BLANTYRE PREVENTION STRATEGY

BPS YEAR 5 ANNUAL REPORT

May 1, 2024 - April 30, 2025

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INTRODUCTION & HIGH-LEVEL YEAR 5 OVERVIEW

"The key question before us is not only what must be sustained, but how we ensure its sustainability in the face of evolving challenges. Malawi's experience with the Blantyre Prevention Strategy has demonstrated that sustainability cannot be achieved through short-term interventions alone. A health systems approach is essential—one that coordinates resources and strengthens long-term capacity across the entire continuum of the HIV response. Sustaining progress requires structural solutions, ensuring that HIV prevention, diagnosis, treatment, and care are embedded within a resilient, adaptive, and nationally owned health system."

- Dr. Martias Joshua

Chief of Health Services responsible for Reforms in Malawi's Ministry of Health, in remarks delivered at the opening of the February 2025 Sustainable HIV Prevention Initiative convening in Lilongwe

In Year 5, the Blantyre District's health team demonstrated leadership and resilience in the face of major challenges to its HIV response and broader health system. As anticipated, the health team rose to the challenge of leading planning and implementation of BPS activities in the district, with limited expert partner support, while providing thought leadership to the adaptation of BPS program elements in Lilongwe and supporting dissemination of best practices and learning to other districts and beyond. BPS has cultivated a culture of partnership, data-use and decision making, and mutual accountability that has shown highly favorable results, including demonstrating comparative improvements in HIV testing, PrEP uptake, and connectivity and linkages between all levels of the system in Blantyre.

Blantyre District has demonstrated exceptional resiliency in the face of the U.S. Government (USG) funding and partner cuts, which started in late January – at the end of Year 5's third quarter. While the national health system has struggled to make decisions in this environment, the district health team (DHT) has utilized its BPS-supported governance and technical leadership capabilities to identify issues created by the USG stop work order and subsequent cuts and has made data-informed decisions about necessary shifts to mitigate greater impact. The DHT's understanding of its current system and its vision for the future enabled such action.

Working together in April 2025, supported by the BPS Secretariat, the DHT and city health focal persons developed the following vision statement:

A Blantyre where:

- the district and city jointly coordinate HIV services across facilities, partners, and communities;
- all health services in Blantyre are high-quality, data-driven, non-stigmatizing, and people-centered;
- service providers (government, private, FBO/CBO) and communities work together to improve HIV prevention outcomes;
- HIV risk is detected, investigated, and targeted with coordinated, rapid response to reduce new HIV infections; and
- all health promotion interventions and HIV prevention services in Blantyre are co-designed and implemented by and with communities.

The DHT also innovated new approaches to expand BPS-supported functions and capabilities to additional facilities and communities across the district and to health areas beyond HIV prevention. For example, under the leadership of the QI unit, the DHT introduced cluster learning sessions to expand the reach of the PrEPUp! QI platform. Utilizing existing facility clusters, the QI coordinator and QI mentors adapted the original PrEPUp! QI collaborative learning model into a cluster learning session format, allowing for more extensive participation and engagement with facilities that had not been part of the original collaborative (described in more detail in the Community Insights & QI section below). Not only was this innovation a significant demonstration of district ingenuity and progress toward sustainability, it marked the first time in Malawi that such a model was applied, allowing for low-cost, government-led better dissemination of knowledge, strategies, and best practices across multiple sites. This initiative has not only expanded the reach of QI efforts in HIV prevention but has also laid the groundwork for future innovations in other areas of healthcare. It also has become a platform for improving data analysis and use, strengthening feedback loops between communities and facilities, and ensuring best practices are shared across the district. The district's commitment to ongoing learning, collaboration, and support is ensuring that Blantyre remains at the forefront of quality healthcare delivery in Malawi.

The district and city teams are committed to ensuring that what they have worked to create is institutionalized and sustained. During in-person and virtual workshops coordinated by the BPS Secretariat (National AIDS Commission (NAC) and CIGH) throughout the year, the district and city teams mapped how the HIV prevention elements come together as a holistic system. The process identified areas of consensus and areas where additional ideation was needed. In addition, the teams worked throughout the year to update standard operating procedures (SOPs), terms of reference (TORs), and other guides to provide documentation to institutionalize and sustain various approaches. Further detail is provided in the Institutionalization & Sustainability in Blantyre section. In addition, CIGH engaged a vendor to develop an initial plan for the BPS adaptation toolkit, which will begin production in early Year 6.

The DHT's technical leadership was shared beyond Blantyre throughout the year. Blantyre District health coordinators continued to be engaged in learning sessions held in Lilongwe in support of the PathToScale initiative. The engagement was symbiotic as Blantyre coordinators also brough back learning from Lilongwe, which was reflected in the updated SOPs and TORs. Blantyre scored

100% on the Local Authority Performance Assessment (LAPA) for the third year in a row, which Dr. Gift Kawalazira, Blantyre District Director of Health and Social Services (DHSS), sees as a sign that Blantyre's systems are becoming resilient and able to adapt to changes, which has been reflected over the last few months. Further, the Blantyre District Health Office (DHO) and Dr. Kawalazira were recognized by the Malawi Local Government Association (MALGA) as District and DHSS of the Year for their contributions to decentralized health service delivery. These awards recognize the district's commitment to providing essential health services across the district and Dr. Kawalazira for his leadership in these local health system improvements. Blantyre is increasingly being recognized as a trailblazer by other districts. In March 2025, the Blantyre District Health Management Team (DHMT) presented BPS during a national meeting of all urban and district DHSSs, organized by the MALGA (Malawi Local Government Association) in collaboration with the Ministry of Health (MoH). The Deputy Minister of Health served as Guest of Honor, with the Secretary of Health (SH) also in attendance. Since the event, the SH and several districts, including Mwanza, have contacted the DHMT to learn more about BPS. See the Learning Dissemination section for more information.

In addition, NAC, with BPS Secretariat support, launched the Strengthening District Health Systems for Sustainable HIV Prevention Working Group. While not solely focused on expanding BPS across the district, the group has identified and agreed on an initial set of districts to engage for systems strengthening, including adapting the BPS model. There are two southern regional districts with concerning HIV incidence increases, Zomba and Mangochi, and one district in the north, Mzuzu, which is a small but very transient city with a lot of traffic coming in from the northern border. NAC will lead initial engagement with these districts in May-June 2025.

Finally, the external evaluation of BPS, which started in late Year 4, was completed and results disseminated in February 2025. Undertaken by the African Population and Health Research Center (APHRC), key findings include that "The BPS contributed to capacity building at the community, health system, and leadership levels"; "Co-creation of [BPS] created a sense of ownership and pride among stakeholders, which has contributed to better acceptability by stakeholders and the community"; and BPS supported increased and sustained uptake of HIV services, namely counseling and testing.

While there were many successes in Year 5, BPS implementation, institutionalization, and sustainability faced challenges as well. In early Year 5, the MoH re-assigned health workers between public facilities. In some cases, facility staff who had been trained in BPS-supported approaches, for example as HCD champions, were moved outside of the district, and new staff who had not been exposed to BPS were assigned. The DHT adjusted accordingly to provide training and coaching to the new staff, but there were delays or gaps in implementation as the new staff became acquainted with the district's approach.

However, it is the changes in USG funding that has had the greatest impact. The Stop Work Order (SWO) and subsequent reductions in funding and terminations of partner agreements has changed the landscape of support in Blantyre. Pakachere, CEDEP, and Family Health Services (FHS) all have had agreements terminated. Examples of the impact include loss of HCD champions among implementing partner (IP) staff who were furloughed; delays in community lab prototype testing; and loss of IP support for implementation of activities such as conducting moonlights in hotspots by MACRO and Pakachere based on active and passive surveillance and expansion of activities by the IPs to other districts and health areas.

Additional challenges in Year 5 included capacity within the MoH Digital Health Division (DHD) to support handover of the BPS-created data pipeline and PALMS and engagement with private health facilities in Blantyre. DHD's limited capacity prior to the USG cuts was tested further by the unexpected transfer of several USG-supported data systems with no preparation. BPS is working with DHD on a full transition plan to support DHD's capacity to take over administration of PALMS and other BPS-supported data tools.

"We have also witnessed, as a systems strengthening project, …other benefits from the system, from other service delivery chapters. For example, from the assessments of the local assemblies, Blantyre has managed to score 100% in three consecutive years out of 29 districts. It's the only urban-based district that has actually managed to do that, and we believe that it's a result of the same systems strengthening project. We have been voted as the best district health office out of 29 district health offices. We've been voted as the best director of health services. [and]…we have a trophy for actually performing well in as far as vaccinations are concerned."

– Dr. Gift Kawalazira

Blantyre District DHSS, remarks during the February 2025 Sustainable HIV Prevention Initiative in Lilongwe

GOVERNANCE

Dr. Kawalazira described Year 5 as "sink or swim" for Blantyre. After 4 years of expert partner support, the District and City health teams took over full responsibility for planning and implementation of BPS-supported HIV prevention activities. It was a test of the system that has been strengthened and fostered through BPS support. The outcomes highlighted strengths but also lingering challenges to be addressed in Year 6.

Among what is working well are use of existing structures to lead the response, e.g. DHMT, City Health Team, coordinators, facilities, and communities. The DHT increased its engagement and coordination of diverse partners throughout the year, including community structures, such as Village Health Committees (VHCs) and Community Health Action Groups (CHAGs).

The joint City and District HIV Prevention TWG met twice this year continuing to strengthen city and district (DHO) linkages and better coordinate HIV prevention interventions at all levels in Blantyre. This collaboration was especially critical in Year 5, as the district took a stronger leadership role in implementation, mobilizing resources, setting local priorities, and ensuring that prevention activities are aligned across city and district stakeholders. These TWG meetings have become a key mechanism to assess how the system is functioning, identify bottlenecks, and adapt implementation strategies in real time.

Under Samden Seunda's leadership as City DHSS, the city and district health teams worked more closely in Year 5 to identify and address longstanding resource constraints and capacity gaps within the City Health Office - challenges that have historically limited the city's full engagement in district-led HIV prevention efforts. Mr. Seunda appointed focal persons for key areas of the HIV prevention response and directed their participation in planning and implementation of activities. A key advancement in this regard was the formal inclusion of city health focal persons in the Expanded BPS Secretariat. This shift - building on a structure introduced in Year 4 that includes Blantyre District Coordinators, NAC, and CIGH - represents a meaningful step toward stronger coordination, system alignment, and long-term sustainability planning across both city and district levels. Since February 2025, city representatives have consistently joined biweekly strategic planning and coordination meetings, including sessions focused on Year 5 reporting, Year 6 planning, and process mapping. However, the city health office has had high staff turnover recently, and only a few of the current focal persons have institutional knowledge from earlier BPS years. When they were introduced in February 2025, many had limited knowledge of BPS and no access to PALMS. The BPS Secretariat worked with the city and DHT to catalogue the city's capacity gaps and has created a plan to address those primarily through peer-to-peer support from the Blantyre DHT coordinators.

The Blantyre Coordination Team (BCT) continues to meet regularly to review and guide technical and programmatic implementation. At the national level, the BPS Steering Committee met twice during the year. However, the Project Management Team (PMT) is now largely defunct given low participation in meetings in Year 4. There continues to be strong NAC engagement and governance from the CEO, Director of Programmes, and other key staff in BPS and in advancing HIV prevention.

"...my surprise with the project - pleasant surprise – was not because I was seeing data being used, but the multisectorality, the multidisciplinary team that works to make the prevention work is what is the surprise. Having worked with the various organizations, government and all that, I know that in Malawi we have done so much in intervening and interventions have been going on and I believe all the things being shared here some of you may be saying but this is new. But they have been siloed interventions - QI projects prior to 2021, prior to Blantyre Prevention Strategy - Quality Improvement has been going. A lot of implementing partners within this room [have] been doing quality improvement within the country. There's been efforts to use DHMIS and other systems, but what surprised me pleasantly and this is why I'm here—to call upon the need to scale up this kind of strategy—is the fact that everything was brought together.

To me, BPS proved to be a platform to harmonize everything that is going on. Blantyre City and District has a lot of partners, a lot of implementing partners, a lot of stakeholders. The district has its own leadership, the city council has its own leadership, but all of them working together and really following what's going on within the city and within the district and making sure that we fight one cause which is the high prevalence and incidence which was at that time and together following through is I think what is key."

- Dr. Beatrice Matanje

NAC CEO, remarks during the BPS AIDS 2024 satellite in Munich

TECHNICAL LEADERSHIP & IMPLEMENTATION

The essential technical capabilities and systems capacities—including governance and technical leadership, digital health, surveillance, quality improvement, demand generation, and community and corporate engagement—fostered by BPS were on full display by the Blantyre district and city health teams in Year 5, leading to more effective and efficient use of resources and providing confidence that Blantyre's HIV prevention response is sustainable. Year 5 highlighted the district and city's abilities to implement evidence-based activities across the prevention cascade and continue to support Blantyre's capacitated health workforce to respond to HIV issues and other health areas.

There were several important takeaways from Year 5 implementation:

- The quality improvement and management platforms became the central mechanism for reviewing and acting upon data, addressing implementation challenges, and sharing best practices among facilities.
- The network model has become the main vehicle for coordination and communication with partners at facility level.
- Through training on active surveillance, community structures have been integrated more into the HIV prevention risk identification/tracking and response with improved linkages with facilities and the DHT.
- There also were important improvements demonstrated in the fostering and sustaining of feedback loops between different activities, e.g. active surveillance, community insights, and QI.

Among the technical leadership that the DHT has assumed from partners is mapping of hotpots, which previously had been done by Pakachere. The DHT has the capabilities to execute on these critical aspects of the HIV prevention response without the reliance on IPs.

The BPS model and experience in Blantyre has shown that it is not just good for HIV. It has had a positive effect on disaster/emerging public health response and improving other health areas. For example, DHO-based QI mentors have expanded their coaching at facilities to include other health services such as Maternal and Newborn Health (MNH), Early Infant Diagnosis, TB, and HIV treatment, and individuals from different health programs, including Health Management Information Systems (HMIS), Laboratory, IDSR, Health Promotion, and Cervical Cancer have joined the pool of QI mentors. QI affinity groups on sexually transmitted infections (STIs) and family planning (FP) have facilitated further integration of HIV prevention in these health services, including PrEP delivery.

Blantyre's strengthened capabilities led to its inclusion as one of the pilot districts for direct facility financing (DFF). There are 12 facilities involved in the pilot within Blantyre, which were chosen based on location of the facility (rural versus urban), number of clients being served by the facility and, most importantly, functionality of the Health Centre Management Committees (HCMC). The BPS-supported surveillance training of HCMCs helped qualify the facilities for DFF. Through the DFF, facility staff and HCMCs have been trained in planning, budgeting, and finance management. As part of sustainability efforts, facilities will incorporate risk identification and response mechanisms within DFF. Funds cannot be used for service delivery or other programmatic implementation, but they can complement through support of fuel, data bundles, and other expenses allowed under DFF guidelines. Program coordinators will be responsible for budgeting capacity-building initiatives for the concerned facilities.

Further highlights of the district's technical leadership are outlined in the program element sections below. However, there also were challenges to programmatic implementation. Among them are

the increase in unregulated hostels in the city, which is putting students (especially adolescent girls and young women (AGYW)) at higher HIV risk; data reviews not done regularly at some facilities; and inconsistent review of HIV active surveillance risk signals. As a result of the USG SWO and cuts, and subsequent pause on HIV prevention delivery by the MoH, activities supported by IPs could not proceed as planned.

In addition, there continues to be a need for innovative ways of engaging the private sector.

Reporting remains an uphill climb among the more than 100 private facilities in Blantyre. Site visits by the DHT coordinators revealed that these facilities often lacked basic knowledge and tools for reporting. In response, the district conducted targeted orientations at specific facilities and has seen early signs of improved reporting. Future ideas include assigning a DHO-level reporting focal point and integrating private facilities more actively into QI affinity group platforms.

Data

Data access and use continued to be core to Blantyre's HIV prevention system in Year 5. We have multiple forms of evidence that PALMS is being actively used by front-line health workers (e.g., public and partner facility staff, community health workers, etc.)—as well as district and site-level coordinators and quality leads—to enhance their ability to make decisions in everyday work (in particular for targeting of resources and improving the uptake and quality of HIV prevention in Blantyre and now Lilongwe, where its use has expanded).

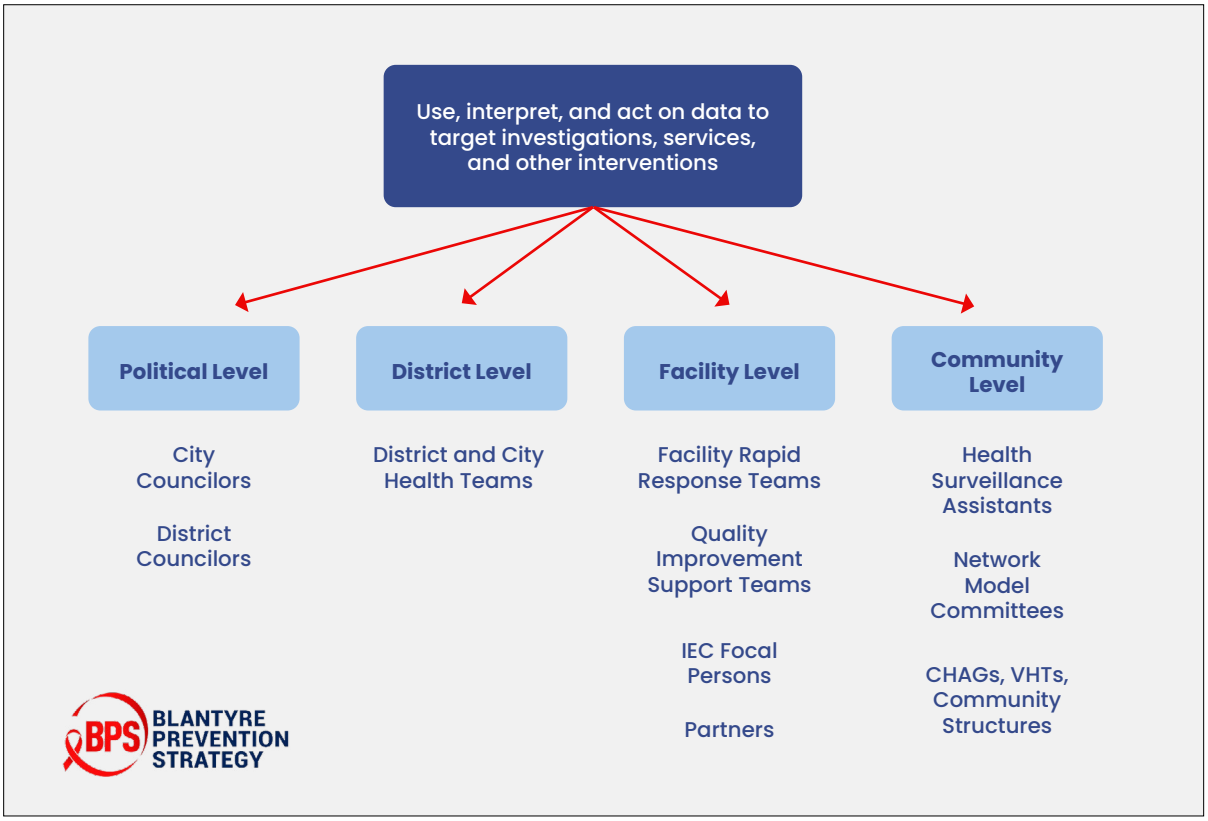


Figure 1. Data use capacitation down to community levels

Elements of the Blantyre's HIV data access and use approach are:

1. **Data pipeline** linking HIV data reported through national systems with other health and non-health data.
2. **Use of a common data platform** (PALMS) to facilitate routine access to necessary data for informed decision making by district and city health teams, facilities, partners, and others.
3. **Capacitated human resources at district, facility, and community levels** – Staff at various levels of the system have been trained in data access and use for decision making.

Current evidence includes the mixed methods external evaluation from APHRC, case studies, testimonials, PALMS usage information, and PALMS evaluation survey data. The APHRC external evaluation report noted that:

- "PALMS has enabled the visualization of data for various indicators for decision making to improve service delivery"
- "Data from PALMS is used to discuss QI progress, identify issues of priority, and brainstorm on strategic service delivery."

The team has accrued substantial evidence of front-line data use in the context of community engagement and QI (associated BPS elements). In addition, data is being used outside of HIV programs as capacity has widened within facilities, e.g. MNCH, family planning, and STI programs. We saw demonstrated during September 2024 site visits the culture of data use that has been cultivated at facilities, inclusive of IPs and community organizations.

Photo 1. Quality nurse at Mpemba Health Centre expertly walking through data visualizations and describing trends and programmatic responses (Sept 2024)

Lessons Learned

- Use of a common data platform has been critical to rolling out and supporting HIV prevention activities and the coordination between district, facility, and community.
- Access to data is critical but insufficient on its own. Health workers need training in data interpretation and analysis to support their decision making, including understanding indicators and triangulation. Data use continues to be a critical challenge, particularly with PALMS and DHIS2 platforms.

Year 5 Actions

As further described in the sections below, data review and analysis for decision making has become part and parcel of Blantyre's HIV prevention response. District coordinators integrated data review and capacitation support into various activities throughout the year, from QI learning sessions to network model committee coaching.

However, the MoH staff turnover early in Year 5 and the PEPFAR IP staff loss late in Year 5 posed challenges to implementation, institutionalization, and sustainability. Previous training was often limited to data clerks, leaving facility managers and other staff unsure how to access and apply available data, especially those who were newly placed in previously capacitated facilities. Many also were unaware of tools like the monthly ScanForm for tracking PrEP uptake. To close these gaps, facilities began using trained focal persons and facility rapid response team (FRRT) members where possible, while the district emphasized the need for orientation for all new Government of Malawi staff and clearer TORs for network model committees.

Transfer of PALMS administration was initiated in late Year 5. The URL is now https://palms.health.gov.mw; however, the previous URL is still active. BPS is working with DHD on a plan to support complete transition and capacity needs over the course of Year 6.

While PALMS has become critical to Blantyre's HIV response, there are opportunities to improve it to support institutionalization and sustainability. First, PALMS dashboards are dependent on the inputs through the data pipeline, and there are sometimes delays in the availability of cleaned data from some of the data sources. The district has recognized that facility staff observation from service delivery and registry data must be considered during data review meetings as a signal, or to triangulate signals, as it is fresher than what is included in PALMS. These issues will be addressed in Year 6.

Second, the indicators and their associated thresholds for green, yellow, and red flags have not been updated since PALMS launched in Year 2. Blantyre's passive surveillance leverages the PALMS platform including monitoring of IDSR-HIV pilot defined indicators. Of the original 16 indicators (8 diagnostic and 8 risk), 3 have been dropped or data is unavailable. Working through a new working group to be established in Year 6 (described in the Surveillance and Response section below), the district, city, MoH, NAC and expert partners will work together to assess the passive surveillance indicators and thresholds developed through BPS's IDSR-HIV pilot and identify changes based on experience, utility, and global standards.

Surveillance and Response

HIV surveillance efforts expanded in the district in Year 5. While traditional IDSR approaches have not proven to work as effectively for HIV under the BPS IDSR-HIV pilot, implementation has been successful in strengthening the capacity at community and district levels, integrating passive and active surveillance into the normal business practice of the district's HIV prevention efforts, and engaged communities in surveillance, detection, and response. Importantly, the District has grown in its technical leadership and governance of HIV surveillance and response efforts. There is coordination happening around risk signals, existing hotspots, and response actions where there was none at the start of BPS. People in the community are cognizant of HIV risks, and there is shared language about issues and response activities. As a result, there is greater coherence and coordination of resources for HIV prevention across the district. Community Health Team participation in identifying risks and responding to the HIV epidemic in Blantyre is resulting in more effective and targeted public health interventions.

Elements of Blantyre's HIV surveillance and response approach are:

1. Use of a common data platform (PALMS) is a core element of Blantyre's integrated HIV surveillance system. It allows for transparency across district and city health teams, facilities, partners, and others about areas of concern and enables quick identification of problem areas through its color-coded flags.
2. Capacitated human resources at district, facility, and community levels – The capacities that have been built through BPS support governance and technical leadership, data access and use, and surveillance and response approaches that are integral to enabling active and passive surveillance.
3. Passive Surveillance in Blantyre involves the systematic identification, collection, monitoring, analysis, and interpretation of structured data. It is conducted primarily at facilities; however, the district and city health teams, network model committees, and others review data routinely to identify issues and opportunities for response.
4. Active Surveillance in Blantyre is primarily community-based with signal reporting from key informants up to facilities and to the district health team. Blantyre's approach to active surveillance has included responding to signals from known hotspots as well as event-based surveillance defined as the organized and rapid capture of information about events that are of potential HIV infection risk to public health.

Lessons Learned

- Use of a common data platform has been critical to rolling out and supporting HIV surveillance and response activities and the coordination between district, facility, and community.
- Access to data is critical but insufficient on its own. Health workers need training in data interpretation and analysis to support their decision making, including understanding indicators and triangulation.
- Capacitation cannot stop at the Environmental Health Office at district or facility level. To support active and passive surveillance, capacitating other district coordinators, health facility staff, community health teams, and community members is valuable. It creates a collaborative mentality and improves coordination during response efforts.
- The indicators developed in the first phase of implementation need to be revisited based on experience. A working group with local and global experts will be established to support the review and revision process.
- There is opportunity for a community of practice among facilities to learn about common signals and effective responses.

Year 5 Actions

The district expanded its active surveillance approach in Year 5. In the third quarter of Year 4 into the first quarter of Year 5, the District Environmental Health Office (DEHO) began training "surveillance informants", i.e. community health teams (CHTs) and other community health structures and key informants (e.g. shop owners, village leaders, and schoolteachers) how to capture data about risk signals. In addition to passive surveillance and active support in known hotspots, the DEHO trained health surveillance assistants (HSAs) and CHT members to identify risk signals and support necessary and timely interventions. CHTs are often the first line of contact between communities and the health system and are well placed to provide critical insight into high-risk communities to inform where HIV prevention interventions should be targeted.

In addition to the original two IDSR-HIV pilot sites, Bangwe and Mpemba, the DEHO trained staff and CHTs from an additional nine HIV high-burden facilities / catchment areas to collect and document active surveillance signals in the risk tracking and response (RTR) tool, an online platform to capture signals, validation activities, and implementation to address risk. HSAs or other community informants can enter a signal into the online RTR tool, which collects demographic and other information about the signal. The entrant creates a new entry in the RTR for the signal and indicates the type of signal e.g. E05: Construction Site, E07: Rest Houses, E09: Bar, Night Club. A total of 298 signals were entered by CHTs in the RTR tool across the 11 facility catchment areas.

Once a signal has been entered into the RTR, the specific facility's rapid response team must validate and confirm it as a risk or discard it. A risk is a confirmed signal and confirmation that something is happening that presents a risk to HIV prevention, e.g. a construction site erected. Upon notice of detection, either reported directly from the community surveillance informants, or detected from PALMS, FRRT members are assigned to investigate the signal. FRRT members will travel to the community to verify and investigate the event, data signal, or possible outbreak, and based on the investigation results, control and prevention measures are implemented together with implementing partners and others with relevant assets. Of the 298 signals entered in the RTR, FRRTs investigated and validated 172 signals as risks. However, only 116 signals were validated as risks after further triangulation with IDSR-HIV indicators in PALMS.

Once active signals are confirmed as risks, the FRRT or QIST meets to deliberate, conduct a root cause analysis, and decide what immediate actions are needed. Actions could include immediate service delivery in the risk spot, referral to the QI team for change idea testing, referral to the IEC team for community insights gathering, etc. and are assigned to facility departments, the network model committee, implementing partners, and others present near the facility. In the facilities using the RTR tool, the actions, responsible parties, and associated timelines are entered for tracking. The district facilitates coordination and appropriate linkages to ensure that initial outreach is followed by a sustained HIV prevention response.

In multiple facilities (including Bangwe, Mpemba, and newly trained facilities like Chileka, South Lunzu, Chilomoni, and Chirimba), FRRTs developed 82 Action Plans (which were shared to different stakeholders including the CHTs, CHAGs, and VHCs) with clear interventions. Some of action plans focused on distribution of condoms, HIV Self Testing and conducting awareness on HIV prevention measures in hot spots. A total of 6800 condoms were distributed to the identified hot spots, 263 clients were given HIV self-testing kits, 63 clients were referred for confirmatory tests at the local facility, and 200 started PrEP. These real-time responses were implemented without further external support. This responsiveness represents a maturation of the surveillance system, where community-identified risks lead directly to targeted prevention interventions.

Expansion of active surveillance training to integrate VHCs and CHAGs into the surveillance system strengthened the community-informed pipeline for risk identification. Integrating these community groups expanded the reach of BPS-supported capacity building into broader health services. The

DHO also engaged local leaders, such as elected District and City Councilors, through training sessions to help them better understand HIV-related data, new prevention strategies, and their roles in oversight and advocacy. In total, more than 700 VHC members, 33 CHAG groups, and 16 Councilors participated in reinforcing the collaborative effort to respond to emerging risks in the community.

Traditional IDSR tools have proven insufficiently tailored for HIV, necessitating adaptations to support risk identification, triangulation, and response. Questions remain about fidelity of their implementation, including the consistency of data entry, data completeness, and whether response actions can be standardized. The RTR tool and other components piloted in Blantyre provide valuable insights but require further refinement and scaling to support district-wide implementation. The active surveillance approach using the RTR was originally piloted in Bangwe and Mpemba, the two original IDSR-HIV facilities, beginning in February 2024 and expanded to more facilities beginning in July 2024. The tool pilot was intended to collect experience and data about the number of signals coming in, how well the tool supported tracking, the ease of use of the tool, and the workload implications for facility staff. The BPS Secretariat hosted a learning session in early September 2024 to review the pilot outcomes.

The learning session highlighted the opportunities the RTR tool provides as a way for the district to capture who is doing what, where, and when. However, there are limitations that need to be addressed. The tool does not capture all fields that would support triangulation and deliberation of action plans. Additional work is needed to update the tool to make it more fit for purpose. While it is online, it is currently separate from PALMS and does not crosswalk between indicator and other available mapping data. Further, a separate Excel-based tool was developed to support decision making around demand generation activities, called the Data 2 Action tool. The district has recognized a need to merge fields from the workbook into the RTR to support better decision making.

There are plans to establish in early Year 6 a dedicated working group, under the leadership of Dr. Kawalazira, on integrated HIV surveillance and response focused on supporting Blantyre through the final period of BPS implementation. This group will serve as a platform for collaboration among key stakeholders to consolidate learning from BPS surveillance and response efforts, enhance tools, further integrate HIV surveillance into routine district health operations, and ultimately link with related efforts. By leveraging local expertise, systematically reviewing Blantyre's approach, fostering multi-sectoral coordination, and addressing identified gaps, this working group aims to optimize BPS's contributions to a sustainable and responsive national system that strengthens Malawi's overall HIV prevention capacity.

Case Studies

Two *illustrative* case studies (below) demonstrate how health workers are using data and related signals or "flags" in PALMS as passive surveillance to spur investigation and response. While these are case studies and absolute causality is not possible, they are two of many such examples that highlight how local data use is driving HIV prevention activity that would not have been possible without data visualization and use.

In case study #1, health workers noted low PrEP uptake (identified through PALMS) among students attending a local college, Malawi University of Business and Applied Sciences (MUBAS) (see Figure 2). Three non-sequential actions were taken to try to understand and address the issue. The first was a July 2023 community lab, which gathered insights that identified unique gaps on PrEP knowledge, concerns about accessibility, and use among students; and misuse of PrEP including sharing pill bottles. A second action was taken at facility level. The insights from the community lab informed QI change ideas at Gateway Clinic, e.g. changing location of the PrEP room and intensifying screening and education at all entry points. The third action was taken at community level to reach the

students directly. A health promotion and service delivery event was held at the campus under the BPS Konda Blantyre, Konda Moyo (Love Blantyre, Love Life) campaign. During the February 2024 event, the network model committee worked together to distribute condoms and HIV self-testing kits and share information for HIV services and products within the catchment area of the university.

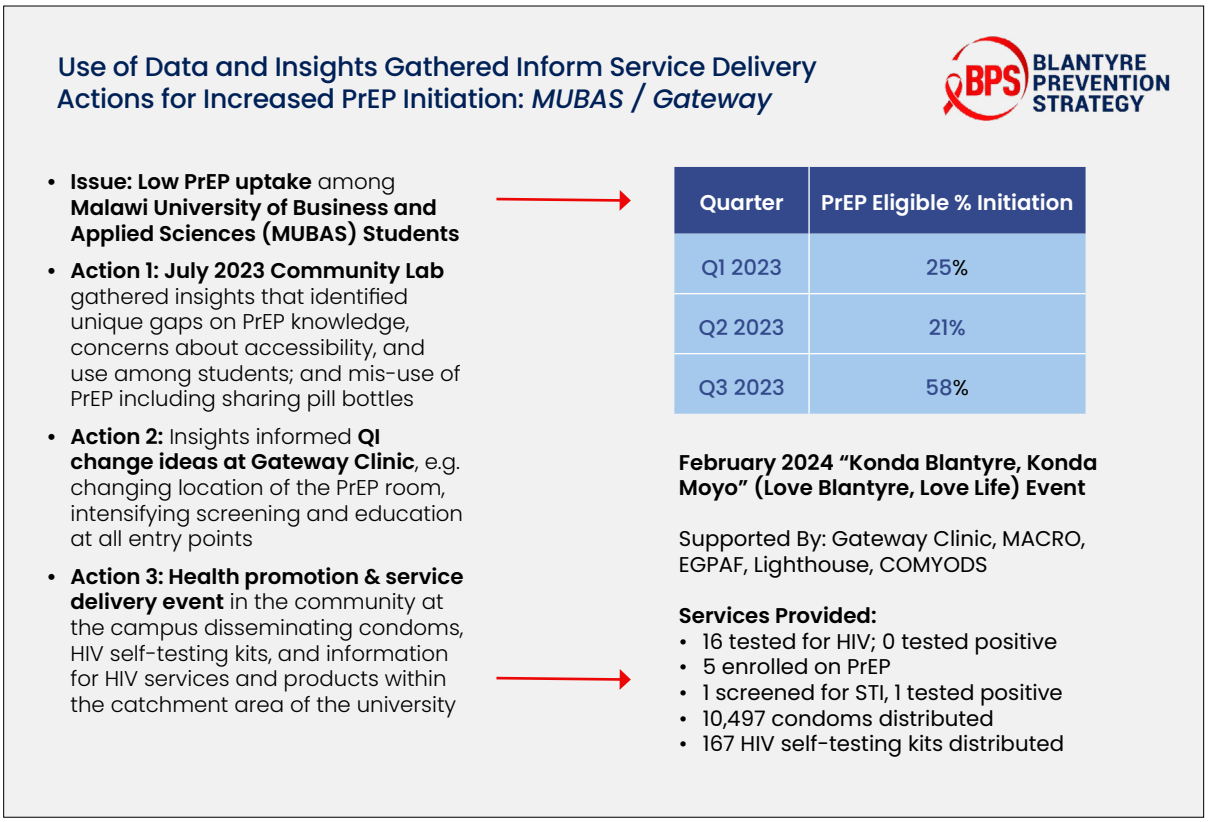


Figure 2. Use of passive surveillance informs additional action for MUBAS students

Following investigation/programmatic action, there was a subsequent rise in HIV testing, PrEP use, and decreased new HIV infections diagnosed at/around the local clinic (Gateway) serving the students (see Figure 4). The number assessed for PrEP stayed relatively constant for the subsequent quarter. The immediate increase in new initiations spiked to more than 60 in the quarter with the network campaign event but levelled off to just over 40 in quarters 3-4 of 2024 (see Figure 5). There was a noted decrease in 2025 quarter 1 likely due to the USG SOW.

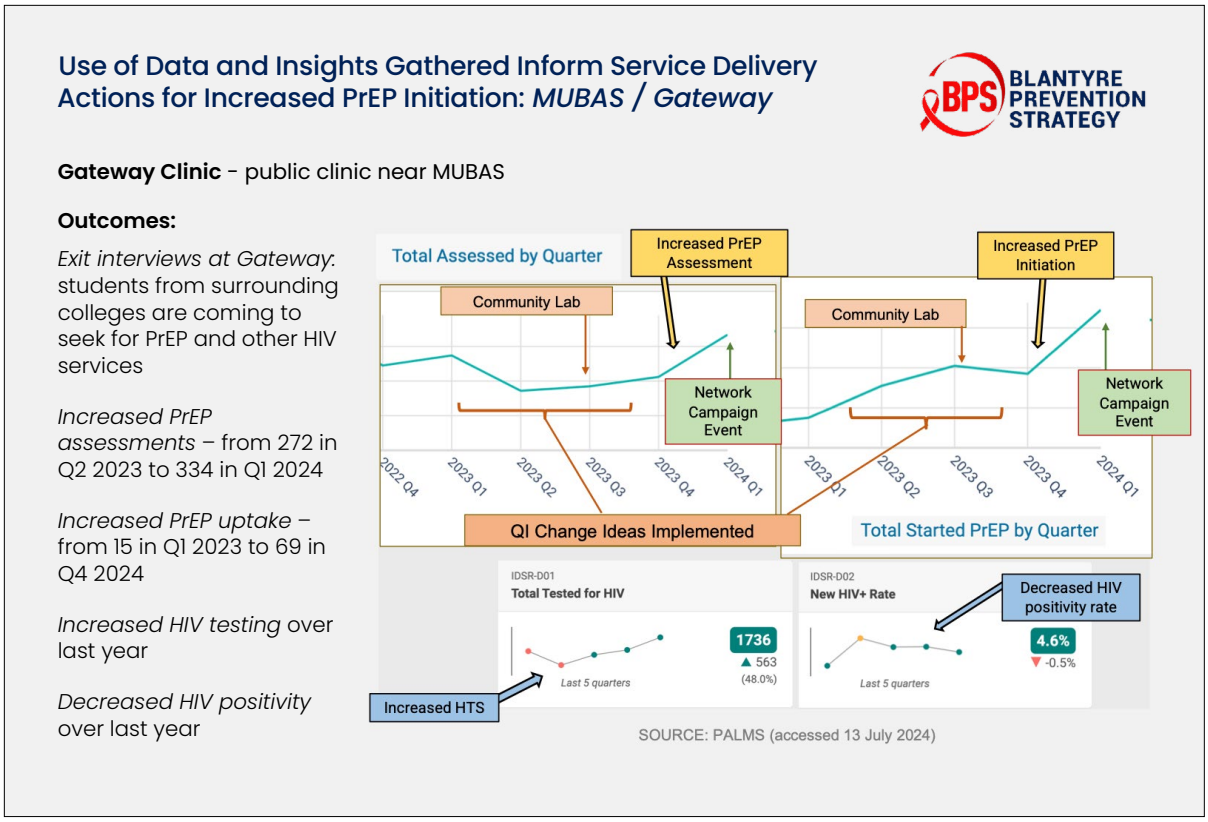


Figure 4. Increased testing and PrEP initiation at Gateway Clinic

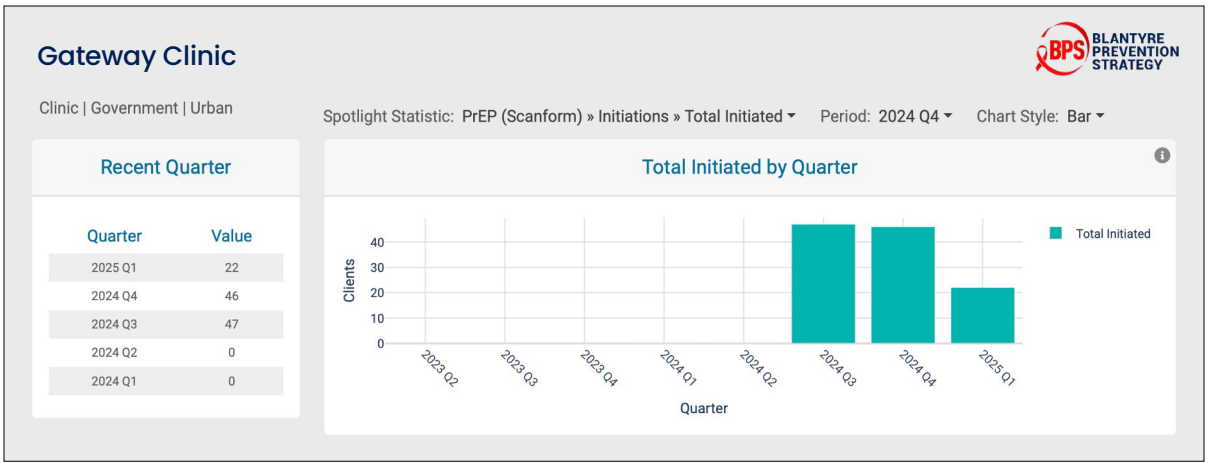


Figure 5. Continuing PrEP initiation at Gateway Clinic (source: PALMS, accessed May 30, 2025)

A second illustrative case study of passive surveillance leading to investigation and response comes from Kadidi (Figure 6). Health workers at Kadidi health centre used PALMS during a data review meeting and noted an increase in HIV infections. While investigating, the health workers on the FRRT discovered new hotspots. They worked with the network model committee for the Kadidi catchment area to organize activities in the community to address the risk issues. There was a subsequent decrease in HIV positivity at Kadidi following implementation of the activities (Figure 7).

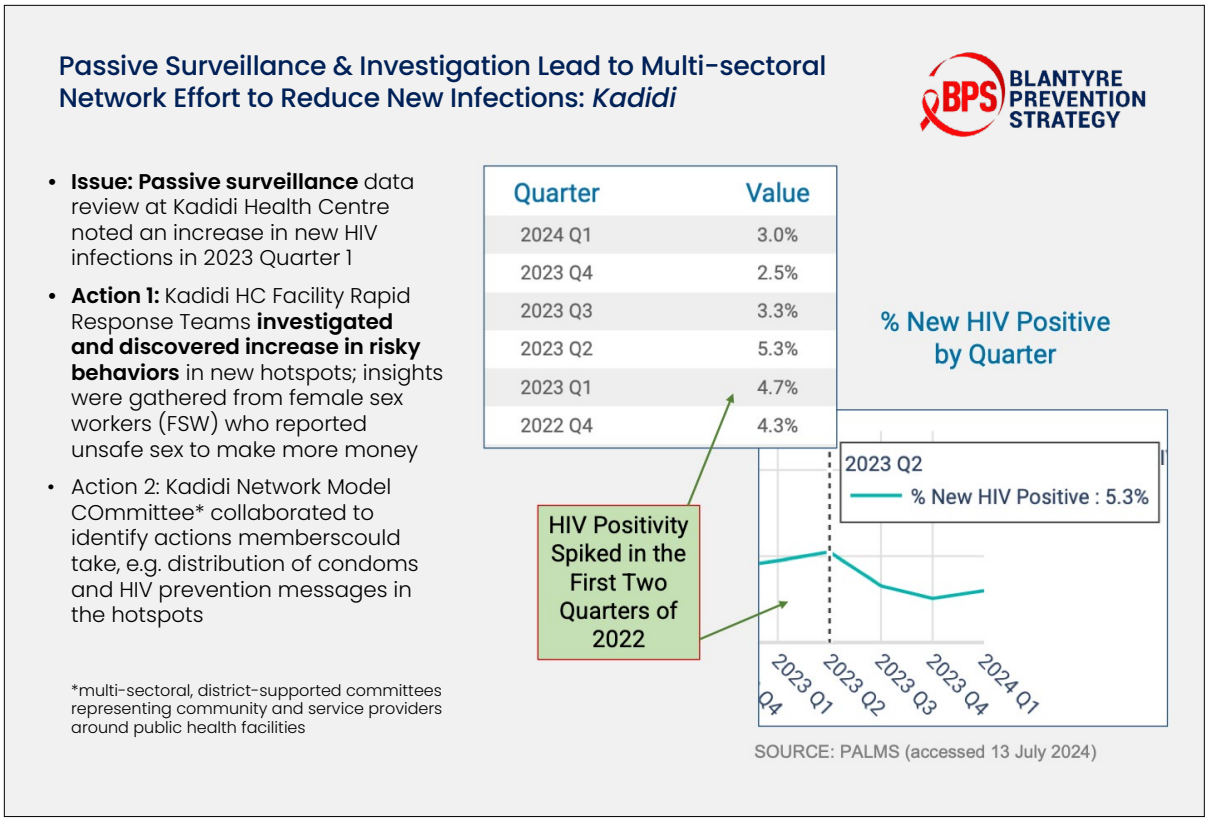


Figure 6. Passive surveillance, investigation, and response at Kadidi Health Center

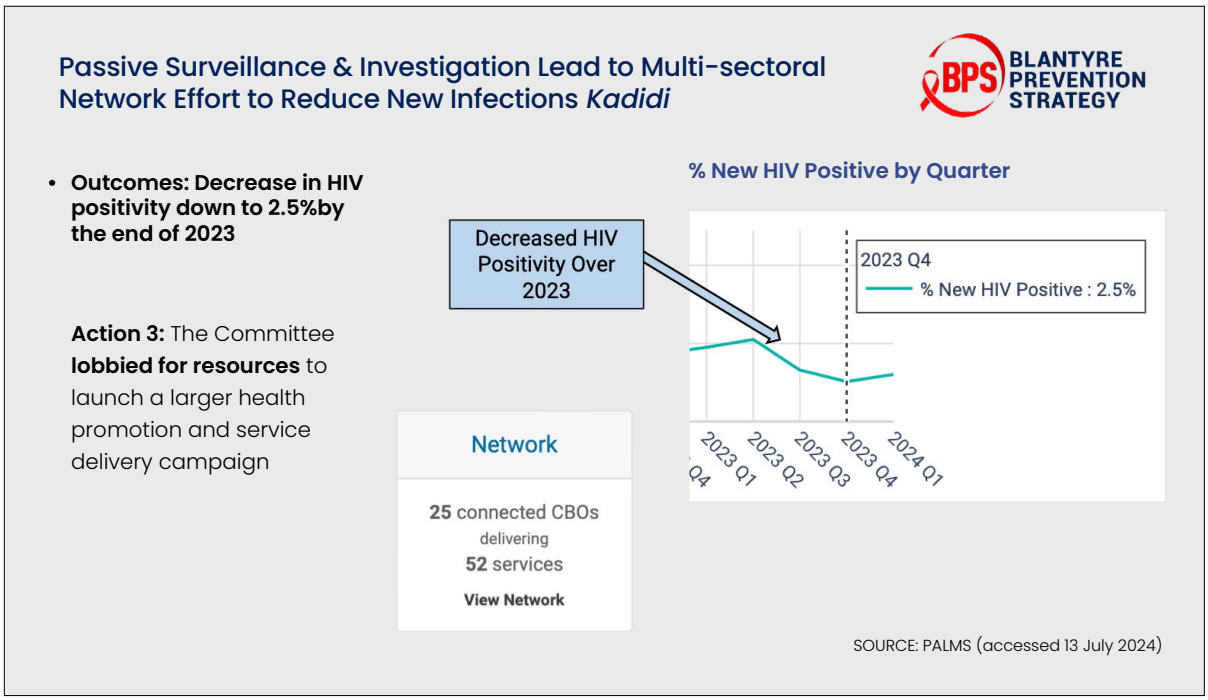


Figure 7. Decrease in HIV positivity at Kadidi Health Center

"The biggest win from the project on the Quality Management platforms… have been formulated at facility-level because these platforms perform two very important functions. Number one to act as point of coordination for all the stakeholders that actually work in the HIV and AIDS prevention realm. Number two they also provide guidance and leadership in as far as the formulation and programming of health activities [that come] from …change ideas."

-Dr. Gift Kawalazira

Blantyre District DHSS, remarks during the BPS AIDS 2024 satellite

Community Insights and QI

Year 5's goal to build a vibrant, district-led QI structure that enables facilities to use data for problem-solving and continuous improvement came to life through a strategy rooted in data—PALMS reviews, deep dive reports, coaching session insights, and real-time feedback from facility teams, which all fed into planning and action. Further, BPS's hybrid approach to bringing human-centered design (HCD) approaches together with QI is institutionalizing. There was a closer collaboration between QI support teams (QIST) and HCD leads at facilities – QISTs now routinely identify issues requiring deeper analysis and channel them to HCD teams, ensuring that QI initiatives are directly informed by community perspectives. The growing alignment between QI efforts and community-derived data has made service improvements more targeted and meaningful.

Cross-sectoral collaboration has also improved significantly, with stakeholders leveraging platforms across workstreams to share community lab findings and mobilize support for health promotion. Facilities are increasingly using routine data to plan health promotion activities and have demonstrated the ability to mobilize resources through networks, reducing dependency on district-level interventions. Partners like MANASO now integrate community insights into their own activities, and facilities are engaging the community to co-deliver events.

A major shift in Year 5 was the way facilities started to internalize QI—not as a project, but as a way of working. Many change ideas are now being implemented routinely: health talks at entry points, 1:1 PrEP counseling, exit interviews, and the use of SOPs to address continuation gaps. Some facilities even advocated for radios in waiting areas to broadcast health messages – a sign that QI is inspiring locally driven innovation. As the year progressed, requests for support began coming from outside the original QI collaborative sites, signaling growing interest and belief in the value of QI. The QI coordinator and QI mentors adapted the original PrEPUp! QI collaborative learning model into a cluster learning session format (described further below), allowing for more extensive participation and engagement.

Elements of Blantyre's collection and use of community insights to improve engagement and quality HIV prevention service delivery are:

1. **Use of a common data platform (PALMS)** is a core element of Blantyre's integrated community insights and QI approach. PALMS facilitates identification of signals that require further investigation and later input from clients to identify solutions that inform QI change ideas for improved service delivery.
2. **Capacitated human resources at district, facility, and community levels.** The capabilities built through BPS, including the district QI unit, QISTs and HCD focal persons, and among network committee members, support the governance, technical leadership, multisectoral partnership, and community engagement approaches that are critical to quality, accessible, and patient-centered service delivery.
3. **Community lab model.** Use of community labs to gather insights from communities and clients about barriers and enablers to service delivery and create solution prototypes has become a critical connective tissue between communities and service providers. Insights have informed delivery changes in Blantyre and national policies, including the PrEP guidelines.
4. **Use of clusters.** The expansion of Blantyre's cluster approach has led to more efficient coaching and to share peer-to-peer learning between facilities.
5. **QI as platform for data review and decision making at facility level.** Through the systems mapping process, any non-urgent active surveillance signals validated as risks, passive surveillance signals, and other non-urgent inputs will be channeled to the facility QIST to review and determine the appropriate next steps in terms of investigation, root cause analyses, and programmatic interventions or change ideas.

Challenges for both community insight gathering and QI related to turnover of facility staff and HCD champions, which disrupted continuity, especially around documentation and use of data. Facility leadership varied widely. In some cases, new mentors were trained and filled in where focal persons had been previously leading QI. Early in 2025, the district rolled out data management training through QI coaching, but sustainability remains a challenge due to uncertainty in availability of future funding. Overall, these challenges underscore the need for robust leadership as a critical pillar in building a resilient health system.

Lessons Learned

- QI capabilities can be institutionalized in district health systems. Blantyre's QI mentors are not only skilled in QI techniques and coaching but have also developed the capacity to train others, creating a sustainable system for continuous quality improvement. With local mentors now capable of leading the QI process, Blantyre has successfully embedded QI into the daily operations of multiple health facilities, leading to improved healthcare service delivery, more efficient operations, and better patient outcomes.
- Facilities can utilize their BPS-supported capabilities to personalize the community lab model and make linkages between their HCD work and other QI actions. They are utilizing skills learned through the community lab model to adapt existing prototypes to meet their context and ensure feasibility. Some facilities iterated the testing process based on the preliminary feedback they were getting from the data.
- Clustering facilities together creates more efficient coaching and mentorship and enables shared learning and problem solving. Use of a cluster approach facilitated community lab activities, QI, data use, and skill building.
- Cluster learning sessions have become a platform for sustaining the QI platform started through the PrEPUP! QI collaborative and for engaging facilities, both public and private, that were not part of the collaborative. In addition, they have enabled the district to expand training and coaching on QI and other health areas beyond HIV. Blantyre's ability to extend QI support to health facilities outside the original project scope, led entirely by district mentors, highlights the success of its BPS QI capacity-building efforts.

- Holding "harvest workshops" is an effective means of capturing lessons learned, best practices, successful strategies and tools to scale HIV prevention learnings from BPS into new districts and facilities.

Year 5 Action

Community Insights

Finalizing Community Labs Started in Year 4

In Year 4, the Blantyre District Health Promotion Office (HPO), with technical support from PSI and FHS, initiated community labs across BPS-supported health facilities aimed at co-creating and testing innovative solutions to address context-specific service delivery challenges using an HCD approach. At the end of Year 4, the community labs had reached the ideation phase, with the next milestone being prototype testing. However, there was a gap in the time until prototype testing could begin. With support from FHS, the HPO facilitated a "revalidation" activity to confirm whether the originally identified challenges were still relevant. Over two days, various BPS-supported health facilities (including Mbayani, Chilomoni, Limbe MACRO, Naperi DIC, Ndirande, Blantyre Adventist Hospital, Bangwe DIC, Madziabango, Zingwangwa, Bangwe, MUBAS, Limbe Health Centre, South Lunzu, Chileka, Lighthouse Trust, Chirimba, Nyambadwe DIC, Gateway, and Mpemba) along with district program coordinators, HCD champions, DHT representatives, and city focal persons, met to:

- Document the status of each community lab prototype.
- Capture learnings from the prototype testing phase.
- Assess the scalability, viability, and feasibility of each prototype using a standardized scoring tool.
- Close out the community labs based on the status of implementation and the outcomes documented.

Health facilities worked together to complete a standard Community Lab Documentation Template that:

- Captured prototype testing outcomes.
- Scored prototypes on scalability, viability, and feasibility using a 10-point scale.
- Documented what worked, what did not, and lessons learned from the testing process.
- Assessed the status of the challenge the lab aimed to solve.
- This step was supported by District HMIS Officers, who validated reported progress against data in PALMS. The revalidation revealed that many facilities had independently progressed and had already begun pilot testing their prototypes.

The exercise also illuminated structural and role clarity issues within facilities, such as absence of clear roles and responsibilities, which affected implementation consistency. As a result, some community lab prototypes remained untested due to resource constraints as of Year 5 quarter 3, highlighting the need for targeted support to ensure all interventions progress through the full HCD cycle. However, the HPO-hosted, follow-up meeting with the health facilities on the untested prototypes on March 24-25th, 2025, which revealed that most of the facilities had been able to test some of the prototypes on their own without waiting for external support. Examples include:

- South Lunzu, which had an low PrEP retention among AGYWs (27% in Q3 CY 2023), integrated services including PrEP uptake among the youth through the Youth Friendly Clinic and use of Youth Champions, which were prototypes developed during their community lab.
- Limbe Health Centre, which also had a challenge of low PrEP retention among clients in Q3 2023 at 20%. The facility tested their prototype–SOPs in PrEP room for providers to follow when

counselling clients to ensure providers followed the counselling guidelines when engaging clients–and saw retention increase to 31% as of quarter 4 2024.

- Chileka Health Centre tested its prototype–establishing a separate PrEP room. The facility's PrEP retention increased from 8.7% for 3 month-retention among females aged 15-30 in Q3 2023 to 23% as of quarter 1, 2025.

To improve sustainability, the district is transitioning the location of community labs to local health facilities. Some community lab meetings had been held in hotel venues previously. The change will promote ownership and reduce costs as well as empower facilities to implement the Community Lab Model autonomously, reinforcing self-reliance and sustainability.

SOP Updates

As part of the institutionalization process, and to adopt learning from the BPS adaptation in Lilongwe, the DHT updated various SOPs, TORs, and the Data 2 Action tool (D2A) for demand generation framework that are essential for Blantyre District and City to standardize demand creation activities, improve coordination across stakeholders, and reinforce data-driven decision-making in programming for HIV prevention. Changes to the documents are described in the Institutionalization & Sustainability in Blantyre section below. One key change influenced by Lilongwe's adaptation was adjusting the journey map tool, which was expanded to allow for more comprehensive responses using the "5 Whys" technique. The previous BPS approach to the "5 Whys" provided broad and straightforward responses. The Lilongwe team framed theirs as open-ended questions to encourage respondents to articulate a more compelling narrative, capturing a contextualized "WHY" demonstrated through role plays. The enhancement enables facilitators to drive toward a deeper understanding of the underlying issues participants face, enabling them to identify and address barriers more effectively. The Blantyre DHPO also found the change to be useful and incorporated it in the refined Blantyre HCD tool kit.

QI

Harvest Meeting

In August 2024, teams visited each PrEPUP! Collaborative facility to gather information on the change ideas and resulting actions that occurred in advance of a district-hosted "harvest meeting" in September to ensure all aspects of change ideas are documented for the collaborative. HEALTHQUAL also participated. During the harvest meeting, each PrEPUP! Collaborative facility QI team facilities provided more details on the change ideas harvested from the QI teams. Participants collaboratively identified the major facilitators (data availability, coaching on HIV prevention policy) and barriers to QI implementation for HIV prevention. The final list of successful change ideas was compiled as a resource for other facilities.

Cluster Expansion & Learning Sessions

Previously, the BPS PrEPUp! collaborative had only four to five sites per cluster. However, through this innovative expansion, each cluster was able to grow to include up to 15 sites, significantly increasing the number of facilities benefiting from the QI capabilities built through BPS. By creating this broader platform for collaboration, Blantyre's QI unit has fostered a culture of knowledge sharing and peer support among sites with diverse experiences and resources. The DHO led all QI coaching in Year 5. QI coaches demonstrated full capacity to mentor facility QI teams on QI tools, data use, project development, and documentation. Leveraging the QI capacity fostered through BPS, the district conducted four QI trainings in six facilities (Nacholi, Soche Maternity, Chabvala, Kadidi, Namikoko,

and a privately owned hospital) without co-facilitation from HEALTHQUAL. The district QI unit also expanded the number of mentors in the BPS cohort from 20 to 27.

To ensure the continued capture of quality and valid data for ongoing QI implementation, the DHO established monthly data deep dive meetings. The meetings convened a team of cluster lead mentors, quality management staff, HIV prevention coordinators, and HMIS personnel to identify gaps and discrepancies in monthly performance data. Each cluster mentor was paired with an HMIS officer to resolve data issues during QI coaching.

In addition to regular coaching and data review meetings, the new cluster model also facilitates regular Cluster Learning Sessions (CLS) where staff from multiple sites come together to discuss challenges, share solutions, and receive guidance from QI and clinical experts. It is a way of convening and mobilizing more facilities within a cluster to share experiences, learn from one another as well as from the district QI Mentors. Importantly, it also has helped to incorporate facilities that were not part of the PrEPUP! Collaborative but have the potential to improve service delivery.

The first three (2-day) CLSs were conducted between February and March 2025 with participants from health facilities within the cluster. Each CLS included presentations of storyboards from existing PrEPUp! sites; orientation on QI methodology for new sites and how to access PALMS for data visualization and use; and initialization of new QI projects (see the UCSF-HEALTHQUAL and Blantyre District Year 5 reports for more detail).

This cluster approach has been an effective and sustainable way of scaling up BPS-supported methods and activities to the remaining facilities in Blantyre, expanding from the 23 PrEPUp! facilities to 50 facilities (35 public facilities, 4 Christian Health Association of Malawi (CHAM) facilities, 7 private facilities, and 4 DICs) by the end of Year 5. Out of the 20 public facilities that have been newly oriented in QI through the CLS, half of them already reported to the district QI unit that they have established QI teams in their facilities and submitted their annual QI plans. A WhatsApp forum has been established for all the facilities that participated in the CLS to facilitate continuous peer-to-peer learning and active engagement. Orientation to PALMS was done in all the sessions through PALMS demo and HMIS team helped open more than 100 new users accounts. The district expects these additions will yield a long-term impact on quality of services in Blantyre beyond HIV prevention services.

The district's cluster model also incorporated almost all DHT coordinators, including those who were not part of the initial team of district QI Mentors and/or work outside of HIV-related health areas, to learn the basics of QI so that they can support their respective programs beyond HIV. As a result, it has proven to be an effective tool for supporting QI efforts in a range of areas beyond HIV prevention. The platform is now being used to strengthen data stewardship practices and facilitate service integration, helping sites improve their overall healthcare delivery. The collaborative nature of the platform allows sites to not only learn from one another but also collaborate on solving systemic challenges and implementing sustainable improvements—making it a sustainable way of spreading QI peer learning.

Cluster sessions also helped integrate injectable PrEP (CAB-LA) into QI coaching. The standard facility presentation template now includes a slide dedicated to CAB-LA to ensure consistent messaging. While demand creation has not been part of the coaching, the DHT is encouraging facilities to explore QI projects focused on injectable PrEP delivery. As the cluster model continues to grow, the district QI unit plans to further enhance the platform by incorporating specialty affinity groups. These groups will allow for more focused learning on specific areas of healthcare, such as maternal health or adolescent care, providing an even more tailored approach to QI efforts.

Stigma & Discrimination Data Collection

In Year 4, PrEP stigma was incorporated into the district's QI work. Using methodology from a HEALTHQUAL model used in other environments, this activity includes applying QI methods to reduce stigma and discrimination (QIS+D) associated with PrEP access in health care facilities, cyclic measurement of healthcare worker and client attitudes and experiences to assess drivers of stigma to identify targeted areas for improvement. QIS+D leverages the QI capacity built among the PrEPUp! facilities through BPS to inform demand creation for PrEP and improve the quality of prevention services.

Between April-December 2024, 9 of the 23 QIC facilities participated HCW completed self-administered measurements online between April and August, while 797 randomly sampled clients completed the client measurement via surveys from June-December 2024. Data was collected by trained hospital ombudsmen and HSAs through structured interviews based on a standard questionnaire. Data was captured on REDCap and extracted to Excel for analysis by each facility as well as aggregated across all facilities. Detailed results are outlined in the UCSF-HEALTHQUAL Year 5 report. Takeaways include:

- In almost all facilities, a large proportion of clients (range of 33-87%) said they had to ask for PrEP first to begin the intake process. An outlier was Zingwangwa HC where only 8.6% had to ask for PrEP.
- More than 90% (range of 83-98%) of clients in the facilities are being counseled by a provider to be monogamous.
- Clients from 3 facilities indicated that they experienced some form of discrimination from HCWs (Zingwangwa 14%, South Lunzu 15%, and Mbayani 29%).

The district quality manager, mentors, and HIV prevention experts reviewed the results during BCT and mentors' meetings and with facilities during the appropriate cluster learning session. The mentors will use the results to guide facilities on key areas where improvement is required.

Case studies

Change ideas have evolved over time as the facilities became more experienced with QI methodologies and saw results from earlier implementation. Early examples focused on specific changes within facilities to support PrEP delivery such as creating a dedicated PrEP room or introducing better flow to how clients move from testing to counseling to enrollment to collection of PrEP. Change ideas introduced over the last couple of years leverage passive surveillance and triangulated data. They reflect the maturity of the capacity that has been embedded within the DHO and the facilities. For example, South Lunzu health center noted that Women and youth were coming to get PrEP, but men were not. The facility's change idea was to have team members reach out to men at various drinking points or where they play games ("Bao") so they could educate on PrEP. They also established outreach clinics to identify men who needed PrEP.

Chileka health center identified an issue with knowledge among prospective and current clients. Most demonstrated a lack of knowledge about PrEP and related services. The facility's change idea was to develop a schedule of healthy talks and conduct client exit interviews to determine the level of understanding of PrEP and their opinions on the service provisions. One question was "Are PrEP clients satisfied with the care that they received during their time there?". The healthy education talks at all entry points were conducted from Year 2 quarter 4 into Year 3. The facility noted improved PrEP initiation data after the talks started but there continued to be issues with continuation at 1 and 3 months. The client exit interviews started in Year 3 around the same time that the STI affinity group started. The facility noted further improvement in PrEP initiation and continuation afterward.

Network Model and Health Promotion

In Year 5, the DHO focused on strengthening and expanding the network model for HIV prevention, with a particular emphasis on bringing the model to facilities outside of the existing cohort. The efforts to expand to additional public facility catchments were rooted in the DHT's understanding that many health facilities lacked awareness of HIV trends within their own communities. To bridge this gap, the DHO has used the establishment of network model committees at facility level to help teams introduce PALMS data and HIV-related information to influential stakeholders, including church leaders and other community representatives. By using local data to drive conversations, facilities were better positioned to engage communities and tailor interventions. Performance data from 15 facilities helped identify which sites required additional support, allowing for targeted mentorship and supervision to improve outcomes where needed most.

Resource mobilization through the network model has fostered long-term sustainability by enabling self-sufficiency and promoting continuous support for HIV prevention efforts. Committees leveraged available financial and in-kind resources to support health activities in the communities. For example, the Kadidi committee leveraged local resources to secure transport for condom distribution.

Elements of Blantyre's community engagement and health promotion approach:

- Data access and use capacity at district, facility, and community levels. Transparent data access down to community level has enabled facilities and the network model committees to identify where there are issues and mobilize resources to respond in the specific communities with the data-informed interventions.
- Trained health promotion officers at facility level. The HPO has focused on capacity building at facility levels to ensure that health promotion campaigns and other demand generation activities are data-informed and targeted to the specific communities and areas with the appropriate information.
- Linked networks of multi-sectoral partners around public health facilities (the Network Model). The network model has become a microcosm of Blantyre's broader health system. Bringing together multisectoral partners around public health facilities has helped bring data use down to community level and fostered a greater sense of partnership and transparency.
- Health promotion and service delivery events in the community. Leveraging the network model committees, Blantyre has moved from more generalized, district-wide campaigns to locally led, locally delivered approaches informed by data.

Lessons Learned

- Facilities and communities are strongly enthusiastic about setting up network model committees.
- Sustaining committee functionality requires ongoing mentorship and structured support, especially around report writing, data interpretation/analysis, and role clarity. To address capacity gaps—particularly in facilities with inactive committees—the district team used existing facility review meetings as opportunities to mentor staff. These sessions also helped re-orient members who had been transferred or newly assigned.

Year 5 Action

A major success in Year 5 was the improved integration of the network model with other programs, such as QI, active surveillance, and public health emergency response teams. This collaborative approach made it possible to address HIV-related issues more proactively. For example, committees helped plan health promotion events, while health promotion officers at facilities began contributing their own resources to amplify these efforts. In Namikoko, low HIV testing rates among STI clients

were addressed through community-led education efforts. Peers mobilized around the importance of HIV testing, eventually fundraising to host community events that drew large crowds using DJs and entertainment to promote health messages. In Madziabango, committees led successful ART defaulter tracing, forming support groups and shifting leadership from implementing partners to district staff, including HSAs and Nurses. Meanwhile, in Chileka, a case involving ART clients stopping treatment due to religious beliefs prompted committee engagement with local churches—resulting in restored treatment adherence and greater community awareness.

Attention also was paid in Year 5 to update demand generation SOPs and tools (described in the Institutionalization & Sustainability in Blantyre) section.

Case Study

The district HPO prioritized the rollout of data-driven health promotion events, targeting facility-identified health issues. Health facilities reviewed their data, analyzed it through root cause analysis and/or community insight gathering, and developed interventions to address identified issues such as conducting a health communication event. The District HPO initiated a new approach to planning such events. Instead of the HPO deciding on the budget for various activities, the HPO encouraged facilities to write and submit proposals to the HPO for support to implement the events planned in response to their analysis.

An example of this approach in action comes from Chilomoni health center, which used passive and active surveillance data to identified an issue they wanted to address in the community. Passive surveillance came during a January 2025 data user clinic, during which the FRRT, QIST, and IEC focal person noted a red flag associated with a rise of number of STI cases among youth in the catchment to 80 cases in quarters 2-3 of CY 2024. Active surveillance data came from community members who identified signals in the community in terms of where "risky behavior" was taking place. After triangulating and investigating the signals, the health center conducted a root cause analysis which revealed four contributing factors:

1. Misunderstanding of PrEP: Many community members lack clarity on its proper use, especially its role in combination with other preventive measures such as condoms.
2. Increased availability of unregulated drinking establishments: These environments foster risky sexual behaviors, particularly among youth.
3. Lack of dual protective measures: Most adolescents prefer to use other preventive measures for HIV, not condoms for STI protection.
4. Selective use of family planning methods: many women prioritize pregnancy prevention without addressing other risks, such as STI protection.

Based on these factors, the facility decided to organize an activity to tackle the knowledge gap on STI preventive measures through a Konda Blantyre, Konda Moyo event at Nthukwa area where most of the cases were registered. As part of its resource mobilization for the event, the facility team submitted a proposal to the HPO for possible funding, which was supported by the District's BPS Year 5 budget. The activity was planned using SOPs for planning a road show and an open event. Partners supported with service delivery.

The facility organized the network model committee to work as a task force for the event and leverage resources in the community. The event was held on April 11, 2025, with support from local partners. For instance, MACRO provided HIV testing while EGPAF supported other services. In addition to distribution of more than 20,000 condoms, 600 self-kit distributions were distributed, 35 received STI screening, and 2 STI clients were treated. Of the 27 tested for HIV, two were found positive and linked to care.

Photo 2. Ward Counsellor Phillip Litchowa giving remarks at the Nthukwa event

Through the activity, what had been a weak committee was strengthened, and there was good collaboration with partners, community structures and local leaders including two Ward Councilors. Following the event, the Facility In-charge for Chilomoni shared that "We are very happy that we have managed to identify a problem, analyse our data and plan our event with the community without being told what to do from the district level".

The HPO sees this new approach to resource mobilization as an important institutionalization step putting the responsibility and ownership at the facility level to use active and passive surveillance data and root cause analysis and identify when, where, and how health promotion and other service delivery interventions should be delivered.

Councilor Engagement

Councilors continued to engage in their communities with HIV prevention messages and linkage to services. The major activity in Year 5 was development of a reference guide that provides general information on HIV and related health areas, descriptions of HIV prevention and treatment interventions, and guidance on the roles and responsibilities of councilors, the DHT, city health team, and other actors working to support HIV prevention in Blantyre. Some delays were caused by Pakachere's precarious operating situation after the USG funding cuts. However, plans are in place to review the draft guide with NAC, MoH, and other interested parties early in Year 6. The goal is to finalize the guide prior to the September 2025 parliamentary elections and use it as a resource in the training for newly elected District and City Councilors.

"Over the past two decades, Malawi has made remarkable strides in the fight against HIV and AIDS. We have expanded access to treatment, scaled up prevention programs, and reduced new infections from 56,000 in 2010 to 13,875 [in 2023]. The Blantyre Prevention Strategy (BPS), a district-based model overseen by NAC and MOH, has further strengthened local capacity for coordination, data use, community engagement, quality service delivery, and the sustained use of HIV prevention interventions. By embedding HIV prevention within the broader district health system, BPS ensures that it is not treated as a standalone initiative but as an integrated, routine component of Blantyre's overall health response, benefiting other disease areas as well."

– Dr. Beatrice Matanje

NAC CEO, remarks during the February 2025 Sustainable HIV Prevention Initiative convening in Lilongwe

INSTITUTIONALIZATION & SUSTAINABILITY IN BLANTYRE

During an April 2025 strategic planning workshop, facilitated by the BPS Secretariat, Blantyre district and city health staff outlined what they see is working well and should be institutionalized:

- Improved coordination and collaboration among stakeholders
- Easy access to data through PALMS for decision making
- Coordination between city, district, stakeholders
- Community-led implementation of interventions
- Use of data in decision making
- Coordination among work streams is working, needs strengthening
- Systems developed to be institutionalized can the response cascade
- Use of existing structures to lead response, e.g. PHIM, DHA, NAC, DHMT, city, coordinators, facilities, communities
- Adaptability of the district/city to implement evidence-based activities across the prevention cascade
- Capacitated health workforce that can respond to HIV issues and beyond

Systems Mapping & Documentation

In quarter 4 of Year 3, the BPS Secretariat began a series of workshops with district-level stakeholders focused on the institutionalization and sustainability of the BPS model, program elements, and related components. Through these sessions, a vision for the institutionalized Blantyre HIV prevention system began to emerge. However, there was a lot of myopia about individual program elements, and district and city stakeholders struggled to articulate how the system needed to come together. It was clear there was need to gain consensus on, and document holistically, the entire HIV prevention system as it has evolved in Blantyre. A top priority for Year 5 was to conduct a systems mapping group model building to help synthesize the system and inform what institutionalization and sustainability activities are needed through the rest of the project.

CIGH has engaged a systems thinking expert to facilitate a systems mapping and group model building exercise with local stakeholders in Blantyre in late June 2024. Participants were district and city health team members, public and private facility staff, community organizations, and BPS partners. Goals of the meeting included to:

- Establish a more detailed understanding of the operation of the Blantyre HIV Prevention System and the functions that it is currently performing to form the basis for institutionalization after the end of the Blantyre Prevention Strategy (BPS).
- Identify gaps in the system where there are inefficiencies, lack of accountability for key functions, and other structural challenges.
- Give local leaders the capacity to continue systems thinking exercises on their own to identify and address system challenges as they arise.

Guided by the expert facilitator, participants engaged in a series of systems thinking and mapping exercises individually and as a larger group, e.g. roles and responsibilities maps, system support maps, action plans, causal loop diagramming, and process flow diagramming. Outputs of those exercises broke ground in documenting not only Blantyre's system but HIV prevention system functions and core components at district level. The meeting highlighted areas where inefficiencies exist and where functions have not been performed (largely because accountability for the functions has not been decided and assigned). The workshop revealed areas of consensus and areas for additional work to articulate roles, responsibilities, relationships, and rules needed to codify the operationalization of the HIV prevention system. Using the framework built over the course of the meeting, participants expressed increased understanding of the remaining challenges and determination to address them.

The BPS Secretariat supported additional in-person and virtual sessions throughout Year 5 to continue the process. The initial workshop had prompted important discussions about roles and responsibilities for data review at facility and community levels that needed to be resolved as they form the heart of Blantyre's HIV system and were necessary to inform the rest of the sustainability planning process. The Secretariat worked with the district and city teams to create two core system process flow diagrams that outline the deliberation, action, and decision-making processes for active and passive HIV surveillance signals and for inputs that come from other sources, such as community labs and QI activities. The iterative process was completed in April 2025. The diagrams will be finalized in early Year 6 and tested by several facilities. The BPS Secretariat will support additional work to ensure roles, responsibilities, and relationships are clearly defined and well documented in various TORs, SOPs, etc. as discussed further below.

"Looking forward in terms of institutionalization, two things we must focus on. Number one, we have to integrate all these changes into the existing structures that we have in Blantyre. Be that community-level, facility-level or even program management-level, even district health management-level. Number two, we have to come up with clear documentation in terms of reference for the members of staff and different players and also come up with clear guidelines on how this should actually be conducted and also develop manuals that can be used for training and also for further improvement of the program. And also, these Quality Management platforms …are very important because they are quite flexible and can be applied to other programs as well, not just HIV and AIDS prevention."

– Dr. Kawalazira

remarks during the BPS AIDS 2024 satellite

TORs, SOPs, and Guides

Another Year 5 priority to support institutionalization and sustainability was to document Blantyre's HIV prevention system and update TORs, SOPs, and other tools based on the outcomes of the systems mapping. The DHT took the lead in updating various tools and documents over the course of the year with some external partner support.

Review and Refinement of the Community Lab Model Toolkit

With support from PSI/FHS, the District HPO led a process to review and refine the CLM toolkit. The original toolkit was co-developed in Year 2 with facilitation by ThinkPlace and adapted from the model used in Kenya. The DHT wanted to update the toolkit based on several years of implementation experience to ensure it was up-to-date, reflective of the Malawian context, and ready to support institutionalization and sustainability. The process started in November 2024 with the involvement of national-level stakeholders who reviewed the manual and provided input. The DHO conducted the first workshop on November 12-14, 2024, in Blantyre with participation from NAC, the MoH Health Promotion Division (HPD) and DHA; BPS partners; PEPFAR IPs; private facility staff; and Blantyre district and city coordinators.

The district's competence and strengthened capabilities in gathering and use of community insights and mastery of the HCD-driven community lab model was showcased during the workshop. The DHT identified critical steps that were missing or misaligned and recommended their addition to simplify or clarify multiple sections. In addition, the DHT worked to ensure the manual reflected not only Blantyre's approach to HCD and the community lab model but how they fit in within the broader HIV prevention response. The additional content reflects on where community labs fit within the system and the relationship with data access and use, passive and active surveillance, QI, and use of tools like PALMS and the RTR. These changes help ensure the institutionalization of the community lab model and the operation of the system as a whole.

A core team continued refining the manual remotely after the workshop and completed outstanding tasks. In Year 6, the HPO is planning to use the revised manual/tool kit to support training in facilities to enhance the capacity of QIST, FRRT and demand creation teams to use HCD and the community lab model and support the feedback loops with QI and other service provision.

Updates to Other SOPs, TORs, and the D2A

The DHT held two additional workshops in December 2024 and January 2025 to facilitate review and updates to various SOPs, TORs, and tools in recognition of the need for:

- Standardized guidance to streamline service delivery and communication efforts.
- Clear roles and procedures to avoid overlap and confusion during implementation.
- Strengthened accountability frameworks for both facility and community-level actors.
- Improved data use practices to ensure timely response to emerging trends and red flags.

Adopting an inclusive and participatory approach, workshop participants represented DHO, Blantyre city health office, MoH HPD (Health Promotion Division), facility representatives, PEPFAR, IPs that support health promotion and service delivery, and BPS consortium partners. A core team, comprised of the HPO, QI Coordinator, and PSI/FHS team members, facilitated consensus building and finalized the content for each document, which fostered a collaborative environment, driving collective ownership and refinement of the final products.

As a result of this collaborative process, the following final documents were produced and are currently pending approval, printing, and dissemination:

- **Health Communications SOP** is a guiding document for the execution of health promotion activities at national, district, and facility levels. It outlines standard processes, messaging protocols, roles, and coordination structures to ensure harmonized communication in support of health interventions.
- **Data Review Meetings TORs** provide a clear framework for the planning and execution of routine data review meetings. The TOR defines:
    - The composition of the review teams.
    - Frequency of meetings.
    - Procedures for data analysis and action planning.
    - Mechanisms for follow-up on agreed actions.
- **Network Model TORs** serve as a reference guide for facilitating community stakeholders' engagement through structured networking meetings. The TORs promote integrated programming, accountability, and stronger community-health system linkages.
- **Data to Action (D2A) Framework for Demand Generation** is a user-friendly tool to assist health facilities and community structures in identifying red flags from routine data (passive surveillance) and linking these to tailored health communication interventions. The tool enhances responsiveness, resource targeting, and community engagement.
- **Community Lab Model Monitoring Tool** was developed under BPS to systematically track and document the progress of each lab throughout the various HCD phases—empathize, define, ideate, prototype, test, and scale. The tool helps facilities and partners to:
    - Monitor the status of prototypes at each health facility.
    - Capture data-driven insights on what is working, what needs improvement, and emerging challenges.
    - Assess the quality of implementation and fidelity to the HCD process.
    - Score and rate prototypes on scalability, feasibility, and viability.
    - Generate evidence for decision-making and potential scale-up.

Future Systems Monitoring

Through the engagement with councilors around bylaws and resource mobilization, as well as during institutionalization and sustainability planning discussions, questions have arisen around how Blantyre's HIV prevention system, its functionality, and accountability for actions will be monitored after the end of the BPS project. One idea was to explore whether civil society could play a role in monitoring and overseeing the execution of the system and whether community-led monitoring (CLM) approaches could be used to support it.

According to an October 2024 commentary in the Journal of the International AIDS Society (JIAS), "community-led monitoring (CLM) of health service delivery holds potential as a social accountability model to increase the accessibility and quality of health systems". Written by leading civil society representatives, the commentary lays out five core principles of CLM:

1. "CLM is led by funded, capacitated and directly impacted communities.
2. Community monitors are trained and supported service users.
3. Data are independently owned by communities and do not duplicate government and donor data unless for triangulation purposes.
4. CLM programmes must adhere to ethical data collection.
5. CLM includes advocacy activities aimed at generating accountability."

CLM has been funded by leading donors as a way of bringing community voices into program design and improving accountability of the programs they fund. In Malawi, like many countries, CLM has largely focused on service delivery of HIV and related health services, primarily HIV anti-retroviral treatment (ART), through the Liu Lathu! and Pamodzi projects. While MANASO and other involved community organizations engage with district and national level program managers and policy makers, political and traditional leaders, and donor-funded partners, the focus of the CLM activities is on health service access and uptake, not on the overall public health system that enables or serves as a barrier to accessible, quality, patient-centered health delivery.

Given the CLM principle focused on accountability and ensuring that health investments are data-driven and sustainable, there is an opportunity to explore how CLM could be utilized to monitor HIV prevention and the governance and implementation of district-level public health systems. Could CLM approaches be used to support the institutionalization and sustainability of the BPS model in Blantyre and Lilongwe by continuing to monitor how project elements and outcomes are sustained at district level over time? And District and City Council performance in enforcing and/or creating bylaws to address structural drivers of HIV infection and barriers to service access and in mobilizing resources for the health sector?

Toward the end of Year 5, BPS provided a small seed-money grant to MANASO to develop a costed proposal in Year 6 that describes a proposed process and general principles for how CLM would be applied, as well as key actors, considerations, and resource needs, to monitor the governance and implementation of district-based HIV prevention systems in Malawi. Based on engagement with, and input from, other civil society and community organizations in the development process, the proposal will outline roles and responsibilities, timelines, and process for testing the use of CLM approaches for monitoring the governance and implementation of district-based HIV prevention systems in Malawi.

INSTITUTIONALIZATION & SUSTAINABILITY ACROSS MALAWI

A key priority for Year 5 was to support expansion of the BPS model through further district adaptation in Malawi, translate BPS learnings into to national-level policies and guidelines, and fully transition administration of PALMS and the data pipeline to DHD. Action was taken on each area.

"As the coordinator of the response in Malawi, we are in the right place where we can think of replicating the learnings from the Blantyre Prevention Strategy."

– Chimwemwe Mablekisi

NAC Director of Programmes, remarks during the BPS AIDS 2024 satellite

Strengthening District Health Systems for Sustainable HIV Prevention Working Group

In late Year 4, NAC prioritized Zomba as the next district for strengthening and capacitation of its HIV prevention system given a troubling rise in estimated HIV infections, which drew the attention of national decisionmakers. Zomba, like its neighbor Blantyre, has urban and rural environments and is home to tertiary educational institutions.

In February 2025, NAC agreed to establish a "Strengthening District Health Systems for Sustainable HIV Prevention Working Group" comprised of government, donor, and partner organizations to strategize and make tangible plans for future expansion of BPS and focused district-strengthening activities. The working group's TORs include:

- Develop a strategy for strengthening district health systems for sustainable HIV delivery, as a catalyst for broader health delivery in the longer term, including plans for adapting the BPS model in the next 3-5 priority districts (inclusive of M&E, risk management, sustainability planning, and stakeholder engagement).
- Support a needs assessment to develop individualized implementation plans that reflect local context, culture, and systems and address areas of improvement identified through the assessments with input of community groups and other local stakeholders.
- Identify and leverage resources to support systems strengthening in those districts.
- Share data, policy landscaping, and other insights to inform development of business cases for adaptation to those districts and future co-development planning (e.g. from the BPS, STRIDE, RESPOND projects).
- Support adoption of the BPS model and program elements in national policies, guidelines, and strategies, include to integrate within the health system.
- Provide input into the development of the BPS model adaptation toolkit.

NAC convened the first meeting on April 4, 2025, and agreed to meet monthly through May or June 2025, then bimonthly. In addition to NAC and CIGH, DHA, CHAI, Blantyre District, and the PathToScale technical advisor were represented with active participation and buy-in into the approach. In addition to Zomba, NAC recommended Mangochi and Mzuzu as the other two districts to focus on initially for adaptation and general systems strengthening.

During the second meeting on April 30, the group approved the road map with actions and timeline through BPS Year 6 (see Figure 8). NAC will lead on engaging districts around the concept and general road map. NAC will facilitate a needs assessment in each district to assess current levels of functionality related to the BPS program elements. Assessment modules include:

- Governance and leadership capabilities (knowledge, skills, abilities, and tools needed to govern the HIV response in the district);
- Availability of resources that support HIV prevention functionality, e.g. tools;
- Technical capabilities (knowledge, skills, abilities, and tools needed to provide technical leadership to the HIV response in the district), including for data use, targeting, community / client insight-gathering, health promotion & demand generation, and service delivery;
- District-level Engagement capabilities (knowledge, skills, abilities, and tools needed to engage with (and between) stakeholders involved in the HIV response in the district, including communities, civil society, private sector orgs);
- Support sustained use of HIV services by clients; and
- Political support, i.e. the internal and external political environments that support HIV service delivery in the district.

The assessment is planned for June 2025 after initial engagement with the districts. The assessment outcomes will inform individual district implementation plans and the amount and type of capacitation needed, which will drive cost implications. The working group aims to leverage in-kind and financial resources, from BPS and elsewhere, to support the implementation. In addition, the group plans to develop a financial plan for longer-term sustainability and further expansion to other districts as part of its work plan.

M&E

External Evaluation

Throughout Year 5, APHRC conducted an external evaluation to assess the extent to which the BPS project has achieved its desired outcomes (a coherent sub-national public health system to develop and strengthen a locally led comprehensive HIV prevention response). APHRC presented its final report to the BCT and Steering Committee in February 2025. See Figure 9 for the high-level findings and Figures 10-13 for specific findings on the BPS co-design process in Years 1-2, the capabilities instilled and embedded locally, and challenges that BPS had to overcome to be successful. The findings validated anecdotal and observational evidence since the outset of the project as well as findings from the behavioral survey especially regarding the use of PALMS, the QI collaborative approach, the engagement with communities, and district leadership.

Key Messages

- Improved district leadership contributed to better coordination and delivery of HIV prevention programming.
- Community-oriented platforms facilitated community health communication. Campaigns like "Konda Moyo, Konda Blantyre" made HIV prevention services more accessible.
- Launching the PrEP Quality Improvement Collaborative (QIC) created a platform to strengthen quality improvement at the district and facility levels.
- The onset of BPS coincided with a shift in the HIV Testing and Counseling trend, changing from a downward decline to a steady rise, with an average of around 533 individuals tested for HIV each month.
- The involvement of Blantyre City councillors as agents for structural HIV risk reduction efforts seems a good entry point for political ownership. Unfortunately, the cyclic changes of elected leaders means that this has to be revisited after every election cycle.
- PALMS improved data access and use by consolidating information from multiple sources into a single data pipeline, simplifying visualization and decision-making. It has great potential, but there are sustainability concerns.

Abdhalah Ziraba, Elizabeth Kemigisha, Jane Osindo, Maurine Ng'oda, Stephen Gakuo Maina and Alister Munthali. February 2025. Evaluation of the Blantyre Prevention Strategy: Program design, implementation and impact. Nairobi, Kenya. APHRC and PALM Consulting Ltd.

Figure 9. Key messages from APHRC's BPS evaluation (Source: APHRC Policy Brief)

What Informed the Design of the BPS?...1

External and Internal factors motivated the design

1. Need to **address the high HIV incidence** in Malawi, Blantyre had consistently had highest incidence.
    - Unique context: commercial center, high population mortality, reservoirs of new infections.
2. Need for a **coordinated HIV response**
    - Lacked coordinated district ownership of HIV response — NGOs driven implementation.
    - Need for a coordinated M/E sytem, to improve access and utilization of data related to different aspects of HIV response (including health, social, and economic aspects).
3. Need for **locally led and locally driven and tailored HIV response**
    - Aligned to the decentralization policy for Malawi that needed to be actualized and strengthened.
    - The design leveraged and was **built collaboratively from existing partnerships** between the government, implementation partners and funders.

Abdhalah Ziraba, Elizabeth Kemigisha, Jane Osindo, Maurine Ng'oda, Stephen Gakuo Maina and Alister Munthali. February 2025. Evaluation of the Blantyre Prevention Strategy: Program design, implementation and impact. Nairobi, Kenya. APHRC and PALM Consulting Ltd.

Figure 10. BPS evaluation findings: BPS design (Source: APHRC Presentation to the BPS Steering Committee, February 21, 2025)

Capacities built by BPS in the district level HIV response...1

- **Multi-stakeholder involvement:** BPS involved key stakeholders at national, district, and health facility levels as well as funders, academia, and HIV implementation partners.
- **Improved coordination:** BPS established an efficient district-led platform for effective coordination of HIV prevention response by the district, city, health facilities and community level partners.
- **BPS interventions** have been rolled out in 25 of the 36 facilities in the Blantyre district at different intervals, of these only 2 of the 36 facilities where pilot activities began have full-scale implementation of all the interventions.

Abdhalah Ziraba, Elizabeth Kemigisha, Jane Osindo, Maurine Ng'oda, Stephen Gakuo Maina and Alister Munthali. February 2025. Evaluation of the Blantyre Prevention Strategy: Program design, implementation and impact. Nairobi, Kenya. APHRC and PALM Consulting Ltd.

Figure 11. BPS evaluation findings: BPS-developed capabilities (Source: APHRC Presentation to the BPS Steering Committee, February 21, 2025)

Capacities built by BPS...2

- **Enhanced district leadership capacity** Improved coordination, ownership, and buy-in by partners. The BPS approach improved planning and implementation accourding to the district's priorities.
- **Improved health communication to generate demand for HIV preveention services:** *Konda Blantyre, Konda Moyo'* [Love Blantyre, Love life] were vital in reaching targeted populations with HIV prevention services.
- **Improved data use in planning:** The BPS developed the Prevention Adaptive Learning and Management Systems (PALMS) in 2021. PALMS provides user-friendly dashboards that display current and historical trends of key indicators related to HIV and other related health areas.
- **Structural risk reduction** through strengthening the capacity of political leaders to engage in the HIV prevention response.
- **Scaling up IDSR to include HIV incidence monitoring.** This district-lef workstream experienced delays in approval and was infrequently mentioned by participants implying its potentionl may not have been fully exploited or appreciated.

Abdhalah Ziraba, Elizabeth Kemigisha, Jane Osindo, Maurine Ng'oda, Stephen Gakuo Maina and Alister Munthali. February 2025. Evaluation of the Blantyre Prevention Strategy: Program design, implementation and impact. Nairobi, Kenya. APHRC and PALM Consulting Ltd.

Figure 12. BPS evaluation findings: BPS-developed capabilities (Source: APHRC Presentation to the BPS Steering Committee, February 21, 2025)

Challenges BPS had to overcome during implementation

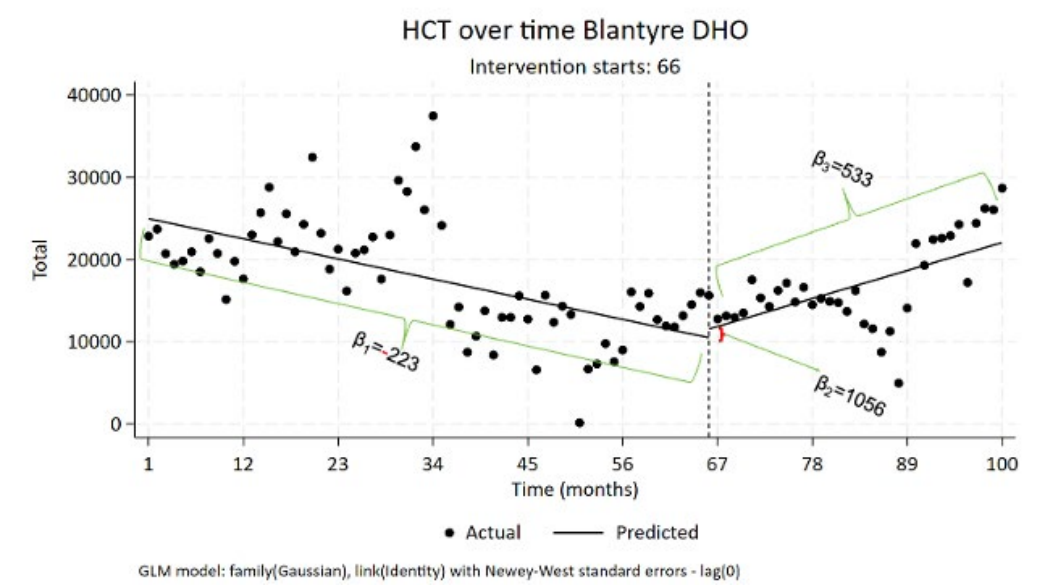
- **Epidemics especially COVID-19:** (also cyclone Freddy, cholera epidemic) delayed implementation of activities for over 1 year as public health priorities changed. COVID lockdowns affected planned face-to-face coordination activities. Anticipated support from the business coalition was affected.
- **Inadequate or infrequent coordination of meetings** among partners, some felt the planned schedule of meeting was not followed, and others could not participate due to short notice prior meeting.
- **The BPS package was deemed too complicated** and the communication needed to be simplified for proper buy-in by the intended audience, especially at the nationl level. This could have slowed down the implementation of activities.
- **Inadequate training on data quality** especially at the source within health facility level and there were concerns about the quality of data used in PALMS.
- **Others:** Intended implementors had busy work scheduled at the health facilities to coordinate community-level BPS activities for instance HCD. As such some activities were partially implemented.

Abdhalah Ziraba, Elizabeth Kemigisha, Jane Osindo, Maurine Ng'oda, Stephen Gakuo Maina and Alister Munthali. February 2025. Evaluation of the Blantyre Prevention Strategy: Program design, implementation and impact. Nairobi, Kenya. APHRC and PALM Consulting Ltd.

Figure 13. BPS evaluation findings: Identified implementation challenges (Source: APHRC Presentation to the BPS Steering Committee, February 21, 2025)

Notably, APHRC found a statistical increase in HIV testing over time related to BPS implementation (p=0.001) (Figure 14). The qualitative attribution suggested that better availability of data was part of what drove enhanced testing and targeting of services. Similarly, a dramatic change in PrEP screening and uptake has been recognized in Blantyre with BPS, and further quantitative analyses are underway to help determine attribution.

Results of ITS Model: Graphically



Abdhalah Ziraba, Elizabeth Kemigisha, Jane Osindo, Maurine Ng'oda, Stephen Gakuo Maina and Alister Munthali. February 2025. Evaluation of the Blantyre Prevention Strategy: Program design, implementation and impact. Nairobi, Kenya. APHRC and PALM Consulting Ltd.

Figure 14. Statistical increase in HIV testing associated with BPS (Source: APHRC Presentation to the BPS Steering Committee, February 21, 2025)

Overall, APHRC found that "BPS significantly enhanced HIV prevention efforts in Blantyre through improved leadership, communication, and data management. The program achieved greater coordination, and service uptake" (see Figure 15). Among the recommendations are that the embedded capacities be sustained and conducting a future assessment of cost implications for further adaptation (see Figure 16).

Conclusions

- **Co-creation:** The design of the programs considered the local context in terms of disease epidemiology and leveraged existing systems including local leadership. This potentially led to the right prioritization and ensured commitment from and involvement by the various stakeholders.
- **Capacitation:** The BPS significantly enhanced HIV prevention efforts in Blantyre through improved leadership, communication, and data management. The program achieved greater coordination, accountability, and service uptake.
- **Improved service uptake:** Early outcome indicators (e.g. HIV testing) showed sustained improvement that corresponded, in timing, with the introduction of BPS. PrEP uptake seems to also be sustained at a steady rate.
- **Programmatic Challenges:** BPS also faced a challenge during the design phase related to the perceived complexities of BPS terminologies, few coordination meetings, high staff turnover at health facilities, and external factors such as epidemics – these the BPS team had to overcome to achieve the set objectives.

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Figure 15. BPS evaluation conclusions (Source: APHRC Presentation to the BPS Steering Committee, February 21, 2025)

Recommendations (1)

- **Sustain the capacities built:** This evaluation came a few years into the implementation of BPS. For greater impact, capacities built need to be sustained longer to allow changes to embed.
- **Track costs:** For potential adoption and wider use elsewhere, it is important that cost data are assessed for value for money. This will not only help in decision-making but also improve efficiency where gaps and wastage are identified.
- **PALMS management:** The PALMS platform is still externally managed and maintained. This platform being at the core of the program needs to be locally managed sustainably in terms of human resources and technological investment.
- **Sustained Learning and Action:** There is a need to sustain local capacity building to be able to keep pace with staff departures but also be able to conduct regular analyses to monitor the performance of the program.

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Figure 16. APHRC recommendations (Source: APHRC Presentation to the BPS Steering Committee, February 21, 2025)

Behavioral Survey Second Round

The behavioral study is designed to gather data on participants' attitudes, behaviors, and capacities to understand if BPS activities yielded expected capacities. The first round of behavioral study data collection in Blantyre was completed in Year 3, which provided an initial understanding of capabilities and attitudes towards HIV prevention, data, and decision making in Blantyre following nearly three years of BPS implementation. That first round of data collection established the level of exposure surveyed individuals had to BPS activities and found that for all four domains assessed (demand and uptake, surveillance and response, QI, and data and information) most respondents reported increased involvement over the previous 12 months. The second round was completed in early Year 5. In total, 260 interviews across 2 rounds of data collection.

Results from the second round complement the external evaluation findings. Respondents affirmed that BPS has put the district at the forefront of decision-making and planning through the project. Respondents who reported:

- agreement with feeling equipped to design and evaluate QI strategies for HIV prevention services were 2.4 times more likely to be working at a BPS QI-exposed facility, compared to those who did not report agreement;
- responsibility for participating in program QI efforts were 3.7 times more likely to be working at a BPS QI-exposed facility, compared to those who did not report responsibility; and
- understanding how to use HCD to develop QI strategies for HIV prevention services were 2.7 times more likely to be round 2 respondents, compared to those who did not report understanding.

Quotes from second round data collection in Blantyre include:

- "We are now as a district the ones planning and organizing the activities alone without relying on the partners."
- "...what exactly did the Blantyre prevention strategy do? Because you can just have something on paper yet they are not doing anything. So how did they influence you to be more involved in these activities. They brought in a team of people working as HSAs. With the help of these HSA[s] as well as the support given to these HSAs it has helped to increase the HIV prevention activities. And also because they work together with different partners to uplift the HIV prevention activities, so this has helped in the reduction of new HIV infections."
- "...data is the one driving us in everything we are doing. We are basing decisions on our data. So the SOPs are helping us deliver service according to how it is supposed to. Whereby if we deliver our service properly at the end of the month, we have accurate data that gives us a clear picture on the activity or program performance in that month." - Health Centre rep
- "...facilities have been able now to address issues on their own rather than just relying on the district. So because of QI they are able to know gaps that they have and how they can manage those gaps without involvement of the district and as well, it's as well helping in delivering quality services to the clients." - Senior HSA

PALMS also was evaluated through the two rounds of behavioral surveys in Blantyre. Mixed methods analyses have demonstrated substantial gains in confidence with data interpretation, decision making, digital literacy, as shown in Figures 11-13 below. In the second round, PALMS was strongly noted as driving data use and informing decision-making and programming: 87% of PALMS users agreed that they use PALMS to identify areas of programmatic need and allocate resources (Figure 17); 85% of PALMS users reported an increase in the availability of HIV prevention data (Figure 18); and 83% reported an increase in trust in HIV prevention data over the last year (Figure 19). One Blantyre

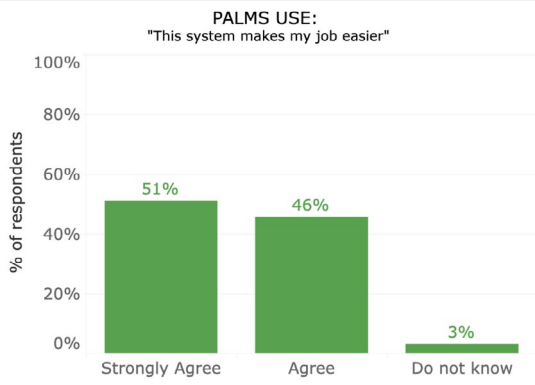
district health team respondent stated that "For data user clinic[s], there is a display of PALMS, so we select facilities we want to discuss, mostly we go for facilities with red flags, maybe we choose that today we discuss on STIs. So we go in PALMS and see where, what facilities have red flags, meaning they have high numbers of STIs, or they have STIs but with high numbers of HIV positive cases. So we analyse them and find the root cause and we plan for a response."

Figure 17. BPS Behavioral Survey Second Round Outcomes

PALMS & data use capacity takeaways

97% (of the 127 PALMS users surveyed) agreed with the statement that PALMS makes their job easier

87% (of the 127 PALMS users surveyed) agreed with the statement that they utilize PALMS to identify need and allocate resources



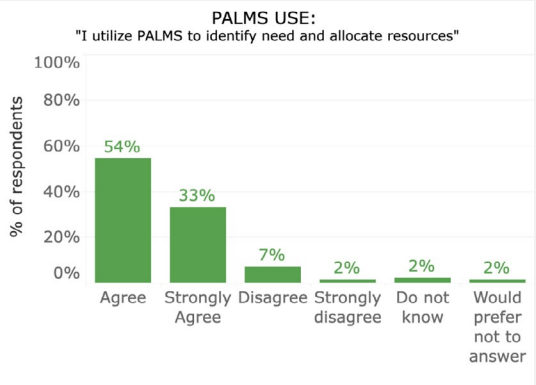
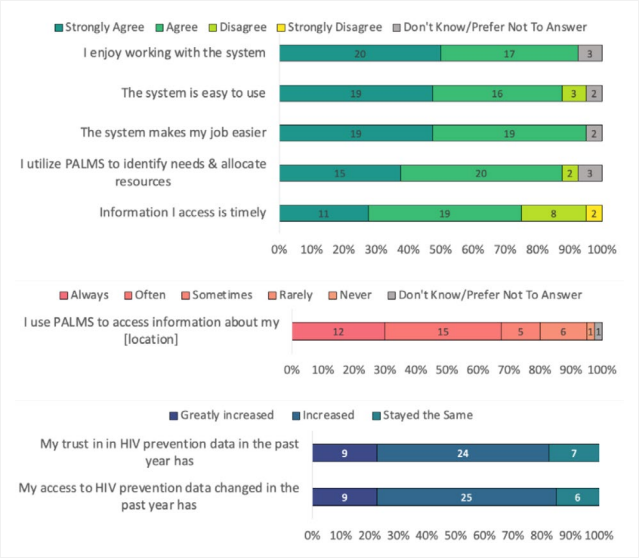


Figure 18. BPS Behavioral Survey Second Round Outcomes

PALMS has high user satisfaction and perceived value



The 2023 (Feb - July) behavioral survey found.

- 93% of users enjoyed working with the system,
- 88% said it was easy to use,
- 75% said the information is timely
- 83% reported an increase in trust in HIV data,
- 85% reported increased access to data.

Figure 19. BPS Behavioral Survey Second Round Outcomes

Special Studies

One of our priorities for Year 5 was to fill in gaps in BPS M&E especially related to programmatic outcomes through special studies. We developed four protocols that will be submitted to the COMREC (Kamuzu University of Health Sciences) IRB in early Year 6 (see Figure 20). Focus areas include:

- The role of community labs in eliciting community preferences and ideas for healthcare improvement;
- Institutionalization of BPS-supported tools, methodologies, and capabilities in key organizations within the Blantyre HIV prevention system;
- The effectiveness and outcomes of the Councilor training on HIV and structural risk reduction; and
- Key changes in Blantyre's public health system associated with Blantyre Prevention Strategy (BPS) support, and the mechanisms through which changes were produced to support successful ongoing and future implementation of HIV prevention interventions.

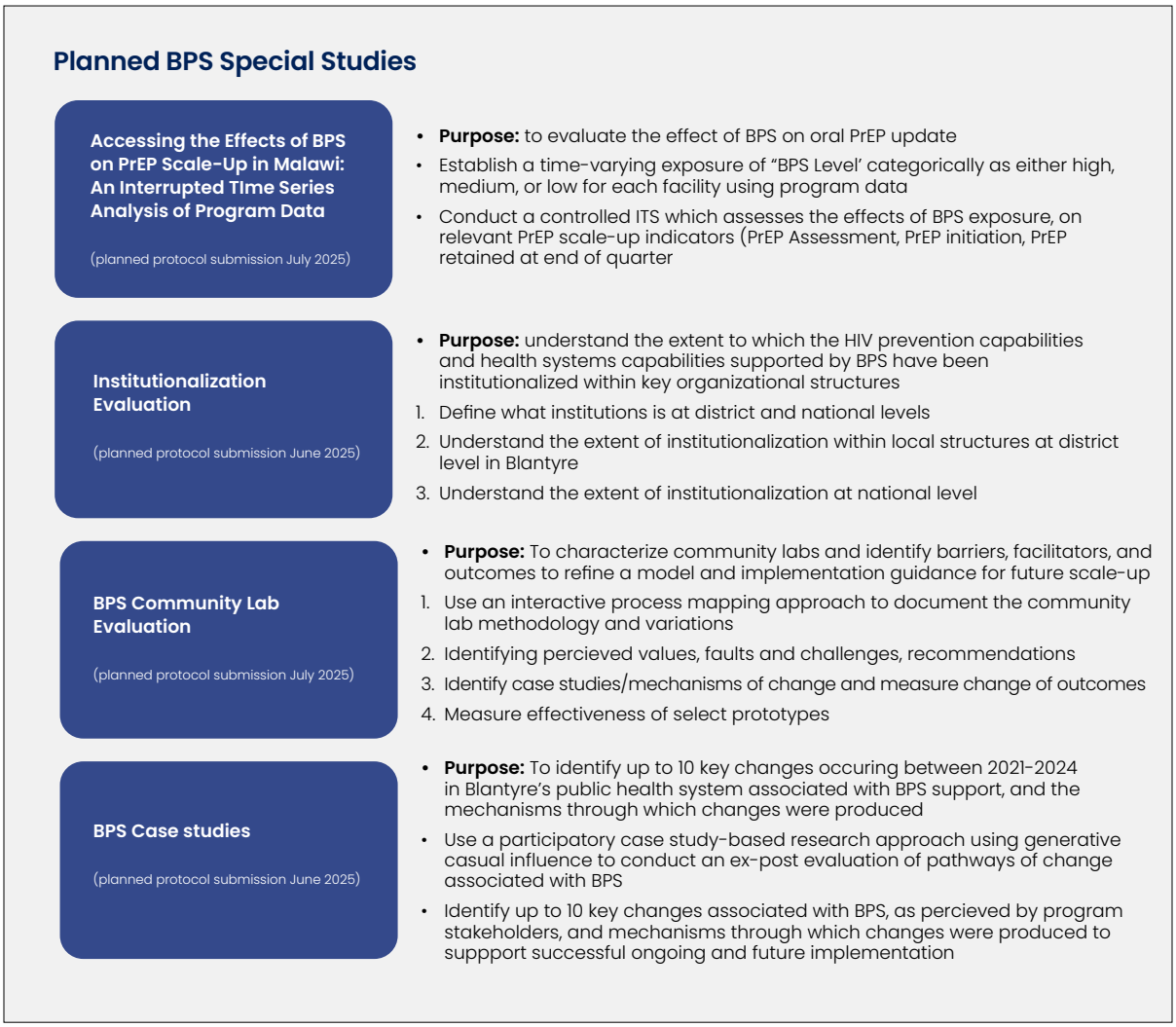


Figure 20. BPS Special Studies to be Completed in Year 6

LEARNING DISSEMINATION

Blantyre District, NAC, CIGH, and others led dissemination of learning and outcomes from BPS implementation in Blantyre nationwide in Malawi and globally through local and global conferences, media and external communications, and publications. In addition, we began work on the design of the adaptation toolkit.

To address gaps in outcome-oriented reporting and presentations, as well as boost professional skills for the future, CIGH engaged Burness, BPS's communications partner, to deliver a training on communications in September 2024. Participants from the district and city health teams, key facilities, and partners received a crash course in message development, framing, delivering effective presentations, and managing media interviews. The course was well-received, and district coordinators requested a follow-up training with more in-depth focus on presentation development and delivery, abstract preparation, and report writing.

Local Dissemination in Malawi

The district strategically opted to leverage existing coordination platforms – such as the BCT and Joint HIV Prevention TWG – to share learnings in Blantyre. This integrated approach broadened stakeholder reach, promoted sustainability, and embedded BPS content into routine district dialogue.

The district also presented to nationwide stakeholders throughout the year. In December 2024, Dr. Kawalazira presented on BPS to the Malawi Partnership Forum. In March 2025, the Blantyre DHMT presented BPS during a national meeting of all urban and district Directors of Health and Social Services, organized by the MALGA in collaboration with the MoH. The Deputy Minister of Health served as Guest of Honor, with the Secretary of Health (SH) also in attendance. Blantyre displayed a pavilion that highlighted the district's progress, where the DHMT showcased the origins and implementation of BPS, demonstrated the use of PALMS dashboards for data-driven decision-making, and presented ongoing HIV prevention efforts. The pavilion also featured all BPS workstreams and illustrated how these components work together to support an integrated, district-led health system. The presentation received strong and enthusiastic responses from the Deputy Minister, the SH, and other district teams. Since the event, the SH and several districts, including Mwanza, have contacted the DHMT to learn more about BPS.

Media & External Communications

A new site was launched ahead of the Munich AIDS 2024 conference:
https://blantyrepreventionstrategy.com

Publications

We made significant progress in Year 5 in pursuit of our goal to disseminate the BPS model, learnings, and outcomes through peer-reviewed journals. BMJ Global Health published our paper **"A Health Systems Approach to More Effective Decentralized HIV Prevention: Development of Malawi's Blantyre Prevention Strategy"** in its February 2025 issue. The article is co-authored by Government of Malawi and expert partners highlights the rationale and early development of BPS.

Two additional manuscripts were accepted for publication in early Year 6. In March, Frontiers in Reproductive Health accepted **"Using quality improvement to close HIV prevention gaps and strengthen district health systems: approach and early implementation**" as part of a series: Accelerating to 2030 – Doubling Down on HIV Prevention to End HIV/AIDS as a Public Health Threat. The paper, co-authored by the BPS QI expert team and the Government of Malawi, describes BPS's innovative use of QI methodologies, namely the QI collaborative.

In addition, the International Journal of Health Policy and Management accepted **"Engaging councillors to address structural and social drivers of HIV infections in Blantyre City: A formative study"**. Dr. Edna Bosire is lead author.

Several other papers are under journal review, including one titled "Strengthening District Health Systems to Achieve Malawi's Decentralization Objectives: Lessons Learned from Malawi's Blantyre Prevention Strategy" also has been submitted BMJ Global Health for publication and is in peer review as of end of May 2025. Additional papers are in production or are planned for Year 6.

Theme	Planned Publication Working Title	Target Journal	Submission
Conceptual framework and implementation	A health systems approach to more effective subnational HIV prevention: The Blantyre Prevention Strategy	BMJ Global Health	Published March 6, 2025
Structural risk	Engaging Councilors to Address Structural and Social Drivers of HIV Infections in Blantyre City: A Formative Study	International Journal of Health Policy and Management	Published June 9, 2025
QI for HIV prevention	Using Quality Improvement to Close HIV Prevention Gaps: Approach, Early Results, and Sustainability	Frontiers of Reproductive Health (Supplement Accelerating to 2030 – Doubling Down on HIV Prevention to End HIV/AIDS as a Public Health Threat Series)	Published June 18, 2025
Sub-national Systems Building	Strengthening District Health Systems to Achieve Malawi's Decentralization Objectives: Lessons Learned from Malawi's Blantyre Prevention Strategy	Health Systems & Reform	In peer review as of May 28, 2025
Data systems/ targeting	Development of Malawi's prevention adaptive learning and management system (PALMS): a multisectoral digital health solution to accelerate HIV prevention	Journal of Medical Internet Research	June 2024 (submitted); pending decision
Coordination/ targeting/ community engagement/ quality delivery	A Network Analysis of HIV Civil Society Organizations to Enhance HIV Prevention Service Delivery in Blantyre, Malawi	Lancet Global Heath	July 2024 (submitted); pending decision
Targeting analysis	Health Facility and Contextual Correlates of HIV Test Positivity: A Multi-Level Model of Routine Programmatic Data from Malawi	BMJ Epidemiology & Community Health	pending decision
Structural risk	Capacitating Elected Ward Councilors for HIV Prevention in Malawi		In draft

Community insight gathering	Barriers, facilitators, and outcomes of Blantyre, Malawi's community lab model use for HIV prevention		Pending study outcomes
Systems change / capacitation	The Blantyre Prevention Strategy: an ex-post evaluation of pathways of change associated with the Blantyre Prevention Strategy (study paper)		Pending study outcomes
Institutionalization / capacity building	Institutionalization of HIV prevention capabilities and health systems capacities within key organizational structures in Blantyre, Malawi, supported by the Blantyre Prevention Strategy (BPS) (study paper)		Pending study outcomes
Structural risk	Evaluating the Effectiveness of working with Elected Ward Councilors in Addressing the Structural and Social risks of HIV in Blantyre, Malawi (study paper)		Pending study outcomes

Table 2. BPS Manuscripts & Publications Years 5-6

Conferences

Photo 2. Government of Malawi, CIGH, and BPS and PathToScale contributors following the AIDS 2024 satellite

BPS government and expert partners gathered in Munich, Germany, at the AIDS 2024 conference to discuss progress and challenges in the rollout of an innovative new approach to strengthening health systems approaches in HIV prevention. The Honorable SH Samson Mndolo provided opening remarks at the BPS satellite session in July 2024, which also featured the NAC CEO, Dr. Beatrice Matanje, and Director of Programmes, Chimwemwe Mablekisi; Dr. Kawalazira, Suzike Likumbo, and Chrissy Banda from the Blantyre DHO; BPS Prevention Coordinator Yohane Kamgwira; and Dr. Charles Holmes and Sara Allinder from the Center for Innovation in Global Health, Georgetown University. The

team explored prevention-related systems development (e.g., digital health, community labs, and QI collaboratives) that make HIV prevention less "operator dependent," and more coordinated, data driven, and locally owned and how the strengthened systems are supporting introduction of injectable PrEP. The full video of the official satellite event is **available on the BPS website**. In addition, BPS was featured through Suzike Likumbo et al's abstract / poster entitled **"Building sustainable district-based Quality Improvement (QI) capacity for HIV prevention in public health facilities in Blantyre, Malawi"** (WEPEE590).

Photo 3. Blantyre District Senior HPO Chrissy Banda (L) and QI Coordinator Suzike Likumbo (R), with QI advisor Moses Enock, presenting at the AIDS 2024 poster exhibition (July 24, 2024)

In February 2025, BPS was featured prominently during the Sustainable HIV Prevention Initiative convening. The Initiative aims to share and advance country-led sustainable HIV prevention responses, such as BPS, and to examine and deepen the understanding of core capabilities and health system functions that define the "how" of sustainable HIV prevention programming in sub-Saharan Africa. Drs. **Mathias**, Matanje, and Kawalazira, as well as others, referred to BPS and the systems change in Blantyre repeatedly throughout the **2-day session** as an example of the type of systems approach needed for resilience and sustainability of national HIV responses, which brought together representatives from 11 African governments, partner organizations, and civil society.

In Year 6, learning from BPS and experience with district systems strengthening will be highlighted at additional conferences. The IAS 2025 science meeting in Kigali, Rwanda, will feature a satellite **"Leadership in Action: Strengthening HIV Prevention Systems and Advancing Innovation in Malawi"**. The 90-minute session on Monday, July 14, 2025, (15:00 - 16:30 CAT in Room: MH2) will feature BPS and the PathToScale injectable PrEP implementation science initiative. National and district leaders will share insights, successes, and challenges from their experience expanding access to HIV prevention choices while addressing the systemic needs required for sustainable health systems. They will speak to how Malawi has demonstrated national and district leadership, by strengthening its HIV prevention systems at national and district-level and systematically advancing the introduction of injectable PrEP.

IAS 2025 also will feature a BPS abstract led by Suzike Likumbo, Blantyre District QI Coordinator, entitled **"Improving Pre-Exposure Prophylaxis Uptake Among Sexually Transmitted Infections Clients through Integrated Service Delivery: Lessons from PrEP Up! Quality Improvement Collaborative in Blantyre, Malawi".**

Adaptation Toolkit

We took important steps toward creating a publicly available BPS adaptation toolkit in Year 5. BPS engaged Bull City Learning to help design and develop a multi-media toolkit. In addition to documenting the BPS model and its program elements, the goal for the toolkit is to inform and support adaptation planning and co-development processes in districts (or other sub-national units) interested in adopting the BPS model. The toolkit will have a knowledge repository of BPS-created or adapted tools, SOPs, TORs, etc., district-agnostic versions of those materials, and include information and guidance about the BPS model, its program elements, and associated systems components and functions.

Work Phase 1 started in January 2025 with a comprehensive review of existing BPS materials; Define toolkit objectives, guiding principles, and the desired approach; and development of a costed design proposal for the development and execution of the BPS adaptation toolkit. The second phase is expected to begin in June after those discussions and feedback and will involve execution of the plan designed during Phase 1. Expected activities include:

- Designing a curriculum that includes clear objectives, desired learning outcomes, and key modules that align with the BPS model.
- Creation of modules and other necessary products and materials.

YEAR 6+

Year 5 provided important learning about the functionality of Blantyre's system and remaining areas of work to support full institutionalization of the BPS model for sustainability in Blantyre. We also were able to make key advancements on strategic project objectives in terms of disseminating the model and informing broader expansion in Malawi. Blantyre's resilience in the face of the USG cuts has re-affirmed our belief in the BPS model as a critical approach to sustainability of district and national HIV responses and their broader health systems.

Through the sustainability planning and systems mapping exercises throughout the year and the April strategic planning meeting in Blantyre, we have a collective appreciation for ways to support the district and city health teams through the remainder of the project. These actions include addressing some of the obstacles and challenges Blantyre faced in Year 5 including staff turnover, capacity of the newly appointed city focal persons, and mitigating the impact of the USG support changes. Areas that the district and city health teams identified as needing more focus, capacity building, and support through Year 6 are:

- Deliberate efforts to conduct induction orientation to newly recruited staff;
- Capacity building for city focal persons;
- Strengthening the mentorship and supervision of all BPS program elements;

- Strengthening and scaling:
  - response activities,
  - coordination with CBOs/CSOs
  - data use and documentation,
  - network model committees,
  - government staff trained in HCD and use of community labs;
- Documenting best practices and ensure that they guide policy change with all partners being aware of the systems built and how to use them accordingly; and
- Identifying innovative ways of involving the private sector and mobilizing financial and in-kind resources.

In April, the district and city health teams identified the following priorities through Year 6:

- Sustain the gains that have been achieved vis a vis system and services, including continuing to use data to target and provide high-quality, accessible HIV prevention services;
- Ensure all district stakeholders have PALMS access and capacity to use data for decision making, e.g. training in data use and analysis, which includes city coordinators, new staff hired in existing facilities, and expansion to all public and private facilities across district;
- Finalize documentation of Blantyre's HIV prevention system, e.g. system, SOPs, tools, etc. and roles, responsibilities, and relationships;
- Strengthen collaboration between the district and city health teams and coordination and communication across work streams, e.g. holding regular joint data review meetings;
- Elevate community structures
- Update and rationalize BPS-supported tools, e.g. PALMS (indicators and thresholds), RTR, demand generation tool;
- Assess skills among those who have already been trained and expand capacities and tool use across the district, including to new facilities and training of staff positions that have turned over;
- Engage the private and corporate sectors for in-kind and financial support, e.g. support to the district for training activities; and
- Support adaptation in other districts.

Other priorities include expansion to additional geographies in Blantyre informed by Year 5 learning and train any new district and city councilors elected in the 2025 elections.

In Year 6, expert partners will support / provide:

- the remaining systems and institutionalization activities; finalization of all special studies; documentation, publications, and communications materials;
- any needed technical or strategic support to the district;
- assessment of data capacity in Blantyre and provision of additional training;
- communications training in Blantyre and Lilongwe;
- translation of BPS learning to national level and
- adaptation other districts through the "expansion" working group;
- development and dissemination of the adaptation toolkit;
- transition PALMS ownership and data tool management to the MoH, NAC, and district; sharing learning at IAS Science 2025 and ICASA 2025; and
- PathToScale implementation, documentation, and dissemination for Blantyre.

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BLANTYRE PREVENTION STRATEGY