Alliance for Public Health

FRONTLINE AIDS

Data collection report based on survey within Frontline AIDS Partnership

PRIMARY HEALTH CARE INTEGRATION MODELS FOR UNIVERSAL HEALTH COVERAGE

KYIV
2025

This publication was made possible with the financial and technical assistance of Frontline AIDS.

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List of Abbreviations

ART	Antiretroviral Therapy
CHW	Community Health Worker
CHWs	Community Health Workers
CSO	Civil Society Organization
CSOs	Civil Society Organizations
EECA	Eastern Europe and Central Asia
EHR	Electronic Health Records
EHRs	Electronic Health Records
FGS	Female Genital Schistosomiasis
HIV	Human Immunodeficiency Virus
IDH	Instituto para el Desarrollo Humano
IPCHS	Integrated People-Centered Health Services
MOU	Memorandum of Understanding
MOUs	Memoranda of Understanding
MPox	Monkeypox
NCD	Non-Communicable Diseases
NCDs	Non-Communicable Diseases
NGO	Non-Governmental Organization
NGOs	Non-Governmental Organizations
PCSI	Program Collaboration and Service Integration
PHC	Primary Health Care
RSSH	Resilient and Sustainable Systems for Health
SRH	Sexual and Reproductive Health
SRHR	Sexual and Reproductive Health and Rights
TB	Tuberculosis
UHC	Universal Health Coverage
UN	United Nations
WHO	World Health Organization

Introduction

ACHIEVING UNIVERSAL HEALTH COVERAGE THROUGH INTEGRATED HEALTH SERVICES

Universal Health Coverage (UHC) aims to ensure all individuals access quality health services without financial hardship. Achieving UHC requires transforming health systems, especially through service integration at the Primary Health Care (PHC) level. [1] PHC emphasizes person-centered, accessible, and continuous care. Integrating services for HIV, TB, hepatitis, SRH, and non-communicable diseases (NCDs) enhances efficiency and outcomes, particularly in resource-limited settings. In many low- and middle-income countries, fragmented systems hinder care for co-morbidities. A unified approach prevents patients from navigating disjointed services, ensuring holistic, coordinated care, essential for managing complex health needs and advancing equitable, effective healthcare delivery in the global South. [2]

THE NECESSITY OF INTEGRATION: BEYOND DISEASE-SPECIFIC APPROACHES

Historically, global health programs have been organized vertically focused on diseases like HIV, TB, or malaria. These programs achieved major gains in disease control but often created fragmented systems, duplicated efforts, and burdened both patients and providers. Recognizing these limitations, the global health community has increasingly shifted toward integrated, patient-centered care models. [3,4]

Integrated service delivery replaces siloed approaches with coordinated, people-centered systems. The WHO defines integration as managing and delivering services, so patients receive a continuum of preventive and curative care across the health system, according to their evolving needs. This is especially urgent in low- and middle-income countries (LMICs), where the dual burden of communicable NCDs is rising. For example, people living with HIV are at higher risk of NCDs due to ageing, long-term ART, and lifestyle changes. Integrated models help address these co-morbidities holistically. [5]

INTEGRATION OFFERS SEVERAL KEY BENEFITS:

- **Improved Access and Continuity of Care:** Patients can access multiple services in one visit, improving convenience and adherence.
- **Enhanced Efficiency:** Integration of streamlines operations, reduces duplication, and makes better use of staff and infrastructure.
- **Better Health Outcomes:** Evidence shows improved chronic disease management, reduced hospital admissions, and increased satisfaction with integrated models.
- **Addressing Social Determinants:** Integrated care also considers broader social and economic factors that influence health, such as housing, education, and employment.

In resource-constrained settings, these advantages make integrated care not just a strategic option but a necessity for achieving Universal Health Coverage. [6,7]

PRIMARY HEALTH CARE: A STRATEGIC ENTRY POINT FOR INTEGRATION

PHC is the most effective platform for service integration, addressing up to 90% of a person's health needs throughout their life. Integration at this level enables early diagnosis, coordinated care, and reduces reliance on costly hospital services. It also minimizes stigma especially for HIV by embedding care within broader services. Financially, integrated PHC optimizes infrastructure, reduces duplication, and lowers patient costs, making it a highly efficient model for resource-limited settings striving toward Universal Health Coverage. [8]

TOWARDS COST-EFFECTIVE AND IMPACT-ORIENTED HEALTH SYSTEMS

One of the key benefits of integrated health service delivery is its potential to improve efficiency and reduce costs while enhancing care quality. By combining services, such as HIV, TB, diabetes screening, hepatitis B vaccination, and reproductive health counseling in a single visit, integrated models lower the number of appointments needed, streamline administration, and make better use of healthcare workers. This reduces both service delivery costs and patients' out-of-pocket expenses, including transportation and time lost from work. [10,11]

Evidence from WHO and other global studies shows that integrating NCD services into HIV and TB programs in sub-Saharan Africa improves cost-effectiveness and long-term outcomes. Integrated care fosters innovations such as task shifting, telemedicine, and digital tools, which are particularly beneficial in resource-limited settings and critical during health emergencies like pandemics.

Economic evaluations further support this approach. Integrated care models have been shown to decrease costs while improving outcomes, as highlighted in systematic reviews and meta-analyses. These models leverage economies of scale and scope for example, combining HIV and SRH services can reduce overhead and improve system efficiency.[12]

However, costs vary by setting due to differences in service maturity, technology, and infrastructure. Understanding these contextual factors is crucial for optimizing integration strategies and achieving sustainable, cost-effective healthcare systems.

FRONTLINE AIDS GLOBAL PARTNERSHIP INTEGRATION PRACTICES:

Recognizing the need for service integration and the potential impact on both individual and public health, Frontline AIDS has initiated a global endeavor to model integrated health services based on the data available from its 17 partner organizations. These partners, spanning regions including Africa, Asia, Europe, and Latin America, were invited to respond to a detailed questionnaire to map current service delivery patterns, integration practices, and future opportunities.

The project's primary objective is to explore and co-create a model for integrating HIV, TB, hepatitis, sexual and reproductive health, and diabetes services within these organizations. By analyzing the responses and service data, this initiative will identify common practices, regional variations, service gaps, and integration opportunities. This evidence will be used to design context-specific, yet scalable, models of integration that align with UHC and PHC frameworks.

Importantly, this initiative also serves as a platform for cross-learning among regions. For instance, integration models that are successful in African partners, such as HIV and reproductive health co-location, can inform programming in Asian or Latin American settings. Similarly, innovations from European or EECA partners around community-based NCD screening can be adapted and piloted in other regions.

METHODOLOGY

PURPOSE AND SCOPE OF THE ANALYSIS

This analysis was undertaken by Frontline AIDS with the objective of examining how various partner organizations across different global regions are implementing service integration models within their health service delivery systems. The broader goal was to generate evidence-based recommendations to strengthen integrated health programming specifically, how each organization can evolve into a one-stop-center for delivering multiple disease condition services. The data collection and analysis framework was carefully designed to reflect real-world operational conditions while drawing from established global models such as the WHO Integrated People-Centered Health Services (IPCHS) framework and other best practices in the integration of HIV, TB, SRHR, NCDs, and digital health strategies. [13]

Data was collected from 17 partner organizations spanning four global regions, Asia, Africa, Latin America, and Europe. The resulting analysis focuses on documenting the types of services currently provided, levels of integration achieved, enablers and barriers, and strategies for future improvement. These insights aim to inform scalable models for integrated service delivery within community and public health systems.

INSTRUMENT DESIGN AND DEVELOPMENT

The core of this methodology rested on the careful design of a detailed data collection instrument. This instrument was not conceived as a rigid research survey, but rather as a pragmatic tool to extract both quantitative and qualitative insights from community-based and regional partner organizations. Its construction was grounded in globally recognized models of health system integration, primarily the WHO-IPCHS framework, supplemented by practical models drawn from Frontline AIDS' internal strategy documents and programmatic experiences.

The questionnaire was developed entirely by the internal programmatic and research teams at Frontline AIDS. These teams included experts with backgrounds in health systems strengthening, community health, program implementation, and monitoring & evaluation. The instrument was carefully tailored to balance standardized data capture with narrative insights from partner organizations. This dual approach ensured not only measurement of service offerings and integration, but also the ability to capture implementation challenges, context-specific nuances, and innovation.

The tool comprised a blend of closed-ended and open-ended questions, organized thematically into three major sections:

SECTION 1: ORGANIZATIONAL SCOPE AND SERVICE PROFILE

This section gathered foundational information on each organization, including:

- Years of operation
- Diseases and services covered (e.g., HIV, TB, Hepatitis, HPV, NCDs, FGS, MPox)
- Primary care offerings and condition-specific programming

It helped establish the service portfolio of each organization, assess disease-specific silos, and evaluate entry points for integrated models. The section was grounded in WHO's ***Service Availability and Readiness Assessment (SARA)*** logic, allowing comparison across clinical domains.

SECTION 2A: INTEGRATED SERVICE DELIVERY MODELS

This was the most extensive section and covered nine thematic tables:

1. One-Stop-Shop Models: Assessed if services (e.g., HIV, TB, HCV, SRHR) were delivered in a co-located manner.
2. Primary Health Care Integration: Explored whether services were embedded within PHC settings, based on WHO's operational framework for PHC integration.
3. Digital Health Solutions: Evaluated use of mHealth, telemedicine, EHRs, and adherence platforms.
4. Integrated Care Approach: Captured facility-level coordination, mobile clinics, co-morbidity management, and inter-provider collaboration.
5. Key Challenges: Identified systemic and operational barriers, including funding, training, stigma, and infrastructure.
6. Continuity of Care: Tracked mechanisms for case management, follow-up systems, referral efficiency, and team-based care.
7. Community Engagement: Mapped the use of local health workers, advisory boards, and culturally sensitive programming.
8. Staff Training & Capacity: Assessed internal education programs, mentoring, and cross-training on integration topics.
9. Digital Readiness: Captured binary indicators for whether the organization had adopted digital tools at all.

Each sub-section mirrored WHO's Integrated People-Centered Health Services (IPCHS) strategy and also reflected principles from the Global Health Sector Strategy on HIV, Viral Hepatitis and STIs (2022–2030), which emphasizes integration, innovation, and person-centeredness.

SECTION 2B: COLLABORATION AND HEALTH SYSTEM INTEGRATION

This section focused on the inter-institutional dynamics between organizations and the wider health system. The guiding frameworks here were WHO's strategies on Health System Strengthening and Service Delivery Redesign.

Key dimensions included:

- Formal and informal partnerships (MOUs, data sharing, referrals)
- Coordination mechanisms (joint training, care plans)
- Support received from health systems (e.g., funding, policy frameworks, monitoring tools)
- Barriers to integration posed by misaligned or absent policy mandates
- Advocacy efforts aimed at influencing policy, building coalitions, or generating evidence

This section aimed to diagnose the enabling environment surrounding the organization, clarifying what structural supports or barriers shaped its integration potential.

SECTION 3: GOVERNANCE AND REPRESENTATION

The final section profiled how each organization was embedded within national, regional, or global networks, and whether it acted as a technical assistance provider for others. This section reflected the extent to which each organization could:

- Influence policy dialogues
- Disseminate integrated models
- Scale innovations across contexts

It also helped assess leadership potential in knowledge translation and south-south collaboration.

3. DATA COLLECTION PROCESS

The finalized questionnaire was converted into a Google Form and distributed digitally to all the partner organizations of Frontline AIDS across Asia, Africa, Latin America, and Europe. Each organization was asked to fill out the form as a team, thereby integrating perspectives from program staff, clinical coordinators, monitoring officers, and leadership as necessary.

The data collection period lasted for several weeks, allowing organizations adequate time to reflect on the instrument and seek internal clarification. Submissions were accepted in English only, as translation services were not employed for this data collection phase. Each organization was permitted one response submission, which underwent internal validation through consultant-led verification and cross-checking. Follow-up communications were initiated in cases where clarification or elaboration was necessary, particularly for ambiguous or complex qualitative responses.

Importantly, organizations were not required to produce evidence or documentation, but many voluntarily referred to sharing documentation and operational experiences to support their submissions. This added a semi-structured layer of evidence backing the self-reported data.

4. DATA MANAGEMENT AND PREPARATION

All incoming responses were downloaded in Excel format for preliminary sorting and cleaning. The resulting dataset was mixed methods in nature, containing:

- Binary responses (e.g., Yes/No),
- Multi-response checkboxes (e.g., types of services offered),
- Open-text narrative fields (e.g., challenges, community involvement),

To ensure usability, the dataset was reviewed for inconsistencies, redundancies, and missing values. The quantitative data were categorized into matrices that could allow for regional comparison, while the qualitative data were coded manually using descriptive coding methods to identify recurring themes across organizations.

The entire process of coding, organizing, and synthesizing data was performed jointly by consultants and internal staff, using both manual techniques and automated Excel tools (such as filtering, pivot tables, and conditional formatting) to identify integration patterns and service gaps.

5. ANALYTICAL FRAMEWORK

The analysis leveraged a combination of descriptive statistical review (for the quantitative components) and thematic synthesis (for qualitative data). Integration was analyzed across the following domains:

- Disease-specific integration (HIV, TB, HCV, SRHR, NCDs, etc.),
- Delivery model innovations (e.g., One-Stop-Shop, PHC co-location),
- Technology adoption (e.g., digital adherence, telemedicine),
- Partnership and policy support systems,
- Community engagement and training approaches.

LATIN AMERICA:

Integrated health service delivery remains an aspirational goal in the region, with persistent systemic gaps. Data from participating organizations provides a mosaic view of current practices, emerging innovations, and entrenched barriers across key domains of integration. Below is a summary of core observations grouped by thematic areas derived from survey Figures, correlated with global integration frameworks such as WHO's Integrated People-Centered Health Services (IPCHS), Integrated Health Service Delivery (IHSD), the CDC's Program Collaboration and Service Integration (PCSI), and the Global Fund's Resilient and Sustainable Systems for Health (RSSH) model. [13-17]

A total of three organizations have participated in the survey. They include GIV - GRupo de Incentivo a Vida; Instituto para el Desarrollo Humano and Kimirina.

SECTION L1: ORGANIZATIONAL SCOPE AND SERVICE PROFILE

The three South American organizations—Kimirina, Instituto para el Desarrollo Humano, and GIV, each have over 25 years of experience, reflecting strong institutional maturity. Their long-standing presence positions them well for service integration, aligning with WHO's IPCHS model of using established platforms. Despite being grouped under Latin America, their countries differ in language and health systems, requiring context-specific integration. Community-driven origins, particularly for GIV, enhance their relevance in RSSH models where grassroots engagement is key. Their stability suggests robust internal systems and potential for regional leadership in integration efforts.

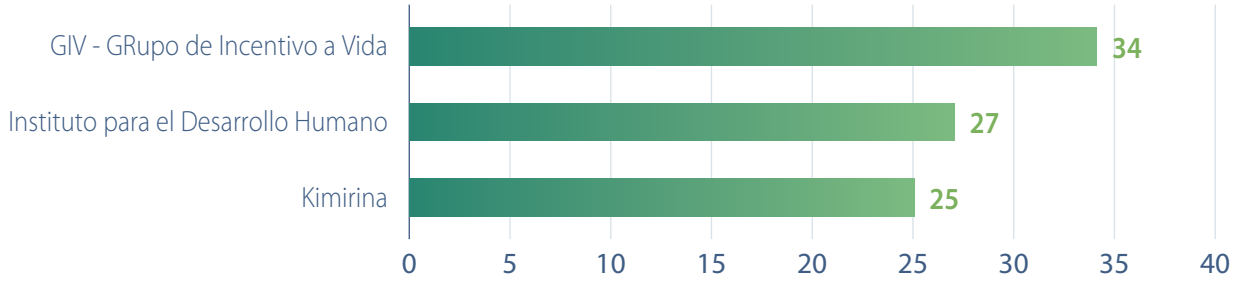

Figure L1.1: *Organizational Experience – Latin America*

All three organizations provide HIV services, making it an ideal entry point for integrating other health areas, as recommended by CDC PCSI. TB services are absent across the board, representing a major missed opportunity for HIV-TB integration. Two organizations offer Hepatitis services, aligning with WHO's integrated care principles for infectious diseases. Mpox services are emerging in Kimirina and IDH, showing adaptability to public health threats. NCD integration is uneven, GIV lacks it, highlighting a gap that future integration strategies should address.

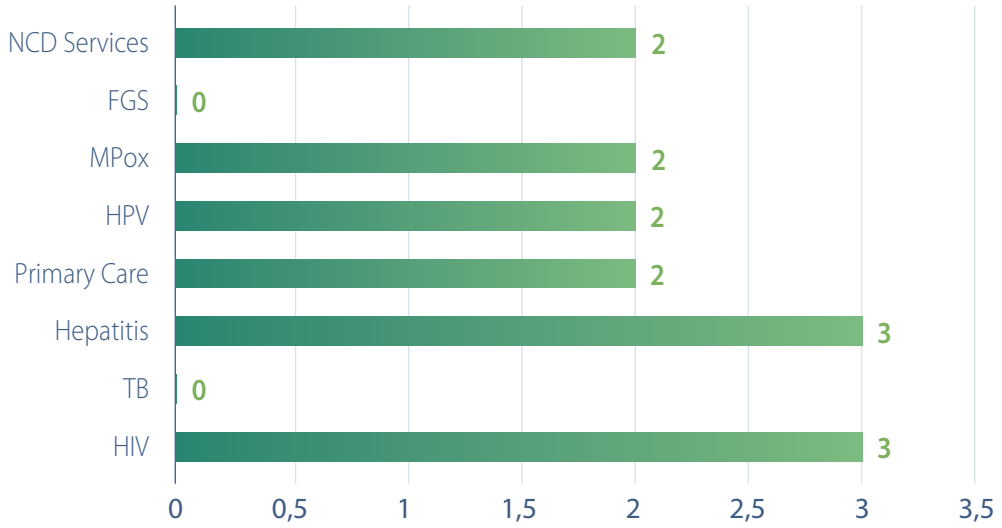

Figure L1.2: *Services Offered – Latin America*

SECTION L2A: INTEGRATED SERVICE DELIVERY MODELS

Most organizations have achieved some degree of service co-location, especially for HIV, TB, and HCV, yet full integration remains inconsistent. While most organizations offer at least two of these services under one roof, fewer have managed to deliver Sexual and Reproductive Health and Rights (SRHR) services in an integrated manner. Importantly, referral mechanisms function well and serve as a backstop in cases where internal integration is not yet possible. However, critical enablers such as shared electronic health records (EHRs) and collaborative, multidisciplinary care teams remain rare, limiting the overall coherence and continuity of patient care. These findings suggest alignment with RSSH goals of integration but highlight a need for stronger investment in foundational systems such as data integration and workforce collaboration (WHO IHSD).

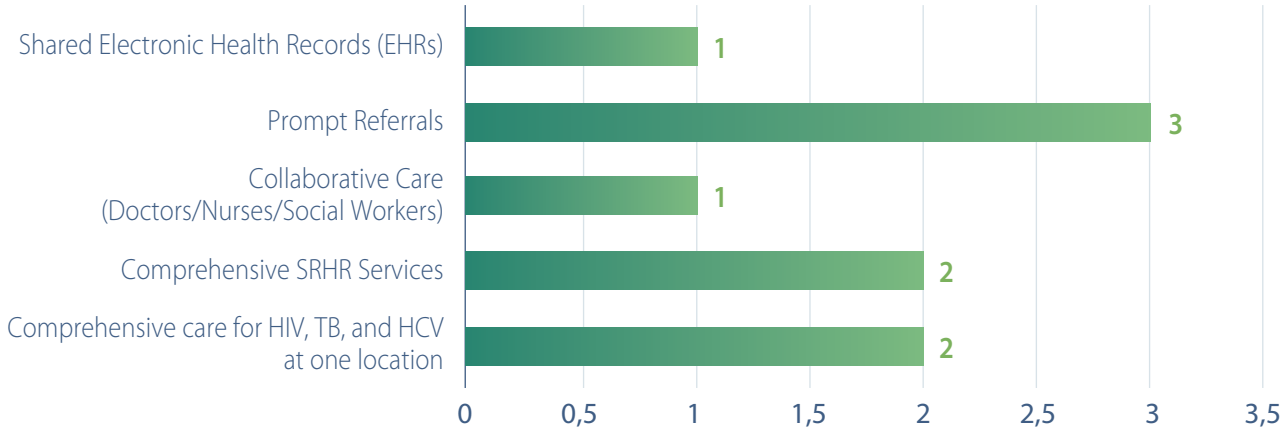

Figure L2a.1: *Services do you provide as part of your One-Stop-Shop delivery model*

Organizations have successfully embedded screening services for HIV, TB, and related co-morbidities at the PHC level, reflecting a shift toward early detection, a central tenet of WHO IPCHS. Yet, these screening efforts are undermined by the near-total absence of treatment options at PHC facilities. Holistic management of co-morbidities is adopted in some settings but remains patchy. Notably, chronic disease monitoring for conditions like diabetes or hypertension is largely missing, signaling a major gap in non-communicable disease (NCD) integration. Nevertheless, strong referral linkages help to partially compensate for these gaps, again suggesting a transitional integration model rather than a fully matured one.

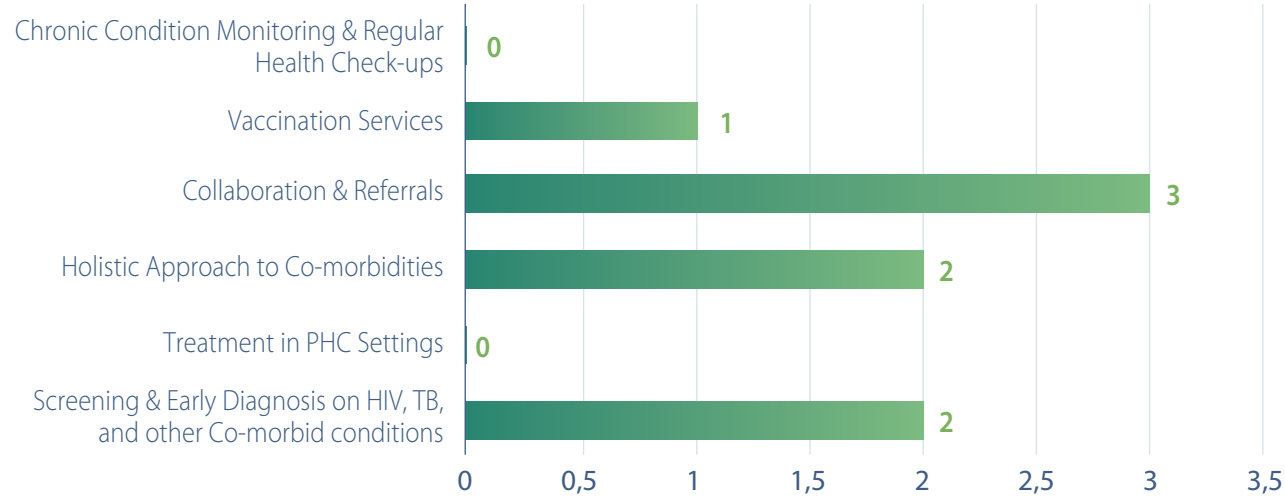

Figure L2a.2: *Services do you provide as part of your Primary Health Care integration delivery model*

While telemedicine and data analytics are gaining traction, overall digital integration remains underdeveloped. No organizations use mobile health apps, digital adherence tools, or public-facing online portals, missing key opportunities to enhance patient engagement, self-management, and remote service delivery. These tools are emphasized across the WHO IHSD and IPCHS frameworks as essential for scaling reach and improving the quality of care in resource-constrained settings. Organizations that have adopted some form of data analytics represent a nascent but promising shift toward evidence-based service planning.

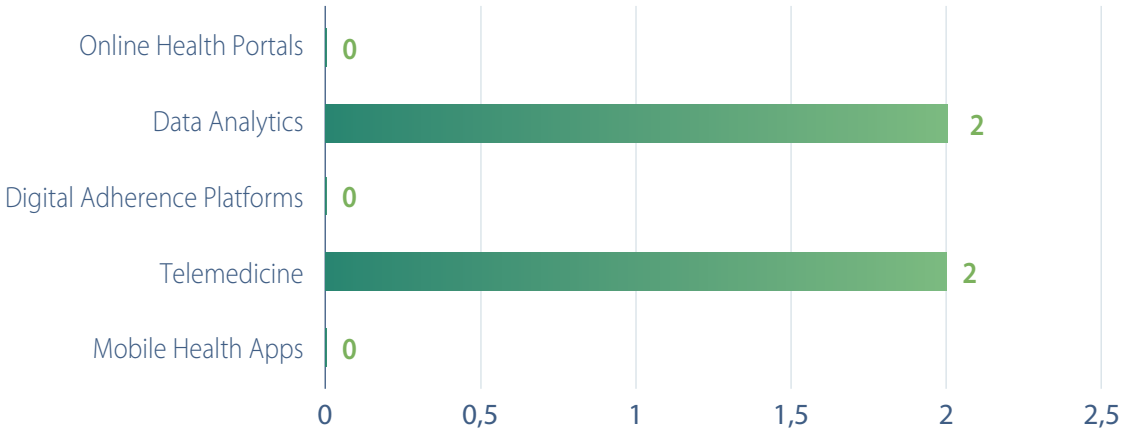

Figure L2a.3: *Services do you provide as part of your Digital Health Solutions/EHR*

Most organizations attempt to integrate care for HIV, TB, HCV, and sometimes NCDs, though facility-level integration is minimal, with only one organization offering multi-condition care under a single facility. Instead, integration efforts appear to be concentrated at the community level (e.g., screenings, education, vaccination). While community-based integration aligns with Global Fund RSSH principles, the lack of mobile clinics and digital tools undermines scalability and sustainability. Referral systems, once again, are widely used, highlighting their role as a critical stopgap where true integration is not yet feasible.

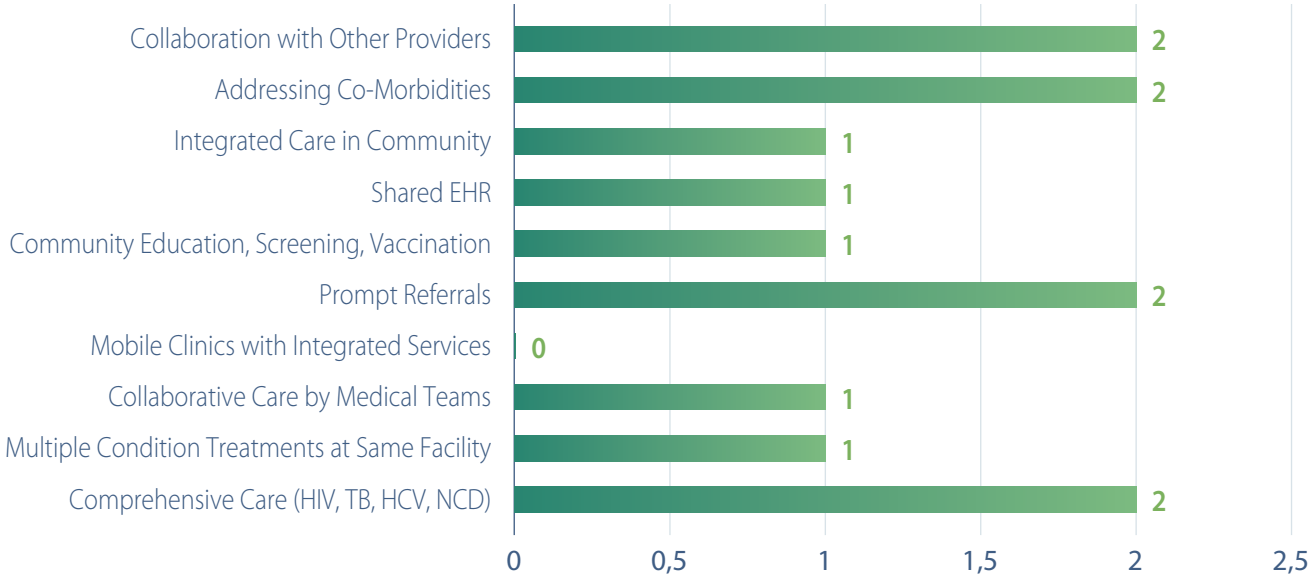

Figure L2a.4: *Organization integrates services for different health conditions*

Financial constraints are universally reported, hampering efforts to scale and sustain integrated services. Coordination challenges, weak data systems, medication supply inconsistencies, and persisting stigma (especially around HIV) further impede effective integration. These findings mirror global insights that integration is not only a technical endeavor but a systemic one, requiring governance reforms, financial investments, and cultural shifts. The lack of comprehensive EHR systems and real-time data sharing directly contradicts the patient-centered logic of WHO IPCHS and frustrates continuity of care

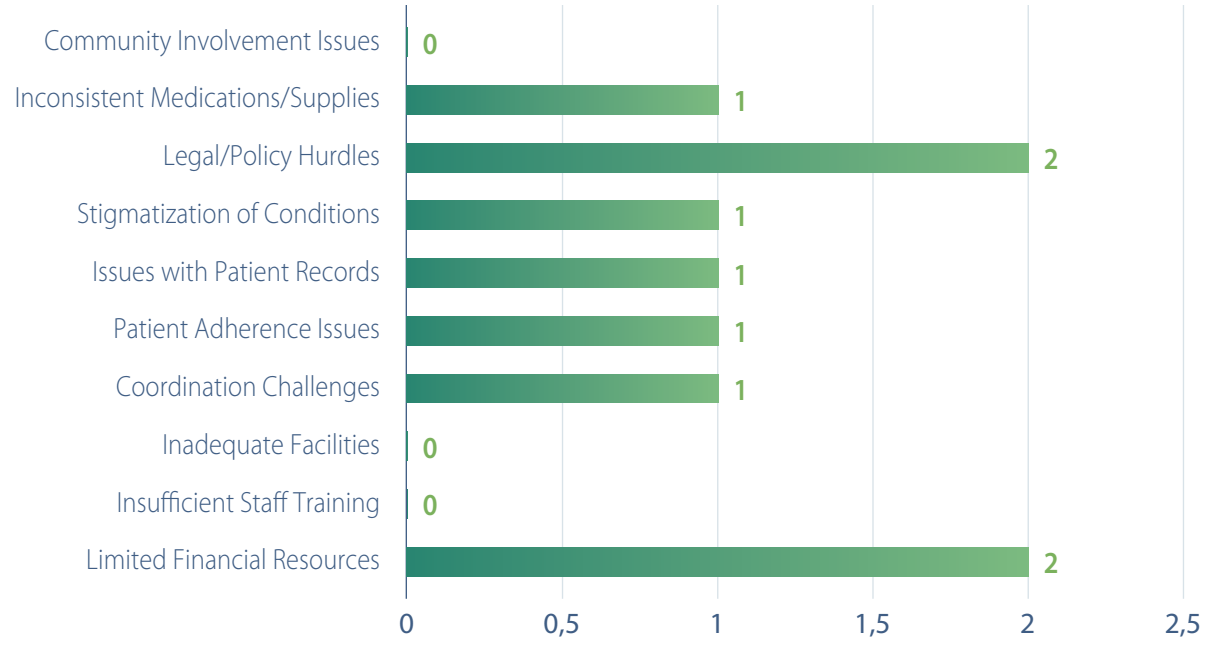

Figure L2a.5: *Key challenges you face in providing integrated services*

Organizations demonstrate some capacity for continuity via referrals and patient education, yet formal mechanisms like multidisciplinary teams, individualized care plans, case managers, and follow-up systems are largely absent. Communication between providers is weak, and patient support networks remain underutilized. This constellation of challenges undermines the longitudinal care continuity championed by all global frameworks, particularly for patients managing multiple chronic conditions or undergoing complex treatment regimens.

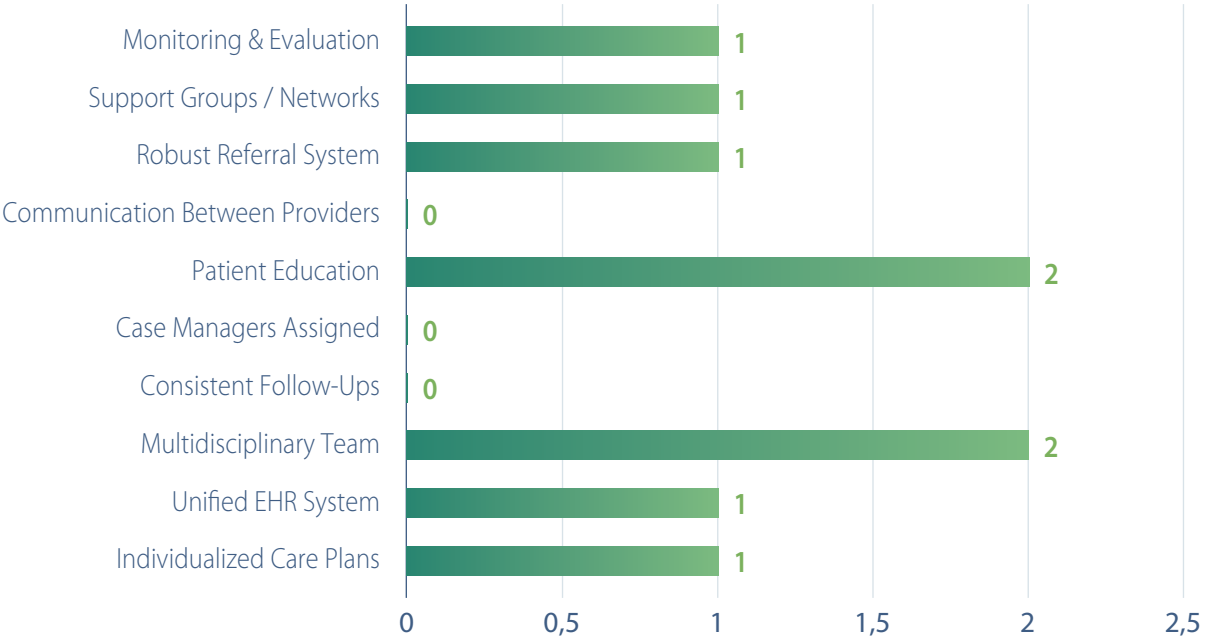

Figure L2a.6: *Ensure continuity of care for patients receiving multiple services*

While some organizations conduct surveys, focus groups, and training workshops, formal governance mechanisms (e.g., advisory boards, structured feedback channels) are lacking. Community Health Worker (CHW) programs are also underdeveloped. Encouragingly, culturally sensitive services and community education workshops are emerging, pointing toward potential pathways for strengthening accountability and responsiveness, a cornerstone of WHO IPCHS's inclusive governance model.

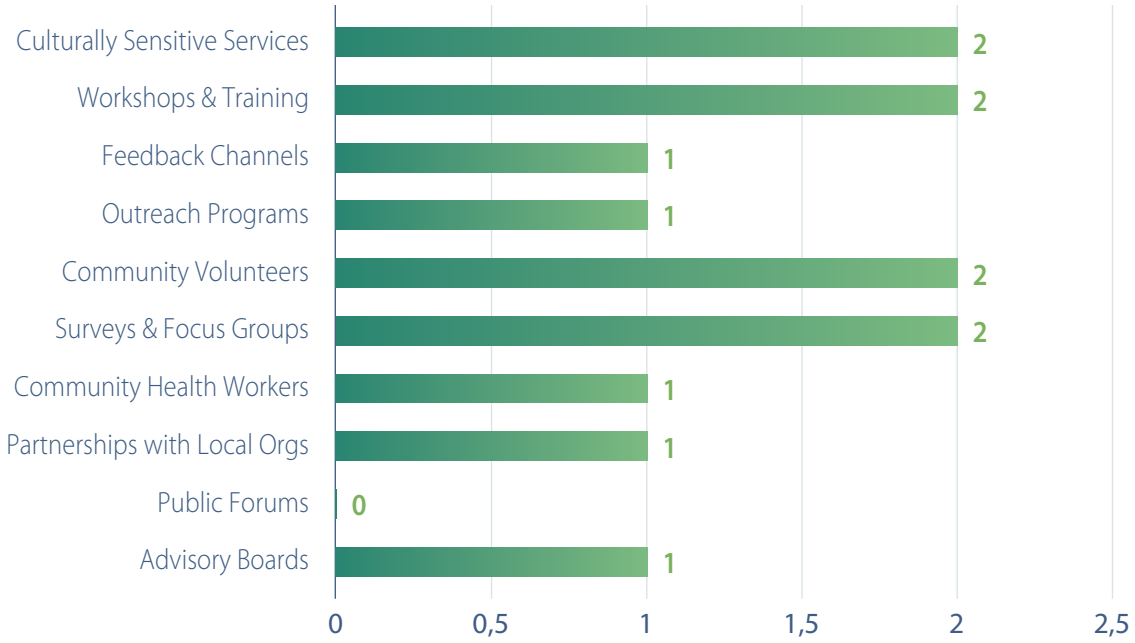

Figure L2a.7: *Community in service delivery*

Some organizations prioritize continuing education and have begun conducting disease-specific integration workshops (notably for HIV/TB/HCV). However, cross-training, mentorship, emotional support, and interdisciplinary collaboration are rarely institutionalized. The underdevelopment of these human resource strategies limits the adaptability and resilience of the integrated workforce needed to deliver complex, person-centered care (CDC PCSI, WHO IHSD).

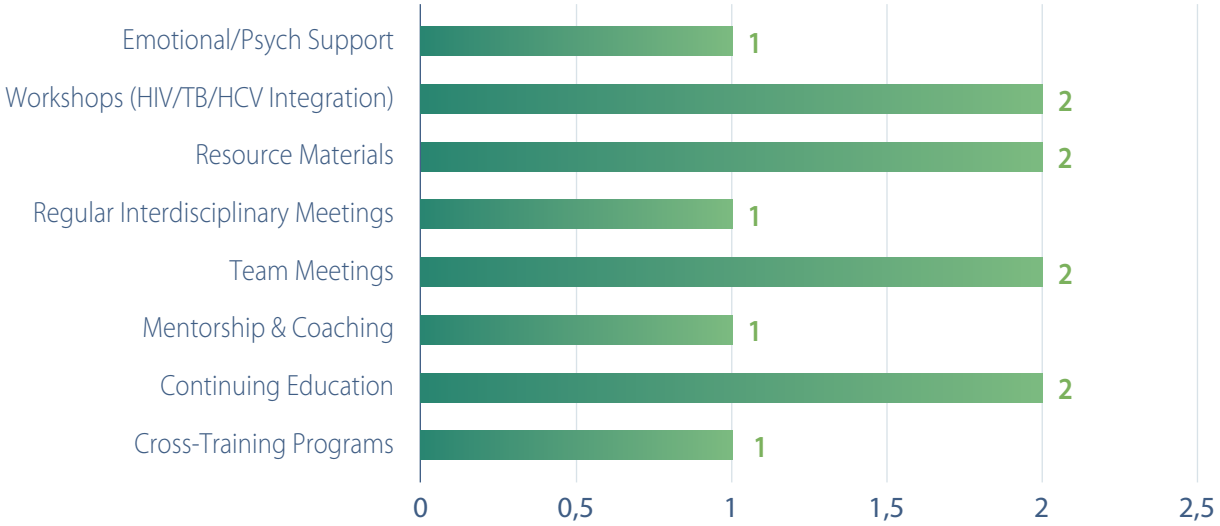

Figure L2a.8: *Training and support do you provide to your staff to deliver integrated services*

Two out of three organizations report no meaningful use of digital tools to support integrated service delivery. This includes absence of digital dashboards, care coordination platforms, or mobile data collection systems. Such tools are central to realizing a learning health system as envisioned by WHO IHSD, which depends on real-time monitoring, feedback loops, and continuous quality improvement.

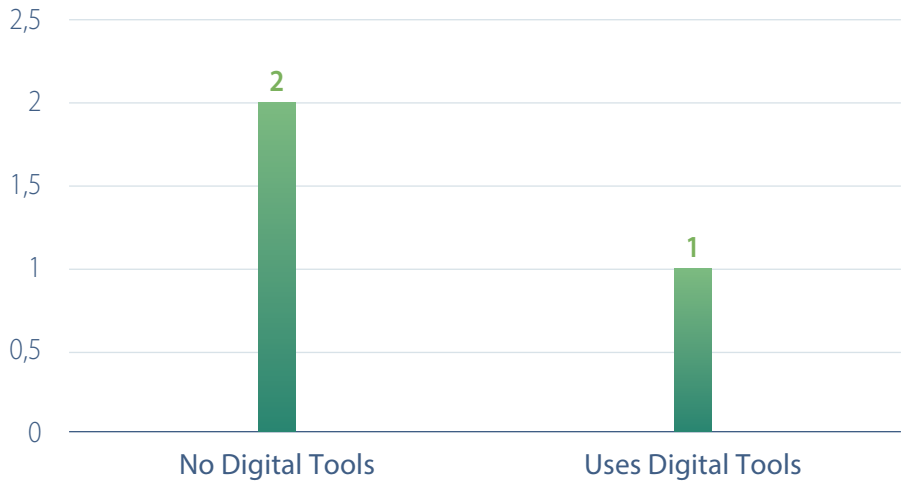

Figure L2a.9: *Digital tools for integrated service delivery*

SECTION L2B: COLLABORATION AND HEALTH SYSTEM INTEGRATION

Across the region, collaboration mechanisms such as referral systems and occasional coordination meetings are present, but they are not embedded through formal agreements (e.g., MOUs), joint training, or data sharing practices. While referrals remain a common link between service providers, they represent minimal integration rather than systemic collaboration. This fragmentation is compounded by the scarcity of joint funding proposals and limited evaluation frameworks, weakening accountability and continuous improvement.

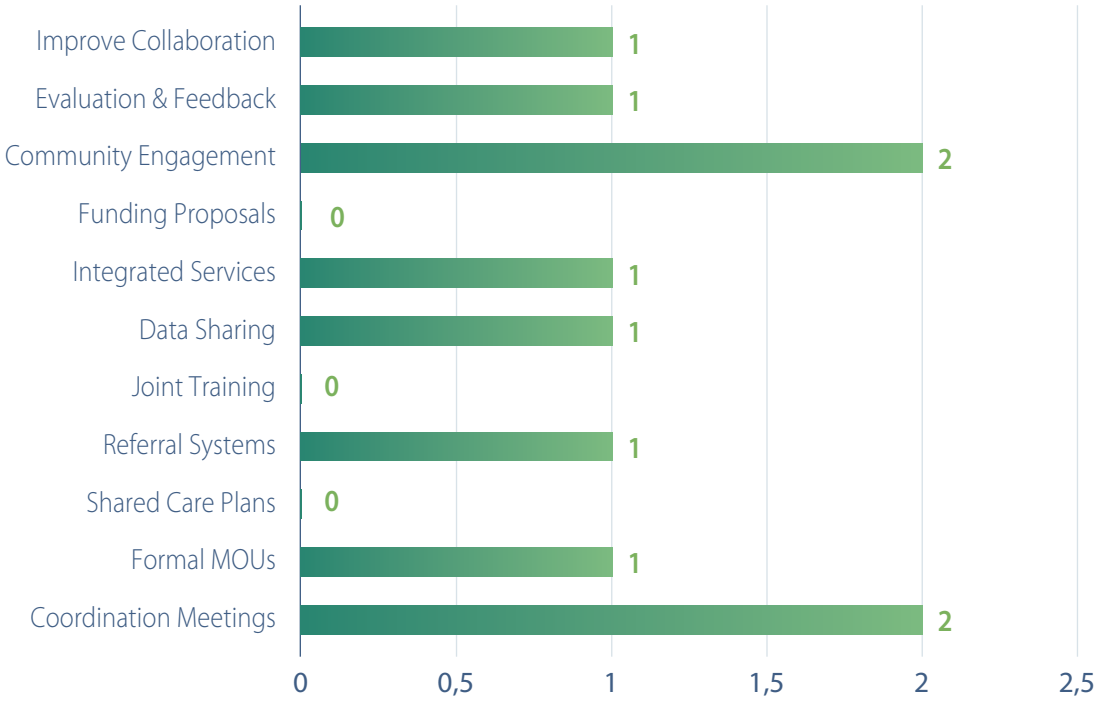

Figure L2b.1: *Collaboration*

Organizations in South America show strong engagement with government bodies and NGOs/CSOs, a strength aligned with people-centered care goals. However, partnerships with clinical service providers, such as hospitals, clinics, and independent healthcare providers, remain sparse or underdeveloped, creating a bottleneck in vertical service integration. The landscape is thus skewed toward administrative and community-level alliances, with inadequate clinical integration.

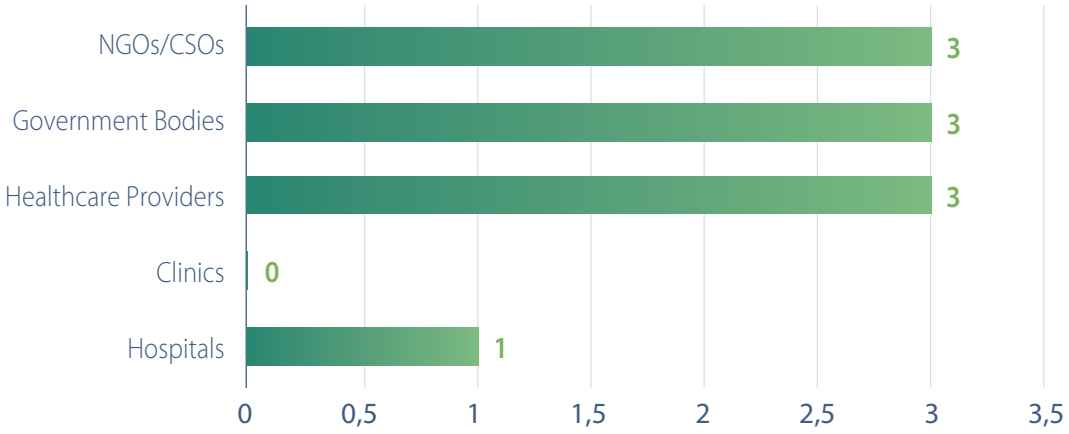

Figure L2b.2: *Partnerships*

Most organizations report having some level of policy and regulatory support for integration from governments, indicating political will. However, there are critical gaps in funding, health workforce training, IT infrastructure, and intra-system communication. Without these foundational supports, even well-intentioned policies struggle to translate into operationalized integration.

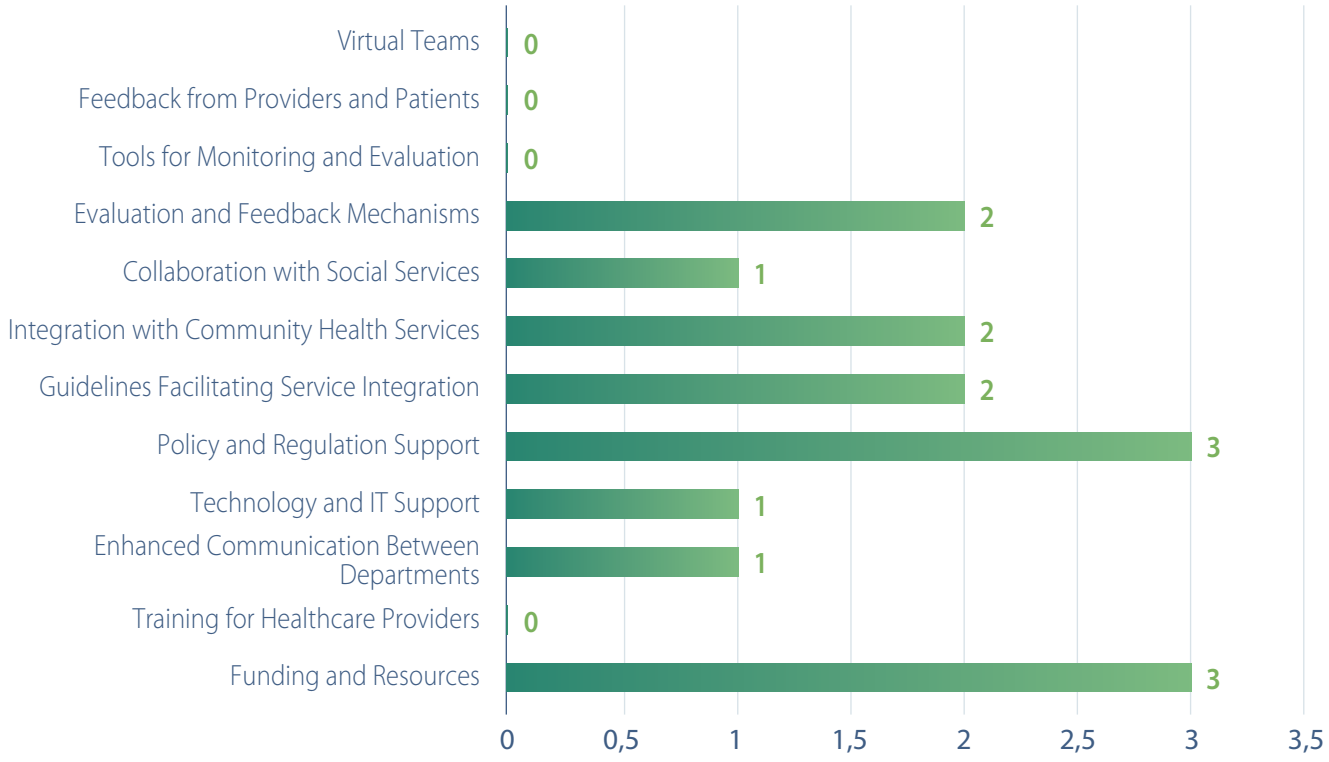

Figure L2b.3: *Support from the health system to effectively integrate services*

Organizations face sluggish bureaucratic change, unclear or conflicting guidelines, and variability in local policy contexts, making integration initiatives difficult to execute. However, not all organizations report these barriers, suggesting that localized governance differences impact integration capacity. Notably, these policy challenges also represent an opportunity for bottom-up advocacy, particularly by organizations already grappling with these issues.

Figure L2b.4: *Policy Barriers*

Advocacy activities for integrated service delivery are occurring at modest levels — some organizations engage in public forums or research-driven advocacy, but few build coalitions or maintain direct links with policymakers. The region lacks a cohesive advocacy front, which dilutes impact. However, a few organizations (e.g., GIV) show promise as regional champions that could mentor and mobilize peer organizations for collective action.

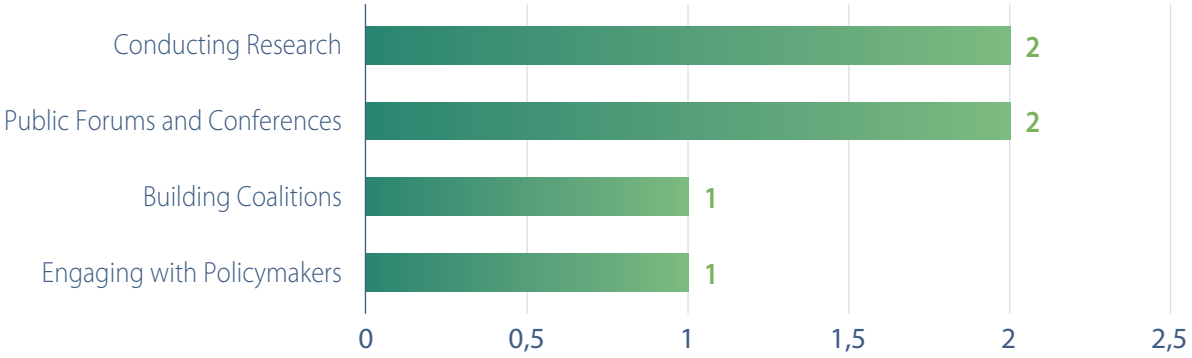

Figure L2b.5: *Advocacy Efforts*

These nine thematic observations under the section 2a underscore that while important steps toward integration have been taken, especially around referrals, community engagement, and screening, transformational systems change, particularly in the areas of digital infrastructure, multidisciplinary care, staff training, and financing, remains a work in progress. The path forward will require coordinated investment, policy alignment, and strong leadership to turn these foundational pieces into a comprehensive, resilient, and person-centered integrated health system.

SECTION L3: REPRESENTATION OF ORGANIZATIONS

In Latin America, organizational representation across global, regional, and national levels remains fragmented and limited. While most organizations are engaged at the national level, participation in regional networks is weak, and only one organization has global representation. This lack of multi-tiered engagement restricts opportunities for cross-border collaboration, access to global innovations, and broader advocacy for integrated health services. Additionally, very few organizations serve as technical assistance providers, indicating underutilized capacity for peer learning and regional knowledge exchange, both essential for scaling integration as promoted by WHO and Global Fund strategies.

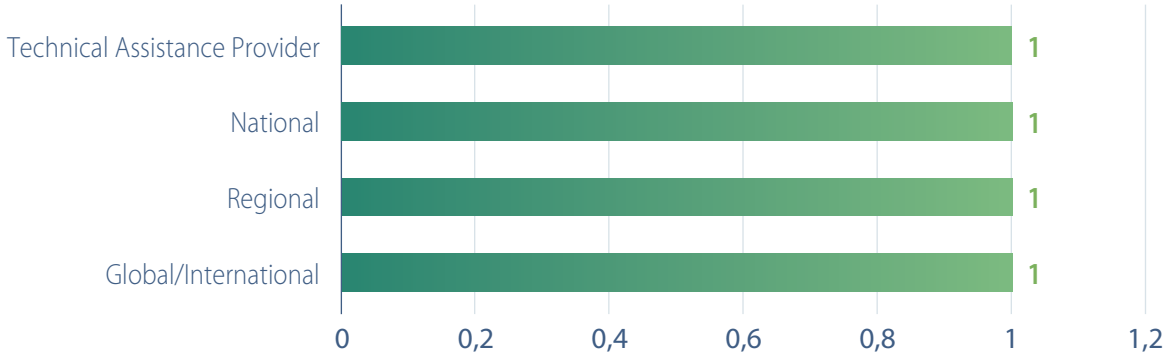

Figure L3: *Representation of Organizations*

Analytical Framework of the Latin America Regions:

DISEASE-SPECIFIC INTEGRATION ANALYSIS

Strengths:

- Universal HIV Platform: All organizations provide HIV services, creating a strong anchor for integration
- Hepatitis Co-Integration: 100% of organizations integrate hepatitis services with HIV care
- Emerging MPox Response: 67% have adapted to include MPox services, demonstrating system resilience

Critical Gaps:

- TB Integration Deficit: 0% provide TB services despite high HIV-TB co-infection rates in the region
- Limited NCD Integration: Only 67% offer NCD services, missing opportunities for chronic disease management
- Absent FGS Services: No organizations address Female Genital Schistosomiasis

DELIVERY MODEL INNOVATION ANALYSIS

One-Stop-Shop Performance:

- Moderate Success: 67% offer comprehensive HIV/HCV/TB services at one location
- SRHR Integration: 67% provide comprehensive sexual and reproductive health services
- Team-Based Care Gap: Only 33% implement collaborative multidisciplinary teams
- Digital Integration Crisis: Only 33% use shared Electronic Health Records

Primary Health Care Integration:

- Screening Strength: 67% provide early diagnosis and screening
- Treatment Gap: 0% offer full treatment in PHC settings - critical weakness
- Chronic Care Absence: 0% provide systematic chronic condition monitoring
- Referral Reliability: 100% maintain prompt referral systems as safety net

TECHNOLOGY ADOPTION ANALYSIS

Digital Health Landscape:

- Mobile Health: 0% adoption - significant opportunity gap
- Telemedicine: 67% partial adoption - emerging strength
- Digital Adherence: 0% - major barrier to chronic disease management
- Data Analytics: 67% use for program monitoring
- Patient Portals: 0% - missing patient engagement opportunity

Digital Maturity Assessment:

- Early Stage: 67% of organizations lack comprehensive digital tools
- Data-Driven Potential: Organizations using digital tools focus on analytics
- Integration Barrier: Absence of shared EHR systems fragments care

PARTNERSHIP AND POLICY SUPPORT SYSTEMS ANALYSIS

Partnership Ecosystem:

- Government Alignment: 100% collaboration with government bodies - major strength
- Civil Society Networks: 100% partner with NGOs/CSOs - strong community foundation
- Clinical Integration Gap: Only 33% partner with hospitals, 0% with clinics
- Vertical Integration Weakness: Limited tertiary care connections

Health System Support:

- Policy Framework: 100% receive policy/regulatory support
- Resource Gaps: Limited systematic funding and technical support
- Training Deficit: 0% receive health system training support for integration
- Technology Support: 33% receive IT support - opportunity for expansion

Policy Barriers:

- Bureaucratic Inertia: Slow policy changes hinder rapid integration
- Guidelines Confusion: Conflicting directives create operational challenges
- Localized Variations: Uneven policy environments across countries

COMMUNITY ENGAGEMENT AND TRAINING ANALYSIS

Community Engagement Profile:

- Limited Governance: Only 33% use advisory boards
- Feedback Mechanisms: Strong in surveys/focus groups (67%) but weak in ongoing channels
- CHW Utilization: 33% deploy community health workers - underutilized resource
- Cultural Sensitivity: 67% provide culturally appropriate services - regional strength
- Volunteer Networks: 67% engage community volunteers

Staff Training and Capacity:

- Continuing Education: 67% prioritize ongoing learning
- Cross-Training Gap: Only 33% provide multi-disease training
- Mentorship Absence: Limited coaching and mentoring systems
- Team Collaboration: Weak interdisciplinary meeting culture
- Psychological Support: Minimal staff wellbeing focus

Recommendations: Latin America

Latin America's integration model should leverage the region's strong organizational maturity, government partnerships, and community engagement while urgently addressing digital health gaps, TB integration deficits, and systematic collaboration weaknesses. The proposed model provides a phased approach to building comprehensive, sustainable, and scalable integration that aligns with WHO IPCHS principles and Global Fund RSSH strategies.

PHASE 1: FOUNDATION STRENGTHENING

1.1 Digital Infrastructure Development

- Shared EHR Implementation: Deploy unified electronic health record system across all the organizations.
- Mobile Health Platform: Introduce SMS-based adherence monitoring for HIV and hepatitis patients
- Telemedicine Expansion: Scale existing telemedicine capabilities to include specialist consultations
- Data Integration Hub: Create regional data dashboard for service monitoring and evaluation

1.2 HIV-TB Integration Imperative

- TB Service Integration: Mandatory addition of TB screening, diagnosis, and treatment at all HIV service points
- Co-infection Protocols: Develop standardized HIV-TB co-management guidelines
- Staff Cross-Training: Comprehensive training on HIV-TB syndemic management
- Supply Chain Integration: Unified procurement and distribution for HIV-TB medications

1.3 Clinical Partnership Networks

- Hospital Referral Agreements: Formal MOUs with tertiary care facilities in each country
- Clinic Integration Pilots: Partner with 2-3 local clinics per organization for service co-location
- Specialist Networks: Virtual specialist consultation networks for complex cases

PHASE 2: SERVICE INTEGRATION EXPANSION

2.1 One-Stop-Shop Model Enhancement

- Comprehensive Service Co-location: All organizations to provide HIV, TB, HCV, and SRHR services on-site
- Multidisciplinary Teams: Mandatory formation of doctor-nurse-social worker teams
- Case Management Systems: Assign dedicated case managers for multi-condition patients
- Integrated Care Pathways: Standardized protocols for managing multiple co-morbidities

2.2 Primary Health Care Treatment Integration

- PHC Treatment Capacity: Develop on-site treatment capabilities for stable HIV and HCV patients
- NCD Integration: Add diabetes and hypertension management to existing service portfolios
- Chronic Care Models: Implement systematic monitoring and follow-up systems
- Community Health Worker Scale-Up: Deploy CHWs for home-based care and adherence support

2.3 Digital Health Advancement

- Mobile Health Apps: Launch patient-facing apps for appointment scheduling and health education
- Digital Adherence Platforms: SMS and app-based medication reminders and monitoring
- Teleconsultation Services: Regular virtual consultations for remote patients
- AI-Powered Analytics: Predictive analytics for identifying high-risk patients

PHASE 3: SYSTEM INTEGRATION AND SCALE

3.1 Regional Network Development

- Latin America Integration Alliance: Formal regional network for knowledge sharing and advocacy
- Technical Assistance Exchange: Peer-to-peer support system between organizations
- Joint Advocacy Platform: Coordinated policy advocacy across Ecuador, Bolivia, and Brazil
- Regional Training Hub: Shared training programs and resource development

3.2 Community-Centered Care Enhancement

- Advisory Board Mandate: Establish community advisory boards at all organizations
- Feedback Loop Systems: Regular community consultation and service adaptation mechanisms
- Culturally Responsive Services: Enhanced focus on indigenous and marginalized populations
- Peer Support Networks: Patient-led support groups for chronic conditions

3.3 Quality Improvement and Evaluation

- Integrated M&E Framework: Unified monitoring and evaluation system across organizations
- Quality Improvement Cycles: Regular PDCA cycles for service enhancement
- Patient Satisfaction Monitoring: Systematic feedback collection and response systems
- Outcome Tracking: Longitudinal patient outcome monitoring across conditions.

ASIA:

Integrated health service delivery remains an aspirational goal in the Asia region, with persistent systemic gaps. Data from participating organizations provides a mosaic view of current practices, emerging innovations, and entrenched barriers across key domains of integration. Below is a summary of core observations grouped by thematic areas derived from survey Figures, correlated with global integration frameworks such as WHO's Integrated People-Centered Health Services (IPCHS), Integrated Health Service Delivery (IHSD), the CDC's Program Collaboration and Service Integration (PCSI), and the Global Fund's Resilient and Sustainable Systems for Health (RSSH) model. [13-17]

A total of six organizations have participated in the survey. They include Lepra Society India; Vasavya Mahila Mandali, India; Mamta Health Institute for Mother and Child; Alliance India; Alliance Myanmar and Khmer HIV/AIDS NGO Alliance.

SECTION A1: ORGANIZATIONAL SCOPE AND SERVICE PROFILE

Organizations in Asia, particularly India, show high institutional maturity, with most operating for 25–56 years. India dominates representation, accounting for four of six organizations, requiring regional strategies to balance Indian leadership with support for Myanmar and Cambodia. The experience spectrum is broad, with newer actors like Alliance Myanmar needing targeted technical assistance. Similar organizational models across countries support cross-national learning and regional collaboration. Vasavya Mahila Mandali, the oldest at 56 years, could act as a technical mentor or innovation hub for less experienced partners.

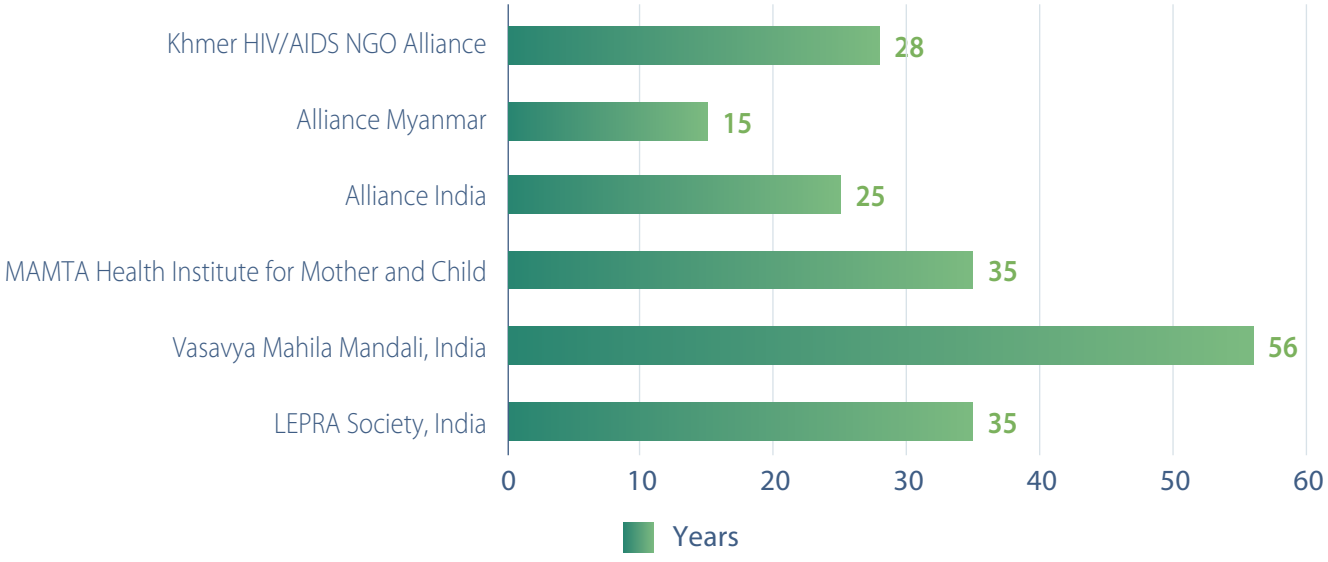

Figure A1.1: *Organizational Experience – Asia*

All organizations provide both HIV and TB services, forming a strong foundation for integrated care. Hepatitis services are limited, creating a gap despite rising co-infections. Half the organizations offer primary health care, indicating a shift toward broader integration aligned with UHC goals. HPV is partially integrated, and only one provides FGS services, pointing to missed SRHR and NTD linkages. No organization addresses Mpox, highlighting preparedness gaps. NCD services are strong overall, except in Myanmar, and Indian organizations vary significantly in service breadth, requiring tailored integration approaches.

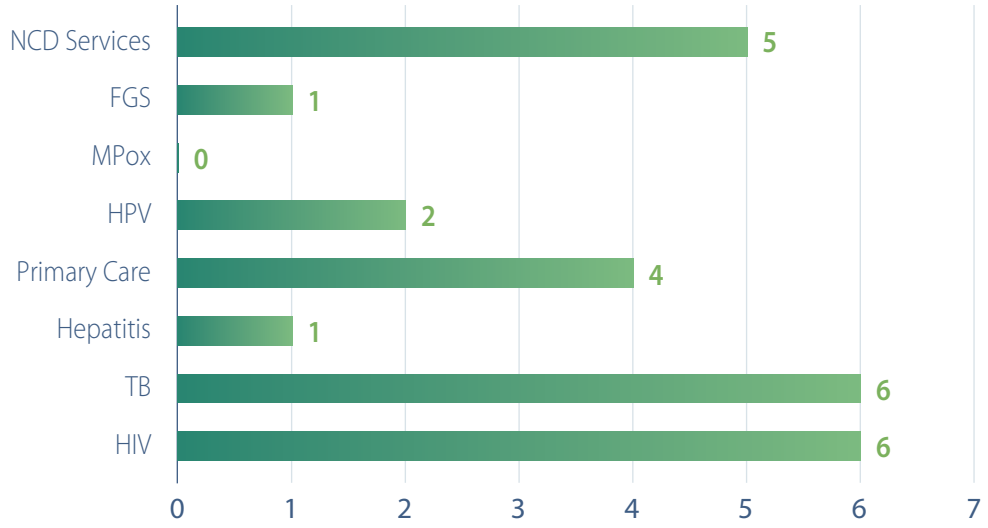

Figure A1.2: *Services Offered – Asia*

SECTION A2A: INTEGRATED SERVICE DELIVERY MODELS

The section highlights widespread provision of integrated HIV/TB/HCV services at single sites, aligning with WHO and Global Fund strategies. SRHR integration is strong across most organizations (except Alliance Myanmar), and collaborative care models using multi-disciplinary teams are common (excluding MAMTA). Referral systems bridge gaps where full integration is absent, but shared EHRs are rare (only Alliance India and Khmer Alliance), limiting care coordination. One-stop-shop maturity varies, with Alliance India exemplifying full integration (SRHR, EHRs, referrals). Cambodia's Khmer Alliance demonstrates alternative integration pathways through digital tools and SRHR focus, despite lacking co-located infectious disease services. Targeted investments could standardize integration gaps

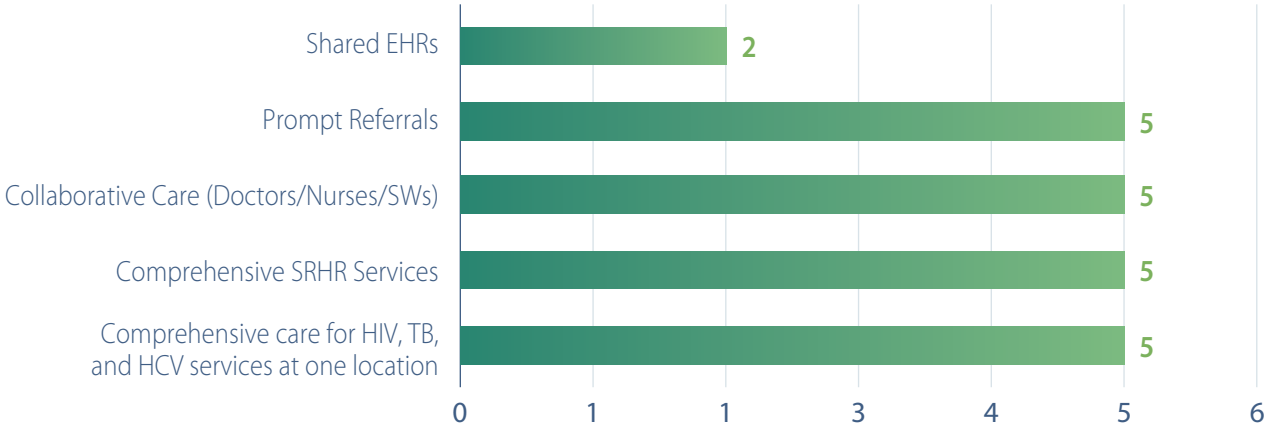

Figure A2a.1: *Services do you provide as part of your One-Stop-Shop delivery model*

All organizations provide universal screening and treatment for HIV/TB at the primary care level, aligning with Astana Declaration goals. Holistic co-morbidity management is partial (e.g., gaps in LEPRA Society and Alliance Myanmar), while referral systems are strong. Vaccination services are underdeveloped, with only Vasavya Mahila Mandali and Khmer Alliance offering robust programs. Chronic disease monitoring is inconsistent, despite growing NCD burdens in Asia. Vasavya and Khmer Alliance emerge as leaders with fully integrated PHC models, setting benchmarks for scaling up syndemic-aware care. Strengthening vaccination and chronic disease management could enhance PHC integration further.

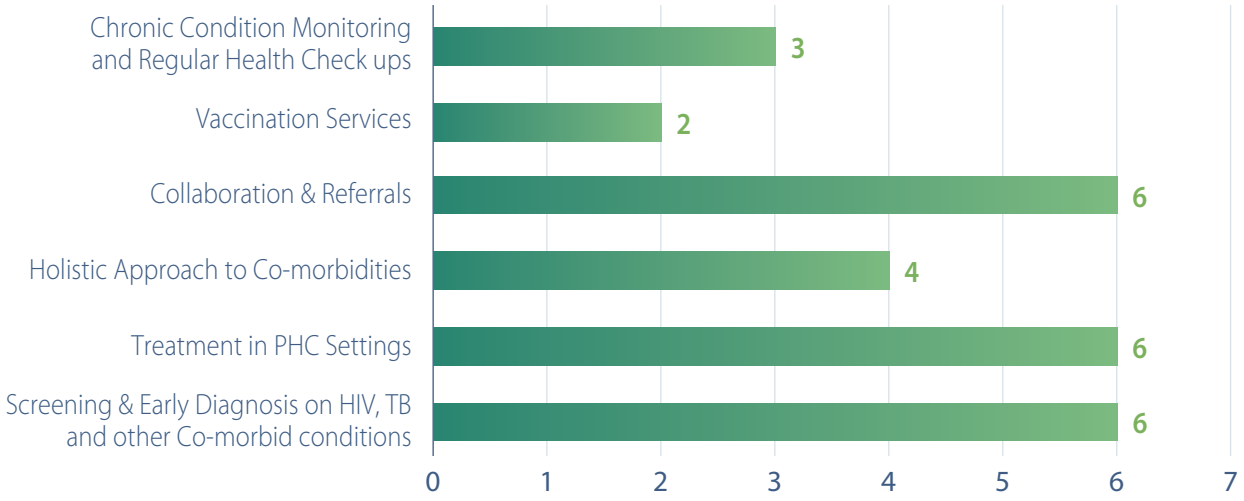

Figure A2a.2: *Services do you provide as part of your Primary Health Care integration delivery model*

Digital health adoption varies, with only half of organizations using mobile health apps and even fewer offering telemedicine (Vasavya, MAMTA, Khmer Alliance). Digital adherence tools are growing (Alliance India, Khmer Alliance), while data analytics is strong among leaders (Vasavya, Alliance India, Khmer Alliance). Online health portals remain limited. Khmer Alliance and Vasavya stand out as digital leaders, employing comprehensive solutions (apps, telemedicine, analytics). However, LEPRA Society and Alliance Myanmar lag significantly, highlighting a need for investment in digital equity to improve reach and patient-centered care.

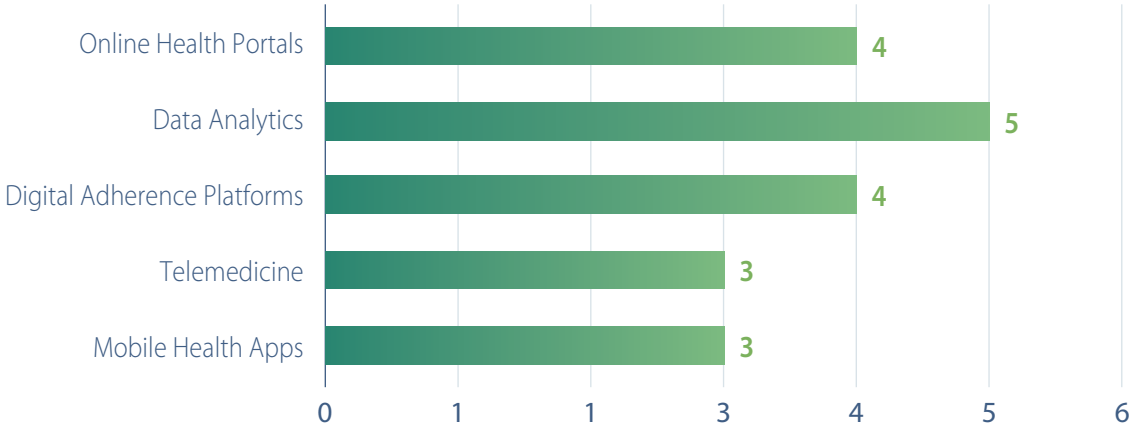

Figure A2a.3: *Services do you provide as part of your Digital Health Solutions/EHR*

Most organizations deliver comprehensive integrated care for HIV, TB, HCV, and NCDs, but only Vasavya offers multi-condition treatment in a single facility. Interdisciplinary teams and strong referral systems are common, while mobile clinics (Vasavya, Khmer Alliance) and shared EHRs (Alliance India, Khmer Alliance) remain limited. Community-based education and screening are universal strengths, but broader digital integration (EHRs) and facility-level co-location need scaling. External collaborations are robust, supporting service expansion. Addressing co-morbidities is progressing, reflecting responsiveness to Asia's dual disease burden.

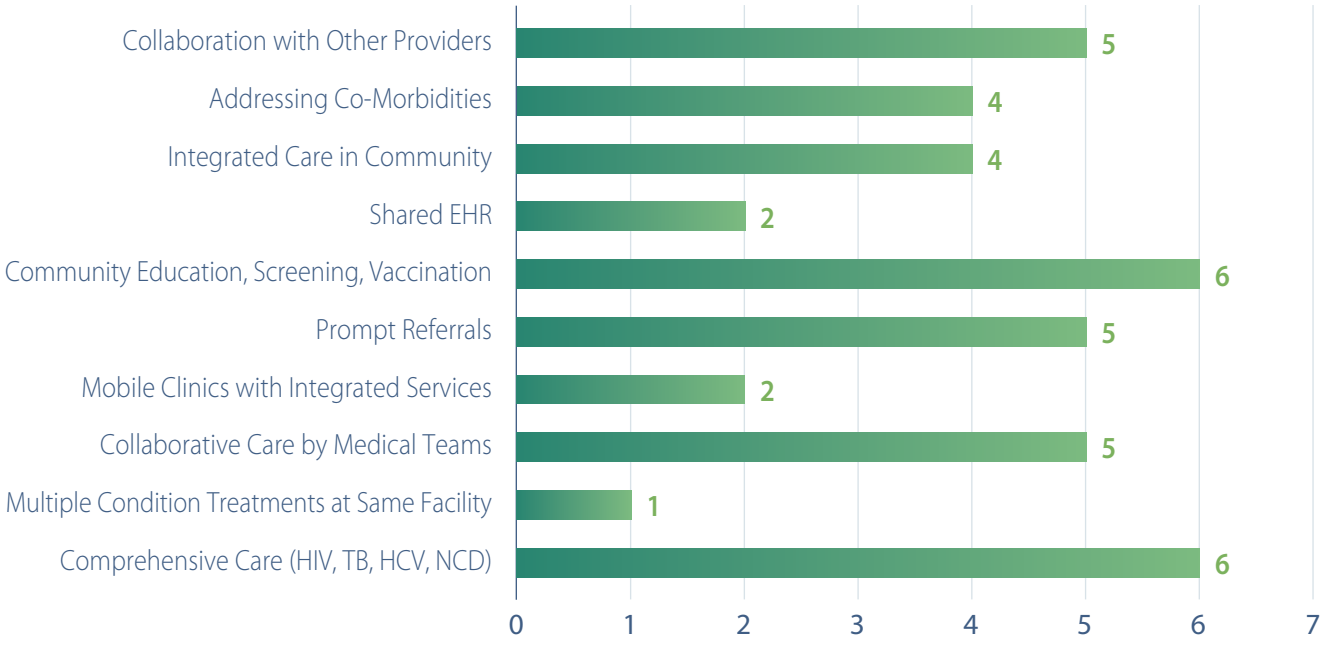

Figure A2a.4: *Organization integrates services for different health conditions*

Financial constraints and infrastructure gaps cripple scalability, while fractured coordination undermines service continuity. Persistent stigma and adherence issues reveal deep patient-facing barriers, compounded by unreliable supply chains and outdated record systems. Policy hurdles (especially in India/Myanmar) create additional roadblocks. Alarmingly, Khmer Alliance faces all challenges simultaneously, a warning sign for overstretched implementers. The stark variation in community engagement (from strong to weak) suggests untapped potential for grassroots solutions to these systemic failures

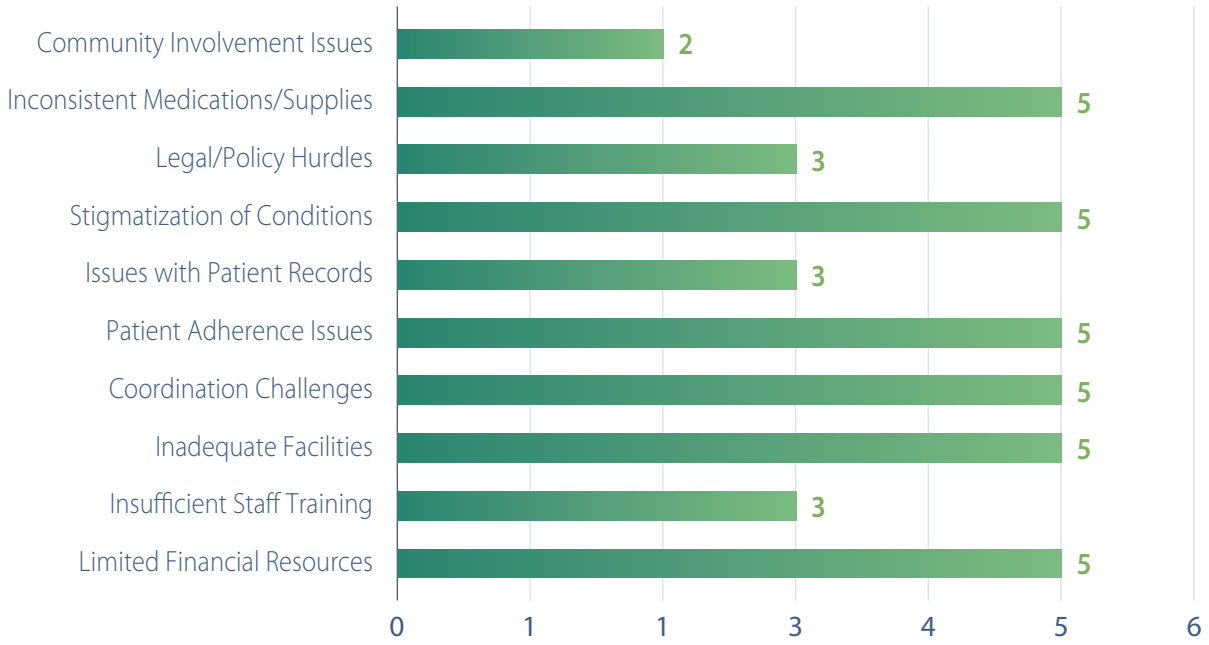

Figure A2a.5: *Key challenges you face in providing integrated services*

While most organizations employ individualized care plans and strong referral systems, critical gaps remain in care coordination. Only Vasavya uses a unified EHR system, and just half leverage multidisciplinary teams, hindering seamless service integration. Patient education and peer support networks are strengths, but inconsistent follow-ups and scarce case managers weaken long-term engagement. Alarmingly, weak provider communication and underdeveloped M&E systems threaten accountability. The reliance on referrals, rather than fully integrated systems, reveals a patchwork approach to continuity that must be addressed through digital solutions, team-based care, and stronger patient navigation support.

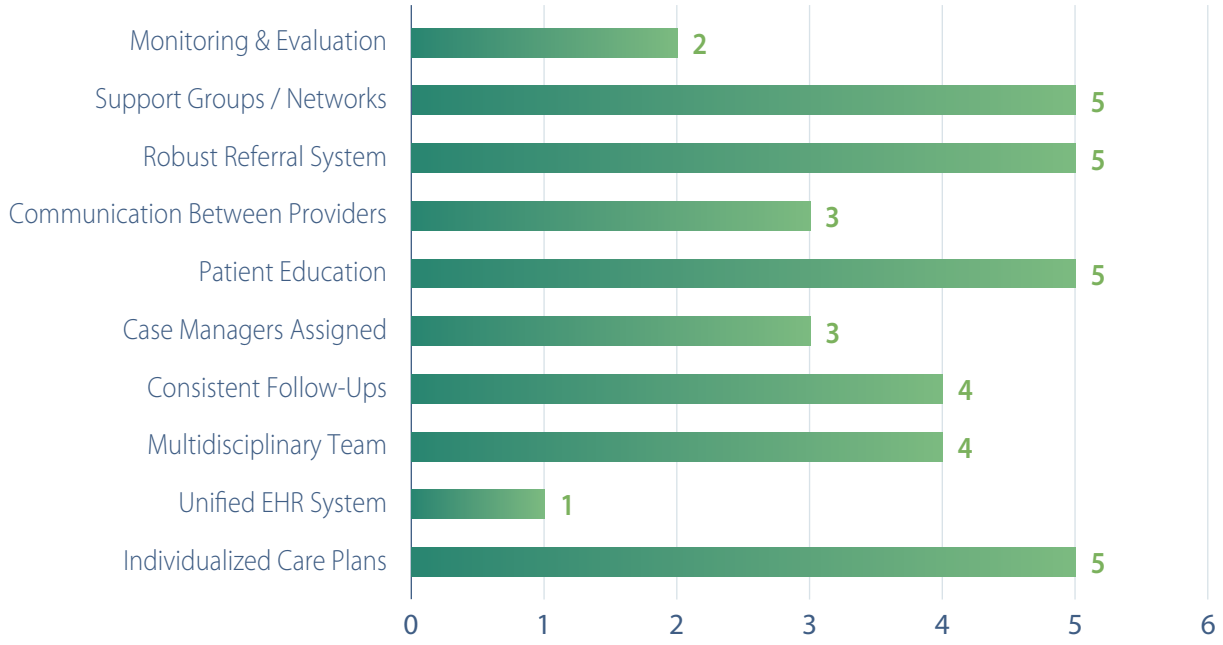

Figure A2a.6: *Ensure continuity of care for patients receiving multiple services*

All organizations use advisory boards and local partnerships, showing strong participatory governance. CHWs and volunteers are widely engaged (except LEPRA) for last-mile delivery. Surveys and focus groups inform needs-based programming, but feedback mechanisms are weak in some (LEPRA, MAMTA, Alliance India). Vasavya and Khmer Alliance lead with full integration—training, cultural adaptation, and outreach. LEPRA lags behind, lacking CHWs, forums, and feedback systems. Culturally sensitive services are common, improving uptake. Strengthening feedback loops and scaling best practices (CHWs, workshops) could enhance community-led integration.

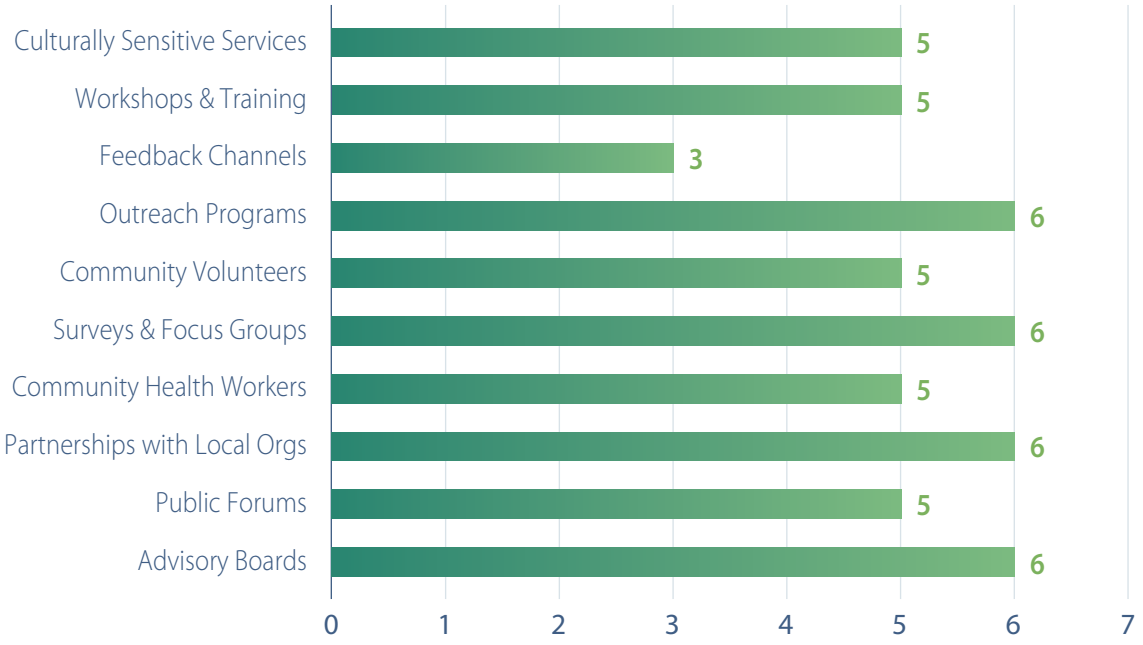

Figure A2a.7: *Community in service delivery*

Most organizations provide cross-training and continuing education, though gaps exist in mentorship and interdisciplinary meetings (notably Alliance Myanmar and Khmer Alliance). Workshops and resource materials are widely used, but emotional support for staff remains inconsistent—only Vasavya, Alliance India, and Khmer Alliance offer structured programs. Vasavya leads with comprehensive support (cross-training, mentorship, team meetings), serving as a model. Critical gaps in cross-training and team coordination hinder seamless integration in some settings, highlighting the need for standardized workforce development strategies.

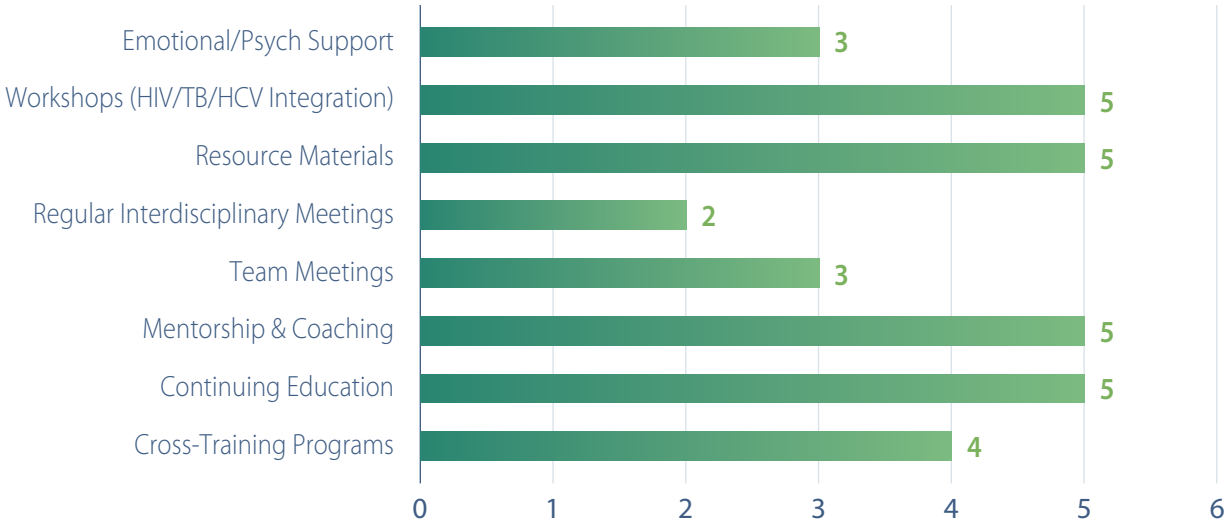

Figure A2a.8: *Training and support do you provide to your staff to deliver integrated services*

Half of organizations lack digital tools entirely, revealing a stark digital divide that hinders scalable integration. Digital adoption correlates strongly with integration maturity—Vasavya, Khmer Alliance, and Alliance Myanmar lead in both areas. Notably, India's experienced organizations (LEPRA, MAMTA, Alliance India) still rely on manual systems, limiting efficiency. Digital tools enhance not just clinical coordination but also community engagement and staff support, as seen in Cambodia/Myanmar's resource-smart models. Closing this gap requires prioritizing investments in EHRs, mobile health platforms, and adherence tracking systems to align with WHO digital health standards.

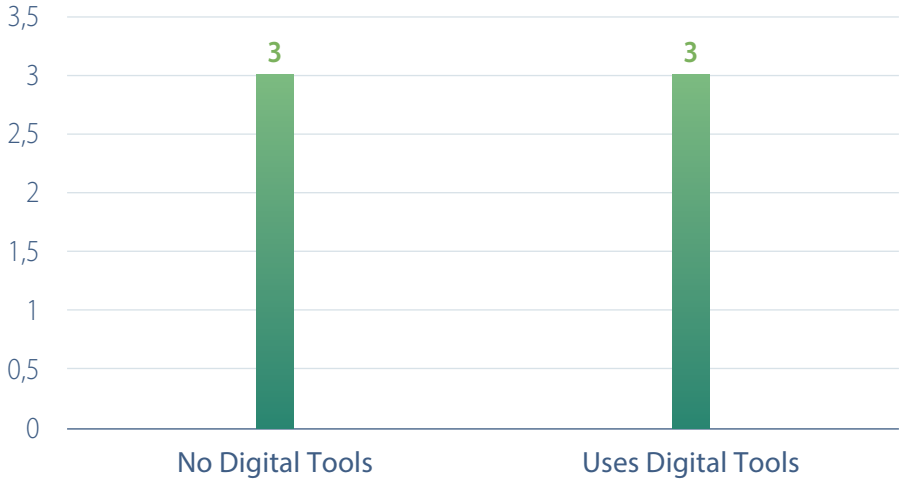

Figure A2a.9: *Digital tools for integrated service delivery*

SECTION A2B: COLLABORATION AND HEALTH SYSTEM INTEGRATION

Most organizations conduct coordination meetings and maintain referral systems, but deeper collaboration remains limited. Only Vasavya and Khmer Alliance use shared care plans, while just half offer truly integrated services. Formal MOUs (4/6 organizations) and joint training show progress, but data sharing and feedback loops are underdeveloped (3/6 organizations). Leading organizations (Vasavya, Khmer Alliance, Alliance India) demonstrate mature collaboration through joint funding and community engagement. To strengthen integration, partners must prioritize formal agreements, interoperable data systems, and structured feedback mechanisms, leveraging best practices from high-performing organizations

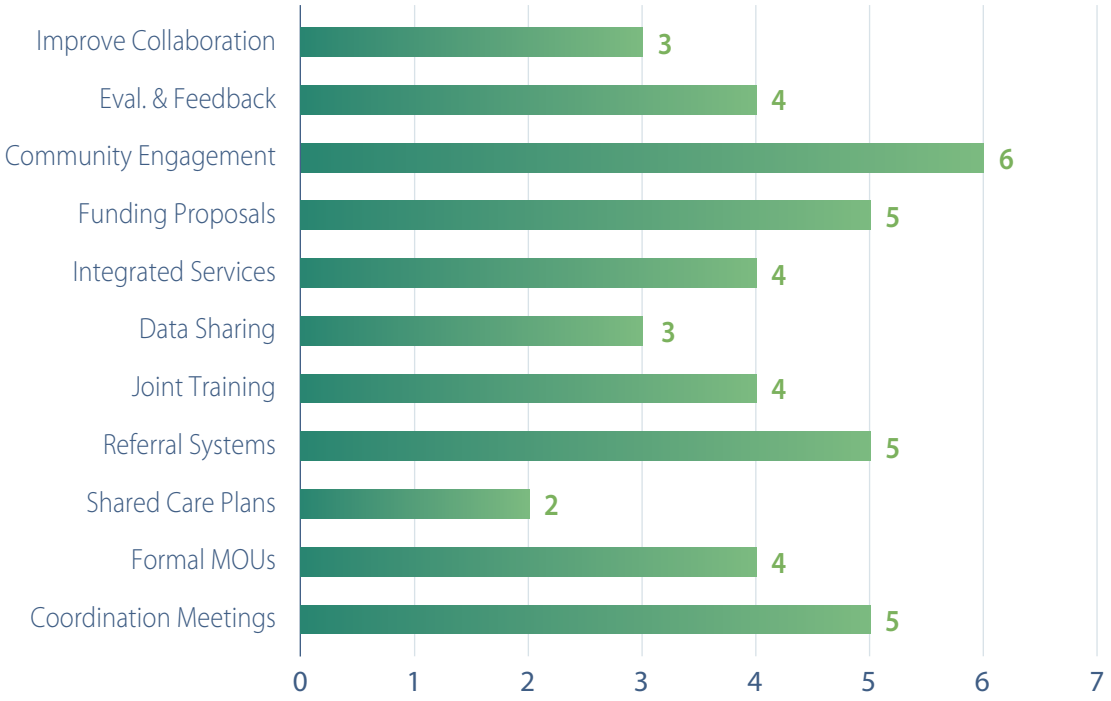

Figure A2b.1: *Collaboration*

Leading organizations (Vasavya, MAMTA, Alliance India, Khmer Alliance) demonstrate robust multi-sectoral partnerships across all five key sectors, enabling comprehensive integration. While all collaborate with healthcare providers and most engage governments (except LEPRA) and NGOs, critical gaps persist: LEPRA and Alliance Myanmar lack hospital/clinic linkages, limiting clinical integration. LEPRA's minimal partnerships (providers/government only) constrain its service delivery scope. Strong government and NGO collaborations prevail, supporting policy alignment and community outreach. Regional leaders (Khmer Alliance, Alliance India, Vasavya) exemplify full-spectrum partnerships, positioning them as potential integration hubs.

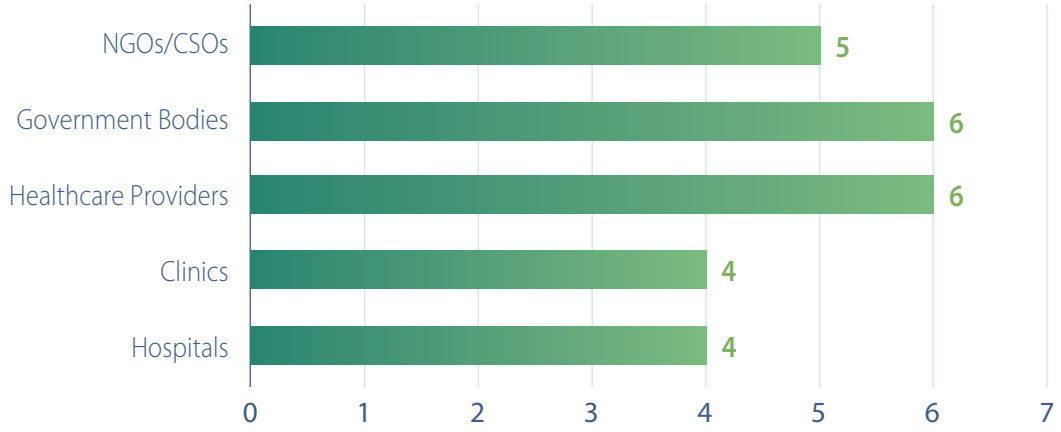

Figure A2b.2: *Partnerships*

Health system backing varies significantly, with Vasavya, MAMTA, and Khmer Alliance receiving comprehensive support while others face critical gaps. Funding remains inconsistent (4/6 organizations), and digital/IT infrastructure is lacking (3/6 organizations), hindering EHRs and telemedicine. While policy environments are generally supportive, implementation varies—particularly for LEPRA and Alliance India. Most benefit from integration guidelines and internal communication (except LEPRA/Myanmar), but virtual care teams are entirely absent. M&E systems are strongest in Vasavya/MAMTA/Khmer Alliance, revealing a quality improvement divide. Community health integration outpaces social service linkages, especially in India/Myanmar.

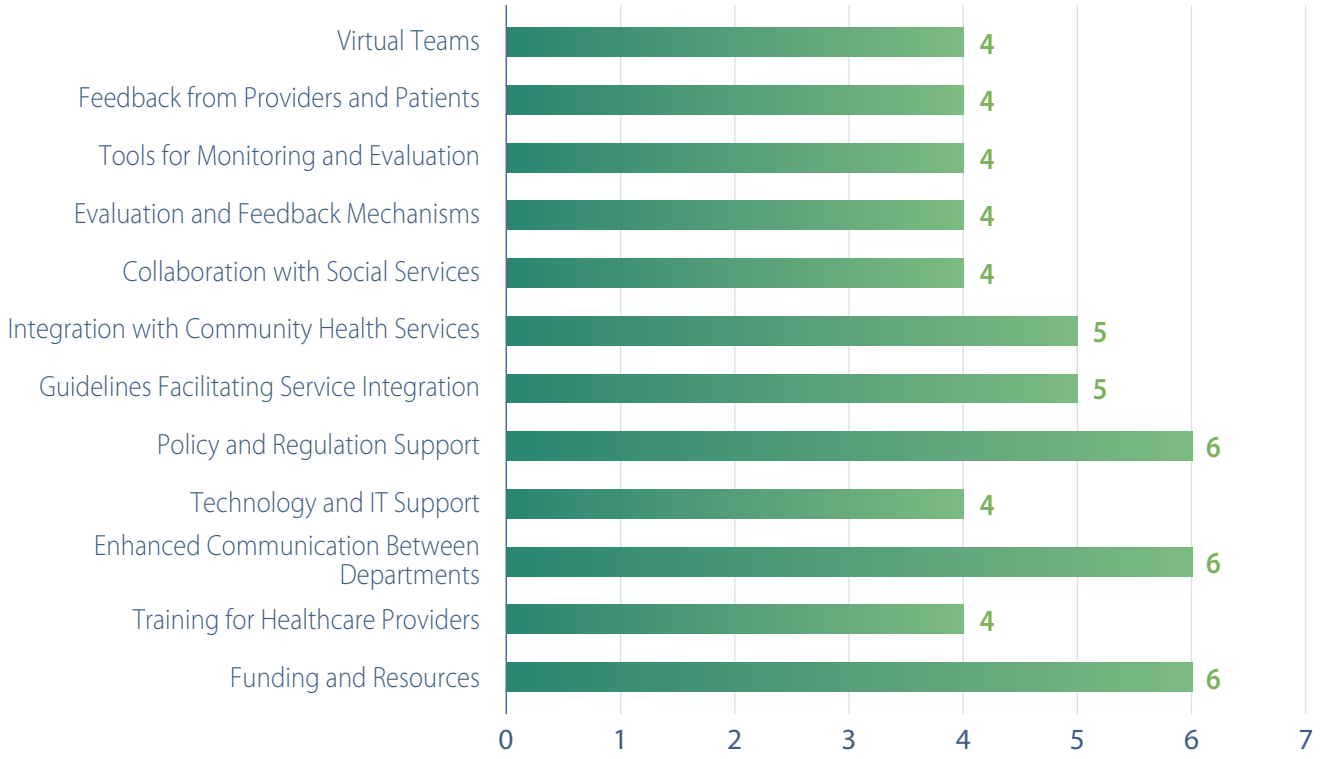

Figure A2b.3: *Support from the health system to effectively integrate services*

Five of six organizations face critical policy gaps, with absent frameworks and conflicting guidelines creating systemic hurdles. Bureaucratic delays plague half the organizations (Vasavya, MAMTA, Alliance India/Myanmar), while only Alliance India reports minimal barriers. Strikingly, top performers like Vasavya confront full-spectrum policy challenges despite strong service delivery, revealing a disconnect between implementation capacity and enabling environments. Cambodia's Khmer Alliance shows partial progress with responsive administration but unclear mandates. This pervasive policy fragmentation demands urgent advocacy for coherent integration frameworks and streamlined governance to unlock systemic change.

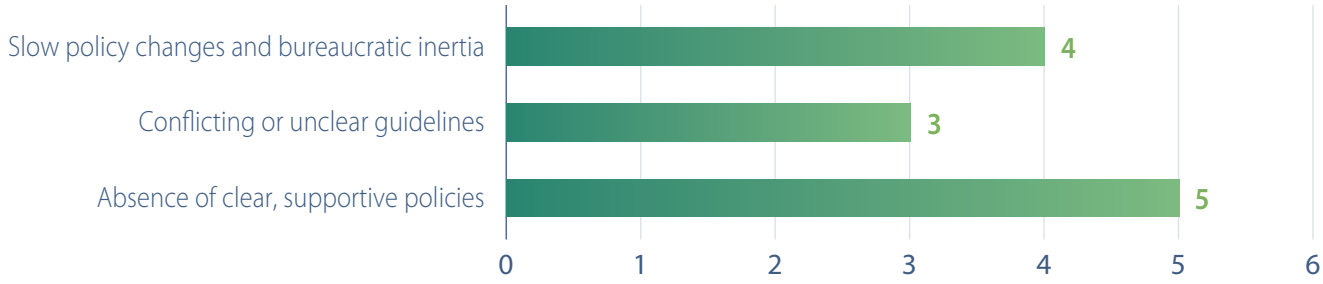

Figure A2b.4: *Policy Barriers*

All organizations engage policymakers, but only 4/6 organizations build coalitions (missing in MAMTA/Alliance Myanmar) and use research-backed advocacy. Public forums are leveraged by LEPRA, Vasavya, Alliance India and Khmer Alliance for community mobilization. Vasavya and Khmer Alliance emerge as advocacy leaders with multi-pronged approaches (coalitions, research, public platforms), while MAMTA/Myanmar rely solely on policy engagement - correlating with their slower systemic progress. Evidence-generation remains underutilized even among top performers, highlighting an opportunity to strengthen data-driven advocacy through cost-benefit analyses and outcome tracking

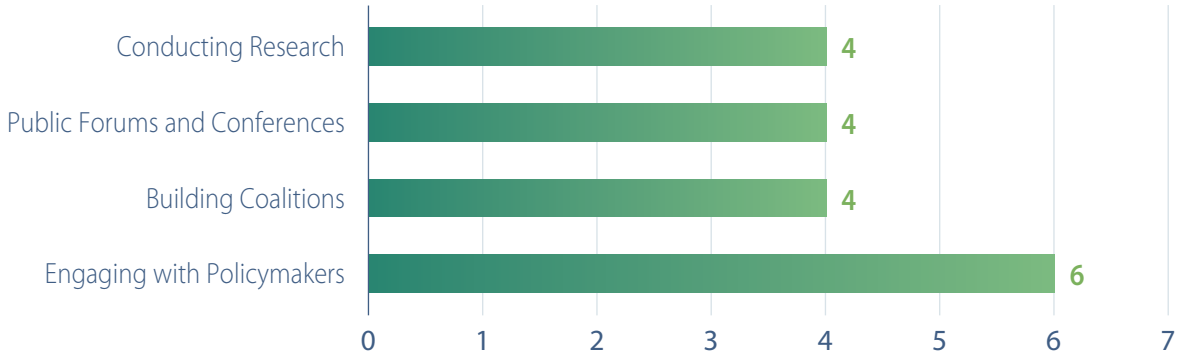

Figure A2b.5: *Advocacy Efforts*

SECTION A3: REPRESENTATION OF ORGANIZATIONS

In Asia, all six organizations operate at the national level, ensuring strong alignment with country-specific health policies and UHC strategies. Half of the organizations, LEPRA, Vasavya, MAMTA, and Khmer Alliance also maintain a global footprint, enhancing their access to technical assistance and international funding streams. However, regional representation is limited, with only MAMTA and Alliance India actively engaged in cross-country collaboration. Notably, four organizations also serve as technical assistance providers, positioning them to support peer learning and replication of integrated service models. Organizations like Alliance Myanmar and Khmer Alliance, though nationally robust, lack regional or technical roles and may benefit from partnering with more established hubs. MAMTA Health Institute stands out for its comprehensive presence across all representation levels, highlighting the potential for select organizations to lead integration initiatives regionally and globally. Strengthening regional collaboration remains a key opportunity to accelerate knowledge exchange and harmonized integration policies across Asia.

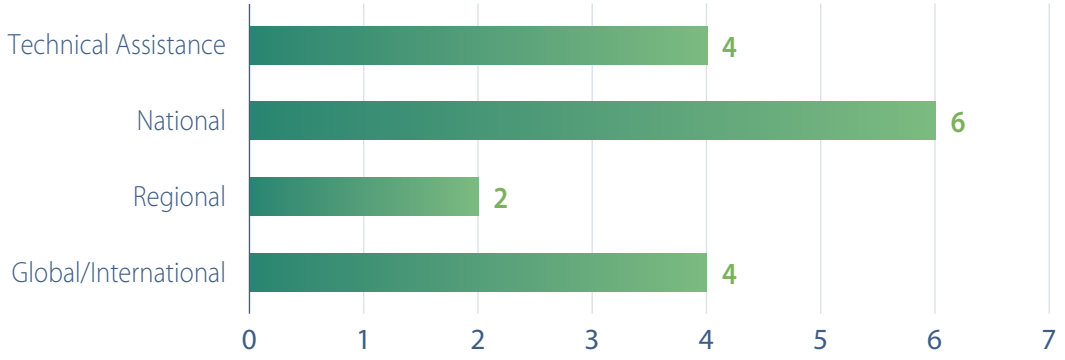

Figure A3: *Representation of Organizations*

Analytical Framework of the Asia Region:

DISEASE-SPECIFIC INTEGRATION ANALYSIS

Strengths:

- Universal HIV-TB Platform: 100% of organizations provide both HIV and TB services - strongest foundation globally
- Comprehensive NCD Integration: 83% offer NCD services, addressing dual disease burden effectively
- Strong PHC Integration: 67% provide primary care services, demonstrating health system integration
- Emerging SRHR Integration: Growing focus on sexual and reproductive health services

Critical Gaps:

- Hepatitis Integration Deficit: Only 17% (1/6) provide hepatitis services despite high co-infection rates
- HPV Service Limitation: Only 33% offer HPV services, missing cervical cancer prevention opportunities
- MPox Preparedness Gap: 0% provide MPox services, indicating pandemic preparedness weakness
- FGS Service Absence: Only 17% address Female Genital Schistosomiasis

DELIVERY MODEL INNOVATION ANALYSIS

One-Stop-Shop Performance:

- Exceptional Co-location: 83% offer comprehensive HIV/TB/HCV services at one location
- Strong SRHR Integration: 83% provide comprehensive sexual and reproductive health services
- Robust Team-Based Care: 83% implement collaborative multidisciplinary teams
- Digital Integration Gap: Only 33% use shared Electronic Health Records

Primary Health Care Integration:

- Universal Screening Excellence: 100% provide early diagnosis and screening - regional leadership
- Universal PHC Treatment: 100% offer full treatment in PHC settings - major achievement
- Strong Referral Networks: 100% maintain prompt referral systems
- Moderate Chronic Care: 50% provide systematic chronic condition monitoring

TECHNOLOGY ADOPTION ANALYSIS

Digital Health Landscape:

- Moderate Mobile Health: 50% adoption - balanced progress
- Growing Telemedicine: 50% implementation - emerging strength
- Strong Digital Adherence: 67% use digital adherence platforms - leading practice
- Excellent Data Analytics: 83% employ data analytics for monitoring
- Growing Patient Portals: 67% offer online health portals

Digital Maturity Assessment:

- Advanced Stage: 50% of organizations demonstrate comprehensive digital integration
- Data-Driven Leadership: Strong focus on analytics and evidence-based decision making
- Innovation Leaders: Vasavya Mahila Mandali and Khmer Alliance show full digital integration

PARTNERSHIP AND POLICY SUPPORT SYSTEMS ANALYSIS

Partnership Ecosystem:

- Universal Government Collaboration: 100% partner with government bodies - exceptional alignment
- Strong Healthcare Networks: 100% collaborate with healthcare providers
- Robust Civil Society Ties: 83% partner with NGOs/CSOs
- Good Clinical Integration: 67% partner with hospitals and clinics
- Comprehensive Multi-Sectoral Approach: Leading organizations demonstrate full-spectrum partnerships

Health System Support:

- Universal Communication Support: 100% receive enhanced departmental communication
- Strong Policy Framework: 100% have policy/regulatory support
- Good Training Support: 67% receive healthcare provider training
- Moderate Technology Support: 67% receive IT infrastructure support
- Robust Integration Guidelines: 83% access service integration frameworks

Policy Barriers:

- Widespread Policy Gaps: 83% report absence of clear supportive policies
- Bureaucratic Delays: 67% face slow policy changes and inertia
- Guidelines Confusion: 50% encounter conflicting directives

COMMUNITY ENGAGEMENT AND TRAINING ANALYSIS

Community Engagement Profile:

- Universal Advisory Governance: 100% use community advisory boards - global leadership
- Strong Public Engagement: 83% conduct public forums and conferences
- Comprehensive Partnerships: 100% partner with local organizations
- Extensive CHW Networks: 83% deploy community health workers effectively
- Robust Feedback Systems: 100% use surveys and focus groups
- Strong Volunteer Mobilization: 83% engage community volunteers

Staff Training and Capacity:

- Good Cross-Training: 67% provide multi-disease training programs
- Strong Continuing Education: 83% prioritize ongoing professional development
- Excellent Mentorship: 83% offer coaching and mentoring systems
- Comprehensive Resource Access: 83% provide learning materials and toolkits
- Integration-Focused Workshops: 83% conduct HIV/TB/HCV integration training

Recommendations: Asia

Asia's integration model should leverage the region's exceptional organizational maturity, universal HIV-TB coverage, and world-class community engagement while addressing hepatitis integration gaps and digital inequities. The proposed model provides a sophisticated, multi-tiered approach that recognizes country-specific contexts while building regional collaboration and global leadership capacity.

The region's unique combination of mature organizations, strong government partnerships, and excellent community engagement positions it to become a global leader in integrated care delivery and a technical assistance provider for other regions pursuing similar transformation.

PHASE 1: DIGITAL FOUNDATION AND HEPATITIS INTEGRATION

1.1 Digital Infrastructure Standardization

- Universal EHR Deployment: Implement shared electronic health record systems across all organizations
- Digital Health Platform: Create region-wide digital health platform with mobile apps and telemedicine capabilities
- Analytics Integration Hub: Establish centralized data analytics platform for cross-country learning
- Digital Equity Program: Targeted support for LEPRA, MAMTA, and Alliance Myanmar to achieve digital parity

1.2 Hepatitis Integration Imperative

- Hepatitis Service Scale-Up: Expand from 17% to 100% hepatitis service coverage across organizations
- Triple Integration Protocols: Develop HIV-TB-Hepatitis co-management guidelines and protocols
- Supply Chain Integration: Unified procurement for HIV-TB-Hepatitis medications and diagnostics
- Staff Cross-Training: Comprehensive training on viral hepatitis screening, treatment, and prevention

1.3 Country-Specific Adaptation Framework

- India Integration Hub: Leverage four Indian organizations as regional technical assistance center
- Myanmar Capacity Building: Intensive support for Alliance Myanmar on digital tools and hepatitis integration
- Cambodia Excellence Center: Position Khmer Alliance as ASEAN best practice model
- Cross-Country Learning: Quarterly exchanges between organizations for knowledge sharing

PHASE 2: SERVICE EXCELLENCE AND SYSTEM INTEGRATION

2.1 Advanced One-Stop-Shop Models

- Comprehensive Service Co-location: Achieve 100% coverage for HIV-TB-HCV-SRHR-NCD services on-site
- Enhanced Team-Based Care: Strengthen multidisciplinary teams with mental health and social work integration
- Advanced Case Management: Deploy AI-assisted case management for complex multi-condition patients
- Quality Improvement Systems: Implement continuous quality improvement cycles across all services

2.2 Universal PHC Treatment Excellence

- Chronic Care Enhancement: Scale chronic condition monitoring to 100% of organizations
- Integrated Care Pathways: Standardize patient journeys across multiple conditions and services
- Community-Clinical Linkage: Strengthen CHW-Clinic Integration for seamless care transitions
- Mobile Clinic Networks: Deploy integrated mobile clinics for hard-to-reach populations

PHASE 3: REGIONAL LEADERSHIP AND GLOBAL IMPACT

3.1 Asia-Pacific Integration Alliance

- Regional Network Formation: Establish formal Asia-Pacific Primary Care Integration Alliance
- Policy Harmonization: Coordinate advocacy for supportive integration policies across countries
- Technical Assistance Exchange: Formalize peer-to-peer support and mentoring systems
- Innovation Incubator: Create regional platform for piloting and scaling integration innovations

3.2 Global Leadership Development

- Global South Leadership: Position Asia organizations as technical assistance providers f or other regions
- Research Excellence: Establish multi-country research collaboratives on integration effectiveness
- Policy Influence: Lead global discussions on PHC integration models and frameworks

3.3 Sustainability and Scale

- Financial Sustainability: Develop diverse funding portfolios including government co-financing
- Integration Institutionalization: Embed integration principles in national health policies
- Workforce Development: Create regional training programs for integration specialists
- Impact Measurement: Deploy sophisticated M&E systems for longitudinal outcome tracking

AFRICA:

Integrated health service delivery remains an aspirational goal in the region, with persistent systemic gaps. Data from participating organizations provides a mosaic view of current practices, emerging innovations, and entrenched barriers across key domains of integration. Below is a summary of core observations grouped by thematic areas derived from survey Figures, correlated with global integration frameworks such as WHO's Integrated People-Centered Health Services (IPCHS), Integrated Health Service Delivery (IHSD), the CDC's Program Collaboration and Service Integration (PCSI), and the Global Fund's Resilient and Sustainable Systems for Health (RSSH) model. [13-17]

A total of seven organizations have participated in the survey. They include OSSHD; LVCT Health; Alive Medical Services; Uganda Network of Young people Living with HIV/AIDS; Education as Vaccine; Pakachere IHDC; ONG Alliance Cote d'Ivoire.

SECTION AF1: ORGANIZATIONAL SCOPE AND SERVICE PROFILE

Most African organizations boast 16+ years of experience, demonstrating strong institutional maturity to drive integrated service delivery - particularly OSSHD Ethiopia (35 years) as a potential regional leader. However, Nigeria's Education as a Vaccine (2 years) requires targeted capacity building to accelerate its integration capabilities. Geographically, East Africa dominates representation (Uganda/Kenya/Ethiopia), suggesting opportunities for regional collaboration, while the West/Southern Africa presence (Côte d'Ivoire/Nigeria/Malawi) highlights the need for context-adapted models.

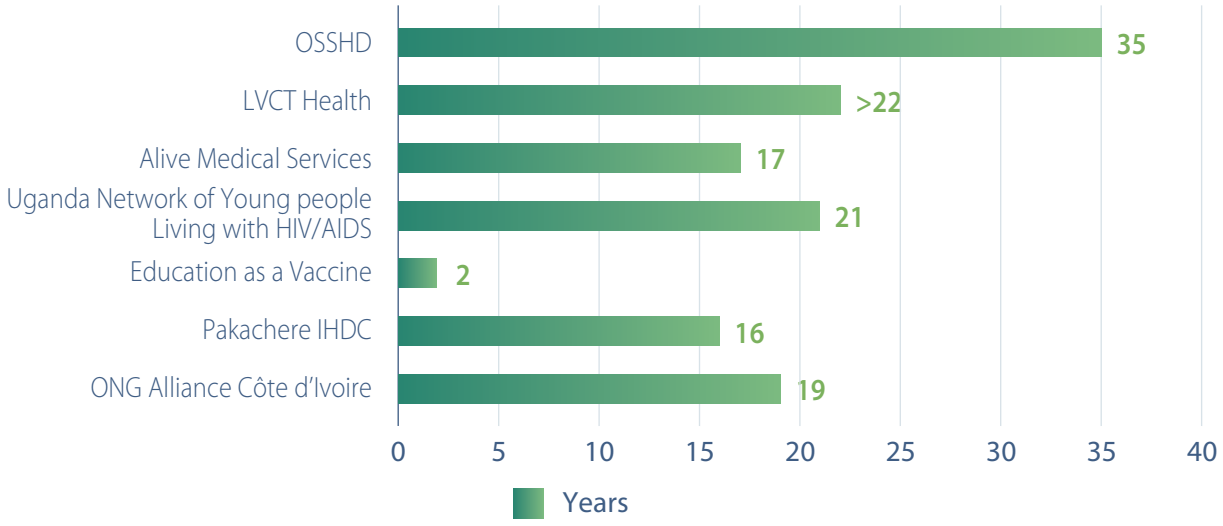

Figure Af1.1: *Organizational Experience – Africa*

All six organizations provide HIV services, forming a strong foundation for integrated care. Tuberculosis services are offered by five organizations, while hepatitis and NCD services are each provided by four organizations - showing progress in co-morbidity management. Only three organizations deliver primary healthcare services, revealing a key gap in anchoring integration. Specialized services show uneven coverage: just three organizations address HPV, only two provide FGS services, and merely one (Alive Medical Services) offers mpox care.

Alive Medical Services and LVCT Health emerge as leaders, delivering nearly comprehensive service integration across seven health areas. These organizations demonstrate how HIV platforms can successfully expand to include TB, hepatitis, NCDs and some specialized services, providing valuable models for other partners.

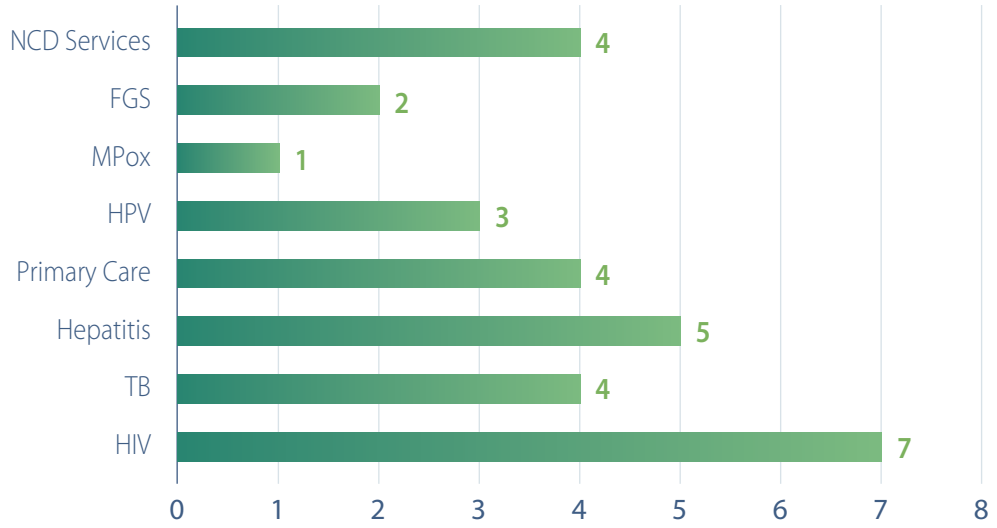

Figure Af1.2: *Services Offered – Africa*

SECTION AF2A: INTEGRATED SERVICE DELIVERY MODELS

Most organizations have successfully implemented comprehensive one-stop-shop models for HIV/TB/HCV services, with nearly all integrating SRHR services and utilizing multidisciplinary teams - demonstrating strong alignment with WHO IPCHS frameworks. Effective referral systems are widely established, ensuring care continuity where full integration isn't possible. However, only Alive Medical Services and LVCT Health have achieved complete integration through shared EHR systems, while OSSHD lags behind in comprehensive service offerings and internal collaboration.

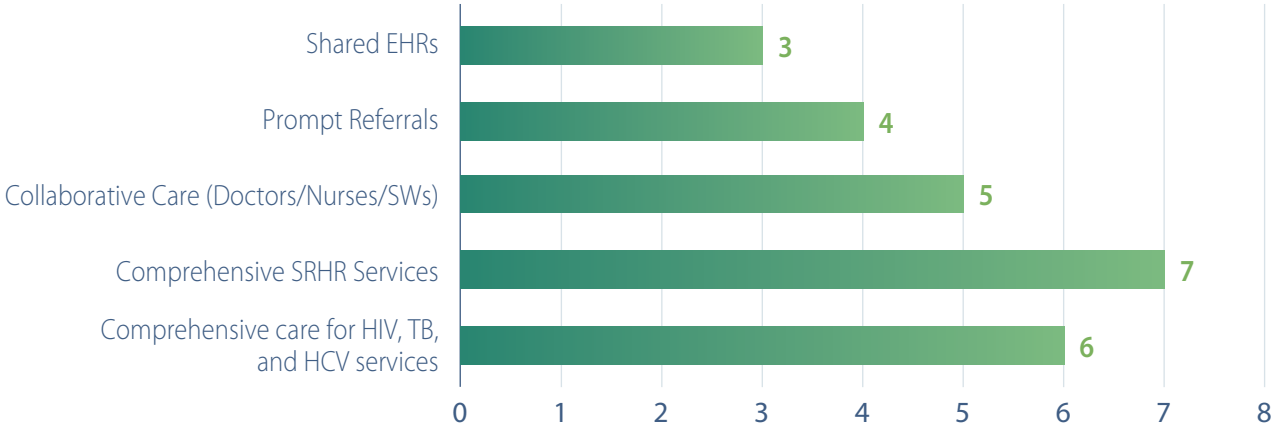

Figure Af2a.1: *Services do you provide as part of your One-Stop-Shop delivery model*

Most organizations emphasize early diagnosis and PHC-based treatment, aligning with WHO's integrated care goals. While referral systems and collaborative care are widespread, holistic co-morbidity management remains inconsistent. Vaccination services show promising integration, but chronic disease monitoring is limited to only Alive Medical Services and LVCT Health. The maturity of PHC integration varies significantly, with some organizations demonstrating comprehensive models while others require targeted support. Strengthening chronic disease management and expanding preventive services are critical to achieving complete continuum of care and universal health coverage objectives.

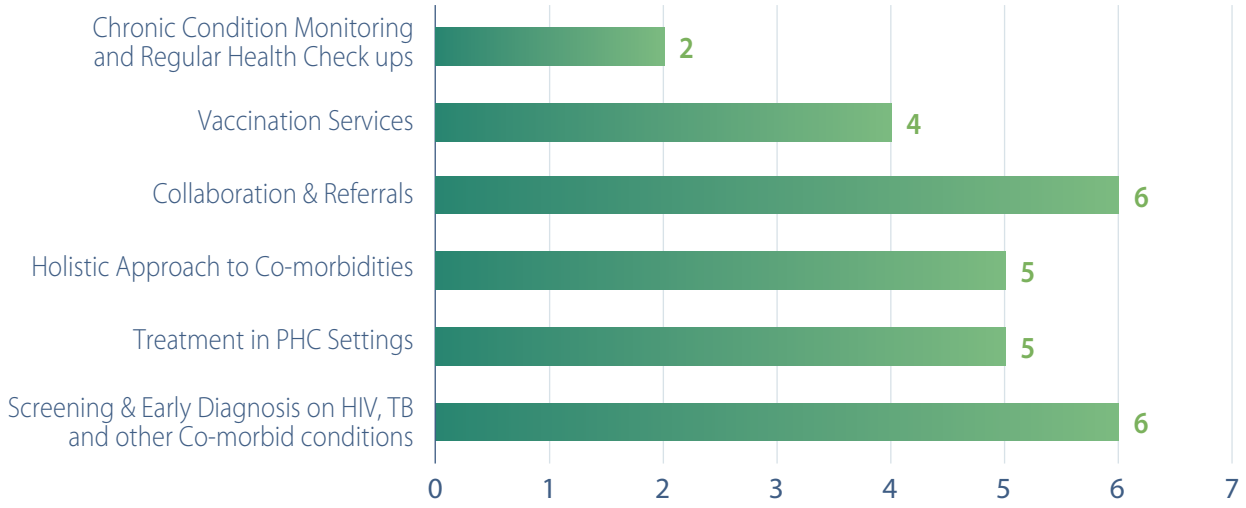

Figure Af2a.2: *Services do you provide as part of your Primary Health Care integration delivery model*

Mobile health apps are widely adopted for patient engagement, while telemedicine remains limited to only Alive Medical Services. Digital adherence tools show strong uptake for monitoring treatment, and data analytics are emerging among leading organizations. However, comprehensive digital strategies are lacking, with online health portals rarely utilized. Alive Medical Services and LVCT Health stand out as digital leaders, demonstrating the potential for integrated technology solutions to enhance service delivery across the region.

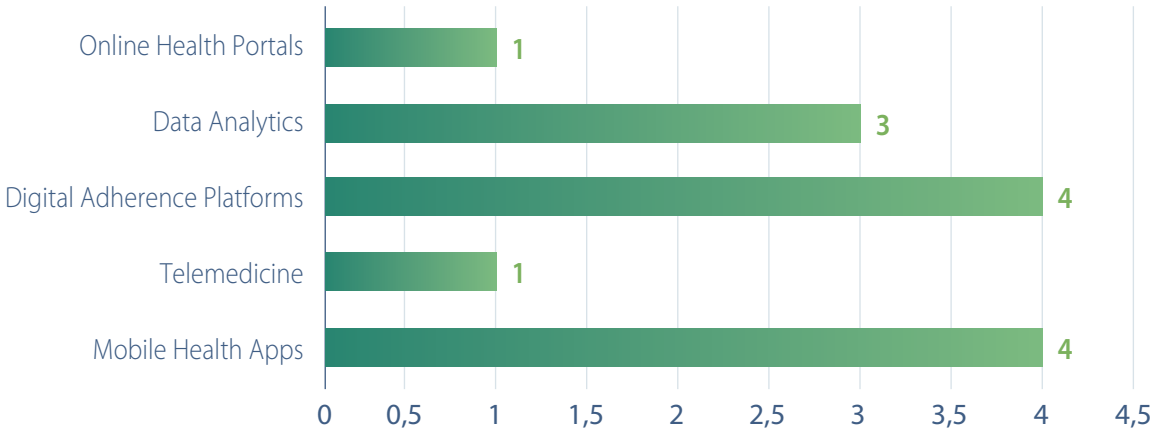

Figure Af2a.3: *Services do you provide as part of your Digital Health Solutions/EHR*

Most African organizations successfully deliver comprehensive, multi-condition care (HIV/TB/HCV/NCDs) through facility-based treatment and strong referral systems, demonstrating progress toward WHO integration goals. While collaborative care models and community engagement are widespread, gaps persist in digital integration (limited EHR systems) and mobile clinic utilization. Only a few organizations systematically address co-morbidities through syndemic approaches, revealing untapped potential for more holistic care models.

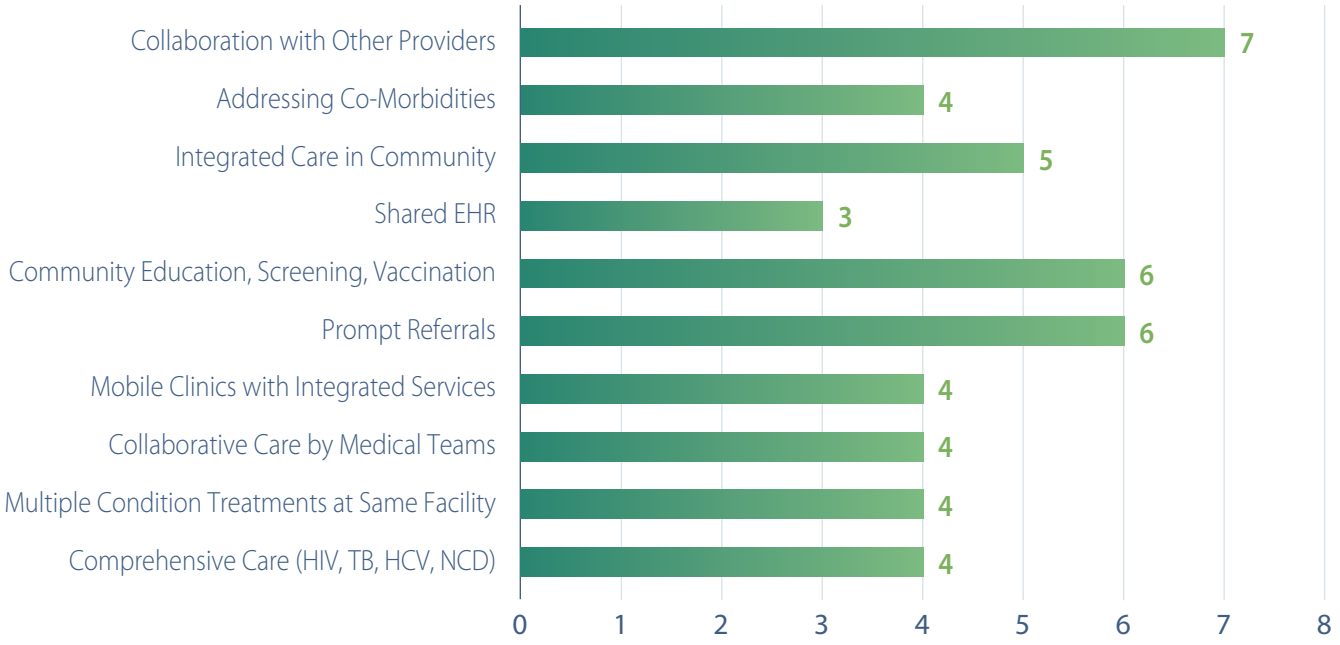

Figure Af2a.4: *Organization integrates services for different health conditions*

All organizations face severe financial constraints, creating systemic barriers to sustainable integration. Critical staff training gaps and inadequate facilities hinder effective service co-location, while weak coordination between departments disrupts care continuity. Widespread patient record system failures and persistent stigma further compromise service quality, with medication supply chain instabilities adding operational complexity. Legal/policy hurdles and inconsistent community engagement complete a challenging landscape that demands urgent, multi-level interventions.

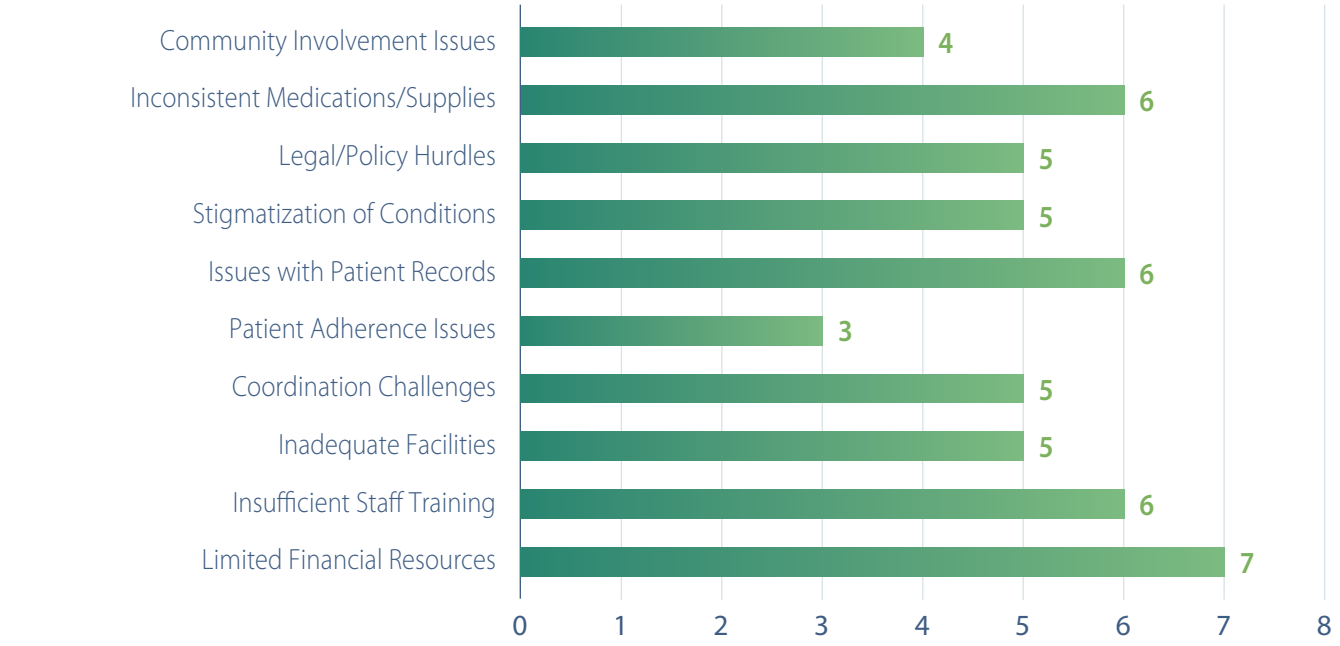

Figure Af2a.5: *Key challenges you face in providing integrated services*

While most organizations develop individualized care plans and maintain strong referral systems, critical gaps remain in unified EHR systems, only Alive Medical Services and Pakachere IHDC have fully functional platforms. Multidisciplinary teams and dedicated case managers are underutilized, weakening coordinated care for complex patients. Patient education and peer support groups are widespread strengths, fostering self-management and retention. However, inconsistent monitoring and evaluation systems hinder quality improvement. Strengthening digital integration, expanding team-based care models, and standardizing follow-up protocols are essential to close these gaps and ensure seamless care continuity.

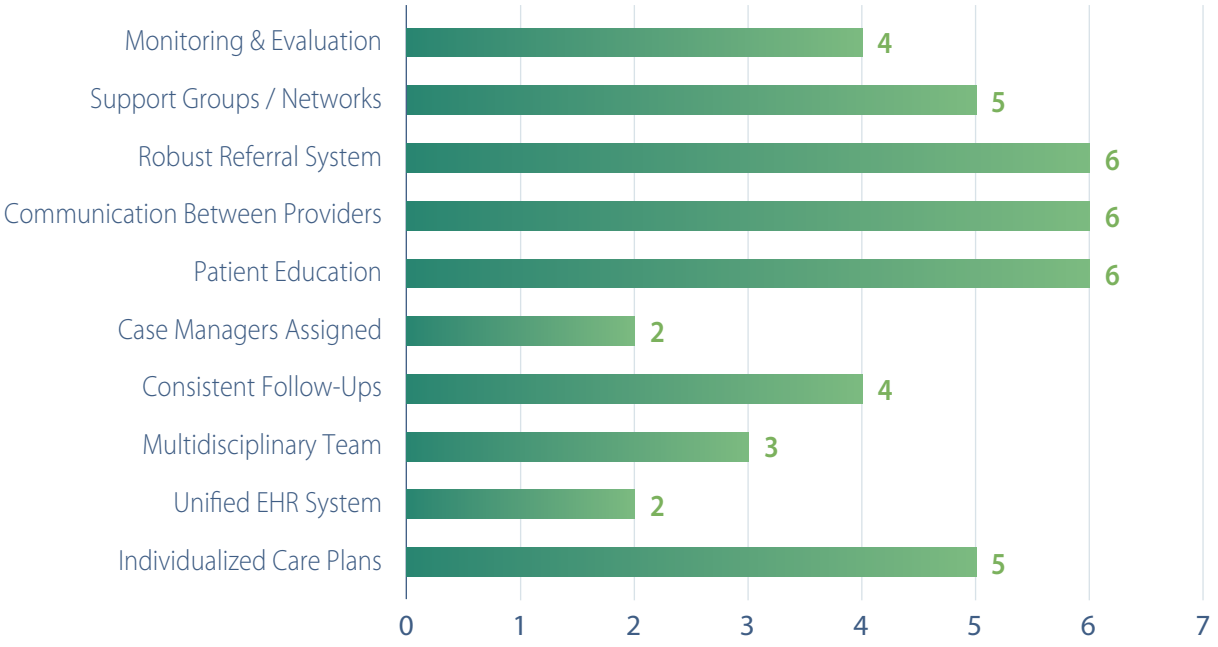

Figure Af2a.6: *Ensure continuity of care for patients receiving multiple services*

Most organizations demonstrate strong community partnerships through advisory boards, public forums, and CHW networks, aligning with WHO's people-centered care approach. Regular feedback mechanisms like surveys and focus groups ensure services remain responsive, while culturally sensitive programming improves accessibility. However, some organizations lag in deploying CHWs and community forums, limiting their outreach potential. Ongoing training initiatives for both community members and staff help sustain engagement, though consistent implementation across all organizations is needed to maximize integration efforts.

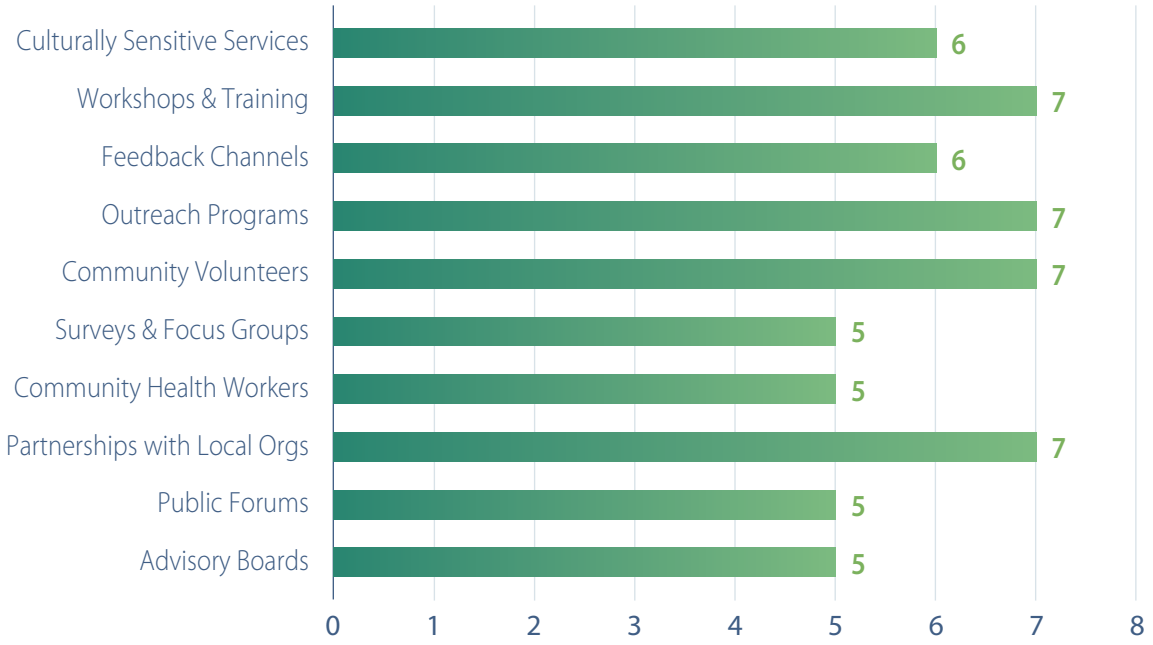

Figure Af2a.7: *Community in service delivery*

Most organizations provide cross-training and continuing education to develop multi-skilled teams, with mentorship programs reinforcing practical application. Regular interdisciplinary meetings and resource materials strengthen service coordination, while specialized integration workshops build condition-specific competencies. However, psychological support for staff remains inconsistent, and some organizations lack comprehensive training programs. Targeted assistance is needed to ensure all partners meet workforce development standards for sustainable integrated care.

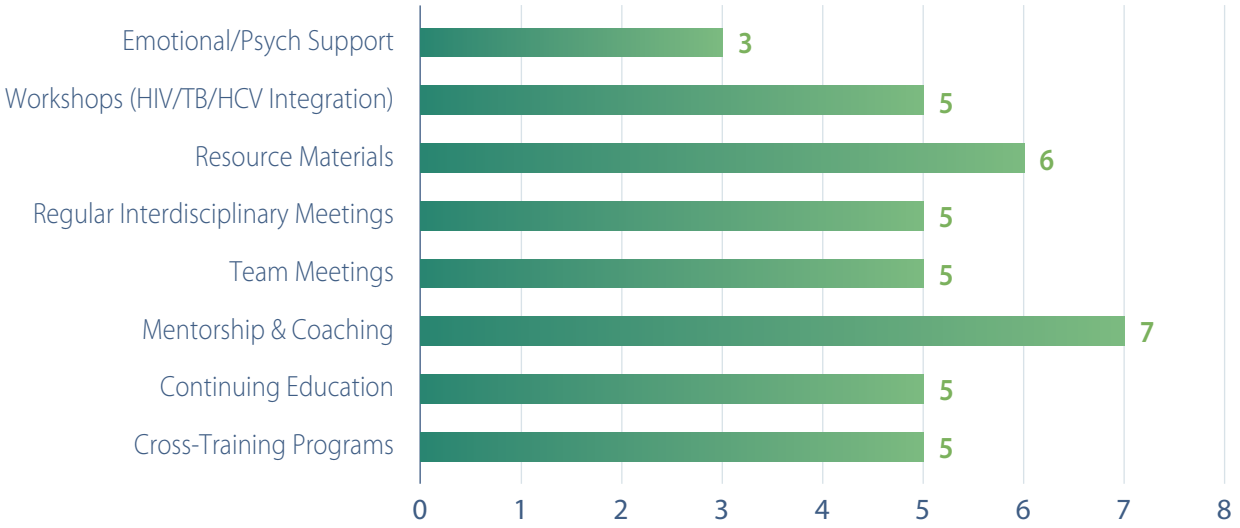

Figure Af2a.8: *Training and support do you provide to your staff to deliver integrated services*

A significant digital gap exists, with only two out of seven organizations currently utilizing digital tools for integrated care delivery. This limited adoption undermines the potential for efficient, patient-centered service coordination as envisioned by WHO frameworks. The absence of electronic health records in most organizations particularly hinders seamless care integration across conditions and service points.

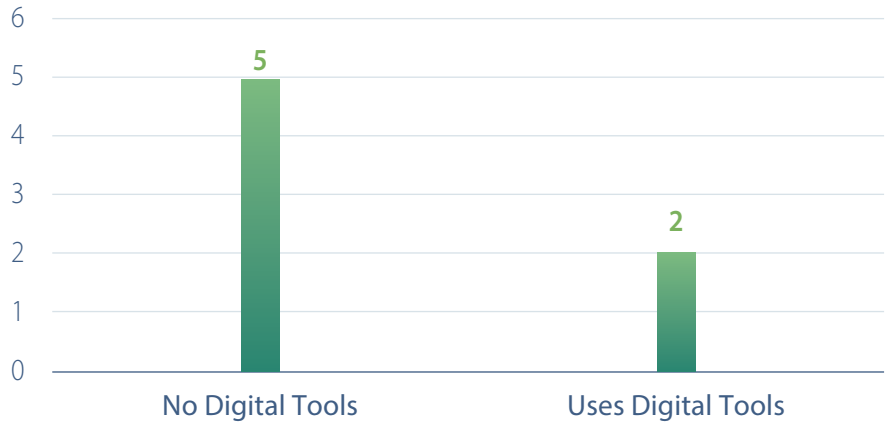

Figure Af2a.9: *Digital tools for integrated service delivery*

SECTION AF2B: COLLABORATION AND HEALTH SYSTEM INTEGRATION

Most organizations demonstrate strong foundational collaboration through regular coordination meetings, formal MOUs, and robust referral systems. However, deeper integration through shared care plans and joint training remains inconsistent, while limited data sharing hinders comprehensive care coordination. Community engagement stands out as a universal strength, though evaluation practices vary significantly.

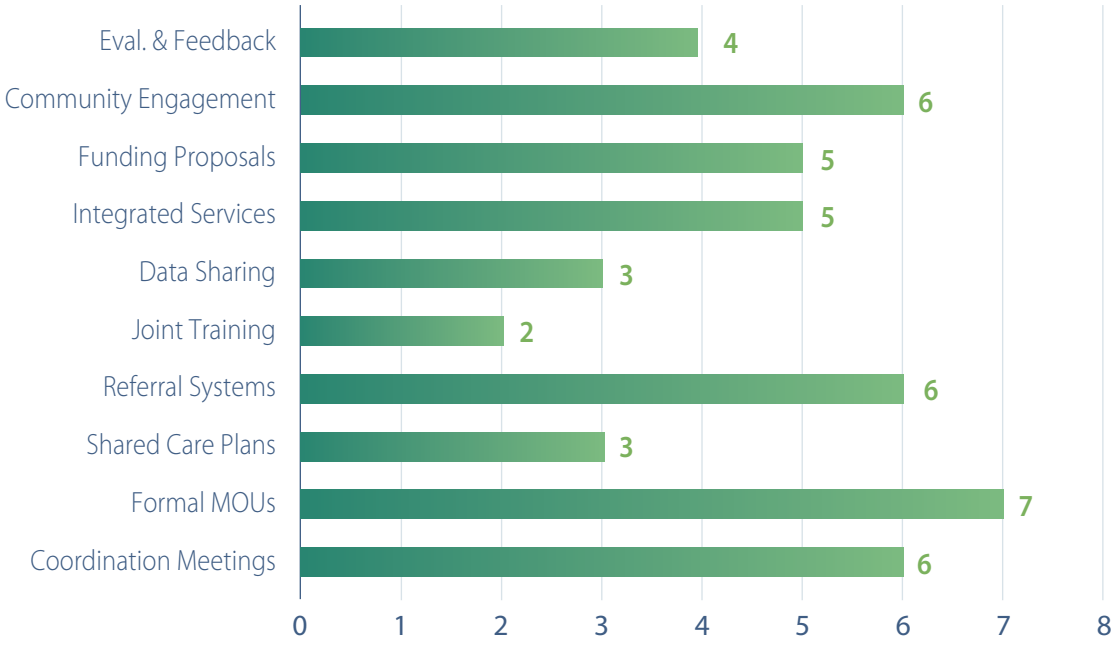

Figure Af2b.1: *Collaboration*

All organizations maintain strong hospital linkages, while nearly all collaborate with government bodies - ensuring policy alignment and referral continuity. Most engage clinics and NGOs/CSOs, though OSSHD shows limited partnerships, risking service fragmentation. Organizations with multi-sector partnerships demonstrate greater integration potential through comprehensive service networks.

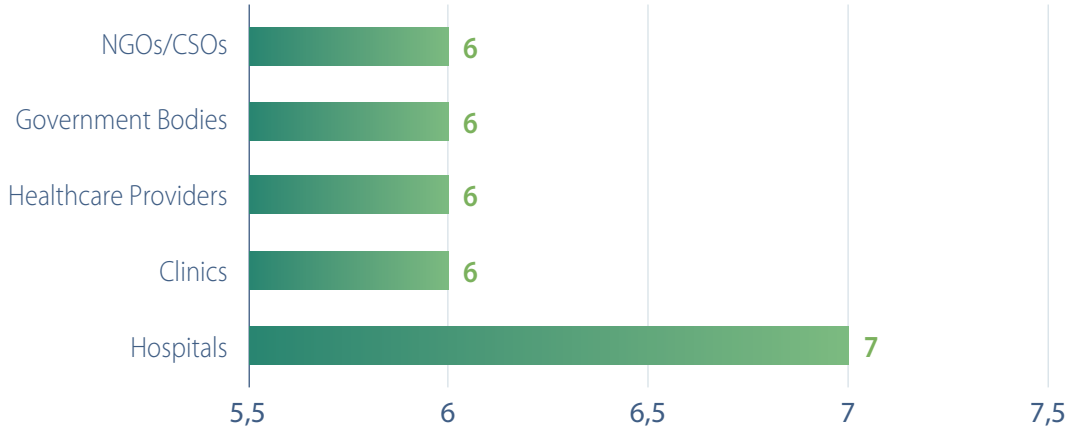

Figure Af2b.2: *Partnerships*

Most organizations benefit from strong funding, training, and communication support, creating solid foundations for integrated care. However, critical gaps persist in IT infrastructure (especially for Pakachere IHDC) and policy alignment (notably Pakachere and OSSHD). While community health linkages are moderately developed, connections to social services remain weak across the board - limiting holistic care approaches. The availability of M&E tools is promising, but inconsistent feedback systems hinder adaptive management. Emerging virtual team models show potential but require wider adoption.

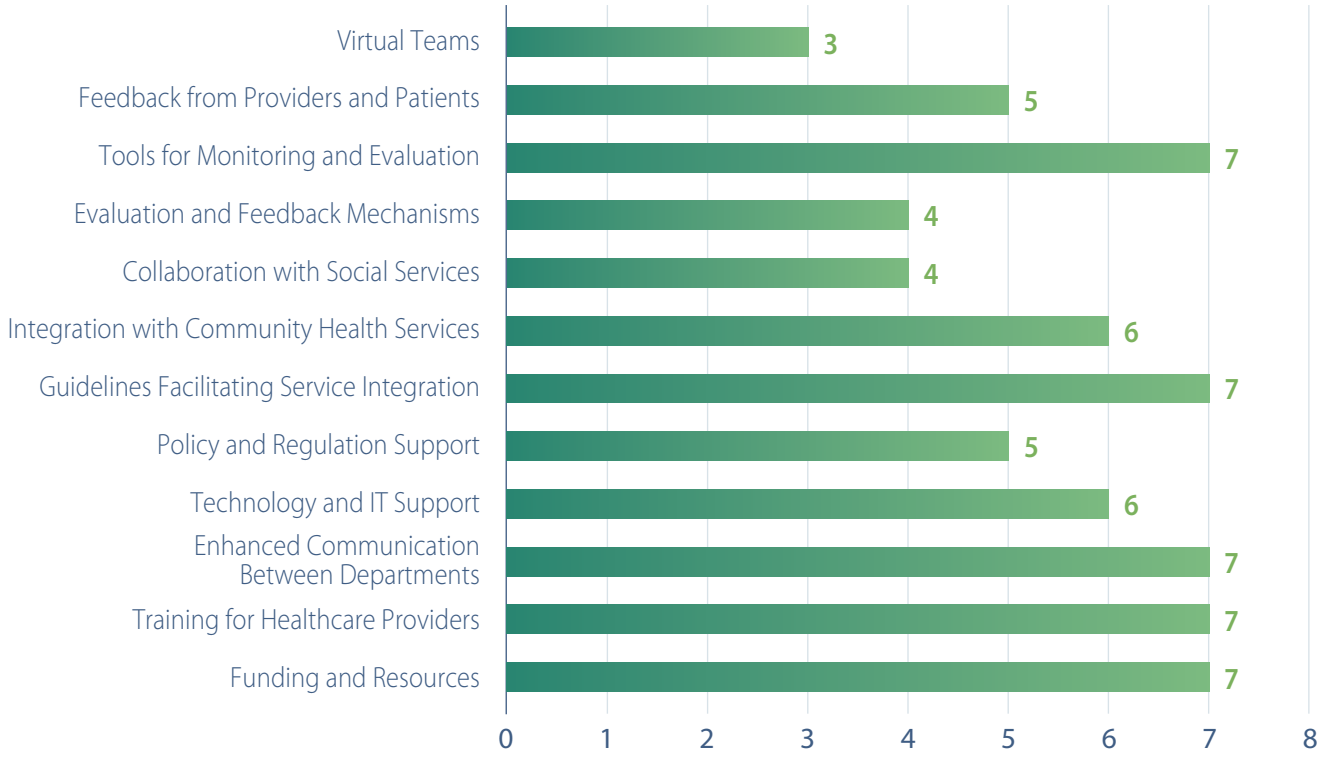

Figure Af2b.3: *Support from the health system to effectively integrate services*

The absence of supportive policies emerges as the predominant challenge, affecting nearly all organizations and creating systemic bottlenecks for implementing integrated care models. While conflicting guidelines are rare (only reported by Pakachere IHDC), bureaucratic inertia and slow policy adaptation persist as major obstacles - even high-performing organizations like Alive Medical Services and LVCT Health face these structural constraints.

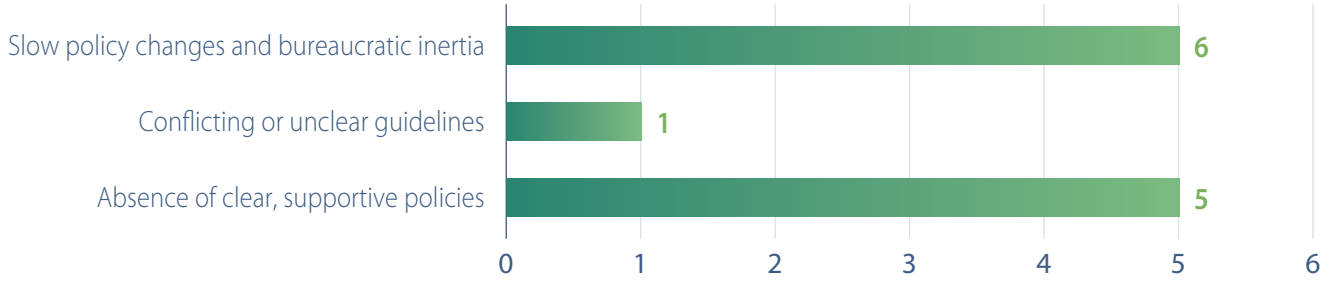

Figure Af2b.4: *Policy Barriers*

Most organizations actively engage policymakers and build coalitions to advance integrated care, with many leveraging public forums to amplify their message. While research-based advocacy is growing, it remains inconsistent across partners. Notably, OSSHD lags, participating only in coalition-building while other organizations like Alive Medical Services demonstrate comprehensive advocacy approaches combining policy engagement, research, and public outreach.

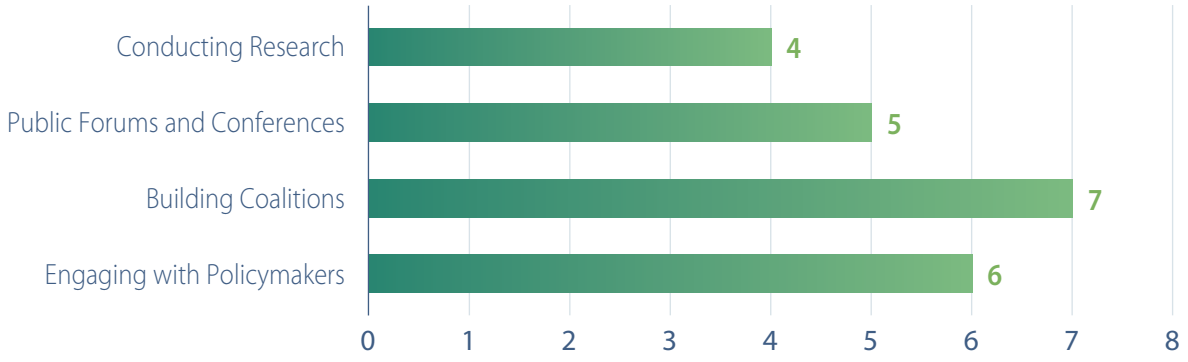

Figure A2b.5: *Advocacy Efforts*

SECTION AF3: REPRESENTATION OF ORGANIZATIONS

In Africa, all organizations demonstrate strong national-level representation, enabling alignment with domestic health priorities and integration strategies. While global and regional engagement is present among several organizations particularly leaders like ONG Alliance Côte d'Ivoire and Uganda Network of YPLHIV it is not consistent across the board. A few organizations, including OSSHD and Alive Medical Services, serve as technical assistance providers, indicating emerging capacity to support peer learning and model replication. However, regional integration is limited in some cases, potentially restricting opportunities for cross-border collaboration and policy harmonization. Overall, stronger international affiliations often align with more advanced integration practices and broader influence in shaping regional health agendas.

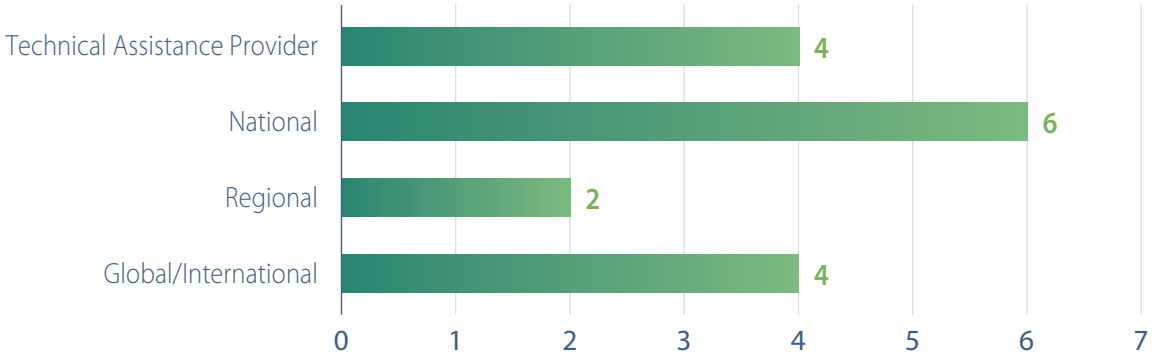

Figure Af3: *Representation of Organizations*

Analytical Framework of the Africa Region:

DISEASE-SPECIFIC INTEGRATION ANALYSIS

Strengths:

- Universal HIV Platform: 100% of organizations provide HIV services - excellent foundation for integration
- Strong TB Integration: 57% provide TB services alongside HIV care
- Growing Hepatitis Coverage: 71% offer hepatitis services - significantly better than other regions
- Expanding NCD Integration: 57% provide NCD services, addressing non-communicable disease burden
- Emerging PHC Integration: 57% provide primary care services

Critical Gaps:

- TB Integration Incomplete: 43% still lack TB services despite high HIV-TB co-infection rates
- Limited HPV Coverage: Only 43% offer HPV services, missing cervical cancer prevention opportunities
- Minimal MPox Preparedness: Only 14% provide MPox services, indicating pandemic response weakness
- Neglected FGS Services: Only 29% address Female Genital Schistosomiasis despite regional prevalence

DELIVERY MODEL INNOVATION ANALYSIS

One-Stop-Shop Performance:

- Strong Co-location: 86% offer comprehensive HIV/TB/HCV services at one location
- Universal SRHR Integration: 100% provide comprehensive sexual and reproductive health services
- Good Team-Based Care: 71% implement collaborative multidisciplinary teams
- Limited Digital Integration: Only 43% use shared Electronic Health Records

Primary Health Care Integration:

- Excellent Screening Capacity: 86% provide early diagnosis and screening services
- Good PHC Treatment: 71% offer treatment in PHC settings
- Strong Referral Networks: 86% maintain robust collaboration and referral systems
- Weak Chronic Care Monitoring: Only 29% provide systematic chronic condition monitoring

TECHNOLOGY ADOPTION ANALYSIS

Digital Health Landscape:

- Moderate Mobile Health: 57% adoption - balanced progress
- Limited Telemedicine: Only 14% implementation - major gap
- Good Digital Adherence: 57% use digital adherence platforms
- Emerging Data Analytics: 43% employ data analytics
- Minimal Patient Portals: Only 14% offer online health portals

Digital Maturity Assessment:

- Digital Divide: 71% of organizations lack comprehensive digital tools
- Innovation Leaders: Alive Medical Services and LVCT Health show advanced capabilities
- Significant Gaps: Most organizations operate with minimal digital infrastructure

PARTNERSHIP AND POLICY SUPPORT SYSTEMS ANALYSIS

Partnership Ecosystem:

- Universal Hospital Partnerships: 100% partner with hospitals - exceptional clinical integration
- Strong Government Collaboration: 86% collaborate with government bodies
- Excellent Healthcare Networks: 86% partner with healthcare providers
- Robust Civil Society Ties: 86% partner with NGOs/CSOs
- Good Clinic Integration: 86% partner with local clinics

Health System Support:

- Universal Core Support: 100% receive funding, training, communication, and integration guidelines
- Strong Technology Support: 86% receive IT infrastructure support
- Moderate Policy Support: 71% have policy/regulatory support
- Good Community Integration: 86% integrated with community health services
- Emerging Virtual Teams: 43% use virtual care coordination

Policy Barriers:

- Widespread Policy Gaps: 71% report absence of clear supportive policies
- Bureaucratic Delays: 71% face slow policy changes and inertia
- Limited Guidelines Confusion: Only 14% encounter conflicting directives

COMMUNITY ENGAGEMENT AND TRAINING ANALYSIS

Community Engagement Profile:

- Strong Advisory Governance: 71% use community advisory boards
- Active Public Engagement: 71% conduct public forums
- Universal Local Partnerships: 100% partner with local organizations
- Extensive CHW Networks: 71% deploy community health workers
- Comprehensive Feedback Systems: 71% use surveys and focus groups
- Universal Volunteer Mobilization: 100% engage community volunteers
- Universal Outreach: 100% conduct community outreach programs

Staff Training and Capacity:

- Excellent Cross-Training: 71% provide multi-disease training programs
- Strong Continuing Education: 71% prioritize ongoing professional development
- Universal Mentorship: 100% offer coaching and mentoring systems
- Good Team Coordination: 71% conduct regular team meetings
- Comprehensive Resource Access: 86% provide learning materials
- Strong Integration Training: 71% conduct HIV/TB/HCV integration workshops

Recommendations: Africa

Africa's integration model should leverage the region's exceptional community engagement, universal hospital partnerships, and strong mentorship culture while urgently addressing digital health gaps, resource sustainability challenges, and policy implementation barriers. The proposed model provides a comprehensive approach that recognizes the continent's diversity while building on shared strengths in community mobilization and partnership development.

The region's unique combination of strong community engagement, excellent partnership networks, and universal mentorship culture positions it to become a global leader in resilient, community-anchored integrated health systems and a technical assistance provider for other regions pursuing similar transformation.

PHASE 1: DIGITAL FOUNDATION AND RESOURCE MOBILIZATION

1.1 Digital Health Infrastructure Development

- Regional Digital Health Platform: Deploy unified digital health system across all seven organizations
- Mobile Health Scale-Up: Expand from 57% to 100% mobile health app coverage
- Telemedicine Network: Create Africa-wide telemedicine network leveraging existing hospital partnerships
- Digital Champions Program: Position Alive Medical Services and LVCT Health as regional digital health mentors
- Basic EHR Implementation: Standardized electronic health records for all organizations

1.2 Resource Mobilization and Sustainability

- Diversified Funding Strategy: Reduce dependence on single funding sources through blended financing
- Government Co-Financing: Leverage existing government partnerships for sustainable funding commitments
- Regional Resource Pool: Create shared resource platform for medications, supplies, and equipment
- Community Resource Mobilization: Strengthen community-driven funding and resource generation

1.3 TB Integration Completion

- Universal TB Services: Expand TB coverage from 57% to 100% across all organizations
- HIV-TB Co-Management: Implement standardized protocols for dual diagnosis and treatment
- Supply Chain Integration: Unified procurement and distribution for HIV-TB medications
- Community TB Screening: Leverage CHW networks for active case finding

PHASE 2: SERVICE EXCELLENCE AND QUALITY IMPROVEMENT

2.1 Advanced One-Stop-Shop Models

- Comprehensive Service Integration: Achieve universal coverage for HIV-TB-HCV-SRHR-NCD services
- Enhanced Chronic Care: Scale chronic condition monitoring from 29% to 100%
- Quality Improvement Systems: Implement continuous quality improvement cycles
- Patient-Centered Care Pathways: Standardized integrated care journeys for complex patients

2.2 Community-Clinical Integration Enhancement

- CHW-Clinic Linkage Strengthening: Formal integration of community health workers with facility services
- Mobile Clinic Networks: Deploy integrated mobile clinics for rural and hard-to-reach populations
- Community-Based Treatment: Expand community-level treatment delivery for stable patients
- Peer Support Scale-Up: Strengthen patient support networks and peer counseling programs

PHASE 3: REGIONAL LEADERSHIP AND SUSTAINABILITY

3.1 Africa Health Integration Alliance

- Continental Network Formation: Establish formal African Primary Care Integration Alliance
- South-South Collaboration: Position Africa as technical assistance provider for other regions
- Policy Harmonization: Coordinate advocacy for supportive integration policies across countries
- Innovation Incubator: Create regional platform for piloting and scaling integration innovations

3.2 Mentorship and Capacity Building Excellence

- Centers of Excellence: Establish regional training hubs in Kenya (LVCT Health) and Uganda (Alive Medical Services)
- Peer-to-Peer Networks: Formalize mentorship relationships between experienced and emerging organizations
- Youth Leadership Development: Leverage Uganda Network's expertise for youth-focused integration models
- Community Leadership Training: Scale community governance capacity across all organizations

3.3 Sustainability and Policy Influence

- Policy Advocacy Coordination: Unified advocacy strategy across seven countries
- Financial Sustainability: Achieve 50% government co-financing for all organizations
- Integration Institutionalization: Embed integration principles in national health policies
- Impact Documentation: Comprehensive evidence generation for global policy influence

EUROPE:

Integrated health service delivery remains an aspirational goal in the Europe region, with persistent systemic gaps. Data from participating organizations provides a mosaic view of current practices, emerging innovations, and entrenched barriers across key domains of integration. Below is a summary of core observations grouped by thematic areas derived from survey Figures, correlated with global integration frameworks such as WHO's Integrated People-Centered Health Services (IPCHS), Integrated Health Service Delivery (IHSD), the CDC's Program Collaboration and Service Integration (PCSI), and the Global Fund's Resilient and Sustainable Systems for Health (RSSH) model. [13-17]

Only one organization, Alliance for Public Health, participated in the survey.

SECTION E1: ORGANIZATIONAL SCOPE AND SERVICE PROFILE

The Alliance for Public Health in Ukraine, with 24 years of experience, demonstrates deep institutional maturity and sustained community engagement. Strategically located in a region facing complex health challenges like HIV and TB, it offers regionally relevant expertise. Its resilience, shaped by crises and transitions, enhances its adaptability for integrated care in fragile settings. As a domain leader, it holds potential as a technical resource for less experienced partners. This foundation positions it well to evolve from vertical programs into broader, integrated primary and community health models.

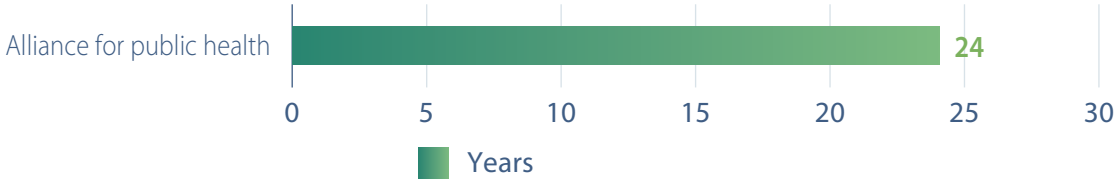

Figure E1.1: *Organizational Experience – Europe*

Alliance for Public Health offers a strong vertical program in infectious diseases, particularly HIV, TB, and Hepatitis, forming a solid base for integrated service delivery. Its inclusion of primary care marks progress toward person-centered models. However, reproductive and emerging health areas like HPV, FGS, and Mpox remain unaddressed, revealing a key integration gap. The absence of non-communicable disease (NCD) services further limits the scope of comprehensive care. While well-positioned to advance HIV-TB-Hepatitis–Primary Care integration, broadening to include NCDs and sexual health is essential for full alignment with UHC goals

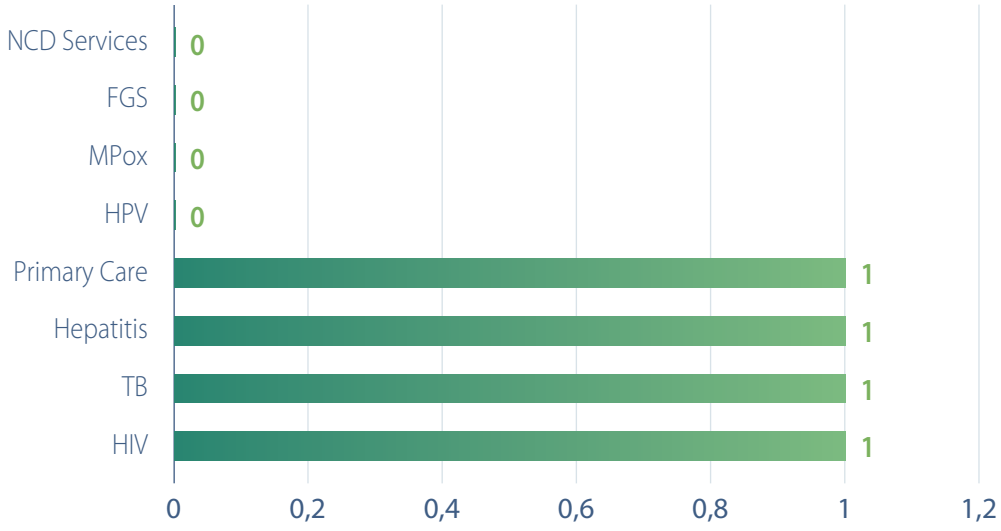

Figure E1.2: *Services Offered – Europe*

SECTION E2A: INTEGRATED SERVICE DELIVERY MODELS

The Alliance for Public Health's One-Stop-Shop model currently lacks co-located comprehensive care, with HIV, TB, and HCV services delivered separately, indicating fragmentation. Sexual and reproductive health services are notably absent, highlighting a gap in truly holistic care. However, the organization benefits from collaborative teams and functioning referral systems, enabling a degree of integration across service points. Despite these strengths, the lack of shared electronic health records (EHRs) hampers care continuity and coordination. Overall, foundational elements for integration exist, but key infrastructure and service gaps remain.

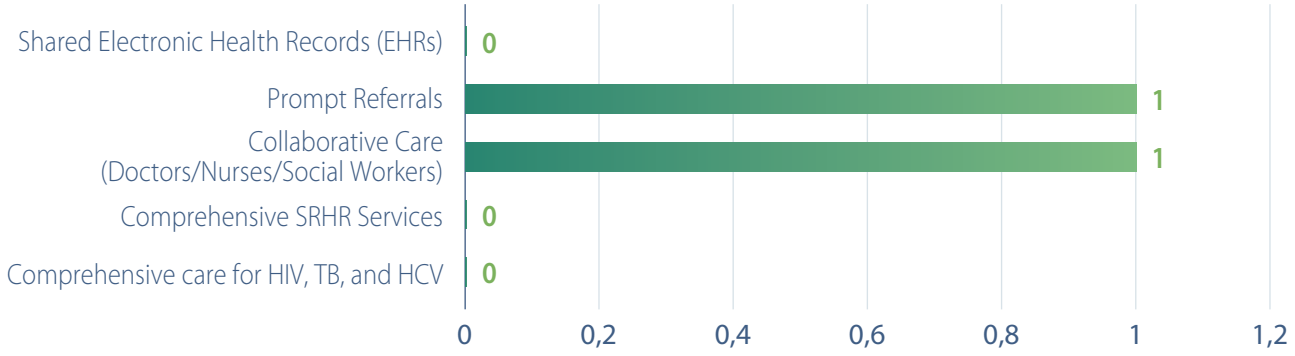

Figure E2a.1: *Services do you provide as part of your One-Stop-Shop delivery model*

The Alliance for Public Health's primary health care (PHC) integration model demonstrates solid front-line capacity with services for screening, early diagnosis, and treatment of HIV, TB, and other conditions. A holistic, co-morbidity-focused approach is in place, enhancing care for clients with complex health and social needs. However, the absence of formal referral collaboration undermines continuity and linkage across services. Preventive functions, such as vaccinations, are not provided, and chronic disease monitoring is lacking, revealing gaps in long-term care essential for sustainable, integrated PHC systems.

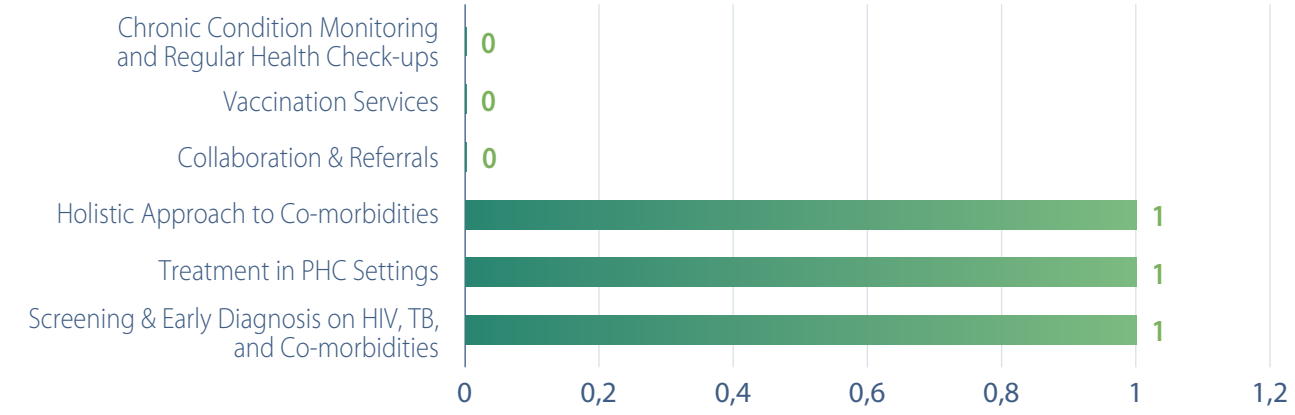

Figure E2.2: *Services do you provide as part of your Primary Health Care integration delivery model*

The organization demonstrates strong backend digital health capabilities, utilizing tools like telemedicine, digital adherence systems, and data analytics to enhance clinical efficiency and strategic oversight. However, patient-facing technologies are notably absent, with no mobile health apps or online portals to support client engagement, self-management, or transparency. This indicates a digital model that prioritizes internal functionality over user empowerment. While data-driven decision-making is a key strength, the lack of frontend tools limits the reach and inclusiveness of digital care pathways.

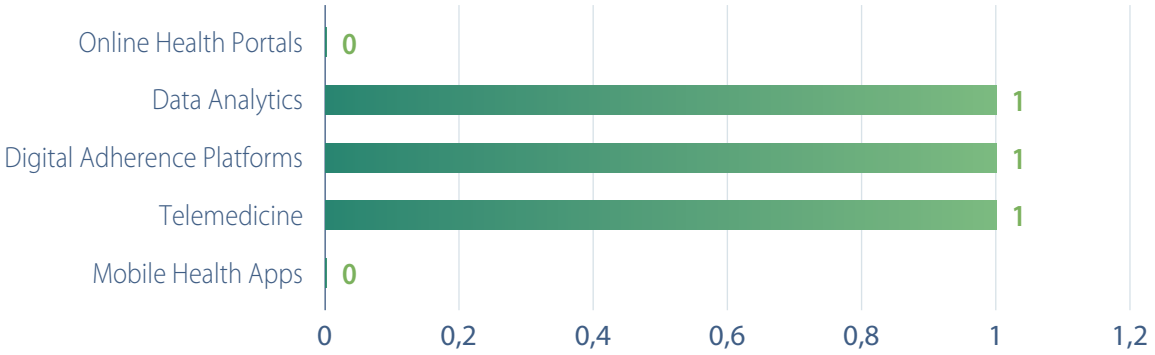

Figure E2a.3: *Services do you provide as part of your Digital Health Solutions/EHR*

The organization delivers integration primarily through operational networks rather than co-located services, leveraging mobile clinics and multidisciplinary care teams to address multiple health needs, especially in underserved regions. While collaboration and referral systems are strong, the absence of shared EHRs and community outreach limits continuity and preventative impact. Despite lacking physical integration, the model shows adaptability through provider collaboration and care coordination across separate service points, underpinned by a mobile and community-driven approach.

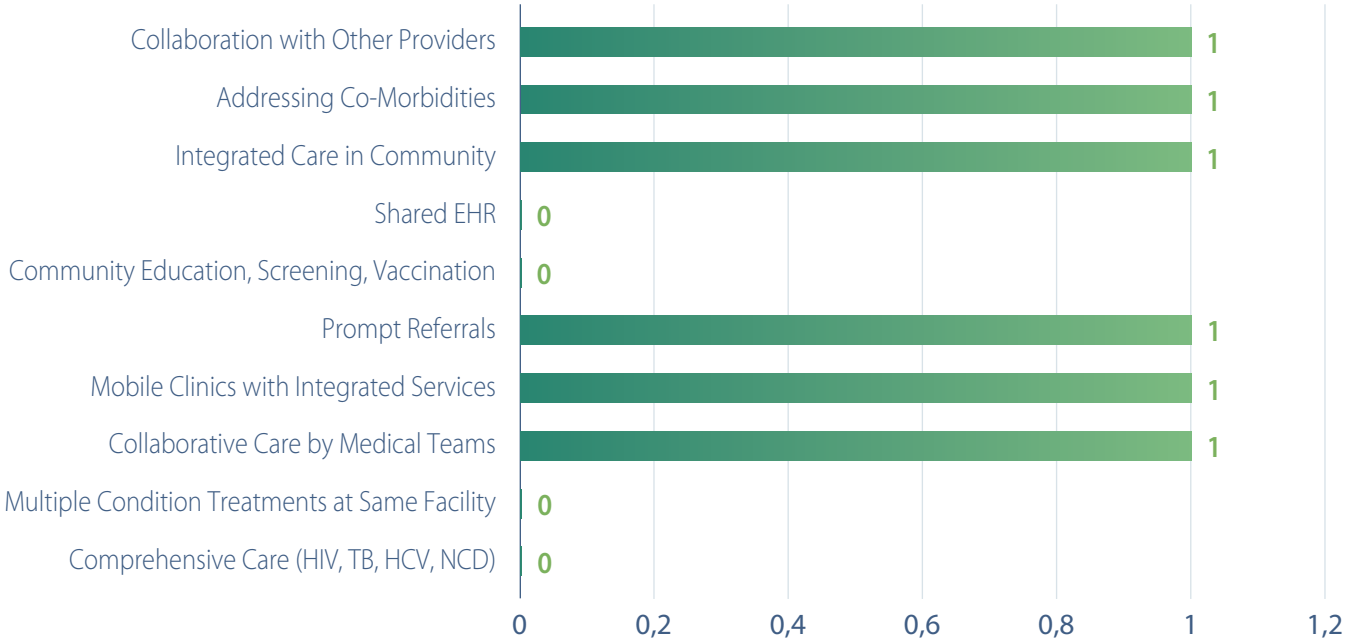

Figure E2a.4: *Organization integrates services for different health conditions*

The organization contends with significant systemic barriers namely financial constraints, facility and workforce limitations, and coordination gaps—that hinder scalable integration. Legal and regulatory frameworks also restrict flexibility, especially in expanding into broader health domains like NCDs and SRHR. Stigma, particularly around HIV and TB, continues to impede community uptake. However, the organization shows strength in internal service flow, patient tracking, and maintains reliable medication supply and community engagement, which provides a stable platform for future improvements.

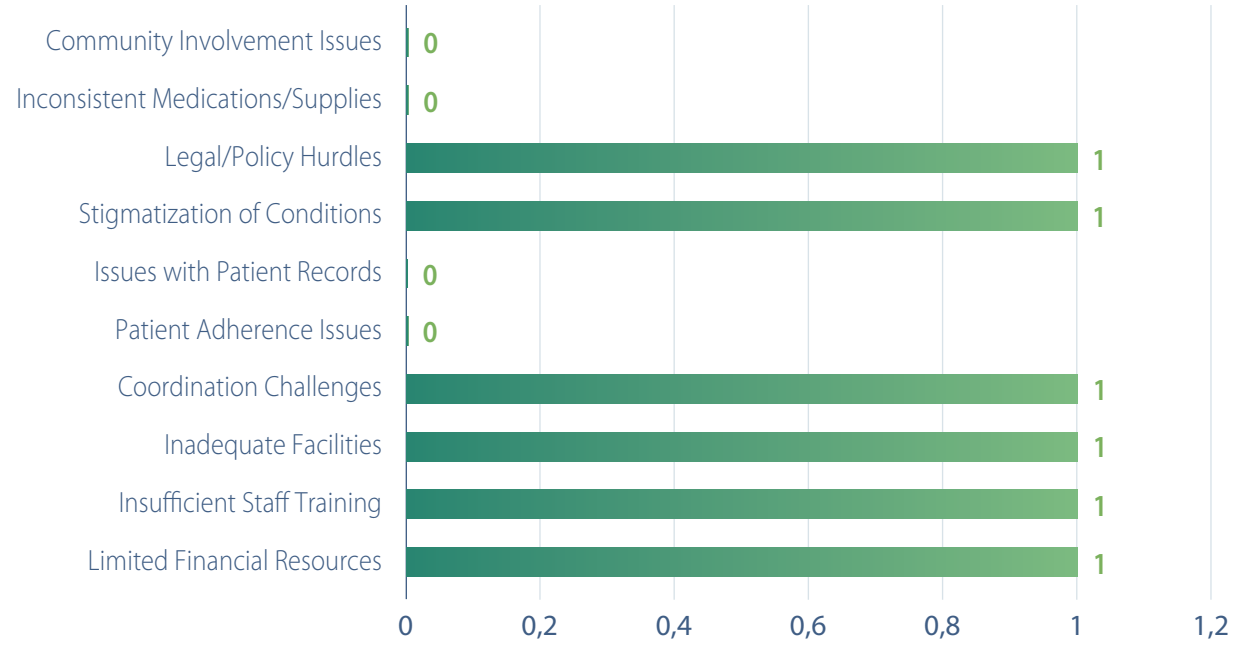

Figure E2a.5: *Key challenges you face in providing integrated services*

The organization demonstrates foundational strengths in ensuring continuity of care, particularly through individualized care plans, dedicated case managers, and functional referral systems. However, the absence of shared electronic health records, interdisciplinary care teams, and consistent follow-up mechanisms constrains comprehensive care coordination. While patient education is actively implemented, the lack of monitoring and evaluation systems hinders the ability to assess and refine integrated service delivery. Addressing these infrastructure and evaluation gaps will be essential to achieving sustainable, patient-centered continuity in multi-condition care.

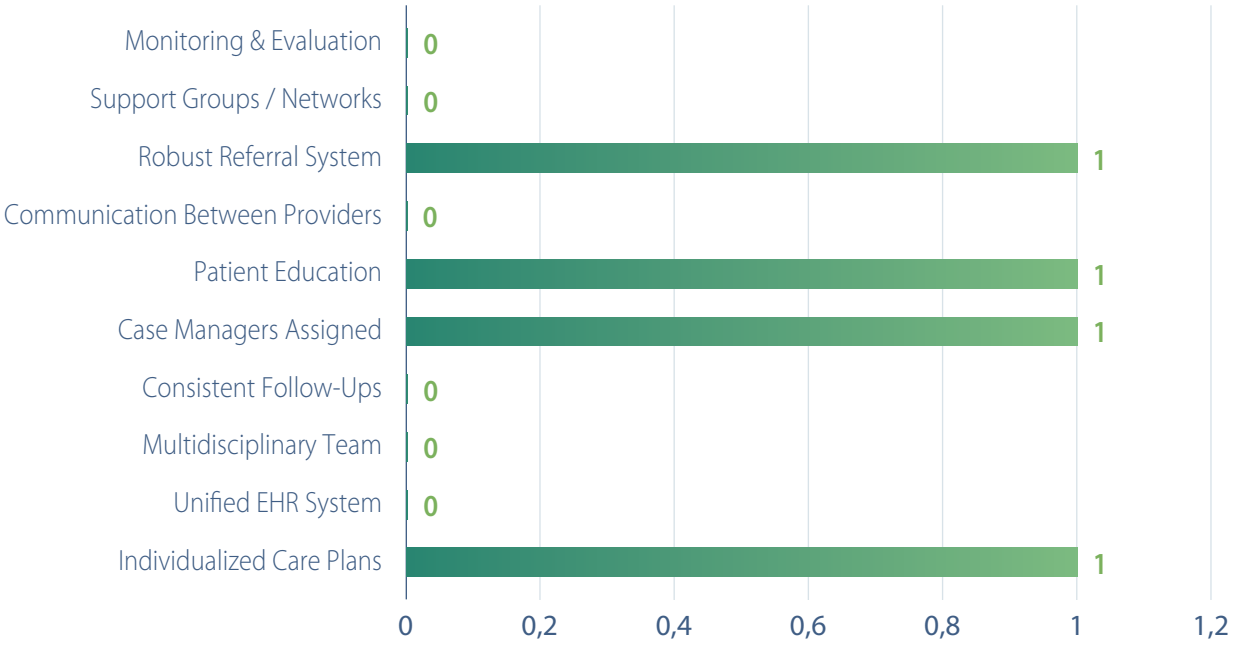

Figure E2a.6: *Ensure continuity of care for patients receiving multiple services*

The organization's community engagement is focused but fragmented relying on targeted feedback mechanisms like surveys and focus groups without broader structural integration such as advisory boards, outreach programs, or community health workers. This limits consistent, culturally sensitive, and grassroots-level involvement crucial for integrated, people-centered service delivery. Despite valuing community insight through research and training workshops, the absence of outreach, CHWs, and volunteer frameworks reduces the organization's reach and effectiveness in marginalized populations. Strengthening these areas is vital to foster trust, continuity, and equity in care.

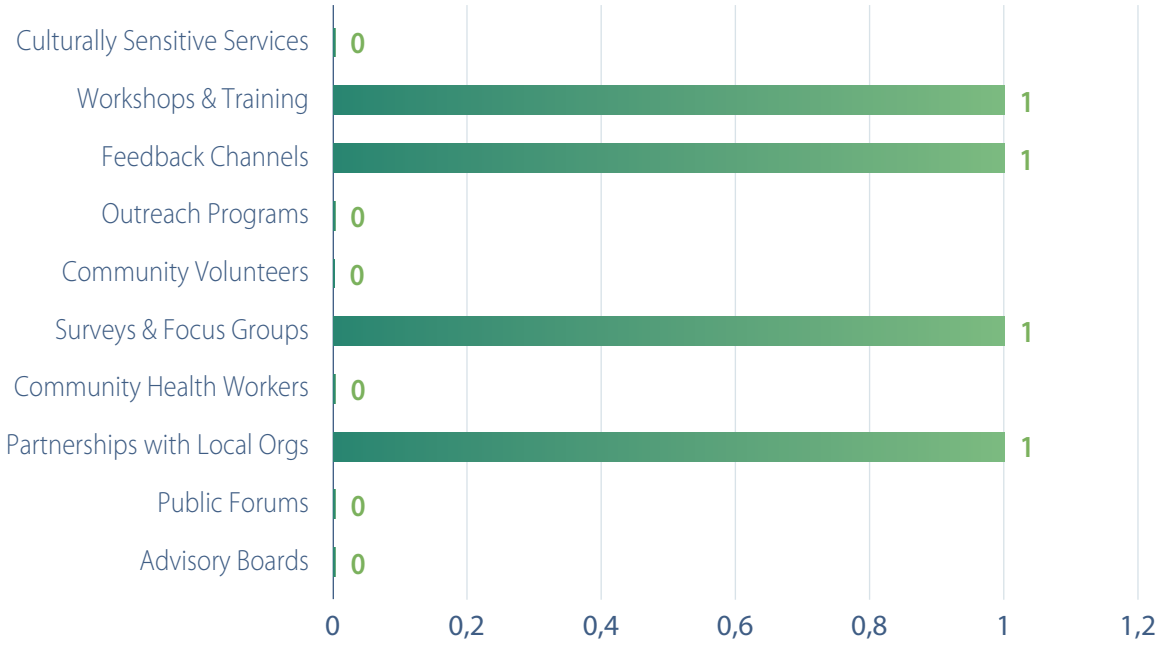

Figure E2a.7: *Community in service delivery*

The organization has a strong foundation in staff training through cross-training, mentorship, and ongoing education, demonstrating a commitment to professional development for integrated care. However, the absence of interdisciplinary meetings and disease-integration-focused workshops limits collaborative practice and clinical cohesion. While psychosocial support is commendably prioritized to manage staff wellbeing, the lack of standardized resource materials could hamper consistent implementation of integrated service delivery models across teams and sites.

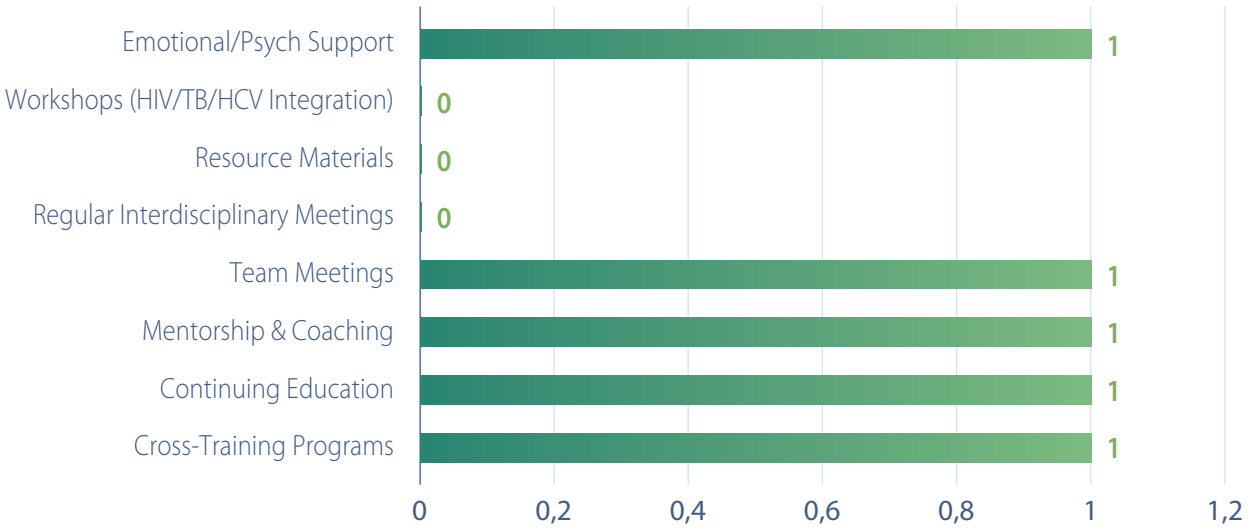

Figure E2a.8: *Training and support do you provide to your staff to deliver integrated services*

The organization lacks a comprehensive digital infrastructure to support integrated service delivery, relying instead on fragmented, program-specific technologies. This results in manual or semi-digital workflows that hinder real-time coordination, referrals, and continuity of care. The absence of EHRs or unified dashboards creates inefficiencies and obstructs patient tracking across services. However, this gap also presents a clear opportunity: investing in centralized digital platforms and client-facing tools could greatly enhance integrated care outcomes and monitoring systems.

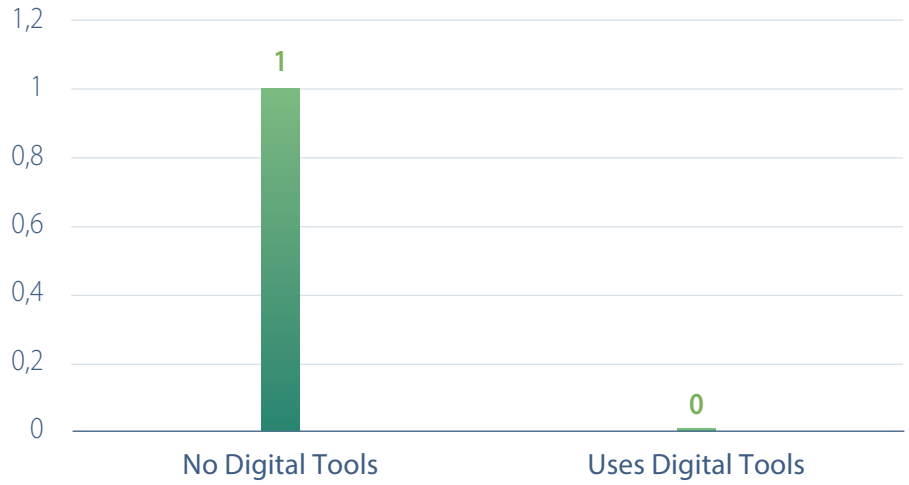

Figure E2a.9: *Digital tools for integrated service delivery*

SECTION E2B: COLLABORATION AND HEALTH SYSTEM INTEGRATION

The organization has established formal MOUs, but lacks the operational mechanisms such as joint training, shared care plans, or coordination platforms needed for functional collaboration. While a referral system exists, it operates in isolation without data integration, limiting clinical continuity. Community engagement and evaluation are prioritized, reflecting a commitment to responsiveness. However, there are no protocols for data sharing or joint funding, restricting innovation and accountability. The absence of feedback loops or structured collaboration improvements further stalls progress toward full-service integration.

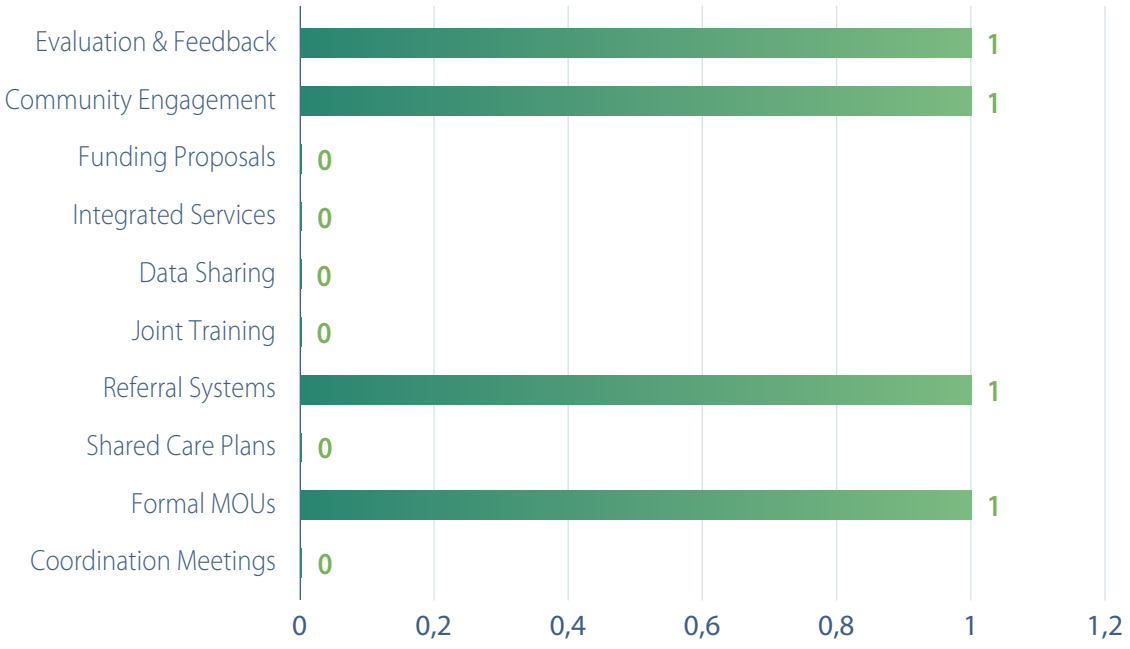

Figure E2b.1: *Collaboration*

The organization maintains strong partnerships with NGOs and government bodies, supporting advocacy and community mobilization. However, it lacks formal linkages with hospitals and clinics, limiting its ability to embed services within clinical systems and ensure continuity of care. While healthcare provider collaborations exist at the practitioner level, system-wide clinical integration is missing. The partnership model leans heavily toward community outreach rather than facility-based service delivery. Strengthening ties with hospitals and PHC clinics presents a key opportunity for advancing integrated and co-located care.

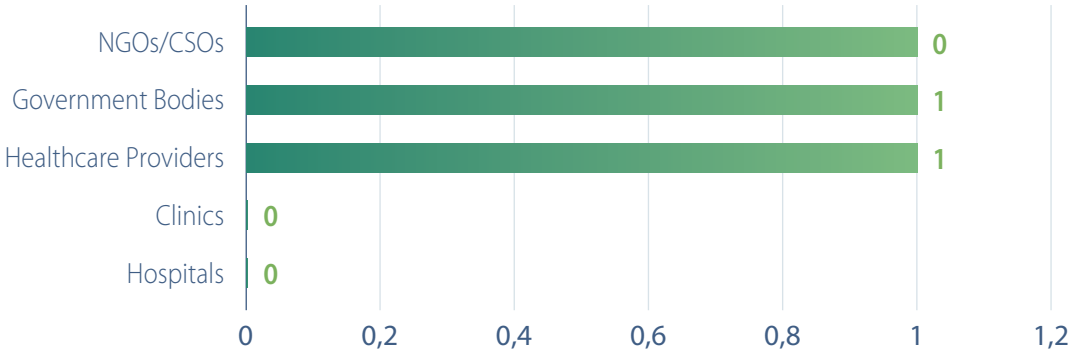

Figure E2b.2: *Partnerships*

The organization receives some health system support through funding and IT infrastructure, providing a partial foundation for service integration. However, this is undermined by a lack of institutional training, inter-departmental coordination, and enforced implementation of existing integration guidelines. Crucially, there are no monitoring or evaluation systems in place to assess integration outcomes or guide improvements. Additionally, the absence of links to community and social services restricts holistic care for patients with complex needs. These gaps highlight a systemic shortfall in operationalizing integration beyond policy intent.

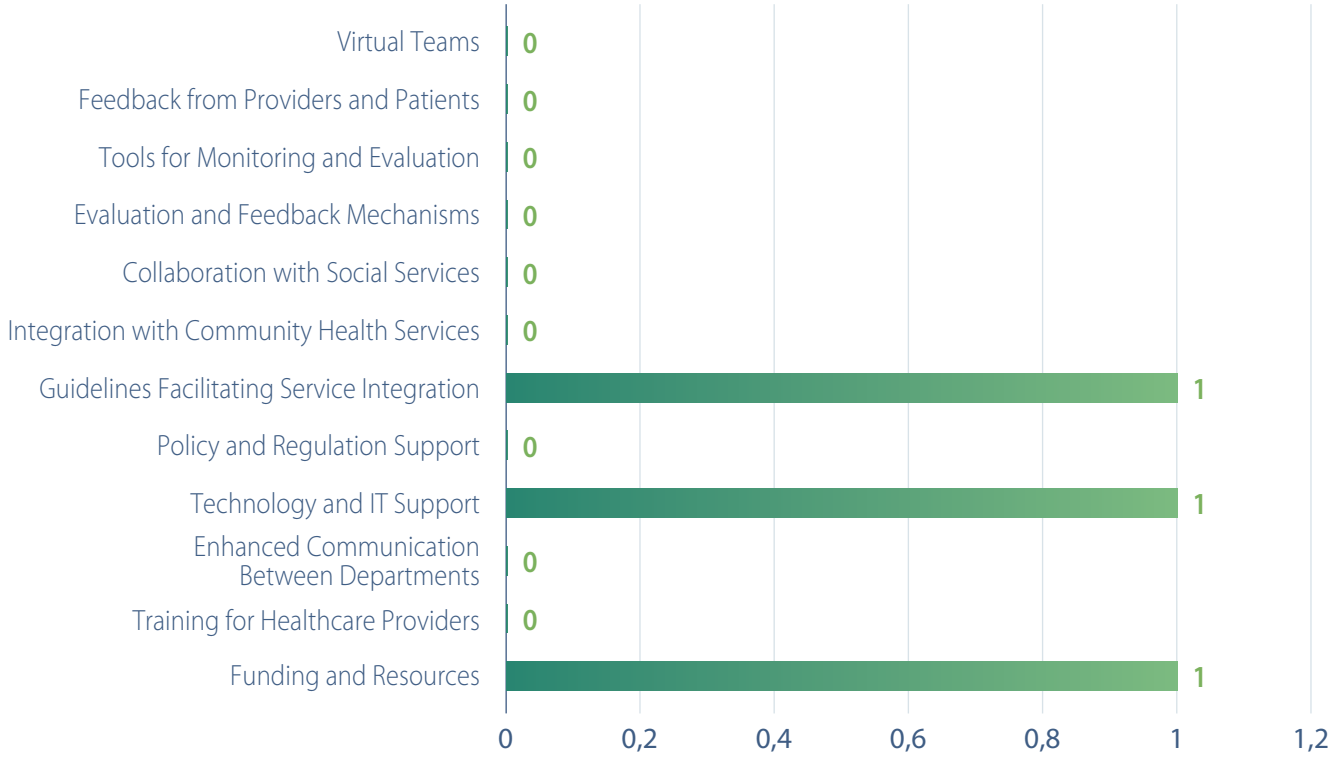

Figure E2b.3: *Support from the health system to effectively integrate services*

Despite reporting no regulatory or policy barriers, and operating within a supportive governance climate, the organization still faces significant implementation gaps. This contradiction highlights that while national policies in Ukraine may favor integration, operational barriers like weak collaboration structures and absence of monitoring systems still impede progress. The policy environment offers strong potential for scale-up, but realizing this requires parallel investment in infrastructure, care coordination, and execution frameworks. Continuous monitoring is also essential to preemptively address any misalignment between evolving practices and future health reforms.

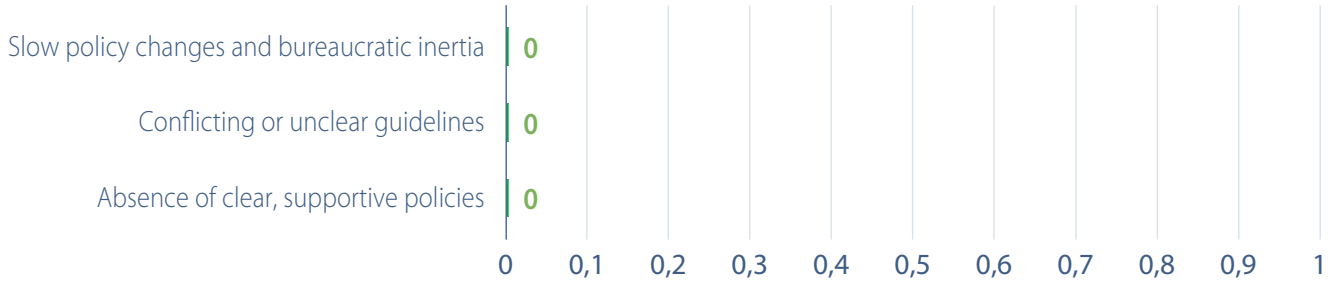

Figure E2b.4: *Policy Barriers*

The organization's advocacy efforts are minimal and largely confined to internal coalition building, lacking direct engagement with policymakers, public platforms, or evidence-based policy influence. This limited scope reduces visibility and restricts its ability to drive integration-related reforms or funding shifts. The absence of public outreach and research dissemination undermines credibility and weakens policy advocacy potential. However, existing coalition networks could serve as a springboard for more strategic, data-informed advocacy initiatives if effectively expanded and aligned with external decision-making forums.

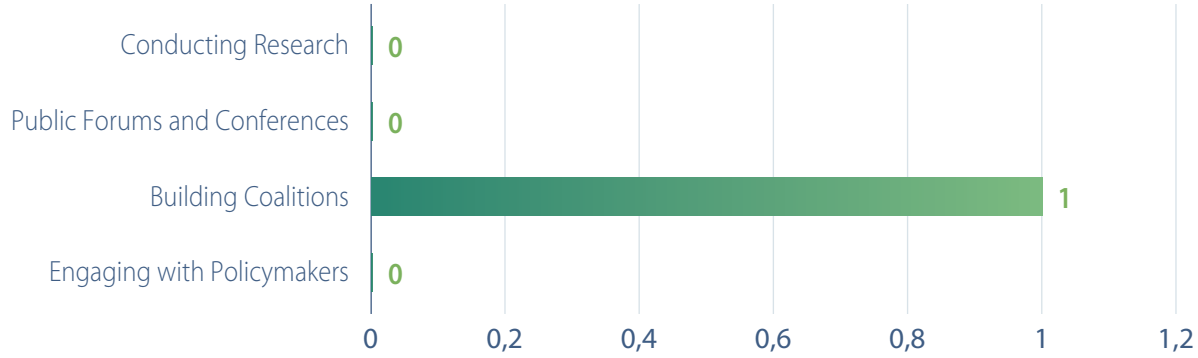

Figure E2b.5: *Advocacy Efforts*

SECTION E3: REPRESENTATION OF ORGANIZATIONS

In the Europe region, the Alliance for Public Health in Ukraine demonstrates strong national-level engagement, ensuring alignment with domestic health systems and policies. However, its absence from regional and international platforms limits opportunities for cross-border learning, technical exchange, and global visibility. Despite its 24 years of experience, the organization does not currently provide technical assistance to peers, representing an underleveraged asset. Strengthening its participation in regional bodies such as EECA or WHO Europe could enhance its influence, attract partnerships, and allow it to contribute valuable insights to the global movement toward integrated health service delivery.

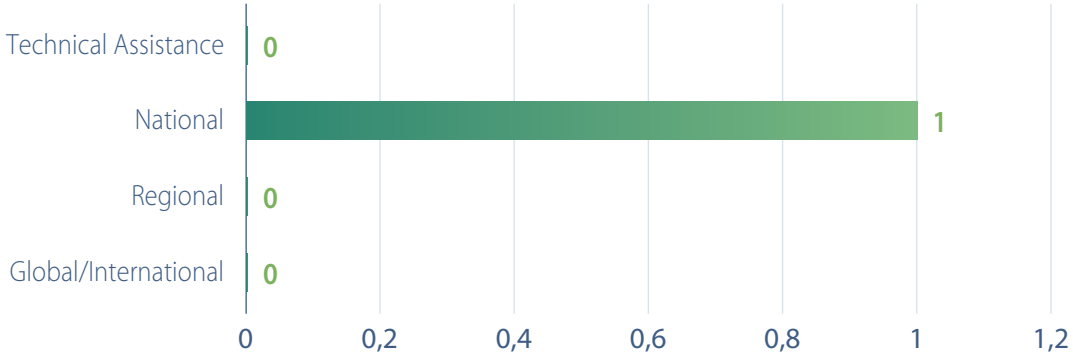

Figure E3.1: *Representation of Organizations*

Analytical Framework of the Europe Region:

DISEASE-SPECIFIC INTEGRATION ANALYSIS

Strengths:

- Comprehensive Infectious Disease Platform: 100% coverage for HIV, TB, and Hepatitis services - solid foundation
- Primary Care Integration: Active inclusion of primary care services demonstrates PHC-based approach
- Crisis-Tested Operations: 24 years of operation through conflicts, pandemics, and transitions
- Mature Institutional Capacity: Well-established organizational infrastructure and experience

Critical Gaps:

- No NCD Services: 0% coverage for non-communicable diseases despite rising burden in Eastern Europe
- Missing SRHR Integration: No HPV, FGS, or comprehensive reproductive health services
- Absent Emerging Disease Preparedness: No MPox services, indicating limited pandemic preparedness
- Limited Service Scope: Narrow focus on infectious diseases without holistic health approach

DELIVERY MODEL INNOVATION ANALYSIS

One-Stop-Shop Performance:

- No Co-located Services: 0% comprehensive care at single location - major structural gap
- No SRHR Integration: Complete absence of sexual and reproductive health services
- Strong Team-Based Care: 100% collaborative multidisciplinary teams in place
- Good Referral Systems: 100% prompt referral mechanisms functioning
- No Digital Integration: 0% shared Electronic Health Records

Primary Health Care Integration:

- Excellent Screening and Treatment: 100% early diagnosis and PHC-based treatment capacity
- Strong Holistic Approach: 100% comprehensive co-morbidity management
- No Collaboration Systems: 0% formal collaboration and referral mechanisms
- No Preventive Services: 0% vaccination services
- No Chronic Care Monitoring: 0% systematic chronic condition management

TECHNOLOGY ADOPTION ANALYSIS

Digital Health Landscape:

- No Mobile Health: 0% mobile health applications
- Good Telemedicine: 100% telemedicine implementation - strength in remote care
- Strong Digital Adherence: 100% digital adherence platforms for treatment monitoring
- Excellent Data Analytics: 100% data analytics for evidence-based decision making
- No Patient Portals: 0% online health portals for patient engagement

Digital Maturity Assessment:

- Backend Strength: Strong clinical and analytical digital tools
- Frontend Weakness: Minimal patient-facing digital interfaces
- No Integrated Systems: Fragmented digital ecosystem without comprehensive integration
- Crisis Adaptation: Digital tools adapted for conflict and emergency settings

PARTNERSHIP AND POLICY SUPPORT SYSTEMS ANALYSIS

Partnership Ecosystem:

- No Clinical Partnerships: 0% partnerships with hospitals and clinics - major isolation
- Strong Government Collaboration: 100% partnership with government bodies
- Good Healthcare Networks: 100% collaboration with individual healthcare providers
- Excellent Civil Society Ties: 100% partnership with NGOs/CSOs
- Limited Sectoral Scope: Focus on public health rather than clinical system integration

Health System Support:

- Good Core Support: 100% funding, technology, and integration guidelines available
- No Training Support: 0% healthcare provider training from health system
- No Communication Enhancement: 0% inter-departmental communication support
- No Policy Framework: 0% policy and regulatory support
- No Community Integration: 0% integration with community health services

Policy Environment:

- No Policy Barriers: 0% report policy gaps, conflicting guidelines, or bureaucratic delays
- Enabling Environment: Supportive policy context for integration efforts
- Implementation Gaps: Strong policies but weak operational support systems

COMMUNITY ENGAGEMENT AND TRAINING ANALYSIS

Community Engagement Profile:

- No Advisory Governance: 0% community advisory boards
- No Public Engagement: 0% public forums or outreach programs
- Good Local Partnerships: 100% partnerships with local organizations
- No CHW Networks: 0% community health workers deployed
- Strong Feedback Systems: 100% surveys, focus groups, and feedback channels
- No Volunteer Mobilization: 0% community volunteers engaged
- Good Training Programs: 100% workshops and training sessions

Staff Training and Capacity:

- Excellent Cross-Training: 100% multi-disease training programs
- Strong Continuing Education: 100% ongoing professional development
- Good Mentorship: 100% coaching and mentoring systems
- Good Team Coordination: 100% regular team meetings
- No Interdisciplinary Meetings: 0% formal interdisciplinary coordination
- No Resource Materials: 0% standardized learning materials
- Excellent Psychological Support: 100% emotional and mental health support for staff

Recommendations: Europe

Europe's (Ukraine's) integration model should leverage the region's unique strengths in crisis resilience, policy support, and digital backend capabilities while urgently addressing gaps in clinical integration, community engagement, and service scope expansion. The proposed model provides a specialized approach designed for conflict-affected and transition settings while building capacity for regional leadership and global influence.

The organization's unique experience operating through 24 years of conflicts, pandemics, and transitions provides invaluable expertise for developing integration models that can withstand and adapt to complex emergencies while maintaining focus on comprehensive, people-centered care.

PHASE 1: FOUNDATION EXPANSION AND CLINICAL INTEGRATION

1.1 Service Scope Expansion

- NCD Service Integration: Immediate addition of diabetes, hypertension, and cardiovascular disease services
- SRHR Service Development: Implement comprehensive sexual and reproductive health services including HPV
- Emerging Disease Preparedness: Develop rapid response protocols for Mpox and future pandemic threats
- Preventive Service Addition: Integrate vaccination services and chronic disease monitoring
- One-Stop-Shop Implementation: Create co-located service delivery model at primary sites

1.2 Clinical System Integration

- Hospital Partnership Development: Establish formal MOUs with key tertiary care facilities
- Clinic Network Formation: Create partnerships with primary health care clinics across Ukraine
- Shared EHR Implementation: Deploy integrated electronic health record system
- Clinical Pathway Standardization: Develop protocols for managing multiple conditions
- Referral System Enhancement: Formalize collaboration and referral mechanisms

1.3 Digital Health Advancement

- Patient-Facing Digital Platform: Develop mobile health apps and online patient portals
- Integrated Digital Ecosystem: Connect backend analytics with frontend patient engagement tools
- Telemedicine Expansion: Scale telemedicine capabilities for broader service integration
- Digital Health Records: Implement comprehensive EHR system for continuity of care
- Crisis-Adaptive Technology: Ensure digital resilience during conflict and emergencies

PHASE 2: COMMUNITY INTEGRATION AND REGIONAL CONNECTIVITY

2.1 Community Engagement Enhancement

- Community Advisory Board Establishment: Create participatory governance structures
- Community Health Worker Deployment: Train and deploy CHWs for community-based care
- Volunteer Network Development: Establish community volunteer programs for outreach

- Public Engagement Strategy: Implement public forums and community education programs
- Culturally Sensitive Services: Adapt services for diverse populations and displaced persons

2.2 Regional Network Development

- Eastern European Health Alliance: Establish formal regional collaboration network
- Cross-Border Health Initiatives: Develop partnerships with neighboring countries
- Regional Policy Harmonization: Advocate for aligned integration policies across region
- Technical Assistance Capacity: Develop expertise to support other EECA countries
- Crisis Response Coordination: Create regional emergency health response mechanisms

2.3 Quality Improvement and Monitoring

- Comprehensive M&E System: Implement robust monitoring and evaluation framework
- Quality Improvement Cycles: Establish continuous improvement processes
- Patient Outcome Tracking: Develop longitudinal patient monitoring systems
- Provider Feedback Systems: Create systematic feedback mechanisms for providers and patients
- Evidence Generation: Conduct research to inform integration model refinement

PHASE 3: GLOBAL LEADERSHIP AND SUSTAINABILITY

3.1 International Engagement and Leadership

- Global Health Security: Position as leader in health system resilience and emergency preparedness
- South-South Learning: Share crisis-resilient integration models with other conflict-affected regions
- International Technical Assistance: Develop capacity to support other countries in similar contexts
- Global Policy Influence: Contribute to international frameworks on health system strengthening

3.2 Innovation and Research Excellence

- Integration Research Hub: Establish center of excellence for conflict-affected health system integration
- Innovation Incubator: Create platform for testing and scaling integration innovations
- Digital Health Leadership: Pioneer digital health solutions for crisis settings
- Evidence-Based Practice: Generate robust evidence base for integration in complex environments
- Academic Partnerships: Collaborate with universities and research institutions

3.3 Sustainability and Scale

- Financial Sustainability: Achieve stable funding through diversified portfolio including government support
- Policy Institutionalization: Embed integration principles in national health policies and strategies
- Workforce Development: Create specialized training programs for integration in crisis settings
- System Resilience: Build adaptive capacity for rapid response to health emergencies
- Regional Replication: Support replication of model across Eastern Europe and Central Asia

Limitations:

This study presents several important limitations that should be considered when interpreting the findings and recommendations. The most significant limitation is the substantial regional representation imbalance, with Europe represented by only a single organization compared to Latin America (3 organizations), Asia (6 organizations), and Africa (7 organizations). This disparity severely limits the generalizability of European findings and prevents comprehensive regional comparison and pattern identification.

The sample size variation across regions creates analytical challenges, cannot adequately capture regional diversity, health system variations, or different integration approaches across European countries. This limitation is particularly problematic given Europe's diverse health systems, economic contexts, and maturity levels integration across different countries.

Additionally, the study's cross-sectional design provides only a snapshot of integration efforts at one point in time, limiting understanding of integration evolution and sustainability over time. The mixed-methods approach, while comprehensive, relies heavily on self-reported data from organizations, which may introduce reporting bias and limit objective assessment of integration effectiveness.

Geographic coverage within regions is also uneven, with some countries having multiple organizations while others have none, potentially creating sub-regional bias. The study lacks standardized outcome measures across organizations, making direct performance comparisons challenging.

Finally, the framework focuses primarily on organizational-level integration without fully capturing health system-level integration or patient-level outcomes. External factors such as political instability, economic conditions, and donor priorities that significantly influence integration success are not systematically analyzed across all regions.

Conclusion:

This comprehensive analysis of primary health care integration models across 17 organizations in four global regions reveals significant opportunities for enhancing integrated service delivery while highlighting critical gaps that must be addressed for sustainable Universal Health Coverage achievement.

Key findings demonstrate that organizational maturity, government partnerships, and community engagement are universal strengths across regions, while digital health adoption, systematic collaboration, and comprehensive service scope remain significant challenges. Asia emerges as the most advanced region with universal HIV-TB coverage and excellent community governance, while Africa shows exceptional partnership networks and mentorship culture despite facing major digital divides. Latin America displays strong organizational foundations but critical TB integration gaps, while Europe's crisis-resilient approach offers unique insights for conflict-affected settings, though limited representation constrains broader regional insights.

The proposed regional integration models for Latin America, Asia, Africa and Europe provide context-specific frameworks that leverage regional strengths while addressing identified gaps.

Success across all regions requires sustained investment in digital health infrastructure, completion of disease-specific integration (particularly TB and hepatitis), strengthening of systematic collaboration mechanisms, and development of robust monitoring and evaluation systems. The study emphasizes that effective integration transcends mere service co-location, requiring fundamental transformation in governance structures, partnership models, and community engagement approaches.

Moving forward, these regional models can serve as blueprints for similar contexts globally while contributing valuable evidence to international frameworks for primary health care strengthening and Universal Health Coverage advancement.

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ACKNOWLEDGEMENTS

The authors team would like to extend gratitude to all contributing partners Kimirina (Ecuador), Instituto para el Desarrollo Humano (Bolivia), GIV – Grupo de Incentivo à Vida (Brazil), LEPRA Society (India), Vasavya Mahila Mandali (India), MAMTA Health Institute (India), Alliance India (India), Alliance Myanmar (Myanmar), Khmer HIV/AIDS NGO Alliance (Cambodia), OSSHD (Ethiopia), LVCT Health (Kenya), Alive Medical Services (Uganda), Uganda Network of Young People Living with HIV/AIDS (Uganda), Education as a Vaccine (Nigeria), Pakachere IHDC (Malawi), ONG Alliance Côte d'Ivoire (Côte d'Ivoire), Alliance for Public Health (Ukraine) who provided invaluable insights through the integration survey. Their commitment to advancing universal health coverage through community-driven service delivery has been central to this work.