MUWRP
Makerere University
Walter Reed Program

MUWRP INSTITUTIONAL CAPACITY SUMMARY

MAKERERE UNIVERSITY WALTER REED PROGRAM (MUWRP)

Institutional Capacity

Biomedical Research • Disease Surveillance • HIV Prevention, Care & Treatment • Health Systems Strengthening

1. Who We Are

MUWRP is a Ugandan non-profit biomedical research organization, established in 2002 as a partnership between Makerere University and the U.S. Military HIV Research Program (MHRP) at the Walter Reed Army Institute of Research (WRAIR). Founded to build local HIV-vaccine trial capacity, it has grown over two decades into a multidisciplinary institution central to Uganda's biomedical research, disease surveillance, HIV service delivery and health-systems-strengthening agenda.

- Legal status: Company limited by guarantee, guaranteed by Makerere University and the Henry M. Jackson Foundation (HJF).
- Vision: To be a leading biomedical research organization for better health.
- Mission: To mitigate disease threats through quality health research, disease surveillance, and health systems strengthening.
- Core values: Excellence, Integrity, Teamwork.
- Renamed 2024 from "Project" to "Program", with a new corporate brand; commercial mortgage on the Nakasero Road headquarters fully repaid in 2023/24.
- Strategic Plan 2022–2026: four pillars (Research & Surveillance; Health Systems Strengthening; Organizational Development; Partnerships & Resource Mobilization) and five strategic objectives.
- Leadership: Executive Director Dr. Hannah Kibuuka; Board Chair Prof. Fred Wabwire-Mangen; senior team includes Deputy ED, Laboratory Director, PEPFAR Program Director and Director of Administration.

Four pillars of institutional capacity

1. Regulated trials: a track record of safely executing internationally regulated clinical trials and cohort studies.
2. Accredited laboratory: a CAP-accredited, GCLP-compliant laboratory network serving research and national diagnostics.
3. Health systems strengthening: a proven model that has helped the MoH build lab hubs, EMRs and biosafety systems at scale.
4. Outbreak response: demonstrated mobilization during Sudan Virus Disease (2022/23 & 2025), COVID-19 and CCHF events.

2. MUWRP at a Glance

Indicator	Capacity / Achievement

Founded	2002 (roots to a 1998 Government of Uganda invitation to the U.S. Army)
Operational footprint	20+ districts in Uganda, plus surveillance sites in Somalia
PEPFAR network	184 health facilities across 6 districts (incl. Lake Victoria islands)
Clients on ART	97,832 today up from 99 clients at program start in 2005
Regional population served	~2.37 million across six supported districts
Vaccine trials	12+ Phase I/II trials for HIV, Ebola, Marburg & Schistosomiasis
Research firsts	Africa's first Ebola vaccine trial (2007); first Schistosomiasis trial (2019)
Laboratory	CAP-accredited continuously since 2005; >99% of processes exceed CAP standard
Biorepository	934,741+ aliquots across 145,000+ samples; 40+ freezers to −196°C
Workforce	One of Uganda's most experienced biomedical/public-health workforces

3. Core Programs & Capabilities

MUWRP operates through six interlocking programs plus cross-cutting functions, all underpinned by a shared governance, quality and administrative core.

3.1 Clinical Research & Vaccine Development (founding capability)

- HIV vaccines: multiple Phase I/II trials since 2002 across DNA, protein-subunit and viral-vector (Ad5, Ad26, ChAd, MVA) platforms. RV591 "RapidVax" completed Part B enrollment (81 participants, Nov 2025). Selected to host the BRILLIANT-001 Phase I HIV vaccine discovery trial (8-country USAID/SAMRC consortium).
- Ebola: Africa's first Ebola vaccine trial (2007); five Phase I/II trials total. Sabin-003 Ebola Sudan Phase II (62 enrolled, 97% retention) data supported emergency use in Ethiopia (2025).
- Marburg: Sabin-002 Phase II (63 enrolled, 96–97% retention) data supported emergency-use deployment in Rwanda (2024).
- Schistosomiasis: Africa's first Phase I trial (2019); 200-participant follow-up at 77% retention in a highly mobile fishing population; data close-out 2025.
- COVID-19: one of 8 Ugandan sites in the Phase III Sanofi trial; data contributed to 2022 EU approval of a heat-stable bivalent vaccine important for low-resource distribution.
- Acute HIV / cure research: NIH/DAIDS cohorts detecting acute infection at Fiebig stages 1–2; HOPE Collaboratory reservoir studies using lymph-node/gut biopsy and leukapheresis.
- Cohort studies: AFRICOS (since 2013; 444 active participants), RV583/MOCHI (422 enrolled) and RV217 longitudinal data underpinning national HIV policy.
- Implementation science: landmark PrEP demonstration project (2017, Mukono) that directly informed Uganda's national PrEP guidelines; now a CASCADE Network site for cervical-cancer screening research (launched Dec 2025).

- Capacity & resilience: expanded Research Pharmacy supports up to 10 concurrent trials; maintained uninterrupted activity through COVID-19; holds a seat on Uganda's National Task Force for epidemic preparedness; mentored partner IRBs (CoVAB, University of Mogadishu).

Key achievements Clinical Research & Vaccine Development

- Africa's first Ebola (2007) and first Schistosomiasis (2019) vaccine trials, among 12+ Phase I/II trials over two decades.
- Data supported emergency-use deployment in Ethiopia (Ebola Sudan, 2025) and Rwanda (Marburg, 2024) and the 2022 EU approval of a heat-stable COVID-19 vaccine.
- Completed RV591 Part B enrollment (81 participants) and selected to host BRILLIANT-001 under an 8-country USAID/SAMRC consortium.

3.2 HIV Prevention, Care & Treatment (PEPFAR) since 2005

HIV Prevention

Prevention services include daily oral PrEP, event-driven PrEP, the Dapivirine Vaginal Ring, and long-acting injectable options (Cabotegravir, Lenacapavir), targeted at female sex workers, fishing communities, migrant populations, long-distance truck drivers, adolescent girls and young women (AGYW), and HIV-discordant couples. Since 2012, MUWRP has implemented Prevention of Mother-to-Child Transmission (PMTCT) services across all six districts, including island communities, achieving a 99% HIV testing rate among the 109,802 pregnant women attending antenatal care in 2024. The DREAMS program for AGYW implemented in Mukono, Luwero and Kayunga enrolled 11,819 AGYW in 2024, of whom 94% received a full primary prevention package plus at least one secondary service; partner CBOs such as ISORE Women's Initiative for Sustainable Development layer services such as Stepping Stones life-skills training, VSLA savings groups, cash transfers, and OVC linkages, having enrolled hundreds of AGYW with documented zero HIV incidence from baseline in tracked cohorts.

Orphans and Vulnerable Children (OVC) and DREAMS Program

MUWRP has implemented the Orphans and Vulnerable Children (OVC) program for close to two decades, growing from a modest pilot of 257 children and adolescents reached in FY2006 to tens of thousands of beneficiaries served annually across Buikwe, Kayunga and Mukono districts a nearly 147-fold caseload increase to its FY2022 peak of 37,828 OVC served. This sustained, multi-year footprint demonstrates MUWRP's institutional capacity to design, scale and adapt a complex social and clinical support program over time, including through major shifts in donor reporting systems (from internal program data to PEPFAR's DATIM platform in FY2015) and through the COVID-19 period, when caseloads continued to grow rather than contract. The delivery model is built on a network of twelve Community-Based Organization (CBO) and faith-based partners including Lugazi Diocese, St. Charles Lwanga Hospital, St. Francis Health Care Services, Hands of Charity, Sikyomu, Chain Foundation, Mukono Church of Uganda, ISORE and CHAF Uganda each anchored to local health facilities, district health and probation teams, police, faith-based structures and the Ministry of Gender.

Programmatic quality has kept pace with scale. Against FY21 COP targets, MUWRP exceeded its OVC_SERV target (107% achievement, 26,634 against a target of 24,879), its comprehensive-services target (OVC_COMP, 105%), its preventive-services target (OVC_PREV, 109%), and its DREAMS-linked target (OVC_DREAMS, 129%). Clinically, the program has sustained viral load suppression among HIV-positive OVC beneficiaries above the 85% PEPFAR target in every reporting period from FY2020 onward, reaching as high as 94%, supported by structured home visits, psychosocial support, vocational referral

and reminder systems. At St. Charles Lwanga Hospital in Buikwe district a single faith-based partner facility the OVC program supports 314 beneficiaries (239 aged 0–17), including 131 children and adolescents living with HIV, of whom 125 (96%) have achieved viral suppression through treatment club meetings, caregiver case conferencing, nutrition demonstrations and transport vouchers for intensive adherence counselling. More broadly, Lugazi Diocese alone operates ten ART-accredited health facilities across MUWRP's catchment area, carrying 10,925 patients in care equivalent to 18% of all patients supported under the MUWRP program illustrating the scale that a single, well-managed faith-based partner relationship can contribute to overall program capacity.

This capacity is further evidenced by a set of MUWRP-developed monitoring tools specific to the OVC portfolio:

- **OVC ART Literacy and Adherence Tracking Tool:** a structured, fifteen-point literacy checklist covering clinical topics (viral load, drug resistance, regimen switches, differentiated service delivery) alongside social and protective topics (disclosure, adolescent sexual and reproductive health, GBV/violence-against-children referral pathways including Uganda's SAUTI 116 child helpline, WASH, and financial literacy/VSLA participation), ensuring adherence counselling is delivered consistently across the twelve-CBO network.
- **Home-Based Non-Suppressed Care Report and CALHIV tracking template:** follows each non-suppressed child across successive home visits, logging viral load results and regimen line alongside barriers captured across eight standard categories non-disclosure, stigma, food security, GBV/child protection, ARV administration issues, facility accessibility, health-worker attitude and caregiver absenteeism together with the intervention applied at each visit.
- **Socio-economic strengthening impact assessment tool:** tracks the sustainability of livelihood packages (Income Generating Activities, Village Savings and Loan Associations, start-up kits) and the Eden demonstration farm, giving MUWRP both case-level granularity and data infrastructure to manage a large, multi-site OVC caseload to PEPFAR reporting standards.

DREAMS Program. Within its OVC portfolio, MUWRP also implements the DREAMS initiative (Determined, Resilient, Empowered, AIDS-free, Mentored and Safe), a PEPFAR-aligned program targeting adolescent girls and young women who are non-suppressed, adolescent mothers, or otherwise exposed to harm. DREAMS is delivered through the same CBO network used for the broader OVC program, layering age- and gender-specific programming onto existing case-management and clinical-integration infrastructure rather than building parallel systems. Enrollment data show a program capable of rapid scale-up in response to need: from 39 girls reached in FY2021, MUWRP scaled DREAMS enrollment to 15,219 in FY2022, before consolidating to a more targeted caseload of 5,248 in FY2023 and 6,577 in FY2024 (in-year, preliminary). Against the FY21 COP target, the OVC_DREAMS indicator was exceeded by 29% (2,193 achieved against a target of 1,702).

- **ISORE Women's Initiative for Sustainable Development (Mukono):** 943 AGYW enrolled (558 pregnant, 385 in transactional sex), identified through girl rostering, facility peer identifiers and school/community referrals, recording 0% HIV incidence among enrollees relative to baseline; 805 completed the Stepping Stones curriculum, 747 received life-skills training (293 of whom sat and passed National Directorate of Industrial Training exams), and 259 received cash transfers that helped 120 AGYW across eight groups establish sustainable businesses, supported by fourteen Village Savings and Loan Association groups. 142 children transitioned from the OVC caseload directly into DREAMS programming, with 119 receiving the SINOVUYO parenting/caregiver curriculum and 72 receiving household-level socio-economic strengthening support.

- **Lugazi Diocese:** has implemented DREAMS since 2016 initially as an in-school programme before expanding in 2018 to the Kasawo, Kimenyedde and Seeta-Namuganga sub-counties enrolling 6,329 AGYW to date, of whom 5,419 (86%) completed the primary service package, leveraging the Diocese's existing footprint of 187 primary schools (62,794 pupils), 25 secondary schools (12,006 students), five vocational schools and two tertiary institutions.
- **Network-wide coverage analysis (August 2022):** of 23,137 active beneficiaries across six implementing CBOs, 19,030 (82%) had received the primary DREAMS service package; coverage ranged from 71% at Mukono Church of Uganda to 95% at Sikyomu, and was strongest among younger adolescents (88% among 10–14 year-olds) relative to young women aged 20–24 (73%) an evidence base that has informed MUWRP's partner-level technical support and outreach/retention adjustments for older beneficiaries.

Recent PEPFAR reporting reinforces this track record at the program level. In FY24, MUWRP's AGYW_PREV indicator reached 96% of target alongside 90% for the parallel Adolescent Boys and Young Men (ABYM) indicator, 99.9% STI screening coverage, and GBV case identification at 105–107% of target underpinned by certification of MUWRP's own male and female lead trainers in the “No Means No” violence-prevention curriculum by NMN Worldwide, and the phased rollout of the SASA! community mobilization methodology for GBV prevention. MUWRP's capacity also extends to program recovery and expansion: in FY24 the project assumed direct management of the Kayunga DREAMS program to correct performance gaps left by a previous sub-grantee, and is now leading its expansion into two additional sub-counties (Kangulumira and Kayunga Town Council) evidence that MUWRP can both stabilize underperforming AGYW programming and scale it into new geography. The program's standing was further validated in 2018, when DREAMS service delivery in Mukono was selected for a site visit by the U.S. Department of State's Senior Advisor for Policy at the Office of the Global AIDS Coordinator and Health Diplomacy, together with PEPFAR Uganda's Country Lead.

Key Achievements – OVC and DREAMS

- Scaled the OVC caseload nearly 147-fold (257 in FY2006 to a 37,828 FY2022 peak) while sustaining individual case management and exceeding all four FY21 COP OVC targets (105–129% achievement).
- Sustained CALHIV viral suppression above the 85% PEPFAR target every period since FY2020 (up to 94%), with facility-level results such as 96% suppression at St. Charles Lwanga Hospital.
- Built and deployed MUWRP-original case-management tools (the OVC ART Literacy and Adherence Tracking Tool, Home-Based Non-Suppressed Care Report, and socio-economic strengthening impact assessment) standardizing practice across a twelve-partner CBO/faith-based network.
- Scaled DREAMS from 39 girls (FY2021) to a 15,219-girl peak (FY2022), exceeding the FY21 OVC_DREAMS target by 29%, and recorded 0% HIV incidence among ISORE-enrolled AGYW cohorts.
- Demonstrated program-recovery capability by assuming direct management of an underperforming Kayunga DREAMS sub-grant in FY24 and expanding it into two new sub-counties.

Adolescent and School Health Innovations

To improve viral suppression among school-going adolescents, MUWRP launched a School Health Program now covering 40 schools across Mukono, Kayunga and Luwero districts, reaching 9,856 learners through 26 school health clubs and supporting 219 HIV-positive learners with improved linkage to care; in the 2025 cohort, 83% of enrolled HIV-positive adolescents achieved viral suppression

compared with 73% among non-enrolled peers. The Young Adolescents Peer Support (YAPS) model deploys 63 trained peer supporters across 18 facilities to provide peer-led counselling and adherence support.

Continuous Quality Improvement and Strategic Information (PEPFAR)

Continuous Quality Improvement (CQI) uses program data to identify performance gaps and apply systematic approaches to close the distance between current and expected performance. MUWRP supports facilities to participate in national and regional CQI collaboratives spanning PMTCT/EID, TB, HIV prevention, and CALHIV care and treatment, including abstract writing and presentations at national CQI conferences, and works closely with District CQI focal persons, coaches and District Health Teams (DHTs) on facility-based technical assistance, root-cause analysis and follow-up.

- Between 2024 and 2025, MUWRP-led Interruption-in-Treatment (IIT) CQI collaboratives delivered a 2.6% reduction in IIT among facilities that had previously accounted for 80% of treatment interruptions program-wide; best practices identified were documented and scaled up to other high-burden IIT facilities across the region.
- In 2025, a regional cervical cancer CQI collaborative addressing screening and treatment gaps among women living with HIV with pre-cancerous lesions or suspected cancer achieved 100% performance across the entire care cascade at participating sites.
- Instituted a Whole Client Model collaborative aimed at ensuring clients receive 100% of the services they are eligible for within a single clinical contact and is scaling best practices from the national HTS CQI collaborative to improve screening, testing and timely linkage to care region wide.

MUWRP's Strategic Information (SI) function comprises program and facility-based staff both government and project-supported who maintain Health Management Information System tools and lead day-to-day data collection, monitoring, evaluation and reporting, working alongside biostatisticians, IT officers and health workers across the six PEPFAR districts. SI activities are guided by service- and data-quality principles, with periodic data verification, validation and quality assessments feeding remediation actions for continuous program improvement. Key interventions include:

- Strengthening data systems for clinical-care governance and prioritizing critical data elements for clinical care, monitoring and program implementation, drawing on MoH-governed systems and data architecture.
- Integrating Data Quality Assurance (DQA) tools into EMR systems and standardizing electronic DQA at facility and district level, alongside capacity building to scale up MoH digital systems for national and sub-national reporting.
- Building CQI capacity at regional, district, facility and program levels, promoting data-driven decision-making, and operationalizing “Data Day” review meetings at health facility and community sites using standardized validation tools.
- Utilizing performance dashboards, including surge performance trackers, to monitor and drive program-wide performance improvement.

Laboratory and Commodity Support (PEPFAR-funded)

MUWRP's PEPFAR-supported laboratory network strengthens diagnostic capacity through a hub-and-spoke model serving all 184 facilities, including hard-to-reach islands. Four of six laboratory hubs

Kayunga RRH, Mukono GH, Kawolo GH and Luwero GH have achieved and sustained international (SANAS) accreditation; Buvuma HC IV and Nakasongola HC IV continue through the SLMTA accreditation pathway. The network is supported by over 20 laboratory/non-laboratory HRH personnel, an 18-motorcycle sample-referral fleet, and infrastructure investments including a dedicated regional equipment-maintenance workshop at Kayunga RRH (with two on-boarded biomedical engineers).

- Sustained SANAS accreditation at four public laboratories (Kayunga RRH, Kawolo, Mukono, Luwero) with low non-conformity counts on recent audits.
- Procured and deployed 13 centrifuges, 10 refrigerators, 1 biosafety cabinet, 2 air conditioners and 35 printers across hub and lower-level laboratories.
- Constructed a new laboratory hub on Buvuma Island and renovated/extended laboratory space at multiple hub sites.
- Installed power-backup systems at 17 GeneXpert/VL-EID point-of-care sites, plus dedicated solar/inverter systems at Mukono GH and Luwero GH laboratory hubs and a 10kVA solar system at Buvuma HC IV (off the national grid).
- Transitioned viral-load test requests from paper to electronic via extended LIMS and ClinicMaster integration and rolled out an Integrated Requests and Results Dispatch System (IRRDS) covering HIV viral load, EID, Hepatitis B/C and sickle cell disease testing.
- Facilitates External Quality Assurance/Proficiency Testing (EQA/PT) panel distribution through the lab-hub system, including TB microscopy blinded slide rechecking, with onsite corrective-action support for any failed results.
- Partners with the Central Public Health Laboratories (CPHL) so national biomedical engineers can calibrate auxiliary equipment (e.g., biosafety cabinets) at hubs where regional engineering capacity is not yet built, complementing the Kayunga regional equipment-maintenance workshop.

Medical Logistics Management (PEPFAR)

MUWRP's Medical Logistics Management function safeguards continuous availability of medicines and health commodities across public, Private Not-for-Profit (PNFP) and selected Private-for-Profit (PFP) facilities in all six supported districts, including hard-to-reach island communities:

- Supports bi-monthly electronic ordering through the National Medical Stores (NMS+CSSP) system for public and PNFP facilities and the Joint Medical Stores (JMS) online system for PFP facilities.
- Coordinates ordering and distribution of third-line ART regimens through Kayunga Regional Referral Hospital to facilities managing clients on third-line treatment.
- Delivers last-mile ARVs, TB medicines and HIV testing kits to the island health facilities of Koome and Buvuma, and oversees receipt/distribution of PrEP drugs, ARVs and cervical-cancer commodities from central warehouses, with accountability maintained through dispensing logs and prescription books.
- Deploys district-based Medicine Management and Laboratory Supervisors who conduct quarterly mentorship and supportive-supervision visits, reinforcing adherence to national guidelines and continuous quality improvement in ART and laboratory service delivery.

Health Systems Strengthening and Digital Health (PEPFAR)

MUWRP's health-systems-strengthening approach aligns with the WHO's six building blocks and Uganda's national Health Information and Digital Health Strategic Plan. Centerpiece investment is the ClinicMaster Electronic Medical Records system a fully integrated EMR spanning outpatient and inpatient care, maternity, laboratory, radiology, pharmacy, theatre and chronic-disease management.

- **Source-code donation:** in 2025, MUWRP donated the ClinicMaster source code to the Ministry of Health's Division of Health Information, reinforcing government ownership, building DHI staff capacity, and reducing vendor dependency.
- **Interoperability:** integration with ALIS, the National Data Warehouse, ART Access (enabling pharmacy refills for stable patients and decongesting clinics), and DHIS2.
- **Health Information Exchange:** implemented viral-load HIE at 86 facilities across Kayunga, Mukono, Buvuma and Buikwe, enabling direct VL request/result exchange with the Central Public Health Laboratories; EID-test HIE in progress.
- **Paperless transitions:** 14 facilities (Kayunga district-3, Mukono -3 , Buvuma-1, Buikwe- 4, Luweero- 4) moved to fully paperless EMR operation; 48 facilities migrated from UgandaEMR to ClinicMaster per MoH guidance, eliminating data silos.
- **Infrastructure:** cumulative donation of over 1,000 computers across 136 health facilities (including a recent tranche of 164 computers and 4 enterprise servers), LAN connectivity at 37 facilities, and solar power backup at 128 facilities, including 6 sites with full service-delivery-point coverage.
- **Point-of-care EMR:** ClinicMaster Point-of-Care deployment is now live at 17 facilities, including one Regional Referral Hospital, alongside contributions to ClinicMaster's core module development for public health facility operations.
- **Workforce:** recruitment/placement of IT officers at high-volume sites (e.g., Kayunga RRH, Luwero GH) for first/second-line technical support, with a deliberate skills-transfer strategy to MoH and district teams.
- **Data quality:** patient deduplication exercises completed at 88 sites; routine SQA/DQA audits and EMR-DHIS2 HIE development to eliminate duplicate manual entry.
- **Cybersecurity:** encrypted remote backups and access controls implemented in compliance with MoH data-protection requirements.

Non-Communicable Disease and Cervical Cancer Integration

MUWRP has integrated NCD screening (hypertension, diabetes) into chronic-care/mixed outpatient clinics, and significantly scaled cervical cancer screening and treatment procuring 30 lithotomy beds and associated equipment across six facilities, partnering with the Uganda Cancer Institute on referral pathways, and building Kayunga RRH medical officers' capacity to perform LEEP (Loop Electrosurgical Excision Procedure) for pre-cancerous lesions at the regional level.

Sub-Grantee Network, Faith-Based Partnerships and Capacity Building

As Prime Implementing Partner for the PEPFAR-funded HIV Prevention, Care and Treatment Program, MUWRP channels a significant share of its service-delivery footprint through a network of sub-grantee institutions rather than direct implementation alone a deliberate model that builds durable, locally owned health-system capacity rather than parallel, donor-dependent structures. Under FY2026 program planning, this network comprises 21 active sub-grantees: 7 local governments, 11 Private Not-for-Profit (PNFP) health facilities, 1 Regional Referral Hospital, 1 General Hospital and 1 Community-

Based Organization. The fuller roster of institutions that have held sub-grants, cooperative agreements or sustained partnership relationships with MUWRP across recent reporting periods reflecting year-to-year changes in funded scope comprises 24 organizations, which cluster naturally into faith-based institutions and other public-sector and civil-society partners:

Category	Sub-Grantee / Partner Institutions
Faith-Based Institutions (10)	Lugazi Diocese; Kyetume Community Based Health Care Programme; Mukono Church of Uganda Hospital; St. Charles Lwanga Hospital; St. Francis Health Care Services Njeru Limited; St. Francis Hospital Nkokonjeru; St. Francis Hospital Nyenga AIDS Care; St. Francis Hospital Naggalama; The International Needs Network of Uganda; Uganda Catholic Medical Bureau.
District Local Governments & Municipal Councils (5)	Buikwe District Local Government; Buvuma District Local Government; Kayunga District Local Government; Mukono District Local Government; Mukono Municipal Council.
Public (Government) Hospitals (3)	Kawolo General Hospital; Kayunga Regional Referral Hospital; Luwero General Hospital.
Community-Based Organizations & Civil Society Partners (6)	Chain Foundation Uganda; Uganda Community Health Access Foundation; Uganda Community Health Empowerment Development and Relief Agency; Hands of Charity; Share an Opportunity Uganda; Sikyomu Development Organization for People Living with HIV/AIDS.

MUWRP's sub-grantee and partner network by category, illustrating the balance between faith-based health institutions and government/civil-society partners. FY2026 PEPFAR program documentation separately cites 21 currently active sub-grantees 7 local governments, 11 PNFP facilities, 1 Regional Referral Hospital, 1 General Hospital and 1 CBO reflecting year-to-year changes in funded scope).

Faith-based institutions anchored by the Uganda Catholic Medical Bureau and Lugazi Diocese represent the largest single cluster (10 of 24 partners) in MUWRP's network, reflecting the historic role of church-founded hospitals in Uganda's rural health infrastructure. Lugazi Diocese alone operates ten ART-accredited health facilities across MUWRP's catchment area and carries 10,925 patients in care, equivalent to roughly 18% of all clients supported under the MUWRP program illustrating how a single, well-managed faith-based relationship can anchor a substantial share of overall program capacity, alongside the public-sector local governments, regional/general hospitals and community-based organizations that complete the network.

Across this network, MUWRP's health-systems-strengthening approach built on the WHO's six building blocks delivers a consistent package of institutional capacity building, whether the partner is a faith-based hospital, a district local government, a public referral hospital or a community-based organization. MUWRP has over the years built the health systems of its sub-grantees and partners across five connected dimensions:

- **Leadership and governance and planning:** strengthens the functionality of hospital boards and Health Unit Management Committees (HUMCs) in collaboration with District Health Teams (DHTs); convenes periodic leadership and governance meetings with sub-grantees to address system gaps; and jointly conducts data-driven performance reviews, aligning facility and CBO work plans to PEPFAR targets and Ministry of Health priorities through performance dashboards and “Data Day” review processes.

- **Human resource management** supports sub-grantees to identify Human Resources for Health (HRH) needs against approved staffing norms, and to recruit, deploy, monitor performance and track attendance to duty with HRH support structured to align with eventual absorption into public service for long-term sustainability.
- **Budgeting and financial systems** tracks sub-grant budgets and expenditure through MUWRP's Microsoft Dynamics 365 Business Central ERP platform, ensuring transparent allocation to the correct funding source and compliance with U.S. federal grant requirements.
- **Implementation:** deliver continuous technical assistance, training, coaching and mentorship to sub-grantee staff on integrated service delivery (chronic care clinic and mixed-OPD models), infrastructure renovation and remodelling for patient confidentiality and infection prevention and control, and adoption of digital health tools (ClinicMaster EMR, LIMS/IRRDS).
- **Grant coordination:** manages the full sub-grant lifecycle agreement issuance, milestone tracking, reporting against PEPFAR/MER indicators, and compliance monitoring across all active and recent sub-grantees, serving as the single point of accountability between USG funding and frontline faith-based, public and community implementers.

This model has also demonstrated adaptive capability: in FY24, MUWRP assumed direct management of the Kayunga DREAMS program to correct performance gaps left by an underperforming sub-grantee, restoring service quality before extending implementation responsibility into two additional sub-counties evidence that MUWRP's capacity building extends to active performance turnaround, not only routine technical support.

Key Achievements – HIV Prevention, Care and Treatment Program (PEPFAR)

- Grew from 99 ART clients in 2005 to 97,832 today across 184 health facilities in six districts, achieving 96% viral load suppression in 2025 surpassing the 95% global target.
- Exceeded FY21 COP OVC targets by 105–129% and scaled DREAMS enrollment to a 15,219-girl peak, while assuming and turning around an underperforming Kayunga DREAMS sub-grant.
- Delivered a 2.6% reduction in treatment interruptions through CQI collaboratives and achieved 100% of the cervical-cancer care cascade target at participating CQI sites in 2025.
- Sustains a 24-institution sub-grantee and partner network spanning faith-based hospitals, local governments, public hospitals and CBOs through integrated leadership, HR, budgeting, implementation and grant-coordination support.
- Scaled digital health infrastructure to over 1,000 computers across 136 facilities, EMR point-of-care at 17 sites and solar backup at 128 facilities, while donating the ClinicMaster source code to the Ministry of Health.

3.3 Clinical & Research Laboratory

A CAP-accredited BSL-2 facility holding continuous international accreditation since 2005; >99% of processes exceeded CAP standards on the 2025 re-accreditation. Has supported 63 research studies and 12+ vaccine trials.

- Safety Lab: clinical testing, participant safety monitoring and PBMC/specimen processing under validated protocols.
- Biorepository: 934,741+ aliquots / 145,000+ samples; 40+ freezers (−20, −80, −196°C); two liquid-nitrogen plants (400 L/day); GSM cloud cold-chain monitoring; IATA-certified shipping.

- Immunology: high-throughput flow cytometry (2× BD FACSCanto II; Cytek Aurora to 40 parameters), MSD multiplex and ELISA a regional hub for HIV cure, vaccine and immunopathology research.
- Molecular biology: renovated PCR suites; Rotor-Gene Q, ABI 7500, QuantStudio 7 Flex; GeneXpert for rapid (<2 hr) HIV VL, TB and STI detection.
- Sequencing/genomics: 10x Genomics single-cell sequencer (Weill Cornell partnership), Oxford Nanopore MinION and Illumina iSeq 100 (USAMRIID-trained).
- Quality systems: GCLP, DAIDS, ISO 15189 and CLIA-aligned; SANAS accreditation at the Fort Portal lab (8th consecutive year, 2025) and four PEPFAR hubs.
- National training resource: hosts 14 MSc and 3 PhD candidates; trained 41 interns since 2019; mentored 8 labs toward stronger quality systems, 3 to independent international accreditation.

Key achievements Clinical & Research Laboratory

- Continuous CAP accreditation since 2005; re-accredited 2025 with >99% of processes exceeding standard.
- Biorepository of 934,741+ aliquots across 145,000+ samples, with 371,644+ logged transactions.
- Mentored 8 laboratories toward stronger quality systems (3 to independent accreditation) and led the SAFE-CU national biosafety assessment of 43 labs.

3.4 Emerging Infectious Diseases Program (EIDP) since 2007

DoD-GEIS-funded surveillance helping Uganda and Somalia prevent, detect and respond to global health-security threats across 8 districts plus Mogadishu, using a One Health approach.

- Surveillance portfolio: influenza & respiratory pathogens; AMR in HAI bacteria and STIs; zoonotic viruses (bats, swine, poultry); acute febrile and vector-borne illness; gastroenteritis; wastewater and pathogen-agnostic next-gen sequencing.
- 2025 findings (respiratory): 35,794 samples / 1,627 participants adenovirus (15.2%), rhinovirus (7.3%), influenza A (6.3%), SARS-CoV-2 (5.4%).
- 2025 findings (AMR): 6,794 samples, 2,645 pathogens (E. coli, S. aureus, K. pneumoniae); >90% resistant to aminopenicillins.
- 2025 findings (zoonotic): influenza A in 42.3% of poultry underscoring avian-influenza and live-bird-market biosecurity risk.
- Infrastructure: enhanced BSL-2 labs at UVRI Entebbe and Makerere CoVAB; external QA with MoH, St Jude (WHO influenza reference lab), USAMRIID and WRAIR MRSN.
- Expansion: new MOU with Jinja RRH (2025); three Nanopore kits and an Illumina iSeq 100 acquired to expand genomic surveillance across East Africa.

Key achievements Emerging Infectious Diseases Program

- Surveillance across 8 Ugandan districts and Somalia; 35,000+ respiratory and 6,700+ AMR samples tested in 2025 alone.
- Detected avian influenza at >42% in poultry, directly informing One Health biosecurity guidance for live bird markets.

• Signed the 2025 Jinja RRH MOU and acquired Nanopore/Illumina platforms for pathogen genomic surveillance.

3.5 ACESO Sepsis & Severe Infections in Austere Settings (since 2015)

DoD-JPEO-funded platform (formerly JMEDICC) at Fort Portal RRH, a DRC-border district chosen for filovirus-outbreak risk; led with the Infectious Diseases Institute. Improves recognition and management of sepsis where ICU capability is unavailable.

- Infrastructure: six-bed isolation/research unit; SANAS-accredited lab (8th year, 2025); capacity to detect and manage filoviruses and COVID-19.
- Core capabilities: hemorrhagic-outbreak response; high-level IPC training; clinical trials incl. mobile IND capability; antibiogram-driven antimicrobial stewardship.
- Sepsis study: 100 participants enrolled (2024, 98% Day-28 retention); 47 more (2025); sub-studies incl. POCUS, Tasso, Immunophenotyping, Tick-Borne, wireless monitoring and Hantavirus.
- Outbreak response: clinical care for 11 infected health workers in the 2022/23 Sudan Virus Disease outbreak; field labs at Ebola Treatment Centres; technical & containment support in the 2025 Rwenzori SVD outbreak; supported COVID-19 and CCHF responses.

Key achievements ACESO

• Built a six-bed isolation/research unit and a SANAS-accredited lab now in its 8th consecutive year (2025).

• Provided care, laboratory and containment support across both Sudan Virus Disease outbreaks (2022/23, 2025), plus COVID-19 and CCHF.

• Sustained 96–98% retention across sepsis sub-studies despite the PROTECT trial's early termination demonstrating operational resilience.

3.6 Cross-Cutting Functions

- Data Management: REDCap, OpenClinica and Medidata Rave databases; 4,200+ visit records captured (2025); full data close-out for the Schistosomiasis study; dedicated data-archival facility at Nakasero.
- Stakeholder & Community Engagement: four active Community Advisory Boards; 100% recruitment achievement and 95% average retention across studies; full RV591 enrollment (81/81) via a radio + face-to-face campaign; hosts the National Cross-CAB Forum and briefs U.S. State Dept and DoD-WRAIR delegations on PrEP and DREAMS.
- Health Systems Strengthening & Digital Health: detailed in Section 4.

4. Health Systems Strengthening & Digital Health

Aligned to WHO's six building blocks and Uganda's Digital Health Strategic Plan, centred on the ClinicMaster Electronic Medical Records system.

- Source-code donation: in 2025, MUWRP donated the ClinicMaster source code to the Ministry of Health's Division of Health Information, reinforcing government ownership, building DHI staff capacity, and reducing vendor dependency.

- Interoperability: integration with ALIS, the National Data Warehouse, ART Access (enabling pharmacy refills for stable patients and decongesting clinics), and DHIS2.
- Health Information Exchange: implemented viral-load HIE at 86 facilities across Kayunga, Mukono, Buvuma and Buikwe, enabling direct VL request/result exchange with the Central Public Health Laboratories; EID-test HIE in progress.
- Paperless transitions: 14 facilities (Kayunga district-3, Mukono -3 , Buvuma-1, Buikwe- 4, Luweero-4) moved to fully paperless EMR operation; 48 facilities migrated from UgandaEMR to ClinicMaster per MoH guidance, eliminating data silos.
- Infrastructure: cumulative donation of over 1,000 computers across 136 health facilities (including a recent tranche of 164 computers and 4 enterprise servers), LAN connectivity at 37 facilities, and solar power backup at 128 facilities, including 6 sites with full service-delivery-point coverage.
- Point-of-care EMR: ClinicMaster Point-of-Care deployment is now live at 17 facilities, including one Regional Referral Hospital, alongside contributions to ClinicMaster's core module development for public health facility operations.
- Workforce: recruitment/placement of IT officers at high-volume sites (e.g., Kayunga RRH, Luwero GH) for first/second-line technical support, with a deliberate skills-transfer strategy to MoH and district teams.
- Data quality: patient deduplication exercises completed at 88 sites; routine SQA/DQA audits and EMR-DHIS2 HIE development to eliminate duplicate manual entry.
- Cybersecurity: encrypted remote backups and access controls implemented in compliance with MoH data-protection requirements.

5. Quality, Compliance & Accreditation

Standard / framework	Scope & status
CAP accreditation	Continuous since 2005; re-accredited 2025; >99% of processes exceed standard
SANAS accreditation	Fort Portal lab 8th consecutive year (2025); four PEPFAR hubs accredited/progressing
GCLP	All trial-supporting lab operations; staff hold DAIDS GCLP certification
ISO 15189 / CLIA-aligned	Laboratory quality systems aligned to international competence standards
UNCST & IRB oversight	All human-subjects research reviewed by UNCST and Makerere SPH IRB
Biosafety / biosecurity	Led SAFE-CU assessment of 43 public labs; enhanced BSL-2 with containment systems
Financial compliance	Microsoft Dynamics 365 ERP; consistent unqualified external audit opinions

6. Administration, Finance & Operations

- Grants management: two decades managing multi-million-dollar grants from PEPFAR, USAID, DoD, NIH and the Sabin Vaccine Institute; Microsoft Dynamics 365 Business Central ERP; consistent unqualified audit opinions; headquarters mortgage fully repaid 2023/24.

- Financial position (2024, audited): total assets US$8,144,801; cash US$5,381,680; unrestricted accumulated funds US$1,390,967.
- Human resources: 64 new staff onboarded (2024); job analyses/role redesign, child-safeguarding training for 86 staff and labour-law sensitization for 90 supervisors (2025).
- Supply chain: remodelled lab space, installed an accessibility lift, refurbished the head office, established satellite offices; managed Stop-Work-Order contract modifications and orderly office closures with cost savings.
- Fleet & last-mile reach: 17 vehicles, 10 motorcycles and 2 marine boats serving Lake Victoria islands (Koome, Buvuma); vehicles/engines donated to district governments to extend commodity and sample-referral reach.

Key achievements Administration, Finance & Operations

- Completed a 2025 organization-wide migration to a centralized Microsoft Dynamics 365 spend-management platform.
- Fully repaid the Nakasero Road headquarters mortgage in 2023/24, securing a permanent institutional home.
- Sustains a 17-vehicle / 10-motorcycle / 2-boat fleet for last-mile delivery while managing orderly 2025 Stop-Work-Order closures and donor diversification.

7. Strategic Partnerships

- U.S. Government / Defense: DoD/WRAIR & WRAIR-Africa, MHRP, HJF, DHA-GEIS, USAMRIID, PEPFAR, USAID, NIH/DAIDS.
- Government of Uganda: Ministry of Health, MAAIF, Ministry of Defence/UPDF, UNCST, UVRI, Uganda Wildlife Authority, six district local governments; Federal Government of Somalia MoH.
- Academic & research: Makerere University & CoVAB, Weill Cornell, Karolinska Institute, Vanderbilt, Helmholtz Munich, University of Mogadishu, IDI, SAMRC.
- Industry & product development: Sabin Vaccine Institute, Sanofi, International Vaccine Institute, INRAE, GIHSN.
- Consortia & networks: BRILLIANT (8-country HIV vaccine), HOPE Collaboratory, DELIVER, CASCADE, the global ACESO consortium, AFRICOS, GEIS.

8. Resilience & Track Record Under Pressure

In 2025 MUWRP navigated major U.S. foreign-assistance policy disruption funding pauses, Stop Work Orders and the loss of roughly 70% of program-funded staffing capacity at points during the year while sustaining core operations.

- Compliant response: rapid implementation of contract modifications; orderly, dignified field-office closures with asset donation and staff-transition support.
- Continuity sustained: HIV testing, ART continuity, 96% viral suppression, laboratory accreditation, and EIDP/ACESO surveillance and outbreak readiness all maintained through 2025.
- Donor diversification: new collaborations and grant applications with the Gates Foundation, Helmholtz Munich, Weill Cornell and Vanderbilt to reduce single-stream reliance.

9. Scientific Impact & FY2026 Outlook

Impact on policy and practice

- National policy: MUWRP cohort and PrEP-demonstration data informed Uganda's national PrEP technical guidelines.
- International regulation: trial data contributed to 2022 EU approval of a heat-stable COVID-19 vaccine and emergency-use authorizations for Ebola Sudan and Marburg vaccines in Ethiopia and Rwanda.
- Dissemination: peer-reviewed publications and presentations at ASTMH, IAS, ICASA, ISV Congress, INTEREST, DELIVER and Global Health Security conferences (2024–2025).

Priorities

- HIV optimization: targeted/index testing to link ≥95% of undiagnosed PLHIV; differentiated service delivery; same-day ART and stronger retention toward 95-95-95.
- TB & PMTCT: bidirectional TB/HIV screening; sustain 99% ANC testing and keep MTCT below 3.2%.
- Health systems & HRH: phased Community Health Extension Worker roll-out in Buikwe and Mukono; commodity-security strengthening across 184 facilities.
- Digital health: extend ClinicMaster and the paperless model; mature Health Information Exchange; expand IT and solar-backup infrastructure.
- Research & surveillance: advance the CASCADE cervical-cancer trial; sustain AFRICOS/MOCHI cohorts; expand Nanopore/Illumina genomic surveillance; maintain vaccine-trial and outbreak-response readiness.