Matshaba

Background: In Botswana, children receiving treatment for cancer and blood disorders at the Botswana-Baylor Children's Clinical Centre of Excellence (BBCCCE) face significant educational disruption. Frequent hospitalizations, fatigue, treatment side effects, and prolonged school absences hinder learning continuity. For most patients aged 5–18, formal education halts at diagnosis, leading to grade repetition, delayed exams, and strained academic identity. These losses extend beyond the classroom, impacting the child's self-concept, developmental milestones, and the caregiver's vision of future independence. Nearly 40% of post-treatment children request school transfers due to stigma or feeling out of place with younger.

The aim is to examine how treatment-related school interruption contributes to psychosocial distress and grief processes among Pediatric oncology families. It positions education not as a secondary need, but as a core domain of survivorship care.

Methods: Data were collected from the BBCCCE's Clinical Social Work Department over an 18-month period (January 2023 to June 2024). Informal educational support records, psychosocial assessment tools, and caregiver reports were reviewed for paediatric oncology patients undergoing treatment. Additionally, qualitative feedback from children and caregivers during psychosocial sessions was coded thematically to assess educational concerns. Psychosocial notes on referrals to the psychologist and the Centre for Resource for Children with Special Needs (CRC) were analysed for timelines and outcomes.

Results: Out of 112 children reviewed:

- 100% halted formal schooling at the start of treatment.
- 60% experienced delays in cognitive functioning, especially among patients who underwent brain surgery or cranial radiation.
- 40% of post-treatment children requested school changes due to grade repetition and peer mismatch.
- 58% of caregiver**s** expressed high anxiety about long-term academic outcomes and reduced independence.
- Informal ward-based educational interventions (using retired teachers or volunteers) were implemented for 36% of admitted patients. However, these were often interrupted by side effects (e.g., nausea, fatigue), space limitations, or lack of structured curriculum.
- CRC assessments, while helpful, had an average wait time of 4–7 months, delaying learning interventions.
- In 2025, BBCCCE co-piloted a new computerized rapid neurocognitive screening tool with CRC and the Ministry of Child Welfare and Basic Education, enabling earlier detection of learning delays in oncology patients and initiation of tailored educational support plans.

Conclusion: Cancer-related educational disruption is a persistent and under addressed challenge in paediatric oncology care. The effects extend beyond academics, impacting children's emotional health, self-concept, and family well-being. Current informal interventions are helpful but insufficient. The new computerized early neurocognitive assessment tool offers promise in closing the care gap. Going forward, integrating educational liaisons into clinical teams, formalizing school reintegration planning, and advocating for trauma informed teacher training as essential. Holistic survivorship must include the right to learn because healing is not complete if the future is out of reach.

144: Translating and Validating a Caregiver Stress Tool to Address Family Stressors and Prevent Treatment Abandonment in Malawi

Grace Chirwa, Jessie Sinkhonde, Lexa Chandidya, Faith Nyirenda, Fatsani Manase, Stuart Kalirani, Alex Nkolokosa, Nicole Schneider, Casey McAtee

Introduction: Stress impacts the well-being of caregivers, therapeutic outcomes, and treatment abandonment in pediatric oncology patients. In sub-Saharan Africa, there is no standardized tool assessing caregiver stress that can identify specific stressors contributing to inferior outcomes or abandonment. This study adapted a validated tool to evaluate caregiver stress and coping capacity, enabling tailored interventions for specific family situations. Additionally, the study outlines a method for resource-limited cancer centers to adapt and validate questionnaires to local contexts.

Methodology: The University of Washington Caregiver Stress Scale (UW-CSS) is a 10-item Likert-style questionnaire assessing caregiver stress across ten dimensions, such as financial stress and relationship strain. It was translated into Chichewa using the Functional Assessment of Chronic Illness Therapy (FACIT) method of iterative forward-backward translation. Expert review and pilot testing assessed the clarity, comprehensibility, and cultural relevance of the translated tool. The translated UW-CSS was administered to a purposive sample of 50 caregivers of children receiving cancer therapy at diagnosis and mid-therapy at Kamuzu Central Hospital pediatric oncology ward in Lilongwe, Malawi. The study employed a cross-sectional design. Cronbach's coefficient alpha and principal component analysis (PCA) were used to determine the reliability and structural validity of the translated questionnaire. Ethical approval was obtained from NHSRC Malawi, and written informed consent was obtained from all participants.

Results: The translated UW-CSS achieved a Cronbach's alpha of 0.76 and unidimensionality on PCA, indicating acceptable reliability and structural validity to assess caregiver stress. A UW-CSS score of greater than 55, indicating significantly high stress relative to the general population, was observed in 86% of caregivers at cancer diagnosis, increasing to 92% at mid-therapy. Financial strain (95% at diagnosis, 100% at mid-therapy) and limitations in personal activities (90%) were the most prevalent stressors, with 75% reporting sleep difficulties.

Conclusion: The adapted UW-CSS is a reliable and valid tool for assessing caregiver stress in sub-Saharan Africa. High stress levels, particularly financial strain, highlight the need for targeted interventions to support caregivers and prevent treatment abandonment in pediatric oncology, ultimately improving outcomes. While limited by single-site design, this study offers a model for locally adapting caregiver tools in resource-constrained settings. Future studies should explore and test interventions aimed at reducing caregiver burden across treatment stages.

145: A Decade of Retinoblastoma Care in Lilongwe, Malawi (2015–2025): Outcomes and Challenges.

Atupele Mpasa, Honour Mhango, Apatsa Matatiyo, Sam Makuti, Samuel Maloya, Amos Nyaka, Moira Chinthambi, Stella Wachepa, Casey McAtee, Nmazuo Ozuah, Rizine Mzikamanda

Background and Aims: Retinoblastoma is a highly curable childhood cancer in high-income countries, but survival in low-income countries remains low. This study describes the clinical and demographic profile, and outcomes of retinoblastoma at Kamuzu Central Hospital (KCH), one of two pediatric cancer centers in Malawi, serving two-thirds of the population. Additionally, we mapped high-burden areas to understand the referral patterns.

Methods: A retrospective review of medical records was conducted for all children diagnosed with retinoblastoma at KCH, from June 2015 to January 2025. Demographic, clinical, treatment, and outcome data were extracted from medical records and analyzed. Overall (OS) and event-free (EFS) survival rates were estimated using Kaplan-Meier analysis, with abandonment as an event. Geographic mapping of retinoblastoma cases was also performed using Power BI software. Ethical clearance was obtained from the National Research Council of Malawi.

Results: Among 91 children diagnosed with retinoblastoma, the median age was 32 months (range: 2 months to 10 years), with a median time from symptom onset to diagnosis of 5 months (IQR 2-12). Forty-four (51%) patients presented with extraocular disease, 31 (44%) had International Retinoblastoma Staging System (IRSS) stage IIIa disease, and 16 (23%) were metastatic at diagnosis. Nearly all patients (90/91) received pre-operative chemotherapy, and 75 (82%) had surgery, with enucleation completed in 73 (80%) patients. Radiotherapy, unavailable at KCH, was indicated for 44 (51%) patients**.** Estimated 2-year OS and EFS were 45% (95% CI 31% - 66%) and 29% (95% CI 18%-45%), respectively. Twenty-seven patients (30%) abandoned treatment - 16 (61%) after surgery. Female sex was associated with higher International Classification of Retinoblastoma (ICRB) stage (p=0.006). Geographic mapping revealed 43% of the cases originated from Lilongwe rural, where healthcare access is limited.

Conclusion: High rates of extraocular disease (51%), clustering in communities close to the cancer treatment center (43%), and treatment abandonment (30%) highlight the need to prioritize early diagnosis, health systems and referral strengthening, and reducing abandonment to improve retinoblastoma outcomes in Malawi. This decade-long retrospective study provides a comprehensive view of retinoblastoma outcomes in Malawi, strengthened by its large sample size and use of geographic mapping to highlight access disparities. However, limitations include missing data, lack of radiotherapy services, and high treatment abandonment, which affect the generalizability of findings.

150: Assessing Paediatric HIV Knowledge Among Medical Interns Rotating at Botswana-Baylor Children's Clinical Centre of Excellence (BBCCCOE)

Oarabile Tome, Koketso Mokomane, T Tshipo, Noor Badri, G P Elias, Abhilash SATHYAMOORTHI, John Farirai, Mogomotsi Matshaba

Introduction: Medical interns in Botswana are key contributors to paediatric HIV care. However, their baseline knowledge in the field remains largely underexplored. While prior studies had mentioned that there was self-reported, adequate exposure to HIV care, there have been few objective assessments determining proficiency Understanding interns' knowledge gaps are critical to improving the educational curriculum, learning approaches and ultimately, clinical outcomes. This aim of this study was to assess baseline competence of paediatric HIV care among medical interns.

Method: From September 2023 to December 2024, all medical interns rotating through the Botswana-Baylor Children's Clinical Centre of Excellence (BBCCCOE) were administered a standardized pre-test from the KITSO Paediatric HIV Training Program at the start of their week-long rotation. The test assessed their understanding of HIV transmission, treatment protocols, and clinical management. Although a post-test was part of the plan, it was not consistently administered due to time constraints within the rotation schedule and variability in clinic workload. As a result, only pre-test data were analysed using descriptive statistics.

Results: A total of 42 interns completed the assessment. Marks ranged from 20% to 89%. Most interns scored between 60–79%, with 13 (31%) scoring 60–69% and another 13 (31%) scoring 70–79%. Only 7% of interns achieved scores above 80%, and nearly 24% scored below 50%, highlighting significant variability in the levels of proficiency.

Conclusion: Despite receiving clinical exposure to paediatric HIV during their medical education, many interns demonstrated limited knowledge in critical areas of paediatric HIV care. This aligns with findings from previous studies on the discrepancy between perceived and actual competence. Structured HIV education with case-based learning or a mandatory online paediatric HIV training module is recommended to undergraduate medical educators as a prerequisite before medical internship.

169: Catalyzing Change: The Impact of the D43 Siyakhula Child Health Applied Research Training Approach on Pediatric TB/HIV Research and Capacity Building in Eswatini

Kwatekai Lockhart, Debrah Vambe, Nontobeko Dlamini, Priscilla Dlamini, Tengetile Mathunjwa, Mduduzi Shongwe, Alexander Kay, Anca Vasiliu, Nomalungelo Dlamini, Ayanda Sikhondze, Crystal Cazier, Anna Mandalakas

Background: In 2023, Eswatini's TB incidence in people living with HIV was 188/100,000 people. However, the country has limited in-country training and research capacity, focusing on children and adolescents living with TB and HIV. Capitalizing on existing partnerships, the collaborative D43 Siyakhula program, the only active D43 training program in Eswatini, addresses the gap by training in-country associate investigators in operational, clinical, translational, and applied research with a focus on pediatric populations with TB and HIV. Two cohorts have been trained in Child Health Applied Research in collaboration with the University of Eswatini (UNESWA). Based on trainee data and feedback from formal surveys, changes to the program were made between the first and second cohorts to improve training quality and further capacitate Emaswati mentors and lecturers.

Description: During the second cohort planning process, coordinated publicizing of the program using existing structures within the country was implemented. The curriculum and learning objectives from the first cohort were reviewed, with increased involvement from UNESWA lecturers and mentors. The training course was extended from three to four weeks to provide more time for developing pilot project protocols with supervision, including a hybrid of workshops and didactic sessions.

Evaluation and Outcomes: The number of participants between the first and second cohorts increased by 86%, which was attributed to increased demand and interest from applicants. Increased involvement of UNESWA faculty led to more practical case studies and local lecturers (25/46 in cohort one; 33/55 in cohort two). All scholars in cohort two (26/26) developed pilot project protocols, compared to 79% in cohort one (11/14). The growth of the training network presented an opportunity for one trainee to receive external funding to implement their pilot project the following year.

Lessons Learned: With the program directly training more than 30 scholars over five years, challenges of balancing work, proposal development, and delays in receiving ethical clearance in Eswatini have been a foremost concern. To address these issues, the Eswatini-based administrative team provides additional support by maintaining consistent communication with and ethical review boards to facilitate approval and monthly report check-ins to help scholars plan their projects effectively. This comprehensive support ensures scholars can successfully advance their research pilot projects despite setbacks.

	1	2	3	4	5
Eswatini based lecturers		25		33	
# of scholars in the program		14		26	
# of pilot project protocols successfully developed		11		26	

Next Steps: As the program continues to support trainees, planning for program continuation is underway. This program expansion will include a path for short-term scholars to a master's in public health with a Health Economics track, led by one of the current Doctoral students, and provide increased opportunities for scholars to present pilot project research. The program has shown notable progress through strategic improvements, underscoring its growing impact and potential to contribute to the continued advancement of research and capacity-building efforts in Eswatini.

182: Planting Sustainability by Empowering Households with Fruit Trees, Vegetable Seeds, and Watering Cans.

Brenda Njete, Tendai Lupale, Susan Mhango

Background: Almost 90% of our clients are from vulnerable households. Food insecurity plus malnutrition are big issues, whereby challenges like poverty and limited access to sustainable agriculture contribute to malnutrition. Food supplements provide temporary relief and hardly empower families to breakdown the dependency cycle. This prompted a decision to come up with **Planting Sustainability an** initiative to build more sustainable impacts from the grassroots level.

Description: This is a community-driven initiative dedicated to fighting household malnutrition through sustainable gardening practices, organic cultivation techniques, and self-sufficient food production. By providing fruit trees, vegetable seeds, and basic farming equipment, and delivering hands-on training in permaculture gardening the initiative enables adolescents to transform gardens into centers of nutrition resilience. Through the support from Dr. Elias and Dr. Jacob, the initiative distributed resources to adolescents and conducted lessons that blend practical skills with environmental consciousness. This all-inclusive method also addresses immediate nutritional needs while encouraging a permanent culture of food independence, ecological regeneration, and community based economic development.

Lessons Learned: The introduction of starter packs in this project, that were watering cans, seeds, fruit trees, and simple agricultural training, has proven to be an important approach in addressing household malnutrition. Watering cans and plants were distributed to 20 adolescents, and trees and vegetable seeds were distributed to 280 pregnant or lactating young women received trees and seeds only. We have seen anecdotal evidence for improved nutrition, with several adolescents changing from severe to moderate malnutrition or reaching standard wellbeing status.
In addition to improving nutrition, gardening emerged as both a therapeutic activity and a community-based income-generating activity. Hands-on training transferred practical farming skills and encouraged ambitions in agriculture and entrepreneurship. Unemployed adolescents who previously had no well-thought-out engagement began expressing ambitions to become commercial farmers. A need for more starter packs from peer inspiration speaks well for the initiative.
This initiative shows how simple interventions can yield multi-faceted results, regained health, personal activity, economic potential plus prompt community wide inspiration. Encouraging this leads to workable answers for food insecurity while empowering a new generation of change.

Next Steps: The initiative provides feasible change for strengthening hospital care, in settings where health outcomes are connected to nutrition and food security. The plans are to continue sourcing funds to expand the program. Join us in Planting seeds of Sustainability, one seed, one tree, one garden, one household at a time.

206: Innovative Aquaponics for Food Security in Indigenous Wayuu Communities of La Guajira, Colombia

Rafael Eduardo Arrieta Jiménez

Background La Guajira, in northern Colombia, is the driest region in the country, with annual rainfall below 261 mm. This ancestral territory of the Wayuu people (the largest Indigenous community in the country, with over 380,000 members) faces high levels of multidimensional poverty, food insecurity, child malnutrition, and limited access to basic services. Factors such as climate change, environmental degradation, and institutional fragility exacerbate these conditions. In response, the “Mi Huerta Casera” project promotes aquaponics as a Nature-Based Solution (NbS), fostering sustainable food production, efficient water use, and the adoption of clean technologies.

Description: The project is based in the municipality of Manaure, La Guajira, at the facilities of the Baylor IPS (11°38'2.60"N, 72°43'5.00"W), where a pilot decoupled aquaponics system operates with a volume of 30 m^3 and a productive area of 120 m^2. Designed for arid zones, the system functions with closed-loop recirculation and water

replenishment of below 1% per week. It is powered by photovoltaic energy, ensuring technical autonomy in contexts with limited infrastructure.

It produces red tilapia, cucumber, bell pepper, and native Guajiro beans, using locally adapted seeds, biological filtration, and principles of functional ecology. In addition, it promotes the valorization of organic waste, fostering a circular bioeconomy and efficient resource use.

A total of 33 Wayuu participants have been trained through six theoretical and practical sessions, with support from the University of La Guajira. The community carries out daily monitoring of parameters such as pH, dissolved oxygen, and temperature, integrating ancestral and technical knowledge to strengthen local capacities and ensure operational sustainability. The system has produced over 290 kg of fresh food, benefitting 299 people and improving their nutrition. The active participation of women and youth has promoted community empowerment and consolidated the viability and replicability of the model in other arid areas.

Lessons Learned:

1. **Generation of context-specific data:** Unique data were collected on the technical performance of a decoupled aquaponics system under arid conditions, providing evidence for future adaptations.
2. **Co-creation of community knowledge:** The combination of traditional knowledge and technical training has empowered local actors and enhanced their active participation in producing sustainable food sources for themselves and their community.
3. **Nutritional improvement through local production:** Aquaponic technology has proven effective in producing fresh and nutritious food on-site, which is disseminated to the community.

Next Steps:

- Scaling the model through modular systems in La Guajira.
- Evaluation of culturally appropriate plant species.
- Development of a community-based and -focused operations manual.
- Define key indicators, including specific productivity (kg/m²/month) and water efficiency (kg/m³), among others, to strengthen replicability, technical sustainability, and sociocultural relevance.

Category 4: Technology-Enabled Care Optimization

58: Weather-Informed Electronic Scheduling System to Improve Clinic Attendance and Retention of Care in Eswatini.

Nkulungwane Mthethwa, Phumzile Dlamini, Mbongeni Dube, Abigail Seeger

Background: Maintaining consistent care is an ongoing issue for people living with HIV and those diagnosed with TB in Eswatini, which, according to the World Health Organization (WHO), has a high TB/HIV burden. Despite follow-up initiatives by Baylor Clinic, missed appointments remain common, disrupting treatment continuity. This study assesses the association between weather patterns and clinic attendance among HIV and TB patients at two Baylor clinics in Eswatini.

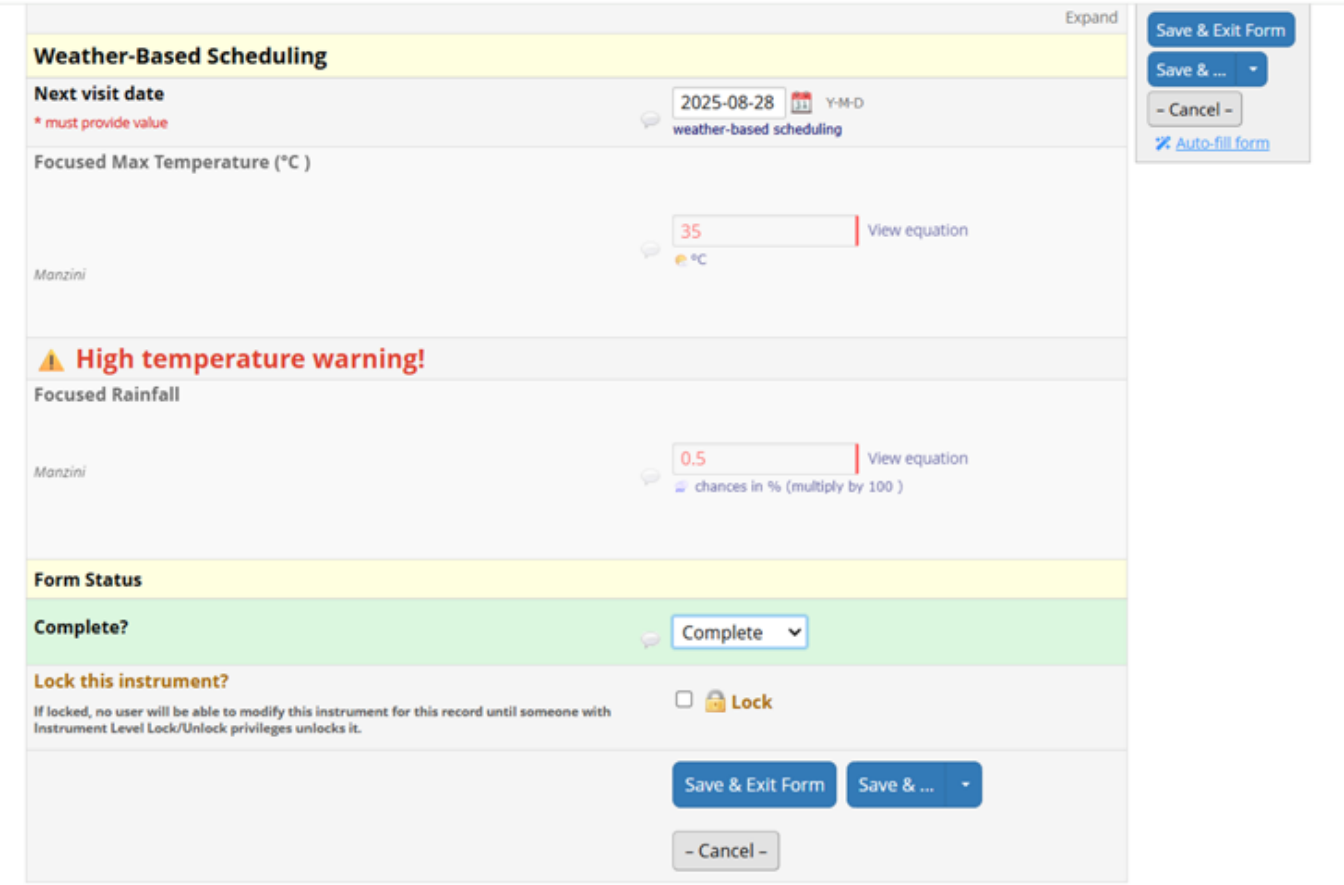
Description: We examined historical weather information from the Eswatini Meteorological Department (EMD) from January 2023 to September 2024. The analysis concentrated on Manzini and Mbabane, where Baylor clinics Raleigh Fitkin Memorial Hospital (RFM) and the Center of Excellence (COE) are situated. The dataset included 38,757 scheduled visits, of which 2,547 were missed. The weather factors included average monthly temperature and precipitation. These were correlated with data on clinic visits and missed appointments retrieved from the electronic medical records (EMRx) system utilized at both locations. We assessed the relationship between weather trends and clinic attendance by correlating the percentage of missed visits with average monthly temperature and precipitation.

Evaluation of Outcomes: Pearson's correlation was calculated between missed appointment rate and average monthly temperature and monthly rainfall separately to evaluate how weather conditions influence clinic attendance. The R-squared between temperature and missed visit rate was 0.1215, indicating that average temperature explains about 12.15% of the variation in missed visit rates. In contrast, the R-squared between rainfall and missed appointments was 0.0483, suggesting that average rainfall explains about 4.83% of the variation in missed visit rates. While both correlations were weak, the findings suggest that temperature may have a modest influence on attendance patterns.

Lessons Learned: The current findings suggest limited evidence that weather conditions significantly influence clinic attendance or retention in care. However, traditional scheduling methods that overlook weather variability may inadvertently contribute to missed visits. To better understand this potential relationship, further data collection is needed, specifically linking daily weather patterns with attendance records. This approach may offer more precise insights into the impact of specific weather events compared to analyses based on monthly averages.

Figure 1: *Screenshot showing forecasted weather for the selected date.*

Figure 2: *Screenshot displaying the forecasted weather for the selected date, including a warning about high predicted temperatures.*



Next Steps: An electronic scheduling tool, developed on the REDCap platform for this study, is designed to align patient appointments with favorable weather conditions. The tool incorporates targeted weather forecasts using a predictive model capable of projecting conditions up to three months in advance. This allows healthcare teams to proactively adjust appointment schedules in anticipation of adverse weather. Forecast data can be imported either manually, via pre-processed uploads, or automatically through an Application Programming Interface (API) that enables real-time synchronization. This tool represents a novel approach to integrating climate data into patient care planning, with potential for broader application in other resource-limited settings.

123: GIS Informed Targeting to Optimize HIV Case Finding in Eastern Uganda

Diana Cherotin, Clark Joshua Brianwong, Richard Jjuuko Kyakuwa, Lwanga Ssekiswa, Eddy Okwir, Frehd Nghania, Alexander Mugume, Dithan Kiragga

Background: Despite substantial investments in HIV prevention, Uganda continues to report approximately 1,000 new infections weekly. The 2020 Uganda Population-based HIV Impact Assessment (UPHIA) estimated an adult HIV prevalence of 4.2% in Eastern Uganda, contributing around 250 new infections weekly. With limited testing resources, the Ministry of Health emphasizes targeted testing in high-burden areas. However, identifying undiagnosed individuals remains challenging and costly, requiring data-driven strategies. This intervention leveraged Geographic Information Systems (GIS) to guide micro-targeted HIV testing in Eastern Uganda.

Description: The intervention applied thematic GIS mapping across 16 districts to identify HIV hotspots. Hotspots were defined as sub-counties reporting at least 27 new HIV diagnoses, 20 treatment interruptions, and 28 cases of high

viremia (viral load ≥1,000 copies/mL) between January 2023 and December 2024. These thresholds were based on a contextualized arbitrary cutoff, supported by national pilot data showing strong associations between new diagnoses and high viremia.

Methodology:

- In June 2025, data from January to March 2024 were analyzed, showing antiretroviral therapy (ART) coverage at 91% in the Eastern region, below the 95% national target.
- Routine program data were extracted from the Health Management Information System (HMIS). Residential data for newly diagnosed individuals were geocoded to the village level using administrative shapefiles.
- QGIS was used to overlay the three indicators and define HIV hotspots. These areas were prioritized for targeted community testing.
- Monthly reviews were conducted to generate new hotspots and monitor changes based on population shifts.

Outcomes: Tororo District, with 90% ART coverage, was the highest-burden area, and Eastern Division the most affected sub-county. From June to December 2024, GIS-targeted testing increased HIV positivity yield from 1.2% (18/1,441) to 2.9% (21/664), demonstrating improved efficiency despite fewer tests. Data were sourced and analyzed from the weekly HMIS reports. The approach enhanced case identification, reduced test kit wastage, and supported community mobilization. The data showed that GIS-guided strategies can significantly strengthen targeted HIV testing outcomes in high-burden areas.

Lessons Learned:

- Geospatial targeting improved case identification and reduced test kit wastage.
- Combining new diagnoses, treatment interruptions, and viremia enhanced hotspot detection.
- GIS-enabled precision mapping allowed health workers to focus efforts on high-risk areas more effectively than traditional outreach.
- Alignment of shapefiles with updated administrative boundaries and regular data cleaning were critical for accurate analysis.

Next Steps and Conclusion: The GIS approach is being expanded to additional high-burden districts and adapted for tuberculosis hotspot mapping. District teams have been trained to integrate GIS into routine data analysis. Future plan is to incorporate mobility and socio-economic data layers using Artificial Intelligence.
GIS-informed targeting offers a practical strategy for enhancing HIV case finding and accelerating epidemic control in Uganda and this can ably be applied to other countries.

134: Utilizing Health Information Systems (HIS) to increase quality data availability and access for the HIV/AIDS epidemic response in the Bunyoro Region

Kiiza Patrick, Patrick Nagisi, Kenneth Onekalit, Ronald Oceng, Emmanuel Tumwine, Jenifer Bakyawa, Honorata Twebaze, Calvin Epidu, Albert Maganda, Daphine Nalule, Musa Mwanje, Samuel Lubwama, Jonathan Mpango, Alice Namale, Evelyne Akello, Enos Sande, Kenneth Musenge, Dithan Kiragga

Background: The use of hard copy registers and tools for reporting, patient-level data management, and service delivery has been widely used in the Bunyoro region, resulting into data extraction and report submission delays to stakeholders such as donors and the Ministry of Health (MOH) for decision-making. In October 2020, the coverage for health information systems (HIS) in Bunyoro was at 50% (73/145), while functionality of HIS was 41% (30/73) of the supported Electronic Medical Records (EMR) health facilities (HF) by Baylor Foundation Uganda (BFU). This performance was associated with lack of computers, tablets, among others, a knowledge gap on HIS, a small workforce, and unreliable power. This abstract describes how the coverage and functionalization of HIS to optimize client service delivery were supported in Bunyoro.

Description: Between October 2020 and June 2025, BFU worked with the Monitoring and Evaluation Technical Support program (METs) to equip HF with computers, power backup systems, and recruited 102 human resources for health (HRH) data personnel to manage data. Working with the district-based mentors, capacity building for the HRH on using the electronic case-based surveillance (eCBSS), Laboratory information management systems (LIMS), short message services (SMS), mortality surveillance, point of care (POC), and Uganda EMR was supported. The teams submitted weekly progress reports for extracted data to cluster-based data leads for merging and sharing with stakeholders. Feedback to the HF teams was provided through biweekly virtual learning meetings, facility and district-based WhatsApp group platforms. This addressed timely data calls to districts, the Ministry of Health, and the donor.

Evaluation and Outcomes: By June 2024, coverage and functionality of the UgandaEMR had improved from 50% (73/145) to 79% (114/145) and 41% (30/73) to 96% (110/114) respectively, 61,510 clients received SMS client appointment reminders while mortality surveillance registered 534 deaths. The turnaround time for managing data calls improved from five days to less than 24 hours and eCBSS expanded from 9% (10/114) as of 2020 to 82% (94/114) by the end of 2024. POC utilisation improved from 3% (1/32) in 2020 to 41% (14/32) at our supported high HFs.

Lesson Learned: Utilization of the HIS led to improved decision-making and the timely use of data to guide program and facility teams on patient-level service delivery and decision-making at the facility and regional levels. Also, it made data collection and reporting easy.

Next Steps: Scaling up UgandaEMR and HIS's to 100 percent, improve Infrastructure and workforce capacity, strengthen interoperability and system integration to streamline data flow and reduce data duplication, improve Monitoring and Evaluation all will further optimize HIS for improved healthcare delivery, data driven decision, and better patient outcomes.

135: Building Resilient and Efficient Laboratory Systems Through the Technical Assistance Teams Strategy at Public Health Facilities in the Fort Portal, Mubende and Bunyoro Regions, Uganda

Bonny Mulindwa, Peter Ouma Oballah, Moses Matovu, Ronald `Mangen, Daniel Bagambe, Richard Jjuuko Kyakuwa, Michael Juma, Calvin Epidu Epidu, Jane Nakawesi Nakawesi, Leticia Namale, Dithan Kiragga

Background: Laboratory systems strengthening, like other healthcare programs, has heavily relied on donor funding. The global decline in donor support has strained health systems in resource-limited settings, threatening service continuity and sustainability beyond projects' end. Prior to 2018, a team from the Central Public Health Laboratories, supported mentorship in Laboratory Quality Management Systems (LQMS), biosafety, and logistics to 423 facilities in the Fort Portal, Mubende and Bunyoro regions using donor funding. However, this model was costly, offered limited mentorship time, lacked clear mentor accountability, and had no sustainability plan. This abstract describes how Baylor Foundation Uganda (BFU) implemented the Technical Assistance Teams (TAT) strategy to build resilient and efficient laboratory systems in the target regions.

Description: Between 2018 and 2025, BFU's Fort–Mubende and ACE Hoima project implemented a district-led programming approach to support the TAT strategy in the Fort Portal, Mubende and Bunyoro regions of Uganda. BFU's laboratory team collaborated with District Laboratory Focal Persons (DLFPs) to identify district-level TAT mentors. A five-day training was conducted, focusing on LQMS, laboratory logistics, biosafety, and mentorship practices aligned with relevant service delivery standards, to equip TATs with the necessary skills. Competent TAT mentors were added to a centralized database and assigned facilities within their respective districts. Annual refresher trainings, coupled with competency assessments, ensured that skills remained up to date. Activity planning was conducted jointly by BFU and DLFPs, in alignment with CDC's Country Operational Plan (COP) targets, and included clear Terms of Reference for each facility engagement. Virtual pre- and post-engagement debriefs were held to share critical updates and learnings. Facility engagements were jointly supervised by BFU and DLFPs. After each visit, TATs submitted detailed reports

outlining activities, challenges, strengths, and follow-up actions. For each day of facility engagement, TATs received a transport refund and a same-day allowance totalling $11.

Evaluation and Outcomes:

Evaluation: Quarterly, TATs visited facilities outside their usual assignments but within the same districts for performance data collection using standardized tools capturing both descriptive and numeric data. Data was processed and compared against targets for performance tracking.

Outcomes:

Table 1: Comparison of outcomes between the old model and the new TAT strategy

Parameter	**Old strategy (central mentors)**	**New Strategy (TATs)**
Daily cost per mentor	$50	$11
Average time to reach hotel of residence from central location	6 hours	Not applicable
Average commute time from lodging/residence to health facility	Over 2 hours	30 minutes
Average daily mentor - mentee session duration	5 hours	8 hours
Targeted facilities (lab hubs) achieving ISO 15189	0% (0/18)	100% (6/6) Fort Portal region since 2018 100% (6/6) Bunyoro Region since 2020 33% (2/6) Mubende region since 2023
Facility lab logistics stock-out duration	Over 2 weeks	1 day (due to localized redistribution)
Facility performance mentor attributions	Limited (mentors per facility keep changing)	Improved, directly attributed to individual TATs
Sustainability & ownership	Less sustainable	More sustainable, locally owned and supervised
Achievement of project outcomes	Centralization slowed achievement of project outcomes	Decentralization accelerated achievement of project outcomes

Lessons Learned:

1. The TAT strategy showed decentralization improves accountability and cost-efficiency.
2. Reduced mentor travel time enabled longer contacts time, accelerating project outcomes including ISO 15189 accreditation among targeted facilities.
3. Refresher trainings-maintained mentor quality while local logistics redistributions reduced stock-outs.
4. District-based mentors and supervisors improved ownership while ensuring sustainability beyond project cycle.

Next Steps: We recommend scaling the TAT strategy to sustainably support service delivery across all healthcare programs including both communicable and non-communicable health conditions.

175: Performance Evaluation of GeneXpert HIV-1 Viral Load Assay Against COBAS 5800 in a Clinical Laboratory Setting

Lindokuhle Dlamini, Bhekisisa Mavimbela, Phepsile Lukhele, Florence Anabwani-Richter

Background: Reliable quantification of HIV viral load (VL) is essential for evidence-based therapeutic decision-making, effective patient management and monitoring of treatment outcomes, yet inter-platform variability threatens comparability of results. Although the point-of-care GeneXpert HIV-1 VL assay is widely embedded in programmatic algorithms, there is a paucity of comparative data on its analytical sensitivity, throughput and operational feasibility versus the high-throughput COBAS 5800 system. This study assessed the performance of the GeneXpert HIV-1 VL assay in comparison to the COBAS 5800 system, a validated and widely trusted reference method. The goal was to determine whether the GeneXpert system is suitable for routine use in the Baylor Clinic Laboratory, particularly in resource-limited settings.

Methods: The verification process evaluated key performance metrics of the GeneXpert system, including accuracy, precision, linearity, and limit of detection. Standardised testing was conducted using pooled human plasma samples across both systems. Accuracy was assessed by comparing GeneXpert HIV-1 VL assay results with the COBAS 5800 using Bland-Altman plots to measure agreement. Precision was determined through repeated measures, calculating the coefficient of variation (CV). Linearity was tested using serial dilutions, and the limit of detection was verified against manufacturer specifications.

Results: The GeneXpert HIV-1 VL assay demonstrated strong alignment with the COBAS 5800 across all evaluated parameters. In terms of accuracy, all GeneXpert HIV-1 VL assay results fell within the 95% confidence interval of the mean difference from the COBAS 5800. For precision, the GeneXpert HIV-1 VL assay exhibited a low coefficient of variation (CV = 0.88%), indicating high repeatability and consistency. Linearity testing revealed a high correlation coefficient (R^2 = 0.99), confirming the GeneXpert HIV-1 VL assay's ability to accurately quantify HIV viral loads across a range of concentrations, including clinical decision thresholds. Furthermore, the GeneXpert HIV-1 VL assay effectively detected low viral loads (<40 copies/ml), meeting the manufacturer's claims and addressing the clinical needs of HIV management.

Conclusion: The GeneXpert HIV-1 VL assay is a reliable, precise, and accurate diagnostic tool, with performance metrics closely matching those of the established COBAS 5800 system. Its ability to deliver robust results across critical parameters makes it a viable option for routine HIV VL monitoring, particularly in resource-constrained environments. The GeneXpert HIV-1 VL assay's decentralised capabilities can significantly enhance patient management by reducing turnaround times and enabling on-site testing. This study supports the adoption of GeneXpert HIV-1 VL assay as a complementary or alternative tool to centralised systems like COBAS 5800, offering an effective solution for decentralised HIV care in resource-limited settings.

180: Enhanced HIV Testing Services Data Management through ScanForm Technology in Malawi.

McDonald Komakoma, Peter Mponda, Cossam Mhone, Omega Mnesa

Background: In Malawi, approximately 3.6 million HIV tests are conducted annually. Managing and reporting this high volume of individual-level HIV testing services data has posed significant challenges. Previously, data reporting relied on manually tallying data from paper records, with errors being identified and corrected through manual reviews of the paper registers. This abstract outline the impact of ScanForm as implemented in Baylor College of Medicine Children's Foundation – Malawi (BCMCF-M) districts, which is a digital innovation designed to automate data reporting and flag potential errors.

Description: In November 2022, the Directorate of HIV, STI, and Viral Hepatitis adopted ScanForm—an innovative, low-resource solution developed by QED. ScanForm enables HTS providers to capture client information using paper

registers. Once completed, the registers are photographed using the ScanForm app, which utilizes optical character recognition and AI algorithms to extract, validate, and convert handwritten data into a structured electronic format. The system automatically generates summary reports and flags potential data entry errors, streamlining facility-level reporting to the Ministry of Health and significantly enhancing data accuracy, completeness, and timeliness. BCMCF-M supported the rollout of ScanForm in Baylor-supported districts for HTS reporting.

Evaluations and Outcomes: In BCMCF-M supported sites, approximately 68,200 HIV tests are reported monthly using ScanForm, representing 100% coverage of all HIV tests. HTS providers reported significant reductions in reporting time, with improvements in the accuracy and completeness of reports. ScanForm eliminated manual tallying, reducing human error and enabling facilities to generate timely, disaggregated data that meets national reporting standards. As a result, manual collection of client-level HTS data for PEPFAR reporting was discontinued. Providers reported increased efficiency and greater confidence in data quality. The app does not store patient data. The intervention can be scaled across diverse facility settings.

Lessons Learnt: ScanForm demonstrated that simple, smartphone-based technologies can significantly improve data quality and reporting without requiring complex infrastructure. Automating data processing frees up time for HTS providers to focus on service delivery. Removing the need for manual tallying reduced errors and improved the accuracy and timeliness of reports.

Next Steps: Beyond HIV testing, ScanForm technology has strong potential for adaptation across other health program areas. Ongoing mentorship for users will continue to strengthen the use and implementation of this innovative data capturing tool.

Category 5: Quality Improvement Initiatives

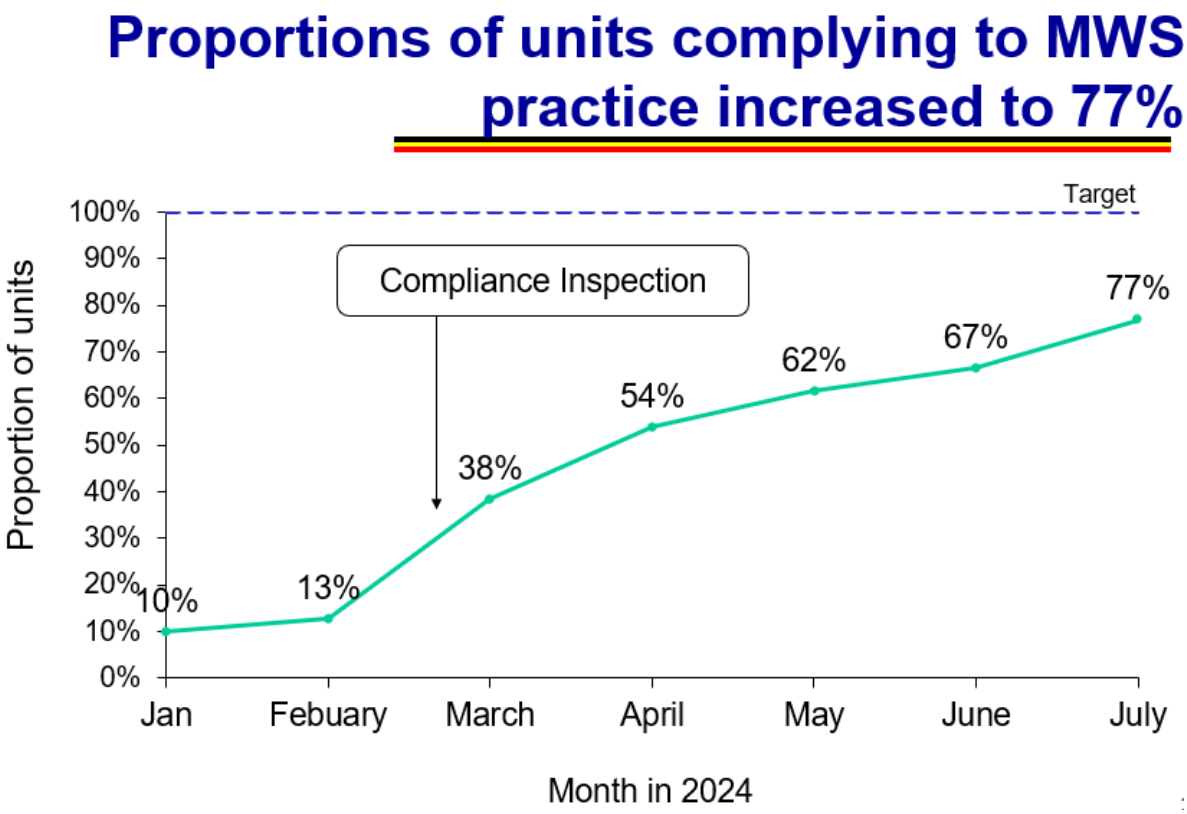
14: Improving Compliance with Healthcare Waste Segregation at Mengo Hospital, Kampala, Uganda Feb-July 2024

Ronald Samuel Lugwana, Samuel Gidudu, Paul Okwalinga, Thomas Nsibambi, Gloria Bahizi, Alex Riolexus Ario

Background: Effective healthcare waste segregation is essential for minimizing infection risks and environmental contamination. The Uganda Laboratory Waste Management Guidelines of 2021 recommend sorting highly infectious wastes into red bins, infectious wastes into yellow bins, sharps in safety boxes, chemical waste in brown bins and non-infectious into black bins. During the Infection Prevention and Control Committee (IPC) meeting at Mengo Hospital in Kampala, waste handlers reported improperly segregated waste stored at the designated site. We set out to improve the proportion of healthcare waste segregation-compliant units from 10% to 70% between January and July 2024 at Mengo Hospital in Kampala.

Methods: We conducted a baseline assessment on waste segregation across 39 waste-generating units at Mengo Hospital in January 2024. We collaborated with the IPC- committee of the Hospital. We conducted a five-why-root-cause analysis to determine the cause of non-compliance to healthcare waste segregation practices. We identified and introduced the most modifiable tested changes monthly to improve compliance with healthcare waste segregation. The changes were monitored for effectiveness using a quality indicator to increase the proportion of units complying with segregation practices from 10% in January to 70% in July 2024.

Results: The baseline assessment found that only 4(10%) out of 39 units at the hospital were complying with healthcare waste segregation practices. Irregular compliance inspection was identified as a primary cause of non-compliance with healthcare waste segregation practices. Initial training sessions and the introduction of waste segregation charts in January increased compliance to 13% (5 units). In February, we included routine inspections and on-the-job training, which raised compliance to 38% (15 units) in March. Continued routine inspections and on-the-job training further increased compliance to 54% (21 units) in April. The introduction of new bins in May raised it to 62% (24 units) and end of July, compliance was at 77% (30 units).



Conclusion: Implementing weekly inspections and healthcare waste segregation charts significantly improved compliance with waste segregation practices in the high-volume private hospital in Kampala. We recommended regular inspections and waste segregation guideline charts for all units generating healthcare waste in healthcare facilities to enhance and sustain compliance.

53: Quality Improvement Initiative to Strengthen Referral for Pediatric Cancer Patients Through Training, Mentorship, and Establishment of WhatsApp Consultation Platform in Lilongwe, Malawi.

Samuel Makuti, Fatsani Manase, Constance Nyasulu, Rizine Mzikamanda, Nmazuo Ozuah

Background: In sub-Saharan Africa, late presentations contribute significantly to poor outcomes. This arises from delayed referrals, lack of awareness, fragmented referral networks, and transportation costs. This study aimed at improving early diagnosis through implementation of a training and mentorship program for community health workers, and establishment of WhatsApp-based consultation platform.

Methods: This was a quality improvement (QI) project at Kamuzu Central Hospital (KCH), one of two pediatric cancer centers in Malawi. The multi-faceted intervention incorporated healthcare worker training on pediatric cancer symptoms and signs, a clinical mentorship program at KCH, and a WhatsApp-based consultation to improve referral efficiency. WhatsApp consultation allowed real-time case discussions with pediatric oncology clinic team. Pre- and post-training assessments were performed to evaluate knowledge on pediatric cancer symptoms and signs, and we measured the trend in the median referral times (time from first presentation at primary health centre to presentation at KCH).

Results: Since the inception of this program in 2020, a total of 911 healthcare workers from 208 facilities were trained in early cancer identification and referral. Pre- and post-training assessments demonstrated 35% increase in knowledge on pediatric cancer warning signs. At the end of training 90% of participants reported confidence in identifying and referring suspected cancer cases. Prior to 2020, median referral time was > 100 days. Between 2021-2022, this

decreased to 55 days, dropping further to 45 days by 2023-2024. Seven healthcare workers have completed the clinical oncology mentorship and now serve as focal persons for communication between their facilities and the cancer treatment center.

Conclusion: Our comprehensive QI initiative of training, mentorship, and WhatsApp consultations resulted in a decrease in median referral times and an increase in provider knowledge of pediatric cancer symptoms. These low-cost, scalable interventions can be adapted to other low-resource settings. Further evaluation is needed to assess the long-term impacts on patient outcomes.

61: Digitization of Tuberculosis Data Through a Quality Improvement Approach: Implementation of the Electronic Case-Based TB Surveillance System in 155 Health Facilities in Uganda

Diana Cherotin, Clark Joshua Brianwong, Richard Jjuuko Kyakuwa, Eddy Okwir, Frehd Nghania, Lwanga Ssekiswa Zimwanguyiza, Alexander Mugume, Dithan Kiragga

Purpose: Uganda's Ministry of Health introduced the Electronic Case-Based TB Surveillance System (eCBSS) in 2020 to enhance TB case management and surveillance. By December 2023, eCBSS had been rolled out in 155 health facilities in Eastern Uganda. However, only 23% of these facilities reported TB (Tuberculosis) cases in real time, delaying patient notification and undermining timely treatment initiation. This quality improvement (QI) initiative aimed to increase the proportion of real-time TB case reporting in eCBSS to at least 90% of weekly Health Management Information System (HMIS) reports by June 2024.

Methods: A root cause analysis in January 2024 identified four key barriers to 23% real-time reporting: undefined data roles, limited internet access, poor data triangulation with HMIS, and large data backlogs. Four PDSA (Plan-Do-Study-Act) cycles were implemented by the QI team, comprising district mentors, data officers, and facility staff, to address these gaps. The team was formed based on their roles in TB surveillance and facility-level data management.
The interventions implemented included: defining specific roles and setting daily data entry targets; providing monthly 7.5GB internet bundles per facility; compiling a contact directory of trained personnel for peer support; sending weekly reminder messages via SMS, WhatsApp, and email; assigning two eCBSS mentors per district for on-site mentorship and follow-up; and deploying additional human resources to support data entry in high-burden facilities.

The performance measure was the percentage of TB cases reported in real time in eCBSS compared to those in the HMIS weekly TB surveillance report.

Data were collected weekly and reviewed during QI coaching visits and weekly virtual check-in meetings. Trends were analysed on a weekly basis using percentage calculations and plotted in Excel to track progress over time. Feedback was provided immediately to staff.

Results: From February to June 2024, 155 facilities implemented four PDSA cycles to improve real-time TB reporting through eCBSS. The process began with clarifying data roles and providing internet bundles, followed by intensified mentorship and backlog reduction. As a result, real-time reporting increased from 23% to 96%, with 1,124 out of 1,171 drug-susceptible TB cases reported on time. Weekly performance reviews and remote follow-up supported continuous improvement. Success was driven by structured mentorship, facility ownership, and partner-supported resources. However, system technical glitches posed challenges that influenced implementation pace and variability in results.

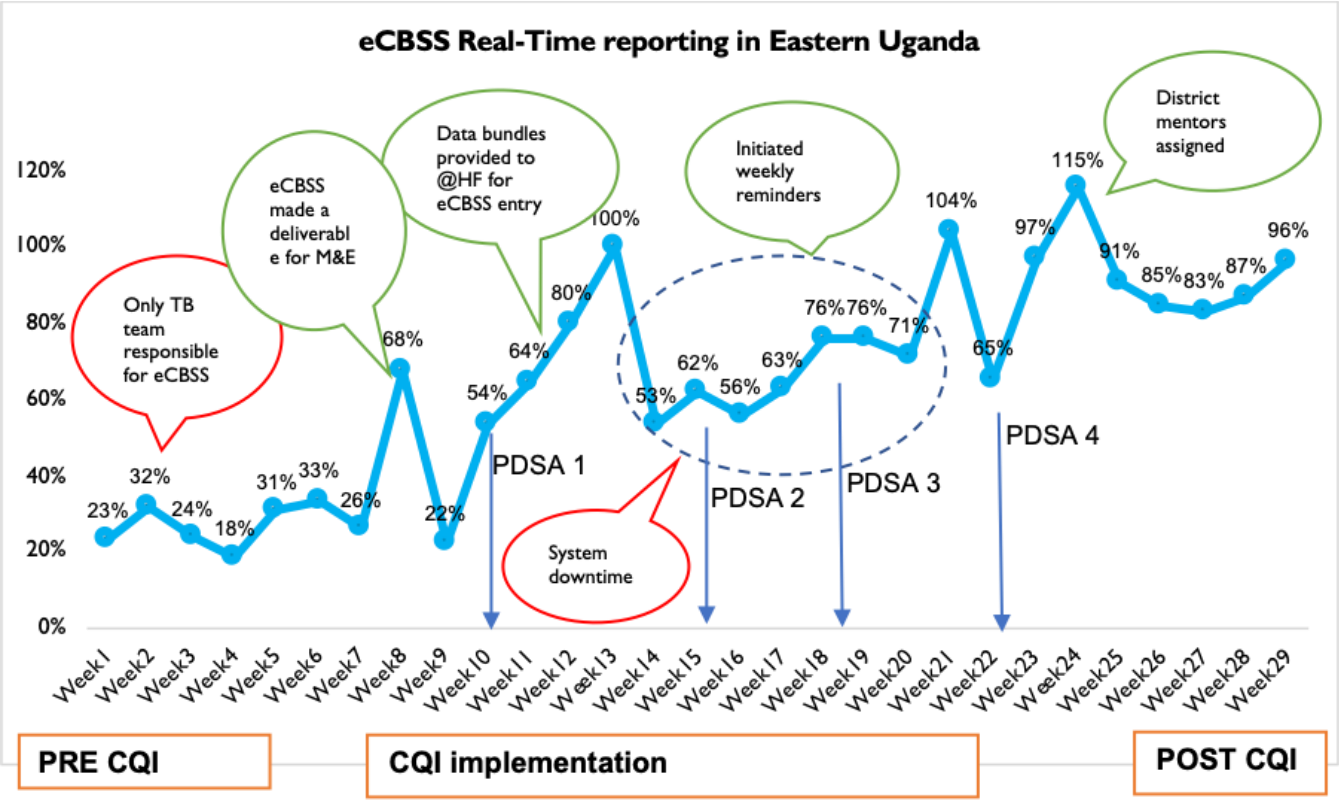


Figure 1 eCBSS real-time reporting rates from Week 01 in January to Week 29 in July 2024

Discussion: This initiative demonstrated that real-time TB reporting can be significantly improved through QI-driven, scalable interventions. Key strengths included strong mentorship and local ownership. Limitations such as system downtime impacted consistency. The findings align with the project's goal of digitization of data and are relevant for similar settings. Progress has been sustained by integrating QI into routine supervision, involvement of district-based mentors, and expanding eCBSS to 100% of the Tuberculosis treatment units.

71: Optimising Community-Based Cervical Cancer Treatment Among Women Living with HIV aged 25-49 years Diagnosed with Cervical Pre-Cancerous Lesions in Bunyoro Region, Uganda.

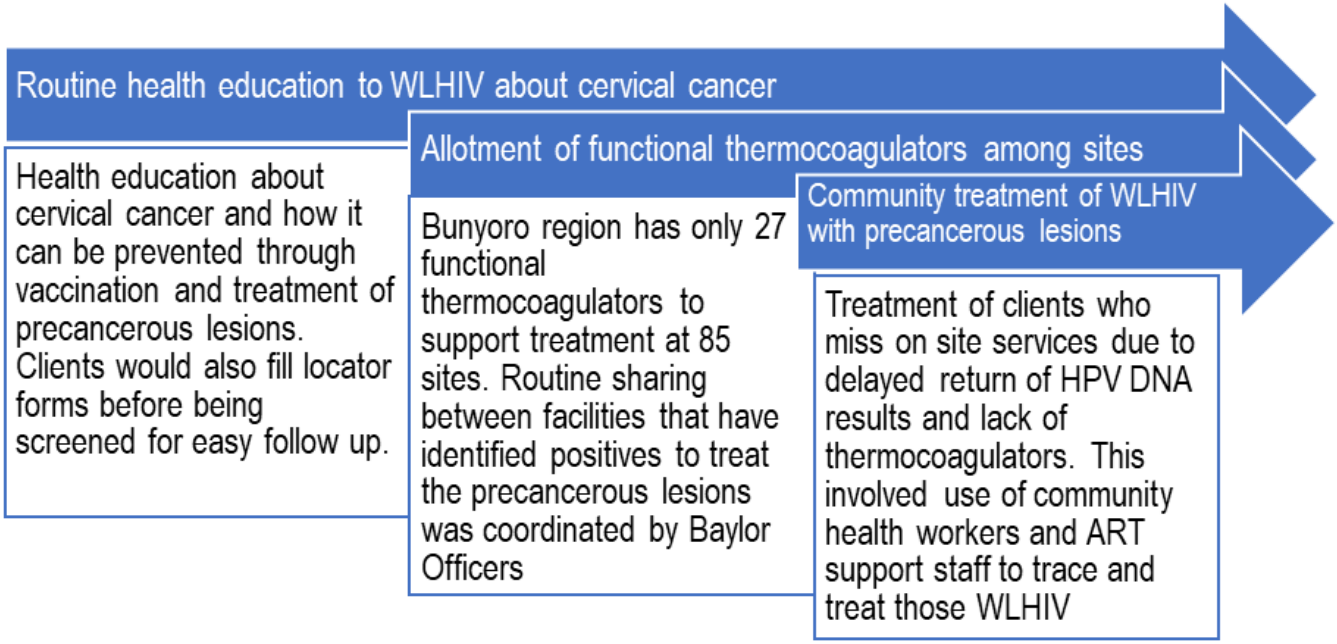
Aston Mucunguzi, Richard Jjuuko, Betty Nsangi, Calvin Epidu, Denise Birungi, Dithan Kiragga

Background: The Ministry of Health with support from PEPFAR introduced a screen-and-treat approach for cervical cancer (CaCx) precancerous lesions with a focus on screening women living with HIV (WLHIV). Combining screening efforts with timely treatment of all screen positives for Human Papilloma Virus (HPV) infection can prevent progression to invasive cervical cancer.

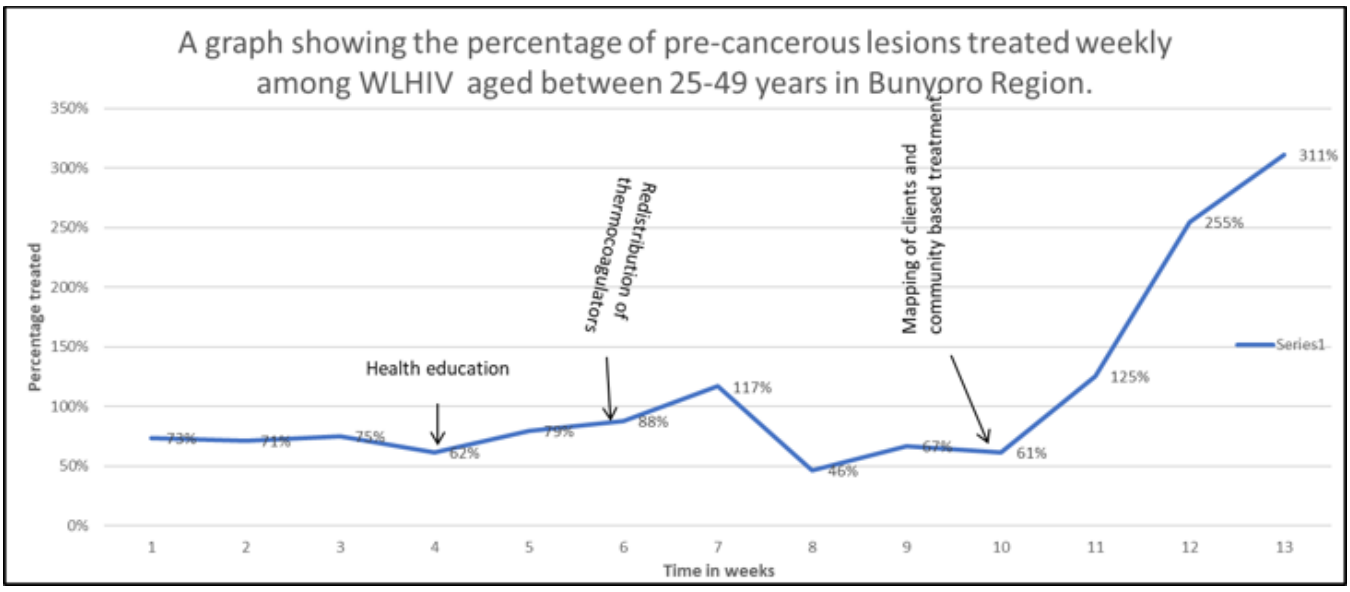
In Bunyoro region, there were suboptimal treatment rates with only 73% (11/15) of WLHIV screened with precancerous lesions treated weekly in June 2023. Through brainstorming and 5 Whys analysis teams identified few functional thermo-coagulators (FTs) for treatment, low literacy levels among patients hence rejecting the treatment, Long Turn Around Time (TAT) of HPV DNA results, and lack of transport to come back to the facility for treatment.
We set out to improve CaCx treatment rates to 100% by September 2023 using a quality improvement approach.

Description: Work Improvement teams (WITs) were formed at 85 health facilities providing CaCx screening services, clear roles and responsibilities were set out for each member and a trained midwife was assigned to head the team.

Using the Plan -Do-Study-Act cycle, the team introduced and tracked changes of weekly health education to all WLHIV in the middle of each clinic day, coordinated allotment of FTs among sites to support onsite and community-based treatment amongst nearby facilities. Previously untreated clients were line listed by community health workers and ART support staff for treatment at Health Centre IIs. Data on treatment rates was monitored and reviewed weekly through the PEPFAR In-Country Reporting System and under-performing facilities supported virtually using Zoom technology.



Lessons learned: A total of 182 WLHIV between 25 and 49 years with pre-cancerous lesions were treated with the median age of 40-49 years. The weekly treatment rates improved from 73% to 125% by week 11. The intervention demonstrated that data-driven, team-based approaches, resource optimization, and targeted health education significantly improve CaCx treatment access and outcomes for WLHIV.



Conclusion/Next steps: A holistic approach that involved leveraging data-driven strategies, team-based approaches, and community outreaches improved treatment rates in the Bunyoro region. Scale up these successful practices can ensure sustained impact on CaCx care for WLHIV.

80: Improving Routine VL Result Timeliness from Kamuzu Central Hospital to Baylor Malawi Centre of Excellence

Dereck Phiri, Chisomo Kutengule

Background: Adolescents living with HIV (ALHIV) require viral load (VL) monitoring to ensure timely interventions. At Kamuzu Central Hospital (KCH), a significant number of routine VL results for Baylor adolescents were either delayed, missing, or not returned to the clinic, observed during monthly updates. This compromised the decision-making, continuity of care, and increased the risk of undetected treatment failure. A quality improvement project was implemented with an aim of ensuring timely availability of VL result, reducing the proportion of untimely routine VL results among adolescents (aged 10–19) at Baylor to <5% by Dec 2024. This abstract presents the results of the QI project implemented at Baylor COE clinic.

Methodology: This was a retrospective cross-sectional study. Retrospective audit in VL register and electronic medical records (EMR) determine the proportion of untimely VL results at Baylor-Malawi CoE. Out of 521 VL results collected in first quarter of 2024, 106 results were outside the required TAT of 21 days, representing 20.35% baseline. A fishbone analysis suggested that Un-intensive follow-up of results and no tracking system were the factors that contributed to long TAT, as root causes. A standardized VL tracking tool, documenting dates of sample collection, result return and result entry into the patient file/EMR was developed. Each end appointed a focal person to facilitate following up of results. The interventions implementation followed the Plan-Do-Study-Act (PDSA) cycle from May 2024 to December 2024 and trend analysis was done using monthly proportions.

Results: Baseline data showed that 20.35% VL results were outside TAT at the point of clinical review. Untimely results dropping to 0.4%, 5.6%, 0%, 0.4%, 2.6% 1.2%, 0% and 1.4% in May, June, July, Aug, Sept, Oct, Nov and Dec respectively.

Discussion: This QIP successfully reduced the proportion of missing routine VL results from 20.35% to less than 5% within nine months. The integration of hub and spoke sites, combined with improved tracking and communication enhanced result accessibility and clinical decision-making. The project relied on manual data extraction, which may have introduced minor data entry inconsistencies. This initiative highlights the importance of strengthening spoke-hub linkages to improve HIV service delivery. Ensuring the timely availability of VL results is critical for monitoring treatment response, preventing drug failure, and sustaining positive health outcomes. The next step is to integrate this initiative to standard care.

84: Improving Maternal HIV Re-Testing Coverage at Critical Time-points during Pregnancy and Postpartum in Rural Uganda: A District-Led Quality Improvement Initiative

Aston Mucunguzi, Gloria Tumwijukye, Joshua Makiika, Calvin Epidu, Denise Birungi, Dithan Kiragga

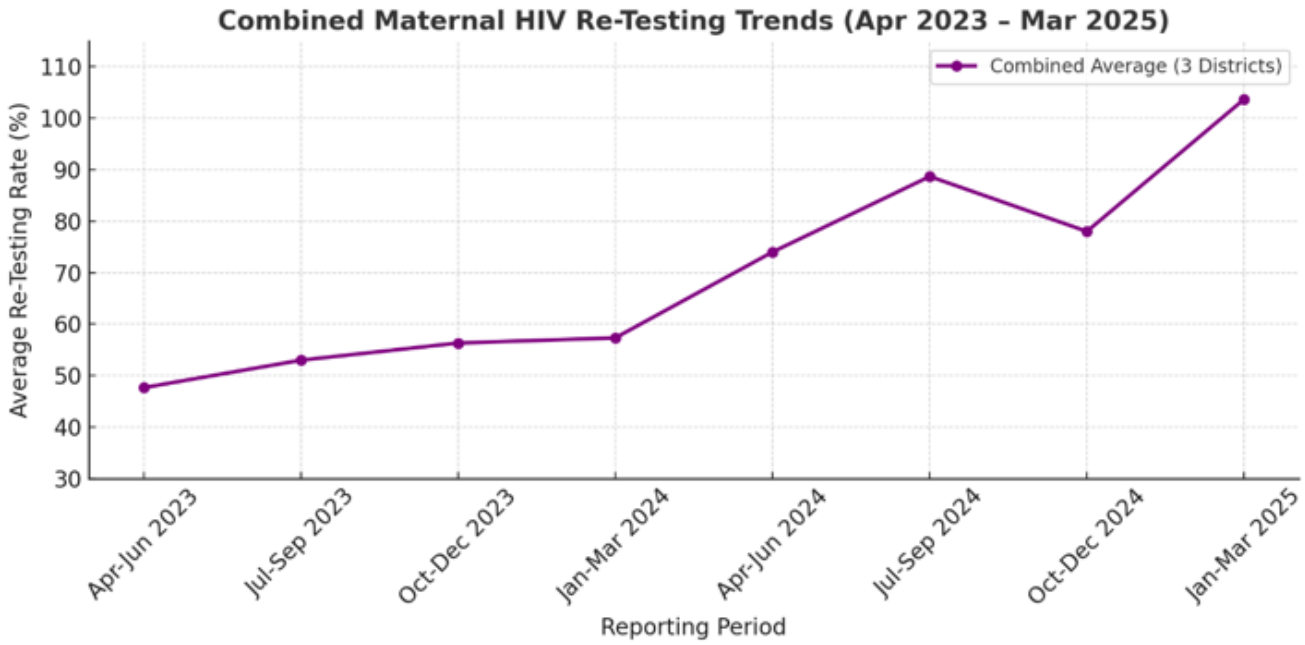
Purpose: By April 2023, maternal HIV re-testing coverage during nationally recommended timepoints (third trimester, labour/delivery, and postpartum) stood at 40% in Kibaale district, 38% in Kakumiro, and 65% in Kagadi, all below Uganda's national target of 85%. This low coverage hindered timely detection of maternal HIV sero-conversion and compromised PMTCT (Prevention of Mother-To-Child Transmission) outcomes. A quality improvement (QI) initiative was launched to increase re-testing coverage to 85% by March 2025 across all three districts by addressing gaps in provider awareness, service integration, and commodity availability.

Methods: The intervention targeted 47 health facilities in Kibaale, Kakumiro, and Kagadi. District and facility-level QI teams were formed, consisting of health workers, peer mothers, Maternal and Child Health (MCH) in-charges, and

district mentors. Baseline assessments identified low staff awareness on re-testing timing, inconsistent screening, poor documentation, and HIV test kit stock-outs as key barriers.

Interventions were implemented through Plan-Do-Study-Act (PDSA) cycles. Continuous medical education (CME) sessions and onsite mentorships emphasized national re-testing guidelines and optimal timing. Health education talks were held in MCH clinics to raise client awareness. Peer mothers were re-purposed to screen all maternal clients at entry points, facilitating early identification and referral. Standard Operating Procedures (SOPs) on maternal re-testing were displayed in each facility to ensure standardized practice. Re-testing targets were shared with facility teams and tracked weekly. HIV re-testing was integrated into antenatal care (ANC) outreaches to expand access beyond facility settings. HIV test kit availability was maintained through proactive monitoring, redistribution, and timely ordering. Data cleaning and harmonization sessions were conducted during joint mentorships to improve data quality. Quarterly district reports and health facility registers were used to track performance.

Results: Between April 2023 and March 2025, district maternal HIV re-testing rates improved steadily; Kibaale from 40% to 111%, Kakumiro from 38% to 108%, and Kagadi from 65% to 92%. The most significant gains followed the introduction of peer mother screening and outreach testing from January 2024 onward. Key enablers included strong district leadership, consistent test kit supply, and inter-facility collaboration. Regular data validation ensured result accuracy.



Discussion: The intervention significantly improved maternal HIV re-testing at critical time-points across all districts. Peer-led screening, structured mentorships, and SOP-guided practice proved cost-effective and feasible in low-resource settings. The initiative reinforced national PMTCT guidelines and demonstrated the value of empowering front line teams. Limitations included early data inconsistencies and occasional peer mother attrition. Future actions will focus on digitalizing tracking, strengthening community-facility linkages, and scaling the approach to other districts.

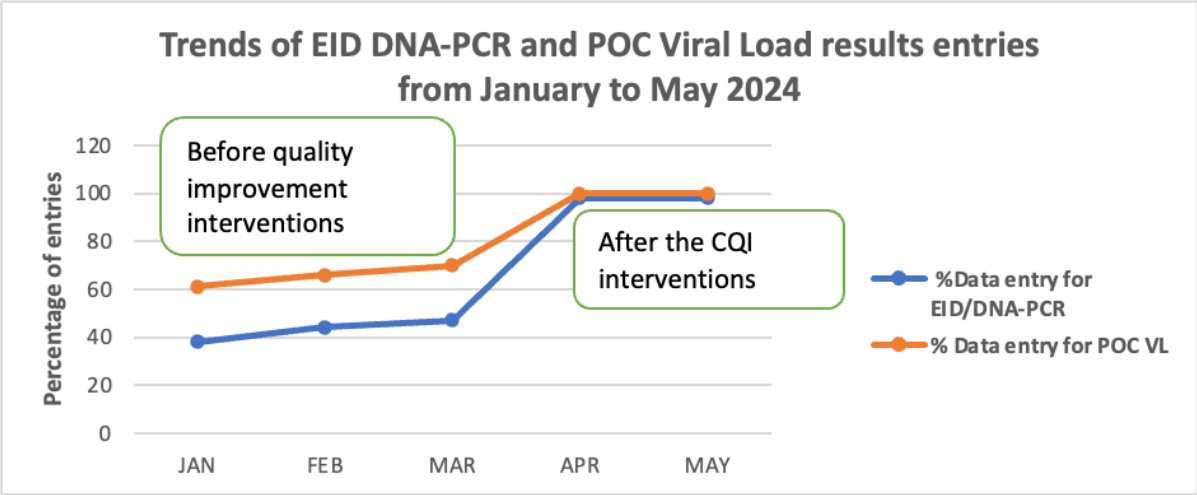
106: Interventions to Improve Data Capture for Point of Care Viral Load and Early Infant Diagnosis in a National Data System: A Case of Baylor Foundation Uganda COE

Gerald Agaba Muzorah, Annet Nalugo, Richard Jjuuko Kyakuwa

Purpose: Data capture in National systems drives decision-making, strategic planning, and mechanisms for data validation from facilities. Results capture and transmission complete the viral load (VL) testing for pregnant mothers and Early Infant Diagnosis (EID) of HIV-exposed infants' cascade. Ministry of Health adopted the ASLM Laboratory Information System (A-LIS) for real-time data capture of point-of-care results for the VL/EID. At Baylor Foundation-Uganda the new A-LIS was a parallel system to the existing electronic medical record (EMRx) requiring clinicians to complete duplicate entries across two systems. Due to lack of data entry into A-LIS, Baylor-Uganda COE clinic was rated underperforming on VL/EID targets. We utilized a quality improvement approach to increase the reporting rate of VL/EID into the national system from 61% and 38% respectively.

Methods: We applied a fishbone analysis to review the factors contributing to low data entry into A-LIS. Lack of training and work overload due to use of parallel systems were the top two reasons. We also identified a backlog of 216 VL entries that were captured on paper-based registers and/or EMRx but not in ALIS. Beginning Jan 2024 to May 2024 we implemented interdisciplinary training to educate healthcare workers on the importance of data capture and use of A-LIS for requesting tests and results entry. Reminders were given in the weekly staff performance review meetings and a quality improvement work team tracked data entry weekly throughout the intervention period of 8 weeks.

Results: VL and EID entry into A-LIS improved from 61% to 100% and 38% to 98% respectively. We also looked at the average turnaround time between requesting and entering results in A-LIS, which was reduced from 2 days to less than 2 hours.



Discussion: Feedback from the Implementing partner to the facilities following review meetings was very important and the clinic lab interface meetings supported improvement in utilization of the database as well as staff acquiring knowledge and skills in electronic requisitioning in the A-LIS thus easing data transmission. The main limitation was on database downtime which resulted in use of paper-based records thus some results were not reported timely on the national database.

122: Tripling TB Case Detection among PLHIV: A Quality Improvement Initiative Optimising C-Reactive Protein and Symptom-Based Screening in Eastern Uganda

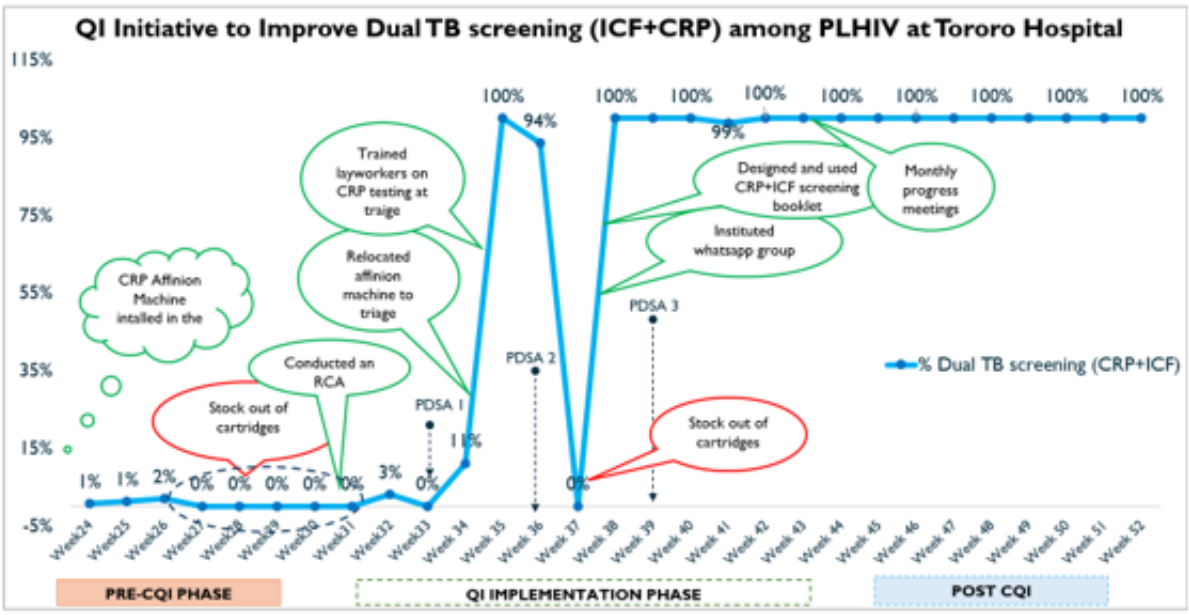
Joshua Brianwong Clark, Diana Cherotin, Godfrey Adriko, Lamu Edeet, Lynda Miriam Ichemu, Damalie Namuyodi, Lwanga Zimwanguyiza Ssekiswa, Richard Jjuuko, Jane Nakawesi, Patricia Nahirya, Alexander Mugume, Dithan Kiragga

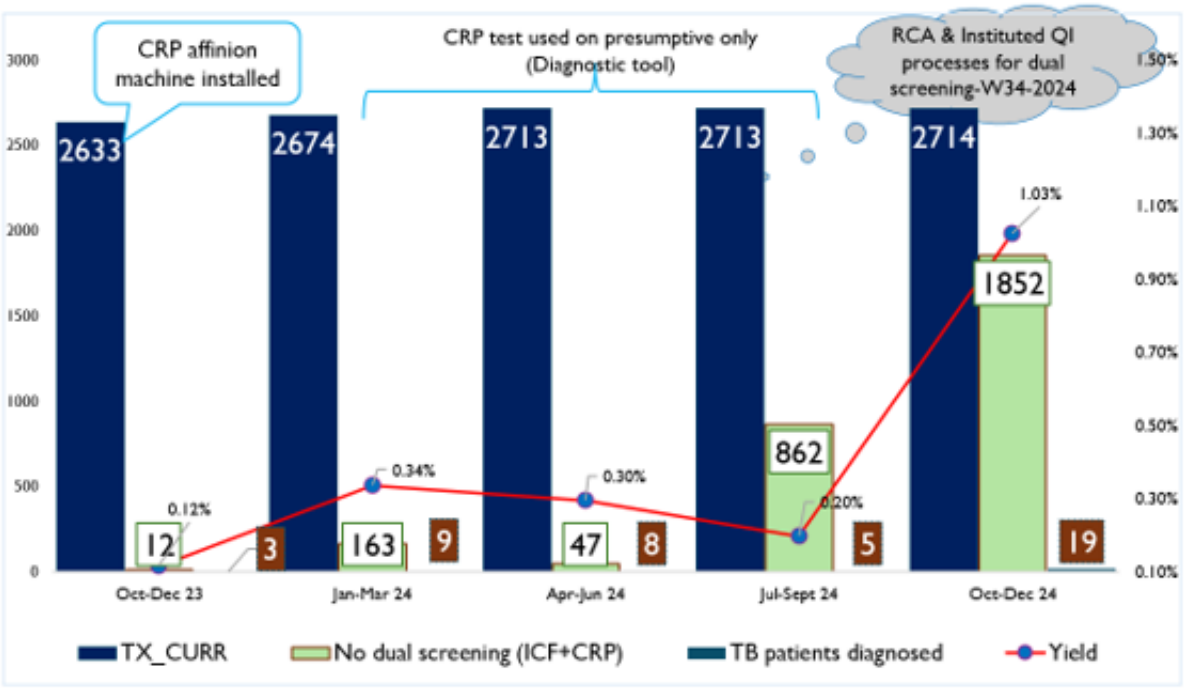
Purpose: Uganda remains among the top 30 high TB/HIV burden countries globally, with over 80,000 new TB cases annually, of which more than 32% occur in PLHIV. TB is the leading cause of death in this population, affecting them throughout all stages of HIV infection. Despite intensified case finding, national data indicate that 44% of TB cases among PLHIV are missed yearly. In FY 2022/23, while 97% of the 328,778 PLHIV were screened for TB using symptom-based tools in Bukedi/Bugisu region, only 0.64% were diagnosed, highlighting the low sensitivity of current tools. To address this, WHO recommends a more sensitive, dual screening strategy combining symptom screen with C-reactive protein (CRP) testing every six months, with or without CXR. Although Uganda adopted this strategy in high-volume ART settings, uptake remained suboptimal. A mid-year 2024 review revealed that fewer than 8% (210/2,550) of eligible clients accessed CRP testing at Tororo Hospital. This quality improvement (QI) initiative aimed to raise CRP-based dual TB screening coverage among PLHIV aged 10 years and above from 8% to ≥90% within 12 weeks.

Methods: A multidisciplinary QI team was established in August 2024, supported by Baylor Foundation Uganda. A root cause analysis (RCA) at Tororo Hospital identified key barriers including health worker knowledge gaps, workflow inefficiencies, cartridge storage issues, and lack of standardized tools for documentation and reporting. Using the Plan-Do-Study-Act (PDSA) model, the team implemented targeted interventions:

- Conducted Continuous Professional development and workflow reorganization to embed CRP into routine triage
- Trained lay workers on CRP testing and HMIS documentation
- Introduction of a CRP-screening booklet at triage and job aids
- Relocated CRP machine to triage and provided cool boxes with daily cartridge stock
- leveraged LabXpert messaging system to deliver same-day GeneXpert results
- Instituted weekly online reporting platform, WhatsApp feedback loops, and monthly performance reviews

Results: Between August and December 2024, dual TB screening coverage among PLHIV increased from 8% to 98% (2700/2714). A nine-fold increase in the TB yield was noted, rising from 0.12% (October to December 2023) to 1.03% (October to December 2024). Integrating CRP testing at triage reduced client loss and improved provider adherence. The use of digital platforms enabled real-time data use, stock monitoring, accelerating problem-solving and performance tracking. Success was driven by leadership support and strong digital infrastructure.





Discussion and Next Steps: CRP-based dual screening, supported by QI approaches, proved effective in high-volume ART clinics. The significant increase in TB yield highlights the limitations of symptom-only screening and the value of biomarker-based strategies. Key lessons include embedding new tools into workflows, addressing both operational and technical barriers, and using digital data for feedback. Next steps include regional scale-up, CRP-EMR integration, and national adoption through: HMIS alignment and strengthening supply systems.

149: Integrating Continuous Quality Improvement in the Tingathe-CORE HIV Program: A Structured Approach to Improving Care and Service Delivery Across 95 Health Facilities in Malawi

Linley Hauya, Rachael Manyeki, Hadji Kalonga, Victor Guzani, Albert Kaonga, Elizabeth Wetzel, Carrie Cox

Background: Optimization of continuous quality improvement (CQI) programming to improve HIV care and service delivery has been fundamental to programming implemented by the Baylor College of Medicine Children's Foundation – Malawi (BCMCF-M) Tingathe Program. An opportunity to routinize the utilization of standardized CQI tools to enhance service delivery processes, improve staff capacity in using CQI tools, and create a sustainable culture of continuous improvement among health facility service providers was identified. We describe the process from 2022-2024 of integrating a comprehensive CQI plan, enhancing service delivery, and fostering a culture of continuous improvement across the program.

Description: We employed an 8-step approach to integrate CQI into program delivery at 95 BCMCF-M-supported health facilities in 5 districts: (1) revising the CQI plan to incorporate CQI methods; (2) conducting baseline assessments to evaluate existing CQI practices; (3) delivering CQI orientation sessions as continuous professional development (CPD) to staff, focusing on steps to improve care and use of CQI tools; (4) establishing multi-disciplinary CQI teams at sites where they were not already present; (5) supporting teams to meet regularly and analyze facility-level data to identify service gaps and implemented CQI projects using the Plan-Do-Study-Act (PDSA) cycle; (6) integrating CQI coaching into regular mentorship and supervision; (7) disseminating effective changes through data feedback, district review, and program meetings to support learning and scale-up; and (8) monitoring CQI activities through routine program data dashboards in Google Sheets and PowerBI to monitor that effective changes are sustained.

Evaluation and results: Effectiveness of CQI integration was assessed using routine program data, including digital dashboards and yearly site-CQI team optimization self-assessments. Sites with functional CQI teams increased from 15 in 2022 to 95 in 2024. Sites implementing at least one project per quarter increased from 15 to 95, and the total projects implemented expanded from 15 to 148. Two program-level CQI projects were completed with notable outcomes including improved identification of HIV status among children of women on Antiretroviral therapy at 95 sites from 82% in November 2022 to 96% in October 2024; and increased advanced HIV disease screening coverage at 7 high-volume sites from 73% in March 2022 to 99% in September 2023.

Lessons learned: Embedding CQI in routine activities was effective when supported by monthly in-person or virtual coaching. Ministry of Health (MOH) ownership was supported through regular sharing of performance dashboards and engaging them to facilitate meetings. District-level data review meetings facilitated the rapid dissemination of best practices among facilities within the district.

Next Steps: Efforts to strengthen district-level MOH leadership ownership to build a culture of improvement across sites are ongoing, with continued capacity building to help service providers take leading roles in initiating projects and applying CQI tools independently.

187: Institutionalizing Routine Client Satisfaction Feedback Assessments Using a Quality Improvement Approach in the Nine Districts of Bunyoro Region.

Richard Kyakuwa Jjuuko, David Etomet, Calvin Epidu, Dithan Kiragga

Purpose: The Ministry of Health (MOH) Uganda launched and rolled out the 2024 routine client satisfaction feedback initiative (RCSFI) Implementation guidelines to systematically collect and use information raised by clients to address their needs and improve the quality of services. In Bunyoro, 36% (84/234) of the clients from 31% (44/144) supported health facilities (HF) were satisfied with the services they received by the end of September 2024. This abstract

describes how the quality improvement (QI) team at Baylor Foundation Uganda (BFU) institutionalized the routine client satisfaction feedback initiative in Bunyoro.

Methods: Between October 2024 and March 2025, the quality improvement (QI) team engaged district teams to brainstorm reasons for the suboptimal coverage and client satisfaction rates. With the help of affinity diagram causes where classified as capacity gaps (knowledge gap on administering the RCSFI tool, gaps with accessing the dashboard), people (lack of focal person for RCSFI, clients were not aware of the initiative), and Materials (Lack of RCSFI printed forms, no quick response (QR) codes, data challenges). Innovations were prioritized, starting with developing a pool of district-based coaches who supported a one-day physical orientation for the district health team (DHT). This team supported facility-based mentorships, selection of facility focal point persons, reviewed the RCSFI form translated into local languages, and activated sites. Facility resource persons like linkage facilitators (LFs), village health team (VHT) members, and counsellors attached to HF were oriented to administer the RCSFI tool to clients with no smartphones. These filled forms were delivered for entry into the online dashboard by the RCSFI focal person. The MOH-generated dashboard provided analytical interfaces of Pareto charts, satisfaction rates by departments, and client feedback. Facility teams and the DHT were provided with passwords to access the data for use at monthly meetings and developed actions. Feedback to clients has been shared through health unit management committee and hospital board meetings. BFU printed and distributed QR codes across all supported facilities, shared weekly updates on coverage and satisfaction rates to the DHT, and held virtual district-based learning meetings.

Results: Coverage for RCSFI improved to 88% (128/144), and client satisfaction improved from 36% (84/234) to 62.4% (794/1272) by the end of March 2025 and 80% services dissatisfaction was attributable to medicines availability, timeliness of services, privacy, access to medical information and cost of services.

Discussion: Engagement of clients in the management of their health is critical to reshaping healthy quality services. Leadership engagement district and facility levels is critical to coordinate the implementation of the RCSFI. Internet challenges, inconsistencies in interviewing clients, and technological challenges to the dashboard have been the major limitations to this initiative. BFU will support monthly mentorships on data use meetings from the RCSFI.

197: Enhancing Accountability in Laboratory Waste Management at Baylor Clinic Laboratory: A Quality Improvement Initiative

Bhekisisa Mavimbela, Lindokuhle Dlamini, Florence Anabwani, Phepsile Lukhele, Thembi Simelane, Lindiwe Dube, Thembela Mavuso

Background: Effective waste management in clinical laboratories is critical to ensuring biosafety, regulatory compliance, and environmental sustainability particularly in high-volume clinical settings. Despite the existence of ISO 15190 standards emphasizing laboratory safety through waste segregation, labeling, and disposal, the Baylor Clinic Laboratory team identified a critical biosafety gap: the absence of a systematic process for tracking and managing laboratory waste from generation to final disposal, primarily due to inadequate training and the lack of standardized procedures. No baseline data were available at the outset, as waste was not being weighed or tracked. This Quality Improvement Project (QIP), conducted from February 2024 to September 2025, aimed to align laboratory waste management practices with ISO 15190 standards by developing and implementing a waste management tool and improving accountability.

Methods: The QIP was set in the Baylor Clinic Laboratory and led by a multidisciplinary team comprising laboratory technologists, clinicians, nurses, support staff, and a phlebotomist. The problem was identified through internal reviews revealing gaps in SOPs and staff responsibilities. Planning began with a thorough review of the existing SOPs, highlighting missing accountability mechanisms. A waste tracking tool was developed in May 2024, though its finalization was delayed due to stakeholder engagement and conflicting schedules. Stakeholder sensitization and

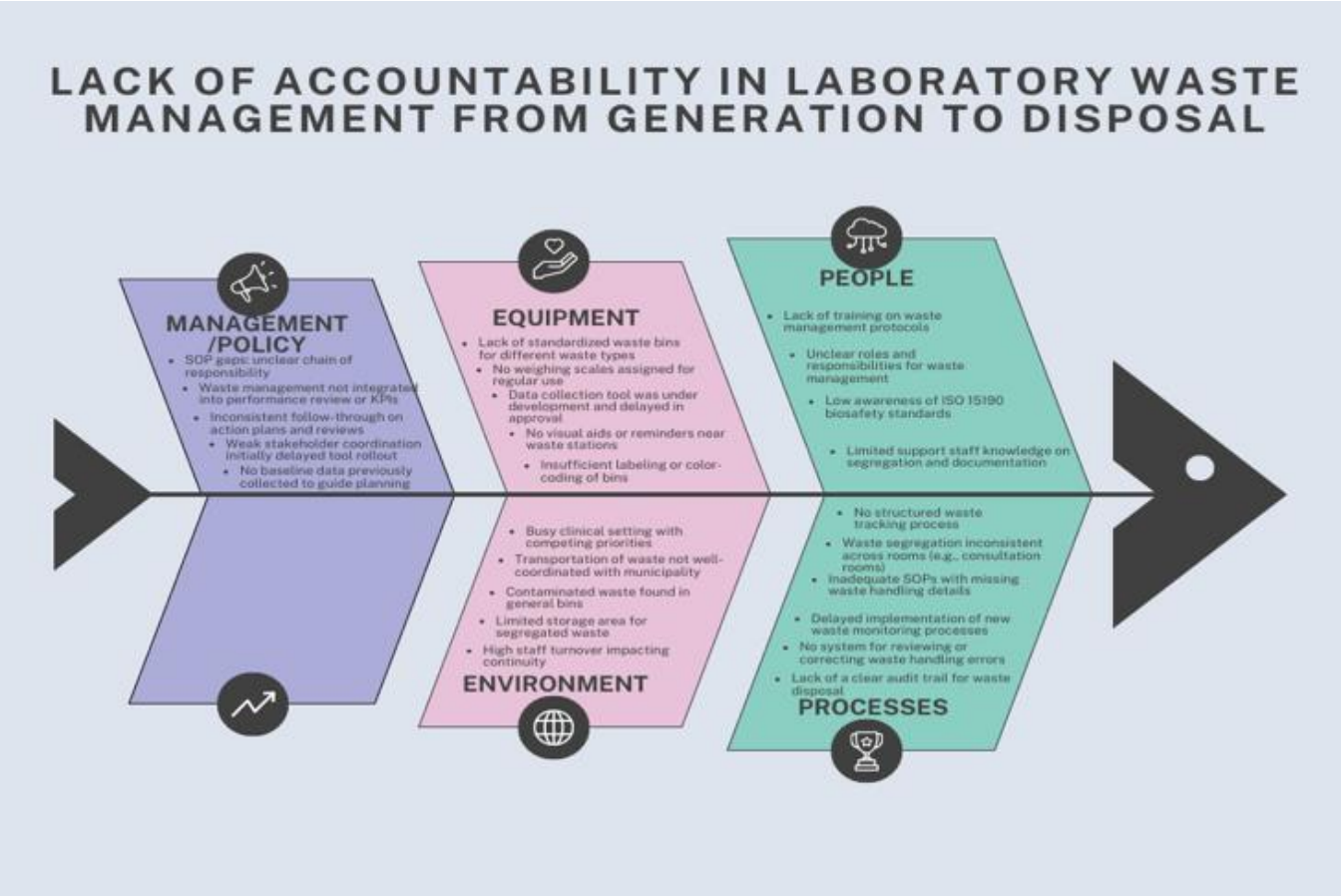
training on the tool occurred in August 2024, uncovering further issues with waste segregation, especially in consultation rooms.

Implementation was structured using a Plan-Do-Check-Act (PDCA) cycle. The tool was piloted with support staff assigned to weigh and record waste daily, and document transportation weekly. Data collection and review were scheduled to occur continuously from October 2024 through September 2025, with monthly analysis involving all stakeholders to assess effectiveness and make adjustments.

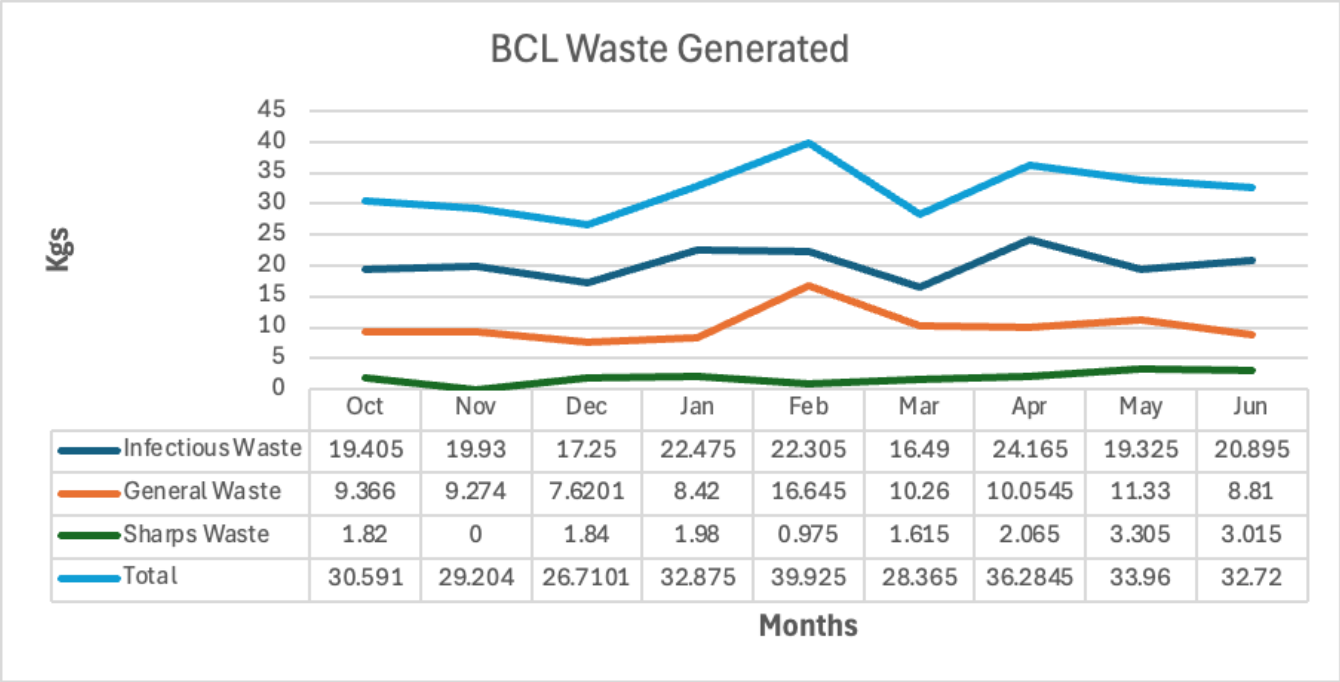
Results: Following the implementation of the intervention, waste tracking and accountability improved significantly. Between October 2024 and June 2025, the laboratory successfully recorded and categorized all waste generated. Infectious waste accounted for the majority, comprising **62.7%** of the total waste, while general waste made up **31.5%** and sharps waste **5.8%**. The generation of infectious waste was almost double that of general waste, highlighting a critical area for focused management and resource allocation. This trend remained consistent throughout the monitoring period, suggesting effective data collection and consistent categorization practices.

Discussion: The primary strength of this initiative was the collaborative, multidisciplinary approach that fostered buy-in across various departments. The use of ISO 15190 as a guiding framework ensured that safety and compliance were embedded in every phase of the intervention. Limitations included initial delays in tool finalization and incomplete staff training at the time of reporting. Next steps include finalizing refresher training, full implementation, ongoing data review, and potential cross-departmental scale-up. Ensuring long-term sustainability will require periodic audits, integration into SOPs, reinforcement through staff orientation and ongoing training.

Annex 1: Root cause analysis on lack of accountability in laboratory waste management.



Annex 2: Results of waste generated by the lab from Oct 2024 to Jun 2025*



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Infectious Waste	19.405	19.93	17.25	22.475	22.305	16.49	24.165	19.325	20.895
General Waste	9.366	9.274	7.6201	8.42	16.645	10.26	10.0545	11.33	8.81
Sharps Waste	1.82	0	1.84	1.98	0.975	1.615	2.065	3.305	3.015
Total	30.591	29.204	26.7101	32.875	39.925	28.365	36.2845	33.96	32.72

203: Improving Zinc Sulfate Treatment Adherence in Wayuu Children: A Culturally Sensitive Approach

Michel Castaño, Clara Lopez

Background: Child health in the Wayuu communities of La Guajira, Colombia, faces critical challenges, marked by high morbidity and mortality rates. Key issues include acute diarrhea (25–30% prevalence in children under five), malnutrition (approximately 20%), and acute respiratory infections (ARIs), which contribute to a mortality rate of 21.72 per 100,000 population. These conditions are exacerbated by limited access to potable water (40%) and sanitation (35%). Clinical guidelines, such as IMCI, recommend zinc sulfate to reduce the incidence and duration of these diseases and support child growth. However, among 1,568 children treated, 265 (16.9%) demonstrated low adherence, highlighting the need for a specific intervention.

Objective: To identify factors affecting adherence to zinc sulfate treatment and to design culturally appropriate interventions to improve compliance and child health in Wayuu communities.

Methods: A clinical-nutritional intervention was conducted in children aged 0 to 10 years with, or at risk of, growth faltering, involving three months of zinc sulfate (SulZinc®) supplementation. Faced with low adherence, a continuous quality improvement approach was implemented using qualitative methods. In-depth interviews were conducted with Wayuu mothers and caregivers in Uribia and Manaure, La Guajira, through four participatory sessions in April. These sessions explored knowledge, experiences, perceived barriers, and recommendations for improvement, which allowed for the cultural adaptation of the intervention.

Results: Caregivers trusted the healthcare system and recognized the benefits of zinc; however, many misclassified it as a vitamin or appetite stimulant, highlighting the need for improved education. Positive attitudes and observable improvements in children's health fostered adherence. Major obstacles included logistical issues: irregular supplement availability, limited healthcare access stemming from geographical and transportation barriers, and conflicts with familial or work routines. Notably, no cultural resistance or distrust of zinc was observed. Recommendations include culturally sensitive education, consistent supplement distribution, improved healthcare access, home follow-up, and community support to strengthen adherence.

Discussion: The findings indicate a partial understanding of zinc's role, despite caregivers' trust and positive attitudes; logistical challenges were the primary obstacle to adherence. The absence of cultural barriers aligns with findings from similar contexts. Strengthening education, logistics, and community engagement is essential to improve adherence. Limitations include the qualitative study design and the need for broader validation.

Recommendations for Quality Improvement:

- Ensure caregivers receive education on the treatment's purpose during each consultation, leveraging oral traditions to promote better adherence
- Train community health promoters to effectively communicate the importance of growth monitoring in child health.
- Monitor adherence and health outcomes to assess the impact of interventions and guide ongoing improvements.

Category 6: Health Systems Strengthening & Integrated Care

78: Fit for Work? Exploring Staff Attitudes and Perceptions Toward Aerobics as a Wellness and Productivity Strategy at Baylor Foundation Uganda: A Cross-Sectional Review

Muhammad Lutalo, Cathbert Tumusiime, Diana Louis Anena, Resty Babirye Okello, Olivia Nalunkuuma, Naomi Apoto, Victoria Ndyanabangi, Dithan Kiragga

Background: Regular physical activity is essential for preventing and managing noncommunicable diseases (NCDs) like cardiovascular diseases, diabetes among others, while enhancing quality of life. Despite clear evidence of its health benefits, 27.5% of adults worldwide fail to meet the World Health Organization's (WHO) recommended levels of 150 minutes of moderate physical activity weekly, thus impacting not only their long-term health but also placing strain on families, healthcare systems, and society.

The Global Action Plan on Physical Activity 2018-2030 highlights the workplace as a vital setting for promoting physical activity among adults. Baylor Foundation Uganda (BFU) launched a workplace aerobics wellness program at the Centre of Excellence (CoE) clinic in February 2024. However, participation remained low, with only 24% of staff engaging in the initiative by February 2025.

This study assessed staff attitudes, and perceptions on participation in the wellness program, identifying enablers and barriers to participation.

Description: Voluntary aerobics sessions led by an in-house trainer were held thrice a week, 60 minutes each, after work hours. Sessions included warm-up, cardio, abdominal exercises, stretching with music tempo guiding intensity and reminders sent via WhatsApp. Participants purchased their own equipment (jump ropes and mats).

Evaluation and outcomes: We employed an online semi-structured questionnaire, administered via google forms to all COE staff through email. Data was cleaned and analyzed using Microsoft Excel. The results were summarized and presented using descriptive statistics.
From 70 respondents out of 146 staff at the COE:

- 51.4% were female; 54.3% were at officer level; 38.6% from the Research directorate.
- 68.6% preferred group workouts, yet only 45.7% had participated in the program.

Most considered themselves moderately fit (Figure 1).

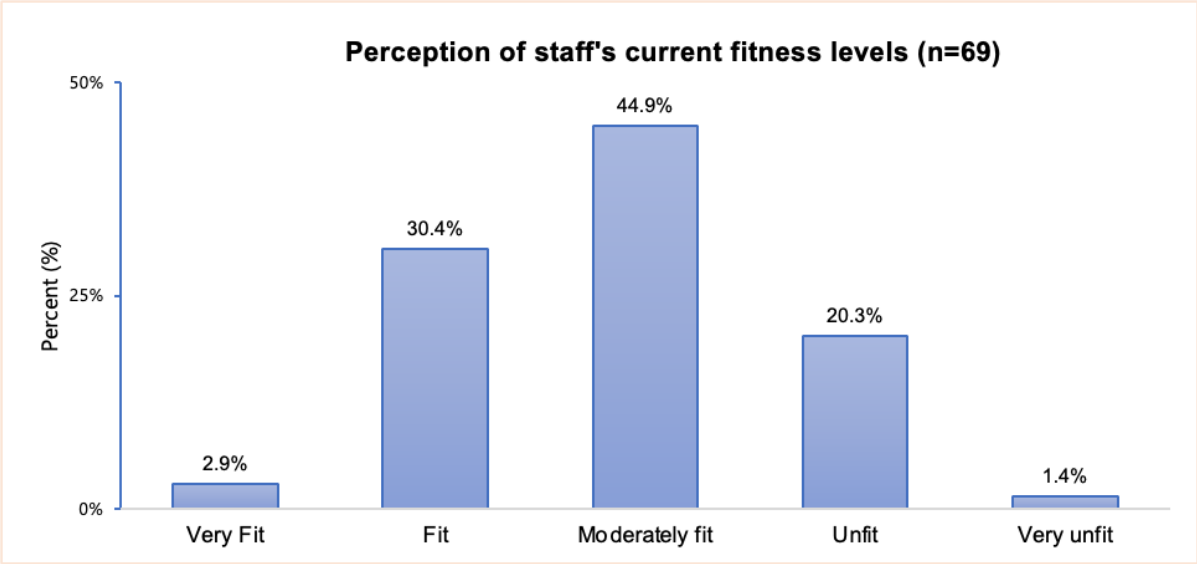


Figure 2: Perception of staff's current fitness levels (n=69)

From 32 respondents that have previously participated in the wellness program, physical, mental well-being, job performance, and satisfaction were rated above average. Notably, males and females expressed equal levels of overall satisfaction (Figure 2).

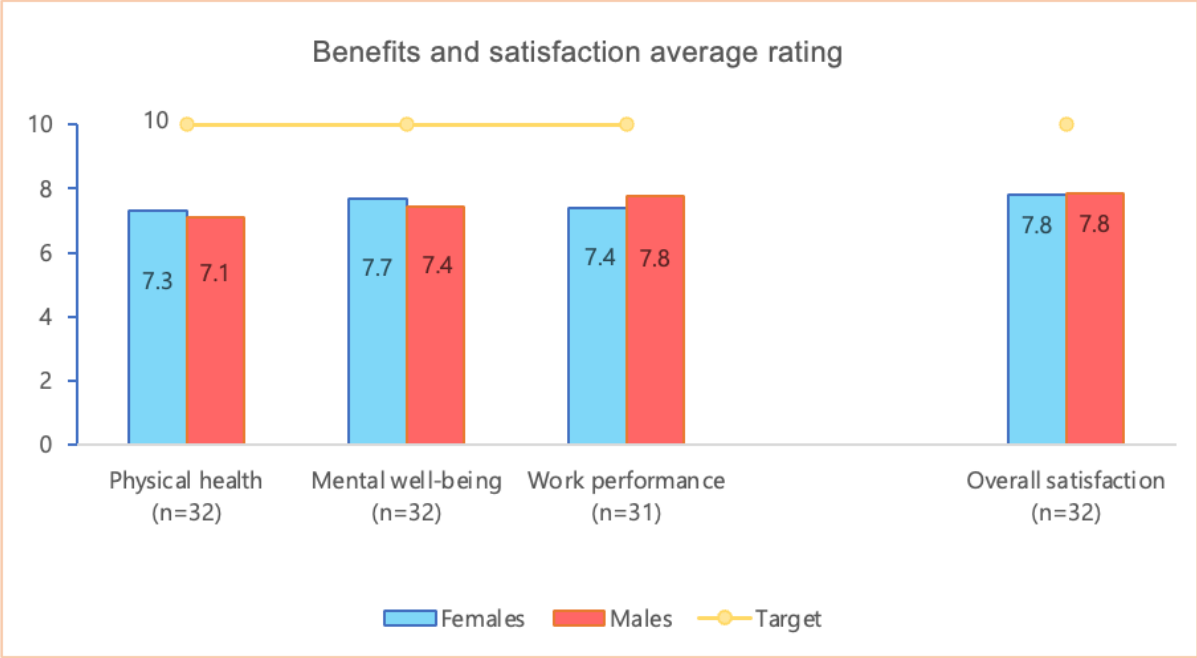


Figure 3: Benefits and satisfaction average rating

Lessons Learnt:

Staff that attended aerobics sessions reported:

- Improved physical health (weight loss, reduced knee pains, increased fitness)
- Enhanced mental well-being (better mood, reduced stress, improved sleep)
- Increased productivity and performance
- Team bonding and socialization
- Consistency in exercising and healthy habits

However, there were challenges with the timing of the sessions and availability of the workout equipment. Notably, early start times resulted in higher participation rates.
Suggestions for improvement included:

- Diversifying activities beyond traditional aerobics
- Engaging certified trainers for safer and varied sessions
- Upgrading facilities (for example, showers, changing rooms, private workout area equipment)
- Offering flexible scheduling options
- Enhancing institutional support (for example, gym memberships, wellness weeks)
- Increasing engagement through awareness campaigns and online sessions

Next steps: BFU will strengthen workplace wellness programs in line with WHO and Ministry of Health recommendations. Findings will inform internal policy discussions and guide broader implementation across the Baylor network.

103: Strengthening Programmatic Delivery of Stool-Based TB Diagnosis Through Community Engagement and Healthcare Provider Support in Eswatini.

Babongile Nkala, Thobile Jele, Tendai Nkomo, Siphiwe Ngwenya, Lindiwe Mdluli-Dlamini, Thulani Jele, Gcinile Dlamini, Andrew DiNardo, Alexander Kay, Anna Mandalakas

Background: Stool-based tuberculosis (TB) testing has been endorsed by the World Health Organisation (WHO) as an alternative for children who cannot produce sputum. Despite its advantages, uptake remains limited in routine care without targeted support. It has emerged as a feasible and preferred alternative to sputum collection, especially in paediatric who are not able provide an adequate sputum specimen. This abstract synthesizes key study insights, lessons learnt, and community engagement strategies from the implementation of stool sample collection showing how the study interventions can complement programmatic initiatives.

Description: The collaborative effort was implemented by Baylor Children's Foundation Eswatini and the Eswatini National Tuberculosis Control Program through on-site training sessions at selected health facilities. We conducted 6 trainings focused on stool sample collection, handling, and preparation for Xpert MTB/RIF testing. While these activities supported an embedded research study (Stool4TB), they were primarily designed to strengthen national program capacity. We conducted three Community Advisory Committee (CAC) meetings to help in improving stool sample collection acceptance in the community. Clear, culturally sensitive communication tailored to patient literacy levels was used to enhance understanding and participation.
Evaluation and Outcomes: Through strong health system coordination and robust community participation, the study achieved a remarkable 98% (n=579) stool sample collection rate, with only 2% (n=15) of participants unable to provide samples due to logistical or cultural reasons. Support from the National Tuberculosis Control Programme provided strategic guidance and logistical backing.
Training and capacity building played a central role in both the study and the program implementation success. The trainings improved sample quality, reduced errors, fostered ownership and confidence among healthcare providers. Despite the perception of stool being a taboo in some settings, targeted communication campaigns successfully shifted attitudes and improved cooperation.

Lessons Learnt: Community engagement helped build trust, address stigma, and demystify traditional taboos around stool collection. Building community trust through transparency and culturally sensitive communication, increased diagnostic access and uptake of stool sample collection. The initiative demonstrated that with adequate training, community involvement, and facility support, stool-based TB diagnostics can be effectively integrated into existing healthcare frameworks. This success offers a replicable model for expanding access to paediatric TB diagnosis in resource-limited settings. Stool continued to be used routinely for pediatric TB diagnosis beyond the study period when

the National TB guidelines were subsequently updated to formally include stool as a TB diagnostic specimen among children below 5 years.

Next Steps: Future efforts require sustained investment in community engagement, continuous trainings, and myth-busting campaigns to normalize stool sample collection and maximize its public health impact. The need for continued demand creation among both healthcare workers and communities was identified for sustaining uptake.

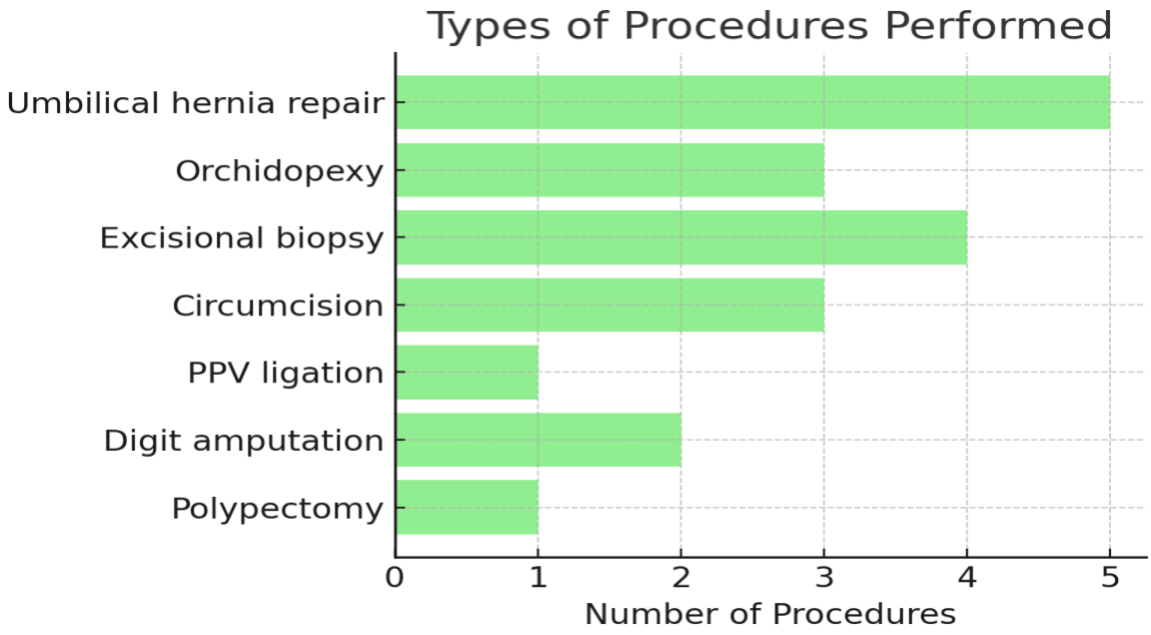
121: Paediatric Surgical Outreach to Ghanzi: Improving Access and Reducing Burden on Families in Remote Botswana

Abdelrahman Elnour, Andrew Dihutso, Abhilash Sathyamoorthi, Mogomotsi Matshaba

Background: Access to paediatric surgical care remains limited in remote regions of Botswana. To bridge this gap, the Ministry of Health has supported a paediatric surgical outreach program to Ghanzi, a city located approximately 546 km from the capital, as part of a multidisciplinary outreach initiative involving various specialties. Ghanzi is served by a primary hospital staffed by a senior medical officer but lacked local paediatric surgical services. This initiative marks the first time that children have undergone surgical procedures locally in Ghanzi.
The program aims to improve access to paediatric surgical services, minimize the need for long-distance travel, and reduce the financial and emotional burden on families. By enabling diagnosis, selected day-case surgeries, and postoperative follow-up within the local setting, the outreach helps ensure more equitable and efficient care delivery for children in underserved areas. This study aims to evaluate the implementation, service coverage, and early outcomes of the paediatric surgical outreach program in Ghanzi, with a focus on types of procedures performed.

Methods: A retrospective review was conducted on paediatric surgical outreach activities carried out in Ghanzi between July 2024 and March 2025. During this period, four outreach visits were undertaken. All paediatric patients were assessed for surgical management and evaluated for suitability to carry out day-case procedures. Selected minor surgeries were performed on-site, while patients requiring complex interventions, specialized equipment, or peri-operative support were referred to tertiary centres in the capital. Postoperative follow-up for locally managed cases was scheduled during subsequent outreach visits to ensure continuity of care.

Results: A total of 41 paediatric patients were evaluated during the outreach visits, comprising of 30 males and 11 females. The age distribution included 10 infants, 10 children aged 1–5 years, 18 aged 6–10 years, and 3 over 11 years. 19 surgical procedures were successfully performed locally as day cases, including umbilical hernia repairs (5), orchidopexies for undescended testes (3), excisional biopsies for soft tissue lumps (4), circumcisions (3), ligation of a patent processes vaginalis (1), amputation of extra digits (2), and polypectomy (1) (figure 1). Most procedures were performed in children aged 6–10 years (n=12), followed by those aged 1–5 years (n=6), and over 11 years (n=1).



Conclusion: The paediatric surgery outreach program has significantly improved paediatric surgical service delivery in Ghanzi. By providing on-site diagnosis, treatment, and follow-up, it helped reduce the need for frequent long-distance travel, lowering associated costs and stress for families. Continued support and expansion of such programs will be essential to ensure that equitable surgical care across Botswana is accessible.

127: Enhancing Appointment Adherence and Engagement via Age Cohorting in an ART Clinic: Insights from Baylor Centre of Excellence-Malawi

Hezel Lakudzala, Kelvin Jobo, Emily Mwase

Purpose: The Baylor-Malawi Center of Excellence (COE) previously used a unified care model for all age groups. While functional, this approach limited the delivery of age-specific, developmentally appropriate care. A quality improvement initiative introduced an age-cohorting clinic model to enhance appointment adherence (ADH) and service efficiency. Patients were segmented as follows: ages 0–9 (Mondays), 10–15 (Tuesdays), 16–19 (Wednesdays), and 20+ (Thursdays). This allowed for tailored communication, counselling, and activities suited to each age group's developmental needs. Children under 5 received care in child-friendly spaces with play therapy and outdoor activities timed to align with caregiver availability and supported by counselling and peer education. Adolescents (10–15, 16–19) engaged in structured sessions with games, music, crafts, peer interactions, and individual/group counselling. Adults received personalized counselling, group education, and flexible appointment times.

Methods: Perceptions regarding age-cohorted clinics were evaluated through questionnaires, in-depth interviews, and focus group discussions with 18 caregivers, 44 adolescents, 21 adults, and 12 healthcare providers. Qualitative data were manually analyzed, while demographic data were processed using Excel.

Results: Respondents felt that age cohorting helped improve appointment adherence, especially for children aged 0–11 and teens aged 16–19. Flexible scheduling and active participation made clients feel more comfortable and less anxious. Fun activities and peer support created a positive atmosphere, while personalized counselling-built trust and motivation. Friendly environments and age-appropriate communication also helped clients express themselves and stay engaged in care.

Conclusion: Age-cohorting at Baylor COE has felt some improvement on appointment ADH, patient comfort, and engagement. Tailored services foster a predictable, supportive environment and empower providers to deliver more effective care. Further research is recommended to assess the impact on medication ADH and viral suppression.

139: Linking Systems, Saving Time: The Role of the Patient Navigator in Enhancing Pediatric Cancer Care Coordination in Botswana

Thutego Nkone, Sewelo Sosome, Robert Kimutai, Mogomotsi Matshaba

Background: Paediatric Hematology-oncology care in Botswana is delivered within a multidisciplinary framework that requires coordination across various service points, including diagnostics, hospital admissions, and specialized laboratory testing. Timely access to care can be influenced by multiple intersecting factors such as resource limitations, procedural requirements, and coordination challenges across institutions. While in high-resource settings patient navigation is often institutionalized through standardized protocols and digital systems, the role in Botswana has emerged more organically shaped by context, relational trust, and real-time responsiveness. This program description explores how patient navigation, adapted to the local healthcare landscape, serves as a vital connector across systems and compares its relational implementation in Botswana with more structured Western models. It highlights the value of culturally grounded navigation approaches in enhancing Paediatric cancer care coordination and outcomes.

Description: Functioning as the central link between clinicians, caregivers, and institutional systems, the patient navigator in the Paediatric Hematology-Oncology Unit has implemented a multi-tiered strategy to optimize patient flow and bridge communication gaps. These include
mapping care trajectories, establishing focal liaison officers in administrative departments, fostering rapport with diagnostic and laboratory staff, and integrating stakeholders into Paediatric cancer awareness events hosted at Botswana-Baylor Children's Clinical Centre of Excellence. In contrast to Western navigation protocols—which often rely on integrated electronic medical records, automatic referral alerts, and standardized navigation pathways—the local model relies heavily on interpersonal relationships and proactive engagement. Through "meet and greet" sessions and embedded advocacy, the navigator ensures that critical cases receive prompt attention, builds accountability, and humanizes institutional processes.

Lessons Learned:

- Delays are multifactorial resulting from structural, procedural, and communication bottlenecks.
- Strong interpersonal rapport and sustained advocacy are instrumental in ensuring responsiveness within a fragmented system.
- Stakeholder inclusion in programmatic activities increases investment in Paediatric cancer care, improving communication between communities, ministries, clinicians, and diagnostic services.
- Real-time tracking and follow-up by a dedicated navigator prevent sample/result/report loss, missed referrals, and unmonitored patient progression.

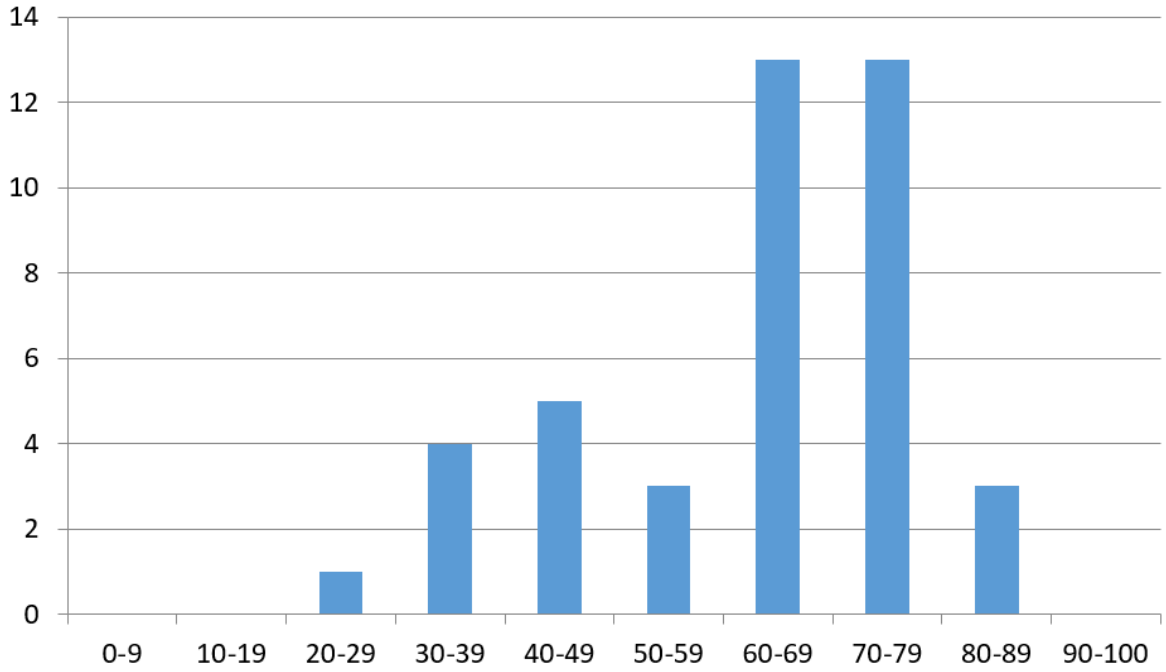


Figure 1: Distribution of Pre-Test Scores Among Medical Interns on Paediatric HIV Knowledge (n = 42)

Next Steps:

- Develop a centralized digital referral-tracking tool to streamline guarantee applications, diagnostic scheduling, and lab coordination.
- Formalize the role of the Patient Navigator within national Paediatric oncology protocols to ensure institutional sustainability.
- Initiate regular interdisciplinary review meetings to flag delays and collectively strategize around solutions.
- Create a national Paediatric oncology fast-track protocol to reduce delays from diagnosis to treatment, especially for high-risk malignancies.
- This model demonstrates the transformational potential of patient navigation not as an auxiliary role but as a pivotal driver of quality, equity, and timely Paediatric cancer care in resource-constrained health systems, particularly when adapted to fit local operational realities.

143: Optimizing viral suppression among non-suppressed PLHIV in the Bunyoro region through implementing an integrated community service delivery model.

Esther Nassali, Calvin Epidu, Richard Jjuuko, Denise Birungi, Dithan Kiragga

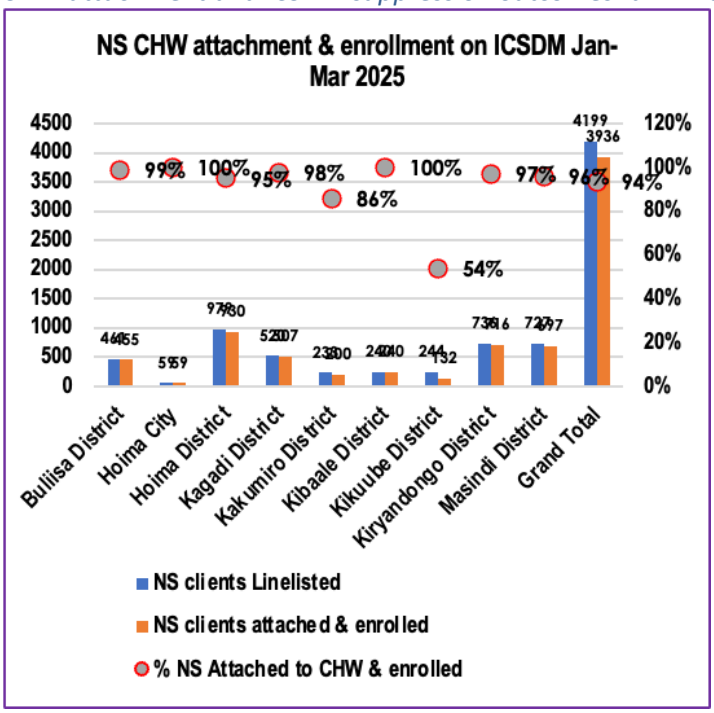
Background: Uganda has adopted the implementation of an integrated community service delivery model (ICSDM), where data of non-suppressed (NS) persons living with HIV (PLHIV) is analyzed per village/parish, and community health workers (CHW) are attached for home visits to provide all expected services at a single contact. From January to March 2024, the Bunyoro region had 4.6% (2579/55310) NS clients, compared to 2.6% (1410/53518) in September 2023. These high non-suppression rates (NS) rates were associated with uncoordinated silo provision of services by community health workers during home visits, leading to fatigued households, inefficient use of program resources, social stigma, and clients missing all HIV/TB services. This abstract describes how implementing ICSDM improved client-level outcomes in Bunyoro.

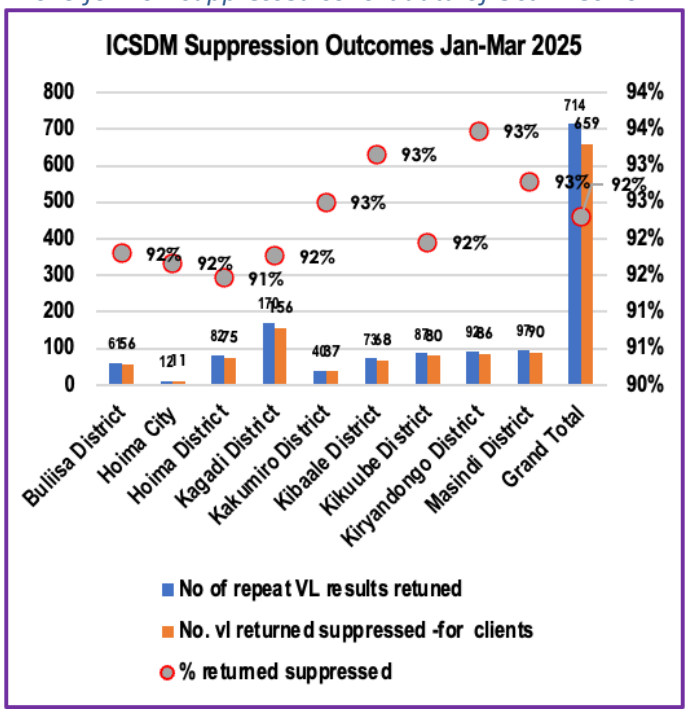
Description: Between April 2024 and March 2025, 52% (76/146) of the high-volume facilities with PLHIVs were supported to provide an integrated service package of a root cause analysis for non-suppression, intensive adherence counselling (IAC), and using the audit tool dashboard to provide all expected services. Secondly, districts formed

technical work group meetings for ICSD, which developed standard operating procedures (SOPs), built capacity through mentorships. CHWs were attached to 15 NS PLHIV residing in nearby communities and facilitated with a transport refund following submission of a home visit assessment and report. Data was aggregated and analysed through Excel and linkages to orphan and vulnerable persons for social and economic support was done. To accelerate learning across teams, a biweekly virtual review meeting was held among the supported facilities.

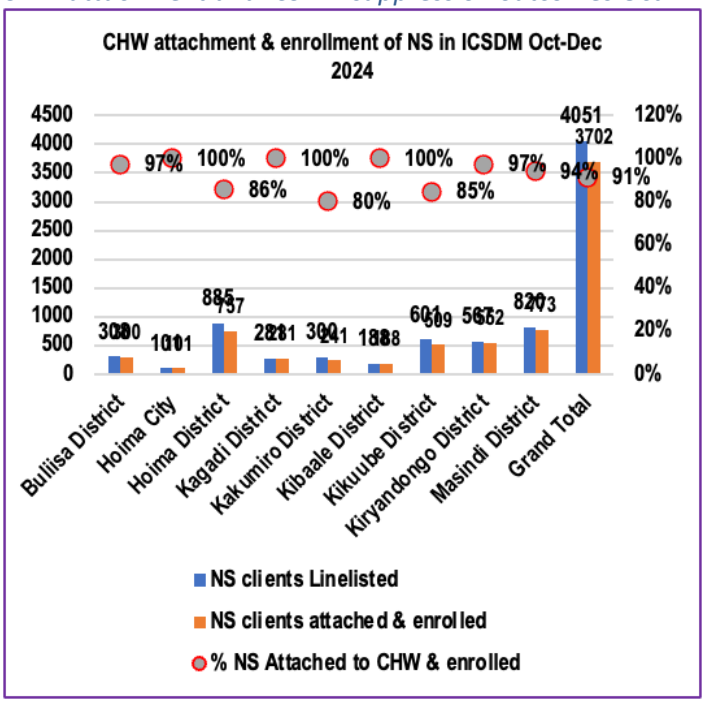
Evaluation and Outcomes: Seventy-six (76) health facilities increased enrollment of NS PLHIVs into the implemented ICSDM from 2,848 in July 2024 to 11,098 by March 2025, to CHWs attachment and quarterly home visits to PLHIVs improved from 2,239 in July 2024 to 9,877 by March 2025, while all NS were visited monthly.
Viral load testing was supported for 1695 NS clients, of whom 90% (1,518/1,695) suppressed following ICSD interventions and improved the overall regional Viral suppression from 93% July 2024 to 97% in March 2025.
Equipped 278 CHWs knowledge to provide integrated HIV/TB services through ICSD. Improved tracking of clients receiving IACs, assessment of the root cause of non-suppression, improved NCD screening (3278 household members) and linkage to prevention services.

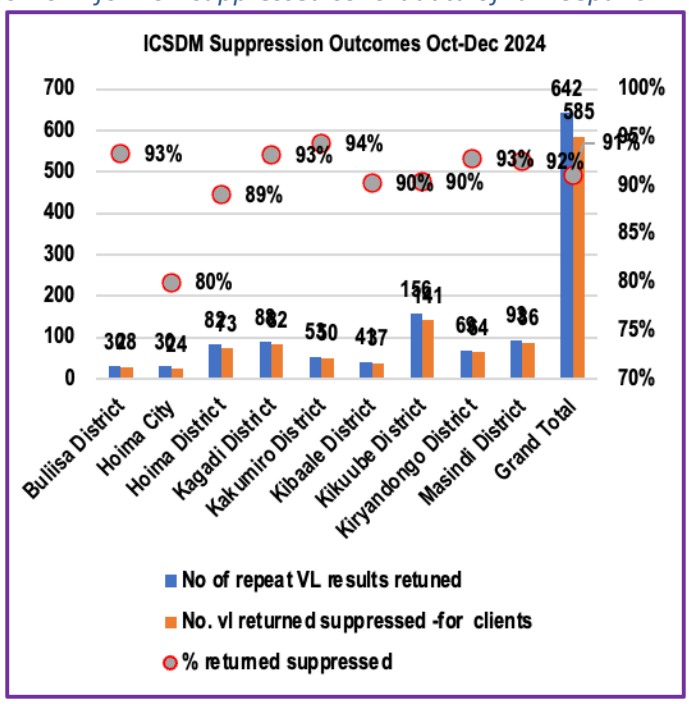
CHW attachment and ICSDM suppression outcomes Jan - Mar 2025 for non-suppressed cohort data of Oct - Dec 2024.



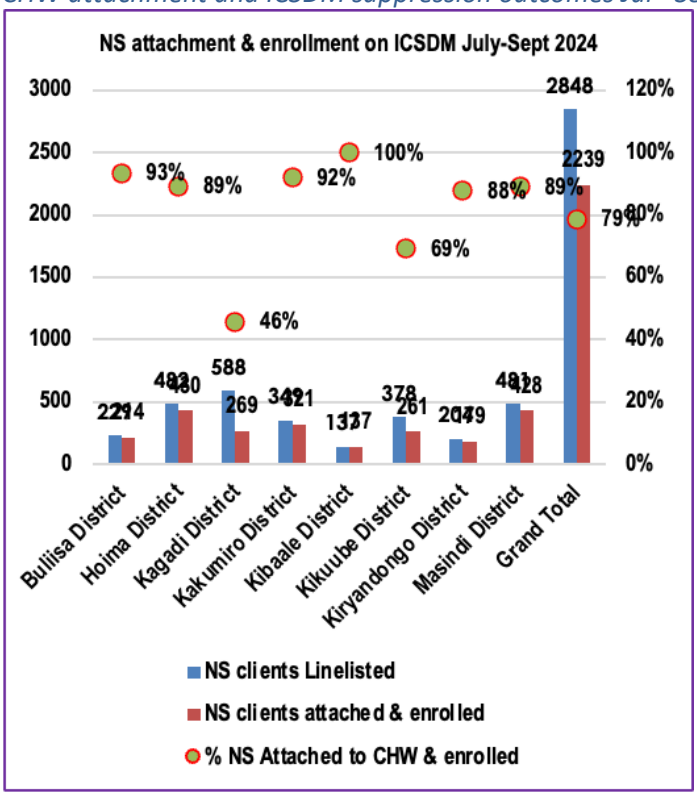


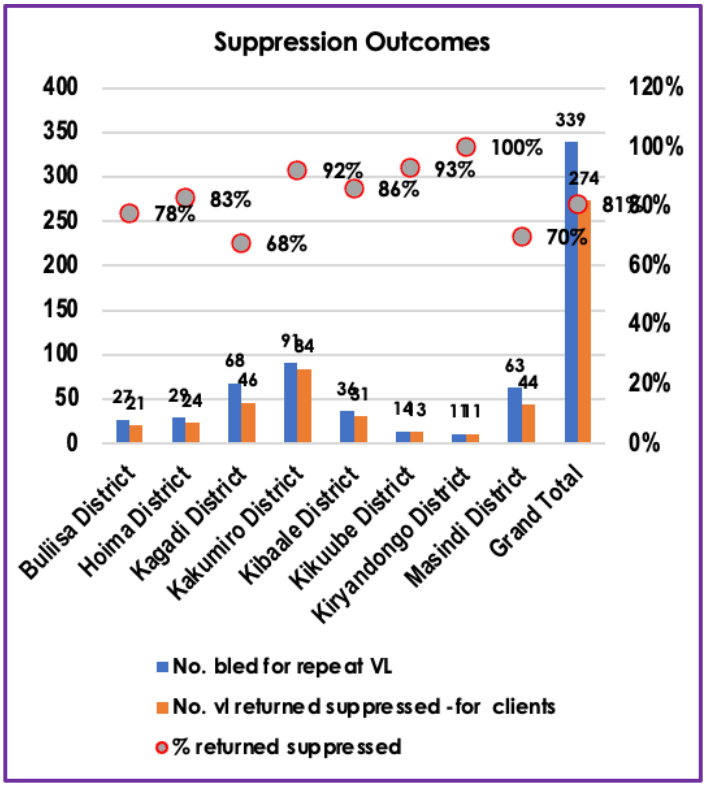
CHW attachment and ICSDM suppression outcomes Oct - Dec 2024 for non-suppressed cohort data of Jul - Sept 2024





CHW attachment and ICSDM suppression outcomes Jul - Sept 2024 for non-suppressed cohort data of Apr - Jun 2024





Lessons Learned:

- The holistic/integrated approach improves health outcomes for the non-suppressed and household members.
- CHWs require routine monitoring and facilitation to conduct successful home visits.
- Need for adequate supplies for CHWs to provide integrated services at the household level.

Next steps:

- Institutionalize integrated community service delivery model as an approach to manage non-suppressed clients across Baylor HIV programs.
- Utilize findings to improve HIV case finding and focus community HIV outreaches.

160: Integrated Disease Management: Exploring the TB-HIV Nexus Among Ugandan Children and Adolescents

Vimal Konduri, Cathbert Tumusiime, Jacob Nyonyintono, Patricia Nahirya Ntege, Peter Elyanu, Dithan Kiragga, Moses Mugerwa, Jacqueline Balungi Kanywa

Background: Coinfection with tuberculosis (TB) is a significant public health challenge among people living with HIV (PLHIV). HIV infection is the leading risk factor for active TB disease. Pill burden, which can be exacerbated by TB treatment, poses a significant barrier to adherence with antiretroviral therapy (ART). Studies focusing on TB treatment and viral load among children and adolescents living with HIV (CALHIV) are limited.

Methods: We conducted a nested case-control study using retrospective data from client records at Baylor Foundation Uganda from 2019 to 2024. 83 HIV-positive clients aged 0-19 years with TB (on RHEZ or RHZ) were matched 1:1 to HIV-positive controls without TB, based on age, sex, ART regimen, initial viral load, and client type (time on ART). Viral load was categorized as undetectable (<200 copies/mL), low-level viremia (200–999), or high-level viremia (≥1,000). Mixed-effects ordinal logistic regression was used to estimate unadjusted and adjusted odds ratios with 95% confidence intervals. Significance was set at $p<0.05$. Analyses were performed using STATA v17 and ethical approval was obtained from Baylor College of Medicine IRB (Protocol H-26616)

Results: Children and adolescents receiving TB treatment were less likely to experience a rise in viral load (VL) six months after starting TB therapy. In univariate analysis, those aged 10–14 years had better viral suppression compared to younger children aged 0–4 years at 6 (OR: 0.27; 95% CI: 0.09–0.79; $p = 0.016$) and 12 months (OR: 0.22; 95% CI: 0.07–0.71; $p = 0.012$). Males showed better VL suppression at 12 months (OR: 0.51; 95% CI: 0.26–1.01; $p = 0.053$) compared to females. Clients on AZT-3TC-DTG were more likely to have higher VL at 12 months (OR: 5.21; 95% CI: 1.10–24.55; $p = 0.037$), while those on TDF-3TC-DTG had better outcomes (OR: 0.40; 95% CI:0.18–0.85; $p = 0.017$). Clients on second- and third-line ART regimens had significantly higher odds of elevated VL at all time points. WHO clinical stage was associated with VL at 12 months, with Stage II, III, and IV clients showing significantly lower odds of increased VL compared to Stage I.

In adjusted multivariate analysis, CALHIV on TB treatment (cases) among all age groups analyzed were significantly less likely to experience an increase in viral load six months after starting treatment, compared to CALHIV not on TB treatment.

Table 1: Multi-variate analysis – adjusted

Characteristics	Initial VL		VL at 6 months		VL at 12 months	
	aOR (95%CI)	P-value	aOR (95%CI)	P-value	aOR (95%CI)	P-value
Age						
0-4 years	*Ref.*		*Ref.*		*Ref.*	
5-9 years	--	--	0.14 (0.02 – 0.89)	**0.037**	--	--
10-14 years	--	--	0.15 (0.02 – 0.95)	**0.044**	--	--
15-19 years	--	--	0.14 (0.03 – 0.99)	**0.049**	--	--
ART regimen						
ABC-3TC-DTG	*Ref.*		*Ref.*		*Ref.*	
ABC-3TC-LPV/r	--	--	15.80 (1.10 – 226.07)	**0.042**	--	--
AZT-3TC-DTG	--	--	0.80 (0.10 – 6.68)	0.835		
TDF-3TC-DTG	--	--	0.59 (0.15 – 2.44)	0.472		

TDF-3TC-DTG-DRV-RTV	--	--	--	--		
Others	--	--	0.58 (0.04 – 9.08)	0.697		
Line of ART						
1st Line regimen	*Ref.*		*Ref.*		*Ref.*	
2nd Line regimen	6.11 (1.95 – 19.11)	**0.002**	5.08 (1.66 – 15.62)	**0.005**	5,54 (1.63 – 18.72)	**0.006**
3rd Line regimen	19.52 (1.28 – 297.62)	**0.033**	15.67 (0.74 – 330.79)	0.077	32.17 (2.09 – 495.36)	**0.013**
WHO stage						
II	--	--	--	--	0.07 (0.01 – 0.94)	**0.045**
III	--	--	--	--	0.30 (0.09 – 1.01)	0.052
IV	--	--	--	--	0.20 (0.06 – 0.73)	**0.015**

Conclusion: CALHIV who received TB treatment were significantly less likely to move into a higher VL category compared to those not on TB treatment after 6 months. This may be due to increased adherence support and visit frequency associated with TB treatment and may represent improved adherence despite pill burden. Extending aspects of that support to all clients may improve adherence and VL suppression.

162: Resilient Continuity: Relocating Adolescent Services from Queen Mamohato Memorial Hospital to Maseru Centre of Excellence (COE)

Mamokone Koetle, Mamosase Lerata, Isaac Andreas, Hlompho Phasumane

Background: Adolescents face unique and complex health challenges requiring youth-friendly, accessible services. At Queen Mamohato Memorial Hospital (QMMH), an adolescent clinic previously operated as a standalone facility, delivering integrated care for young people. In 2023, due to institutional restructuring and logistical challenges, the clinic was relocated to the Maseru Centre of Excellence (COE). Although the new location enabled proximity to other health services, adolescent care became a non-integrated program within a shared space. This move posed challenges to maintaining service continuity and adolescent-centered care amidst limited autonomy and infrastructure constraints. The objective was to sustain adolescent health services without compromising quality, confidentiality, or engagement during and after the transition.

Description: The adolescent clinic at Baylor Foundation Lesotho's Maseru COE continues to serve youth aged 14–20, offering comprehensive services including sexual and reproductive health care, HIV testing and treatment, psychosocial support, and health education. The multidisciplinary team—comprising doctors, a psychologist, nurses, peer educators, a receptionist, pharmacist/ pharmacy technician and social workers— operates independently but within a shared clinical setting. To address the new environment, several adaptations were made: designated youth-specific time slots to ensure privacy, enhanced mobile outreach to maintain service access, and optimized scheduling to accommodate limited consultation space. The ALPEC project provided refresher training to staff, reinforcing adolescent-friendly care standards despite the reduced autonomy of the physical space.

Evaluation and Outcomes: Within the first six months post-relocation, the clinic maintained over 85% of its pre-move service utilization. Data from exit interviews and focus group discussions showed that adolescents were largely satisfied with the professionalism and friendliness of staff but expressed concerns regarding privacy in the shared space. Key indicators such as appointment adherence, ART refill rates, and peer navigator engagement remained consistent. Peer support sessions and youth-led health talks continued, albeit with slightly lower participation due to the spatial transition.

Lessons Learned: The transition highlighted the value of program adaptability and the importance of engaging adolescents in shaping service delivery. Despite logistical and spatial challenges, the clinic sustained essential services

with minimal disruption. Barriers included coordination with COE staff, visibility of adolescent services in a broader facility, and maintaining privacy. However, the resilience of the team and youth input drove effective, context-specific adjustments that upheld trust and service quality.

Next Steps: Planned improvements include advocating for semi-dedicated space, enhancing privacy measures, and promoting further integration of adolescent services within COE systems. Long-term evaluation will focus on health outcomes, retention in care, and client satisfaction. Lessons from this experience offer a replicable model for other facilities undergoing transitions, emphasizing the need for youth-centered planning, dedicated staffing, and flexible service models.

194: Advancing Health Outcomes for HIV and Non-Communicable Disease Patients through Integrated Chronic Care Clinics: Lessons from Bunanpongo HC III and Bufumbo HC IV

Evelyn Apio Okwaro, Lwanga Ssekiswa Zimwanguyiza, Alexander Mugume, Richard Jjuuko Kyakuwa, Denise Birungi, Dithan Kiragga

Background: The Ministry of Health (MoH) Uganda is focused on strengthening and sustaining health service delivery through an integrated, one-stop-shop approach. The health care system, at Bunapongo Health Center III (HCIII) and Bufumbo Health Center IV (HCIV), has experienced fragmented care, with HIV management done at separate clinics from other chronic conditions (CD)such as Hepatitis B, Hypertension, and Diabetes. This separation affected service continuity, client-centered care, and lower client satisfaction (CS) rates of 82% (24/29). We describe how early adopter facilities of Bunapongo and Bufumbo Health Centers implemented the MOH's guidance on establishing integrated chronic care clinics (CCC).

Description: Following the MOH guidance on integration, Baylor Foundation Uganda collaborated with district health teams in Mbale district and Mbale city to support the integration processes. The previous space for the Anti-Retroviral Therapy (ART) clinic and Maternity wards was redesigned into CCC at Bunanpongo HCIII and Bufumbo HCIV, respectively. Facility in-charges deployed staff and adjusted duty rosters with redefined roles. A minimum care package, a mini-laboratory and dispensing area were created. The team-built capacity among healthcare workers, modified client flow charts to encompass other CD, enhanced data management, by introducing care cards and client files. Quality improvement initiatives through team meetings, addressed client feedback. A client appointment tracking system, health education sessions on adherence, lifestyle modification, and bi-weekly onsite mentorships were supported.

Evaluation and Outcomes: By March 2025, both Bunapongo HC III and Bufumbo HC IV demonstrated improvements in service delivery, CS and clinical outcomes. At Bunapongo HC III, 102 clients benefited from the program, including 67 persons living with HIV (PLHIV), 30% of those currently on anti-retro viral treatment (TX_CURR). Among hypertensive and diabetic patients, 94% achieved stable clinical outcomes (CO), and all PLHIV attained viral suppression (100%). Appointment keeping improved by 9%, from 85% (17/20) in July 2024 to 94% (15/16) in March 2025, while CS increased from 83% to 95%. Bufumbo HC IV enrolled 952 clients, including 421 PLHIV (88% of the TX_CURR), appointment keeping improved from 75% in June 2024 to 89% in March 2025. Additionally, 100% of PLHIV were screened for NCDs. The integration of services significantly reduced stigma associated with ART clinics, Improved CS from 82% (14/17) to 94% (16/17) and CO from 36% (80/223) to 62% (80/129).

Lessons Learnt: Integrating chronic care and HIV services at Bunapongo HC III and Bufumbo HC IV enhanced service delivery, CS, clinical outcomes, streamlined patient management, and fostered a client-centered approach. Higher engagement among PLHIV underscored the effectiveness of integrated service delivery and reduced stigma associated with ART clinics reflected a broader impact of a unified healthcare model.

Next Steps: Develop standard operating procedures for the model, sustain gains and scale up to additional healthcare facilities.

195: Application of Precision Targeting Strategy to Enhance Identification of HIV and TB Cases in High-Risk Rural Uganda: Lessons from Bulambuli District.

Boaz Mutakangarana, Rhona Barusya, Richard Jjuuko, Lwanga Ssekiswa, Jennifer Bakyawa, Martin Naimu, Patricia Nahirya, Alex Mugume, Denise Birungi, Dithan Kiragga

Background: Despite national progress toward ending AIDS by 2030, Bulambuli District remains highly vulnerable, with rising HIV infections among adolescent girls and low male engagement. To address this, the district adopted a precision targeting approach using the Uganda HIV Vulnerability Index dashboard, with indicators like HIV positivity, viral suppression, treatment interruption, syphilis, teenage pregnancy, and unmet VMMC need. Sub-counties of Buginyanya and Bulambuli Town Council were identified as high-risk areas (red on dashboard) with scores of 9 and 8, respectively. The intervention aimed to identify new HIV and TB infections in these areas and avert new infections, targeting Muyembe HC IV and Buginyanya HC III.

Description: Between 1st–30th November 2024, Bulambuli District was selected for a precision intervention based on high HIV vulnerability scores. A district entry meeting was held to brief stakeholders, and two high-risk sub-counties were identified using the HIV Vulnerability Index dashboard. Two health facilities serving these areas were selected, and line lists of non-suppressed, lost-to-follow-up, and newly diagnosed HIV-positive clients were generated via the EMR system.

The intervention integrated Assisted Partner Notification (APN) and Social Network Strategy (SNS) to trace and test sexual and social contacts for HIV and TB. Hotspots were mapped based on historical positivity data and stakeholder dialogues. A multidisciplinary team (lab personnel, counsellors, and mobilisers) conducted community-based screening and testing. Positive cases were linked to care, and HIV-negative clients received prevention services. Additional eligible services such as CD4 testing, viral load (VL), and intensified adherence counselling (IAC) were also provided.

Outcomes: Precision targeting in Bulambuli District led to identification of 48 new HIV cases and 11 confirmed TB cases. Contact tracing through Assisted Partner Notification (APN) and Social Network Strategy (SNS) proved the most effective for HIV case finding, yielding a 12.25% positivity rate—over four times higher than hotspot testing (3.92%). Muyembe HC IV recorded the highest HIV positivity from contact tracing at 18.88%. Among 106 individuals screened for TB, 11 tested positive (10.37%), with Buginyanya contributing the majority of samples.

Table 1: Key results from precision targeting activities (November 2024)

Activity/Outcome	**Buginyanya HC III**	**Muyembe HC IV**	**Total**
APN/SNS Activities			
Partners/social contacts tested	91	90	136
New HIV+ identified	7	17	24
HIV Positivity Rate (APN/SNS)	*7.69%*	*18.88%*	*12.25%*
Hotspot Testing			
Total tested	191	422	613
New HIV+ identified	5	19	24
HIV Positivity Rate (Hotspot)	*2.62%*	*4.50%*	*3.92%*
Total New HIV+ Linked	12	36	48
TB Screening & Testing			
Presumptive TB Samples	55	51	106
Positive on GeneXpert	6	5	11
TB Positivity Rate (GeneXpert)	*10.91%*	*8.19%*	*10.37%*

Lessons Learned:

Key lessons include:

- Precision targeting is more effective in identifying HIV and TB cases than conventional methods.
- High-quality data is essential for guiding micro-targeting decisions.
- Integrating care, treatment, and prevention services within this model enhances efficiency.

Next Steps: Precision targeting demonstrated effectiveness in identifying undiagnosed HIV and TB cases in high-risk areas, significantly improving case detection rates compared to conventional approaches. Precision targeting/micro-targeting should be scaled up to other high-risk facilities/districts in the region. There is a need to strengthen data systems through complete documentation and timely reporting to enable availability of quality data for microtargeting decision making. Additionally, districts should integrate precision targeting in the routine technical support supervision and mentorship to health facilities.

199: Impact of Highly Engaged Community Advisory Board (CAB) on Research and Health Awareness in the Community: The Baylor Foundation Uganda's (BFU) Experience

William Nkemba, Fiona Nakiyingi, Shallon Kabs Kesande, Adeodata R. Kekitiinwa, Patricia Nahirya Ntege, Mahnaz Motevalli, Violet Korutaro, Rebecca Nabukenya

Background: Community-centered approaches effectively build partnerships between organizations and communities and can address quality-of-life issues. The Community Advisory Board (CAB) by linking scientists to the community, ensures the community's interests are prioritized. In August 2014, a CAB was established for BFU, which included individuals with relevant lived experiences to guide the research and programs.

Description:

Setting up a Culturally Responsive and Contextually Relevant Group

The BFU has established a community advisory board (CAB) with three sub-groups to address specific populations: (1) Maternal and Child Health, (2) Adolescents and Youth, and (3) Key and Priority Populations (KP/PP). Each sub-group operates independently but collaborates to share strategies and insights.

Implementing Effective Core Phases of Formation, Operation and Maintenance

Formation: The CAB structure and its roles were developed by representatives from the community, staff, and organization leadership, in line with the 2022 Uganda Community Engagement Guidelines. The CAB primarily advises researchers and program implementers on community entry, recruitment, retention, and compensation strategies, while also identifying and minimizing participant risks and burdens. Furthermore, the CAB guides the creation and dissemination of informational and educational materials to the community.

Operation: The CAB engages in activities to enhance community awareness of research and programs. This includes quarterly radio talk shows on HIV prevention, treatment, and research studies, as well as community sensitization about current clinical trials, protocol and informed consent review, and outreach efforts.

Outcome: The CAB improves by gathering feedback from the community and research team and advocating for changes. The BFU team provides adequate training for CAB members.

Lessons Learnt: The CAB has empowered individuals to make informed decisions about participating in clinical trials by promoting participant care and cultural sensitivity. This effort has increased health awareness in the community and strengthened relationships between community members and researchers.

Next Steps: Collaborating with researchers and programmers throughout a clinical trial or project, the Community Advisory Board (CAB) enhances quality and prioritizes community needs. This partnership should be emphasized as it fosters a more effective and inclusive research environment, benefiting both researchers and the communities they serve.

217: Integration of HIV/TB and Non-Communicable Diseases (NCDs) Using a Primary Health Care Approach

Makatleho Sejana

Background: Although there has been a notable decline in adult HIV prevalence from 23% in 2003, Lesotho faces a dual burden of disease: a high prevalence of HIV at 18.5% among adults (2024 National HIV Estimates) and TB/HIV co-infection rates remain relatively high, worsening mortality. There is a significant rising burden of non-communicable diseases (NCDs) such as hypertension, diabetes mellitus and mental health illness. The country's health system further faces challenges with human resource shortages, fragmented services, and limited infrastructure. People living with HIV (PLHIV) are at increased risk for NCDs due to aging and ART side effects.
Baylor Lesotho through the LEADR project provides differentiated service delivery for HIV and TB prevention, testing and treatment at community and facility levels, with integration of HIV within the primary health care (PHC) model targeting aging populations of PLHIV, pregnant and breast-feeding women and children. The program collaborates with multiple stakeholders to integrate current investments in HIV/TB and NCDs to ensure that these populations are appropriately offered and/or referred to other essential services as part of PHC.

Description: Paballong ART corner in Butha-Buthe district integrates NCDs and implements a holistic patient management approach. This includes provision of a comprehensive integrated package of services that includes NCDs, HIV/TB and minor ailments management for PLHIV. To optimize and transform ART corners into chronic care clinics, ongoing multistakeholder meetings between the hospital management, LEADR and other implementing partners were held to map full roll-out.

Evaluation and Outcomes: A feasibility assessment was conducted to evaluate human resources for health (HRH), infrastructure, and capacitation needs. The results highlighted that approximately 80 PLHIV are seen at Paballong daily, and 84 HTN and 24 DM patients seen at OPD. This implies that when integration starts, about 200 patients will be seen per day at the Chronic Care Clinic. Additionally, to cater for the large number of patients there is need for a multi-disciplinary team consisting of a doctor, nurses, a data clerk, counsellors, pharmacy and lab personnel. Moreover, there will be need for at least addition rooms for consultation, counselling, lab tests, pharmacy dispensing area as well as space for records. Capacity building is also necessary to close identified knowledge gap on NCDs management for HRH deployed at Paballong, and HIV/TB management for HRH within other departments.

Lessons Learnt:

- Integrating non-communicable diseases (NCDs) into HIV and TB programs in Lesotho is an important and increasingly urgent public health priority
- Integration using One-stop clinics and chronic care models is feasible in Lesotho with enough funding, workforce and capacity building

Next Steps: Mobilize local funding for integrated care and strengthen partnerships to pilot integration models in supported districts. Develop capacity building plans for healthcare workers.

221: Seasonality Analysis of PrEP Enrollment and ANC Attendance: Strategic Insights for Enhanced HIV Prevention Programming

Tseliso Marata, None Roto, Makoa Domela

Background: Seasonality refers to systematic calendar-related movements in a time series that occur at regular intervals over time. Understanding seasonality is very crucial in healthcare utilization as it provides room for optimizing HIV prevention interventions. Seasonal variations can significantly influence the uptake of preventive services like Pre-Exposure Prophylaxis (PrEP) and antenatal care (ANC). This analysis aims to identify seasonal trends in PrEP enrollment and new ANC attendance to inform targeted HIV prevention strategies and as proof of concept.

Methods: We conducted a time-series analysis using monthly data on new PrEP enrollments and ANC attendance spanning multiple years (January 2020 to December 2024). The data covers facilities in Butha-Buthe, Mokhotlong, Maseru Centre of Excellence and Mohale's Hoek Satellite Centre of Excellence. The last two facilities have no PMTCT data. These two datasets were used for demonstrating the concept of seasonality analysis and its applicability on real public health data. Seasonal decomposition was performed using the additive model in the *Statsmodels* python library, providing a clear distinction between underlying trends, seasonal fluctuations, and residual components. The study was conducted on aggregated data, and supported under the umbrella protocol for BCMCF-L.

Results: Our analysis revealed marked seasonal patterns for both indicators. PrEP enrollments demonstrated consistent peaks and troughs throughout the year, reflecting likely influences of mobilization events and periodic shifts in service demand. Specifically, seasonality shows troughs in April and peaks in August. Similarly, ANC attendance showed predictable seasonality, highlighting periods of increased health service utilization, possibly correlating with factors such as agricultural cycles, holidays, or economic activities. New ANC attendance has troughs in December, and peak attendance in January.

Residuals show considerable variability in the PrEP enrolments, with several months showing deviations from the expected seasonality trend. Large deviations may demonstrate specific external factors like policy change, and/or program interruptions. There is a considerable level of consistency with seasonal patterns in ANC attendance, showing little or no program interruptions as compared to PrEP enrollments.

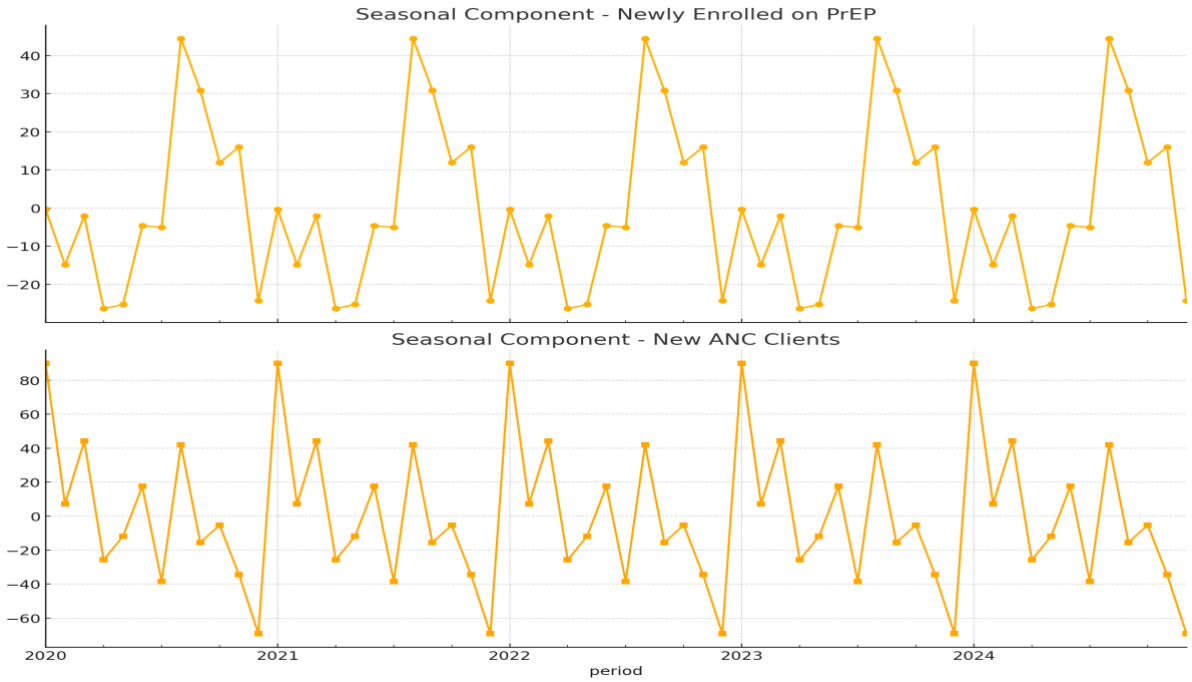


Figure 4: Seasonality analysis for both PrEP and ANC

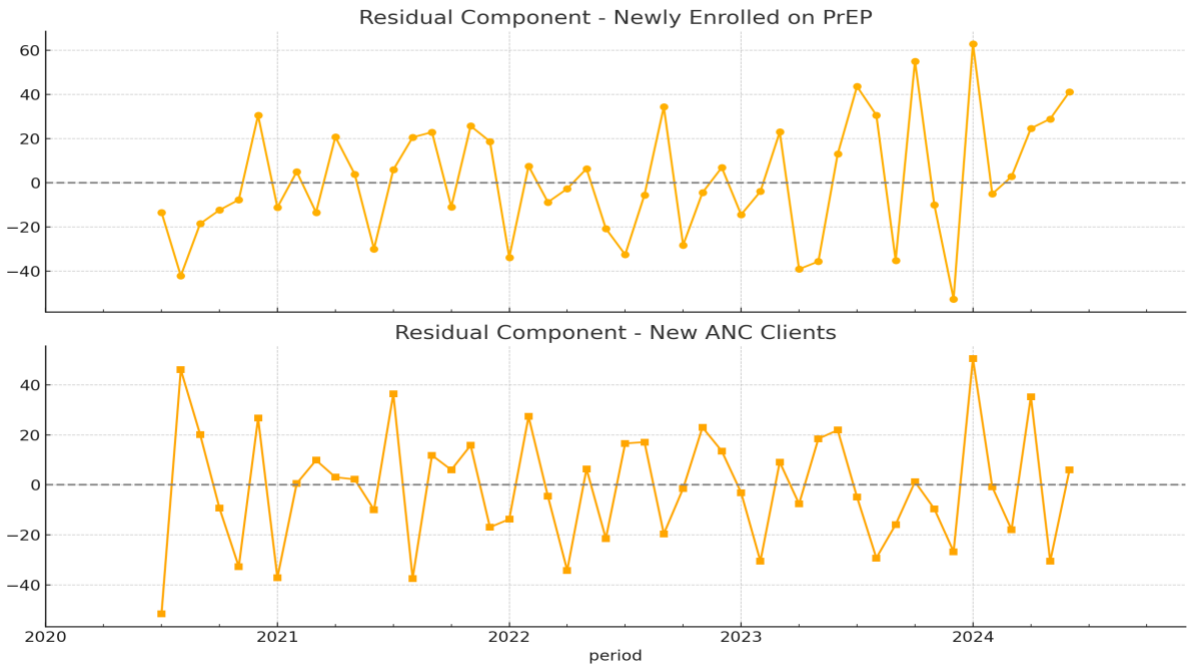


Figure 5: Analysis of residuals for both PrEP and New ANC attendance

Conclusion: Seasonality significantly affects the uptake of critical HIV prevention services. Recognizing these patterns allows for strategic scheduling of intensified outreach and resource allocation. Incorporating seasonality into planning can enhance service effectiveness, improve resource efficiency, and ultimately contribute to better HIV prevention outcomes. HIV prevention programs should integrate these insights into their operational frameworks to ensure services are delivered when they are most needed and most likely to be utilized by target populations.

222: Resuscitating the Health Centre Advisory Committee at St Peters Health Centre; The Importance of Community Involvement in Health Systems Strengthening

Moliehi Chabalala, 'Makatleho Sejana, 'Mabene Tsotako, Limpho Seeiso, Mosa Molapo Hlasoa

Background: St. Peter's Health Centre in Nqoe Community Council in Butha-Buthe serves a population of approximately 11 000, across 42 villages. During the COVID-19 pandemic, the Health Centre Advisory Committee (HCAC), which was a vehicle for community participation and accountability, was temporarily dismantled. This led to delayed communication and limited outreaches, which are essential for effective healthcare delivery.

Description: In 2022, the reconstituted HCAC including a policeman for law enforcement guidance and support, a patient representative, the mission priest for spiritual guidance and moral authority and a community councilor for political representation and advocacy within government structures was resuscitated. In addition, the health center secured a representative seat in the Nqoe Community Council in 2024, enhancing the facility's ability to contribute to local governance.

Lessons Learnt:

1. *Reintroduction of health education and community engagement:* The Community Council supported and organized community gatherings for health education by the health center. These were effective during public health emergencies and vaccination campaigns, with the council utilizing existing resources to disseminate health information.

2. *Enhanced Infrastructure support*: A water supply crisis at the health center was promptly escalated, resulting in timely restoration of water supply. This proactive intervention ensured that the facility could maintain essential services without major disruption.
3. *Strengthened Community representation:* Through representation in the Community Council, the health center forms part of the local decision-making processes. Resource allocation, community mobilization, and healthcare needs are regularly addressed in council meetings.
4. *Progress in Institutional Compliance:* The SIMS quality assurance assessment conducted in May 2024 revealed comparatively better performance in stakeholder engagement, patients' rights, stigma and discrimination policies and child safeguarding measures. However, the extent of the impact on health outcomes, has not been quantified.
5. *Local Resource mobilization for Adolescent Psychosocial Support Group:* Dwindling donor funding negatively affected a local Non-governmental Organization (NGO) that supported monthly network club meetings providing adolescent psychosocial support. Although the monthly meetings remained, refreshments were reduced to once quarterly. The result was poor adherence; most adolescents, regardless of need for enhanced adherence counselling sessions (EACs) or blood draws, opted to attend only the quarterly meetings missing other monthly meetings. In June 2025, the HCAC, mobilized supplies and funds to support the monthly meetings. The health center plans to seek support from the business sector to ensure sustainability. In the meantime, the health facility has started a vegetable garden to support the meetings.

Next Steps: A well-functioning HCAC is important to the implementation and monitoring of these areas. Resuscitating the health center committee has yielded improvements in community engagement, local resources mobilization and possibly healthcare service delivery. By improving communication, infrastructure support, and health education, the health center is equipped to address the needs of its community.

Category 7: Cervical Cancer & Reproductive Health

12: Bridging the Gap through Providing Targeted Community Outreach Mobile for Cervical Cancer Screening and Treatment Among High-Risk Women

Philisiwe Dlamini, Nkosingiphile Mashaba

Background: Cervical cancer remains one of the most common causes of cancer death in women especially in less resourced areas with poor access to screening programs. The primary goal of the project is to reduce cervical cancer incidence in Eswatini, by establishing a comprehensive, and innovative cervical cancer intervention program at constituency level, utilizing a novel roving model to bring services directly to underserved populations. Targeted outreach efforts have become an essential approach to bridge the gap between healthcare services and underserved populations, with main aim of facilitating early detection and better treatment results.

Description: Using roving outreach model, the program provides community cervical cancer screening mobile clinics, focused on all women of reproductive age. The approach involved joint efforts between healthcare providers, community stakeholders and Factory Management. Provided community mobilization campaigns, health education, screening and treatment. Screening services were offered using Visual Inspection with Acetic Acid (VIA) and Pap smears, eligible clients treated on-site. Medical Officer, Nurse and Social Worker provide screening, treatment and counselling services for clients on-site.

Evaluation and Outcomes: Demographic variables and clinical data were collected using the Research Electronic Data Capture (REDCap) system. Roving mobile clinics are equipped and linked to REDCap in recording live client service provision. Client tracking, follow-up of results, and referral systems were integrated into the program through REDCap, improving data management and continuity of care.
Screening and treatment services were provided in two geographic locations for three consecutive days: a high-volume setting with flowing human traffic (different shopping centres within the city centre each day) and at a work setting with

high employment of women (two garment factories). At the shopping centres with high volume of people with an assumption that there will be eligible women with an interest to screen for cervical cancer at the mobile vans. A total of 59 women screened in the three days with zero precancerous lesion identified. Yet at the garment factories more women accessed the services: at factory one 105 women were screened with 5% (5/105) precancerous lesion case finding, and second factory screened 68 women and 2 diagnosed with precancerous lesion (3% case finding), with all days of screening identifying a client with positive precancerous lesion.

Number of women screened for cervical cancer in three different geographic locations

	Outreach at City Centre		Garment factory one		Garment factor two	
Screening day	# of women screened	Positive with precancerous lesion	# of women screened	Positive with precancerous lesion	# of women screened	Positive with precancerous lesion
Day One	27	0	44	1	21	1
Day Two	20	0	35	3	20	0
Day Three	12	0	26	1	27	1
Total	**59**	**0**	**105**	**5**	**68**	**2**

Lessons Learned: The performance of client's accessibility to services in the different locations shows the importance for programs to properly classify target population of programs and understand their demographics, to allow proper categorization and provision of customized service package. City centre location may intensively require an education and awareness service provision as opposed to fully fledged clinical service provision.

Next Steps: Targeted testing allows accessibility of eligible women to timely screening and treatment services. Expansion of targeted outreach to areas that have high population eligible for screening, engagement of leadership structures for accountability.

13: Integrating Psychosocial Care into Early Cervical Cancer Prevention at Community Outreach Mobile Clinic: Focus on Positive Precancerous Lesions

Nonhle Duba, Philisiwe Dlamini

Background: Cervical cancer remains one of the most common causes of cancer death in women especially in less resourced areas with poor access to screening programs. Through roving community outreach mobile van, the ECPT provides cervical cancer screening for eligible women and on-site treatment for clients diagnosed with precancerous lesions. Ensuring timely review, treatment and appropriate management of precancerous lesions is crucial for preventing cancer development. Clients diagnosed with positive precancerous lesions may refuse to receive treatment on-site due to several reasons thus exposing the lesion to eventually develop to cancer.

Description: The program provides community cervical cancer screening mobile clinics: health education, screening and treatment. Screening clients using Visual Inspection with Acetic Acid (VIA) and Pap smears, eligible clients treated on-site. Medical Officer, Nurse and Social Worker provide screening, treatment and counselling services for clients on-site.

Evaluation and Outcomes: There are social, cultural and economic reasons affecting women to access cervical cancer screening and on-site treatment for positive precancerous diagnosis. Clients opt out of on-site treatment due some of the following reasons:

- Cultural beliefs: clients would want to first consult with their spouses on if they can access the treatment.
- Religious beliefs: some would first want to consult with traditional healers in the belief that the screening outcome may be a result of witchcraft.
- Lack of adequate and accurate information: clients may have heard numerous myths with regards to cervical cancer treatment.

Psychosocial officers during the mobile outreach services provides awareness and education to all clients before accessing the screening services, to provide background on the process and information on the next steps to be followed regardless of any screening outcome.

Lessons learned: Psychosocial Officer during mobile outreach is in the same screening room with the nurse and appreciate the discussion the nurse is having with each client and they create the client relationship even before screening results are provided. For clients screened with positive precancerous lesions the Psychosocial officer provides counselling in the same room without moving to another service point. By providing clear and accessible information about their condition, rationale for treatment, and the importance of follow-up, alongside addressing emotional distress and building coping skills, individuals are more likely to actively participate in their care and adhere to recommended review appointments. As evidenced by a current ongoing project where active social worker involvement has resulted in a near 0% loss to follow-up and 99% adherence to scheduled appointments.

Next Steps: By addressing the anxieties, informational needs, and potential barriers to engagement experienced by patients, psychosocial interventions can foster a greater understanding of the importance of follow-up appointments and adherence to recommended review schedules.

73: Prevalence of High-Risk Human Papillomavirus for Cervical Cancer and Associated Factors Among HIV-Positive Women at Kagadi Hospital, Kagadi District.

Aston Mucunguzi, Simon Kigozi, Rawlance Ndejjo

Background: Cervical cancer is a significant health concern, particularly among women living with HIV(WLHIV) as HIV exacerbates the risk of persistent high-risk Human Papillomavirus (hrHPV) infections, which can progress to cervical cancer. Despite this risk, a significant knowledge gap exists regarding the specific factors contributing to hrHPV infection in this population. Understanding these factors is essential for designing effective, targeted screening and intervention strategies that are tailored to the unique risks faced by WLHIV.

Objectives: This study aimed to assess the prevalence of hrHPV infection and determine the associated factors among WLHIV receiving care at Kagadi Hospital.

Methods: A cross-sectional study was conducted at Kagadi Hospital's ART clinic involving 213 HIV-positive women of reproductive age, selected through systematic random sampling. Data were collected through a pretested, standardized questionnaire. Cervical specimens were obtained from the participants and tested for hrHPV using the Cepheid Xpert HPV test on a GeneXpert machine. Descriptive statistics and modified Poisson regression analysis were performed using STATA 17.

Results: A total of 213 HIV-positive women participated in the study, with 85 (39.9%) testing positive for high-risk human papillomavirus (hrHPV). Among those who were hrHPV-positive, 60.0% had other hrHPV types, 11.8% had HPV type 16, 11.8% had HPV type 18/45, 3.5% had both HPV 16 and 18/45, 3.5% had HPV 18/45 and other types, 7.1% had all three strains, 2.4% had HPV 16 and other types. Key factors significantly associated with increased hrHPV infection risk included being married (aPR = 1.6, 95% CI: 1.1–2.5, $p<0.01$), using hormonal contraceptives (aPR = 1.5, 95% CI: 1.1–2.2, $p<0.01$), and alcohol consumption (aPR = 1.4, 95% CI: 1.1–2.1, $p<0.05$). Having a non-detectable viral load was protective (aPR = 0.6, 95% CI: 0.4–0.9, $p<0.05$).

Conclusions: This study revealed a high prevalence of high-risk human papillomavirus (hrHPV) among HIV-positive women at Kagadi Hospital and identified key associated factors, including marital status, alcohol use, hormonal contraceptive use, and viral load suppression. To mitigate the risk of hrHPV infection, there is a need to integrate alcohol reduction strategies and comprehensive sexual health education into HIV care services while emphasizing the

importance of maintaining viral load suppression through consistent adherence to antiretroviral therapy. Additional guidance and studies on hormonal contraceptives options should also be considered.

177: Supporting Menstrual Hygiene Management for Adolescent Girls

Emily Mwase, Hazel Lakudzala, Chifundo Chigwenembe, Tendai Lupale

Background: In Malawi, where most of the population lives below the poverty line, menstrual hygiene management (MHM) remains a significant challenge, particularly for adolescent girls, including those living with HIV. Economic hardship limits access to affordable menstrual products, with disposable sanitary pads costing up to 4,000 MWK per packet, competing with essential families purchases and supplies. Many girls then use unsafe alternatives like cloth, leading to poor menstrual hygiene, increased infection risk, and frequent school absenteeism.

Description: To respond to this problem, Baylor College of Medicine Children's Foundation Malawi distributed reusable sanitary pads to 191 adolescent girls attending teen club at the Centre of Excellence (COE) from January 2022 to August 2024. Reusable sanitary pads were provided by our colleagues in our maternal health program. This initiative aimed to improve MHM and enhance the girl's well-being. The reusable pads were durable, washable, and environmentally friendly, providing a cost-effective solution for long term use. By using existing clinic resources and partnerships, the program demonstrated the potential for impactful interventions despite limited resources.

Lessons Learned: The program showed significant improvements in the girls' ability to manage their menstrual hygiene confidently. Girls reported reduced school absenteeism, allowing them to participate fully in educational activities. Feedback also highlighted the positive impact on their self-esteem, dignity, and overall quality of life. The program's success underscored the importance of response and resourcefulness in addressing adolescent girls' unique challenges in Malawi. The Malawi COE has demonstrated that impactful MHM interventions can be achieved through creative resource utilization, partnerships, and community engagement. This program serves as a model for other resource-constrained settings, highlighting the potential for sustainable solutions that address vulnerable populations' unique needs. By empowering adolescent girls with the means to manage their menstruation hygienically, we can improve their health, dignity, and educational outcomes, ultimately contributing to a brighter future for Malawi.

Next Steps: Based on this success we aim to teach adolescent girls how to make reusable sanitary pads using locally sourced materials. This skill-building initiative will promote sustainability, reduce dependence on external supplies, and provide girls with a valuable skill. By integrating pad-making workshops into the existing program framework, the initiative seeks to create a replicable MHM model that can be scaled up to reach more girls. The program also plans to explore partnerships with local artisans and community organizations to source materials. The program aims to make a lasting impact on adolescent girls living with HIV, enhancing their dignity and health.

201: A Cross-Sectional Review of VIA Negative, HPV Positive Cervical Screening Results at Baylor Foundation Eswatini COE

Wonder Nxumalo

Background: According to WHO, women living with HIV have a significantly higher risk—approximately six times—of developing cervical cancer compared to HIV-negative women. This is largely due to the link between HIV and Human Papillomavirus (HPV), a major cause of cervical cancer. In low- and middle-income countries like Eswatini, access to advanced screening is limited, and Visual Inspection with Acetic Acid (VIA) remains the common method due to its affordability. However, VIA's limited sensitivity means it may miss high-grade lesions (CIN2+), especially in asymptomatic women. HPV testing, though more sensitive, presents a clinical challenge when results show VIA-negative but HPV-positive (VIA-/HPV+), as such women may still harbor precancerous lesions.

Baylor Foundation Eswatini COE adopted a dual-screening strategy using VIA and HPV testing. The rise in VIA-/HPV+ cases created uncertainty in follow-up care, revealing a gap in policy and clinical guidance.

Program Description: This six-month cross-sectional review, from October 2024 to March 2025, focused on women aged 21–49 screened with both VIA and HPV testing. The aim was to analyze outcomes of VIA-/HPV+ women—a frequently overlooked group in routine practice.

Context and Target Population: The program targeted sexually active women aged 21–49 attending Baylor Clinic for cervical screening. These women are largely from low-income backgrounds with limited access to advanced gynecological care. A dual-screening approach was implemented to improve early lesion detection, though discordant results (VIA-/HPV+) posed clinical management challenges in the absence of national or clinic-specific protocols.

Activities and Interventions:

1. **Dual Screening:** VIA by trained nurses and HPV testing via cervical swabs.
2. **Identification of Discordant Cases:** VIA-/HPV+ women flagged for follow-up.
3. **Triage:** Women were counselled and referred for cryotherapy within 3–6 weeks.
4. **Data Documentation:** Demographic and clinical data recorded and analyzed.

Evaluation and Preliminary Results:

- Of 200 women screened, 85 (42%) were HPV-positive.
- 62 (73%) of these were VIA-negative.
- 40 of the 62 returned for cryotherapy.
- Feedback showed women appreciated multiple screening options and counselling but faced transport and fear-related barriers.

Lessons Learned: HPV testing successfully identified high-risk women missed by VIA. Strengths included a high follow-up rate and early lesion detection. Challenges were transport issues, cross-border patients, and 32% loss to follow-up.

Next Steps and Replicability: Recommendations include scaling up HPV testing, implementing same-day treatment, revising national guidelines, and SMS reminders to reduce loss to follow-up. The model is replicable in other low-resource settings, with adequate training, community engagement, and resource support.

205: Bridging Cultures to Enhance Contraceptive Acceptance: The Case of Subdermal Implants among Wayuu Women in La Guajira

Rebeca Vanegas López

Background: In La Guajira, Colombia, where 65% of the population is Wayuu and the average number of children per woman is 4.7 (DANE, 2018), access to modern contraceptive methods remains limited due to cultural, geographical, and health system barriers. Despite institutional efforts, only 33% of Wayuu women of reproductive age use contraceptive methods (Ministerio de Salud, 2018). This study aimed to understand the cultural challenges related to the acceptance and insertion of subdermal implants in Wayuu women, exploring how their worldview influences decision-making regarding reproductive health.

Methodology: A qualitative investigation was conducted in three communities within the municipality of Uribia, La Guajira. This involved semi-structured interviews with 25 women of reproductive age, three community leaders, and two health professionals involved in family planning programs. The analysis identified patterns of resistance, acceptance, and cultural reinterpretation regarding implant use, as well as tensions between the biomedical model and traditional Wayuu medicine.

Results: The findings show that many women experience distrust of the Western healthcare system due to previous negative experiences with contraceptives and traditional beliefs. Pressures from family, community, and male partners were identified; in some cases, these partners interpret implant use as a sign of infidelity or unauthorized sexual autonomy, which generates conflicts and hinders continuous use. Although some women recognize its utility, many opt to use it secretly or discontinue it due to social pressure. Beliefs also persist that the implant can affect future fertility or cause illnesses due to the absence of menstruation, fueling a negative reinterpretation of the method. These perceptions limit its acceptance and sustainability within the Wayuu cultural context.

Discussion: The study underscores the importance of strengthening intercultural strategies that merge traditional knowledge with reproductive services. Developing educational materials in Wayuu and Spanish—such as audios, videos, games, and participatory activities—can address myths from a culturally grounded perspective. Engaging traditional authorities, community representatives, and testimonials from users fosters peer support and demystifies the method through relatable examples. This approach promotes dialogue between diverse knowledge systems and enhances acceptance, reaffirming Wayuu women's fundamental right to autonomous, informed reproductive choices.

210: Targeted Screening for Cervical Cancer: Introduction of Human Papilloma virus (HPV) testing at Baylor – Maseru COE

Mabene Tsotako, Matebello Nkalai, Esther Makhalanyane, Mosa Molapo Hlasoa

Background: Cervical cancer is the fourth most common cancer in women with most incidences and mortality in low- and middle-income countries. Lesotho, cervical cancer ranks as the most frequent cancer and the leading cause of cancer-related deaths in women. The primary cause of cervical cancer is the Human Papilloma Virus (HPV), however, data on the HPV burden is not available in Lesotho. According to the HPV Information Centre (March 2023), Lesotho has a population of 771,897 women ages 15 years and at risk of developing cervical cancer, with an estimated 541 women diagnosed with cervical cancer and 362 dying from cervical cancer annually.
Usually, the immune system clears HPV from the body, due to being immunocompromised, women living with HIV (WLHIV) are 6 times more likely to develop cervical cancer compared to women without HIV. In Lesotho, screening was traditionally performed using visual inspection with acetic acid (VIA) or Pap smear in some cases. To improve screening, empower women to do self-sample collection and use a more reliable screening option as recommended by WHO, Lesotho adopted HPV testing in 2024. Implementation at Baylor COE Maseru started in October 2024

Description: HPV testing is done for all women aged 25 years and above. Women are counselled and taught on self-sample collection and once collected, samples are taken to the laboratory. The turnaround time for results is 2 - 6 weeks. Women who screen positive for HPV are then triaged using VIA or Pap smear. If they triage positive, they are treated with thermocoagulation or referred for Loop Electrosurgical Excision Procedure (LEEP). Those who triage negative have a repeat HPV test after 2 years.

Evaluation and outcomes: All women who were screened were registered in the Ministry of Health cervical cancer screening register and results documented accordingly. Those with positive results would then be called to return for prompt management. Since implementation, 276 women have been screened. 72 screened positive for HPV while 106 screened negative. 21 of those that screened positive were triaged with VIA and none had pre-cancerous lesions.

Lessons learned:

- Fewer women with positive HPV test results were reached for triage; no clear tracking system in place.
- The screening was more acceptable to women compared to when screening was done with VIA
- Success and continuity of screening are dependent on the availability of resources and machine functionality
- Inconsistent documentation due to register inadequacies

Next steps:

- Strengthen timely tracking of women who screen positive by:
    - Providing comprehensive health education on the importance of further management
    - Updating patient contacts at every encounter
    - Alerting patient trackers for prompt tracking
- Improvise documentation in the register to cater for inadequacies
- Refresher trainings through attachment at the national Cancer Centre

218: Primary prevention of Cervical Cancer through HPV vaccination in Butha-Buthe, Mokhotlong and Maseru COE.

Makatleho Sejana

Background: Human Papilloma Virus (HPV) is the leading cause of cervical cancer in Lesotho. Approximately, 541 women are diagnosed with cervical cancer each year, highlighting a total cost of over M100,000 per patient, and 362 die from the disease annually (WHO report August, 2024). In alignment with WHO's Global Strategy, Lesotho aims to eliminate cervical cancer by 2030 through vaccination, screening and treatment. In 2022, Lesotho reintroduced the HPV vaccine, which was previously halted due to high cost. Country-wide campaigns with financial support from WHO and Gavi were carried out. The reintroduction, however, still proved campaigns costly. This called for integrating HPV vaccination into routine Primary Health Care services. Baylor Foundation Lesotho supports HPV vaccine service delivery in twenty-four health facilities across Butha-Buthe and Mokhotlong districts, including Maseru COE.

Description: The presence of the LEADR project has been integral to the campaign's success. The project supported operational aspects of the vaccination campaign (logistics, outreach, and public awareness), provided technical assistance to the Ministry of Health EPI program in conducting the readiness assessment, development of tools, planning and policy formulation on HPV routinization. LEADR teams also complimented mobile vaccination teams, reaching schools, as well as churches. The teams played a significant role mobilizing learners for vaccination in collaboration with village health workers and LENASO. Leveraging on the already existing staff at health center level and at Maseru COE, the routinization support was extended to vaccine distribution, screening girls for eligibility and offering vaccine, and data capturing and analysis.

Evaluation and Outcomes: All girls aged 9-14 years of age are screened for vaccine eligibility, registered manually in the Ministry of Health HPV register and electronically in Covax system. A two-dose schedule with an additional booster dose is administered to immunocompromised girls. A single dose is administered to those not immunocompromised. Cumulatively, from 2022 to 2024, Butha-Buthe achieved a coverage of 103%, (10,439) with Mokhotlong at 101% (8,486) of girls vaccinated. Baylor Maseru COE vaccinated 410 girls who visited the clinic from May 2022 to June 2025.

Lessons Learnt:

- Campaigns reach underserved and hard-to-reach populations, increasing coverage. However, they are resource-intensive and may cause data backlogs. This results in delays in data analysis and reporting.
- HPV vaccine routinization is more sustainable and continuous beyond donor support but presents high likelihood for missed opportunities.

Next Steps:

- Appoint a nurse at every facility as the HPV vaccination champion.
- Optimize clinic workflow for patient pre-screening before appointments to identify girls who are eligible for HPV vaccination, integrate vaccination at every service entry, and offer the HPV vaccine during all visits.

Notes

www.TexasChildrensGlobalHealth.org

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