Integration Primer

Pragmatic considerations for advancing integrated systems and services to strengthen primary health care

2025

PATH

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Introduction

Primary health care on the road to 2030 and beyond

Almost half of the world's population does not have access to essential health services, with stalled progress in the Sustainable Development Goals era further limiting advances toward universal health coverage targets.[1] Often called the "expressway" or "engine" for universal health coverage, primary health care (PHC) covers 80% to 90% of an individual's lifetime health care needs (Figure 1). As defined by the World Health Organization (WHO), PHC is a whole-of-government and whole-of-society approach to health that combines multisectoral policy and action, empowered people and communities, and primary care and essential public health functions as the core of integrated health services.[2,3] The polycrisis of pandemic threat, climate disaster, economic slowdown, and geopolitical conflict coupled with changing demographics and shifts in disease burden demand urgency in building more resilient and future-forward health systems to deliver integrated, people-centered PHC.

The global health and development sector experienced unprecedented disruption in 2025, with major funding shifts requiring new approaches to sustaining health gains and advancing equity. The Lusaka Agenda and the subsequent Accra Reset calls for shifting from fragmented donor-driven approaches to more sustainable, country-led health systems through domestic resource mobilization, efficient use of resources, and strategic integration of services and systems. In an era of constrained donor assistance for development, integration is no longer just an optimization strategy, rather it is a necessary imperative for health system sustainability and resilience as countries seek to maximize the impact of every dollar to maintain and expand access to essential services.[4,5]

Who this primer is for

This primer aims to aid health planners, implementers, advocates, and donors with pragmatic guidance and considerations to advance integrated systems and services to strengthen PHC. This primer highlights learnings from PATH's experience designing and implementing integrated services and systems in partnership with the government, the private sector, and other key stakeholders.

What is integration in health care, and why does it matter?

While integration in health care is a concept that encompasses many definitions depending on the setting, it is centrally focused on how health services are organized and managed to deliver care to people where and when they need it, and with a commitment to improved quality of care.[6,7] Throughout this primer, we refer to a broader definition of integration that moves beyond the service delivery domain by incorporating health system components that are required to functionally enable delivery of integrated health services, such as leadership and management, financing, information systems, and human resources.

Integration is a critical enabler for strengthening people-centered PHC—it has been shown to improve service access, uptake and continuity, and health outcomes and to reduce costs.[9,10,11] In an environment of increasingly constrained resources, integration is an essential approach to improving efficiency on the pathway to sustainable access to PHC and health care for all.[12] WHO has recently published several guidance documents on integration, including integrating implementation guidance on control of noncommunicable diseases (NCDs) into other health programs,[7] policy considerations for decision-makers integrating HIV and PHC,[13] and key considerations for integrating mental health and HIV interventions;[14] and The Global Fund released technical guidance on accelerating integration of HIV, tuberculosis and malaria to strengthen health outcomes.[15]As health system leaders consider whether and how to advance integrated systems and services, additional practical guidance for how to prepare, design, implement, and monitor integration is needed.

Integrated health services

WHO defines integrated health services as "managed and delivered so that people receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease-management, rehabilitation, and palliative care services, coordinated across the different levels and sites of care within and beyond the health sector, and according to their needs throughout their life course."[6]

FIGURE 1.

What is primary health care, in practice?

PHC covers 80% to 90% of a person's health needs and is defined by a set of **essential health services, products, and policies** needed to:

Reflect comprehensive and whole health (physical and psychosocial)

Prevent and detect disease, **promote** health, and **manage** illness

Address the broader social determinants of health (social, economic, environmental)

Source: Adapted from WHO PHC Communications Materials, 2022.

Taxonomies of integration: What, where, and how

Numerous definitions for integration have been put forward. We conducted a rapid review of integration taxonomies drawing from widely referenced frameworks. Here we summarize the key definitions and highlight commonalities in how integration is conceptualized across frameworks. Most frameworks include key elements that help to conceptualize different options for integration, including elements related to "what," "where," and "how":

WHAT | Most frameworks describe **domains of integration** as what is being integrated (e.g., activities, policies, organizational structure);[16] several frameworks articulate different **types of integration** (e.g., clinical, organizational, professional, systems, functional);[7,14,17,18,19] while still other frameworks distinguish **vertical integration**, involving linkage across levels of care (i.e., disease-focused view), from **horizontal integration**, involving linkage across sectors of care (i.e., holistic focused view),[17,20] and **diagonal integration**, aimed at strengthening health systems to advance targeted-disease and health-area priorities.[21]

WHERE | Several frameworks describe the **level of integration** as where the integration is occurring. These are specified as the micro, meso, and macro levels of the health system, or alternatively, the local, regional, national, and global levels.[6,16,17]

HOW | Often referred to as the **continuum or degree of integration**, this articulates how integration is organized and managed using an array of different key concepts and terms to define the range from segregation to full integration.[6,17,18,22]

PATH's approach to integration

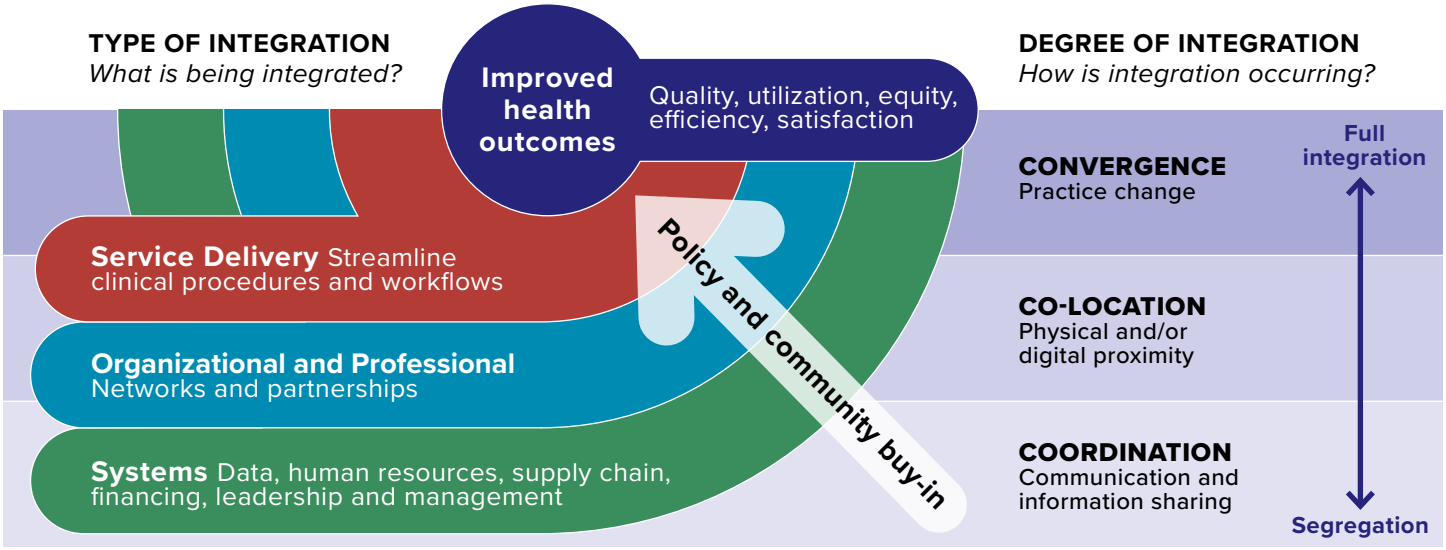
PATH works to accelerate people-centered PHC through innovation and partnerships across more than 40 countries. There is no one-size-fits-all approach to integration. We design integrated systems and services tailored to the context, co-created with government, civil society, private sector, and community members, and improved through adaptive learning and change management.

Conceptual framework for integration

Our conceptual framework for integration emphasizes the interplay between **what** is being integrated and **how** it is being integrated, all with the goal of improving health outcomes.

FIGURE 2.

Conceptual framework



Framework adapted from Valentijn et al., 2013 Rainbow Model for Integrated Care; Grépin and Reich, 2008, Degree of Integration; and Heath et al., 2013, Levels of Collaboration.

TYPES OF INTEGRATION describes what is being integrated, including three categories: **service delivery** (clinical workflow focus), **organizational/professional** (contracting, strategic alliances, knowledge networks, intra-/interprofessional partnerships), and **systems** (human resources for health, financing, information systems, supply chain management, leadership and management), none of which are mutually exclusive, as successful integration may require planning and coordination across these types.

DEGREE OF INTEGRATION captures how integration is occurring—it is *not* all or nothing, but rather is represented along a continuum from segregation to full integration. **Coordination** involves communication and information sharing across organizational units. **Co-location** refers to physical or digital proximity within and across existing organizational units. **Convergence** indicates practice change in which resources of different organizational units are pooled to enable increased people-centered life-course care.

CROSSCUTTING ENABLERS advance people-centered PHC, for example, through **supportive policies, advocacy, and community buy-in** to inform the effective and inclusive design and implementation of integrated approaches.

IMPROVED HEALTH OUTCOMES are the primary goal of any health system. Integration is a means to an end toward advancing people-centered PHC across the life course. It should contribute to advancing clearly identified improvements in health outputs and outcomes, such as **patient satisfaction, quality of care, and service utilization**, among other efficiencies.

To conceptualize differences in how integration is operationalized, **Table 1** compares illustrative examples for coordination, co-location, and convergence, organized by the type of integration; it is intended as a practical tool to support stakeholders in considering what aspects of integration are most relevant to address within their context and with respect to their goals for an integrated approach.

TABLE 1.

Degree of integration: Conceptualizing examples across integration types.

	DEGREE OF INTEGRATION		
	COORDINATION Communication and information sharing that aims to enable increased access to care	**CO-LOCATION** Physical and/or digital proximity of services and collaboration in care planning/delivery	**CONVERGENCE** Systemic health practice change to enable increased people-centered life-course care
SERVICE DELIVERY			
SERVICE DELIVERY MODELS	Initial service encounter by a health care worker/ organizational unit for the primary reason for visit, with communication and information sharing to enable referrals between organizational units for additional service offerings (usually on a different day, and/ or in a different part of the clinic)	Initial service encounter by a health care worker/organizational unit for the primary reason for visit, plus at least one additional service (screening, treatment) offered by the same provider at the same clinical encounter (e.g., "bilateral" 1:1 integration: NCD screening added to an HIV service)	Initial service encounter by a health care worker/ organizational unit for the primary reason for visit, plus additional screening and care for any relevant PHC services based on a life-course approach
ORGANIZATIONAL AND PROFESSIONAL			
PARTNERSHIPS	Informal partnership linkages supported through information sharing between organizations and health care professionals to deliver a comprehensive continuum of care to a defined population	Formation of networks among organizations or professionals, or agreements (e.g., Memorandum of Understanding) that outline formalized arrangements for how different organizations and partners will work together	When different organizations work together under a single governance structure and/or merge to form a new entity to pool their skills, resources, and expertise

Table continued on the following page.

	DEGREE OF INTEGRATION		
	COORDINATION Communication and information sharing that aims to enable increased access to care	**CO-LOCATION** Physical and/or digital proximity of services and collaboration in care planning/delivery	**CONVERGENCE** Systemic health practice change to enable increased people-centered life-course care
SYSTEMS			
LEADERSHIP AND MANAGEMENT	Separate leadership and management structures for each individual health area; while updates are communicated across health areas, there is limited co-planning and no shared targets	Leadership and management structures remain separate by health area but utilize existing governance mechanisms for co-planning, identifying shared targets, and aligning strategies through multisectoral coordination	One leadership and management structure outlines collective planning, policies, financing, data, stakeholder engagement (including private sector), and targets to enable integrated, people-centered PHC
HUMAN RESOURCES FOR HEALTH	Health care workers are trained to predominantly provide care in one health subject area	Health care workers are trained to predominantly provide care in one health subject area plus one or more additional health areas to enable "bilateral" 1:1 service integration	Health care workers are trained across multiple health subject areas to provide holistic, integrated services at the point of care and anchored in a life-course approach
COMMUNITY HEALTH SYSTEMS	Community-based cadre trained in one select health area; conduct household visits for targeted health promotion and education in a single health area	Community-based cadres trained on selected health areas to work side by side (household visits, mobile events) to provide health promotion and education across several health areas	Community-based cadre trained in an integrated scope of work to provide holistic health promotion anchored in a life-course approach
INFORMATION SYSTEMS	Separate data collection and analysis across multiple health areas; communication required to access data across systems that are not interoperable	Data largely remain in separate systems by health areas; some limited data from one health area may be collected alongside the primary health area (e.g., people living with HIV screened for hypertension)	Interoperable data systems across health areas, ideally tracked at the individual level to allow better understanding (e.g., through electronic medical records and integrated reporting) of population-level trends to inform policy- and decision-making
SUPPLY CHAIN MANAGEMENT	Separate forecasting, procurement, and management of essential health commodities by health area	Some overlap in forecasting, procurement, and management of essential health commodities given shared location and opportunities for service integration	Collective forecasting, procurement, and management of essential health commodities considering all PHC needs for integrated service models
FINANCING	Siloed financing and planning, budget, and expenditure analysis managed separately by health area programs without a centralized view of domestic and donor financing in one place	Some joint financing and planning to support integration, but largely remains unstructured and opportunistic, and potentially tied to time-limited grants or pilot programming	Collective/joint financing and planning—one budget covering all health areas is centrally managed at the subnational level and includes a centralized view of all funding, including domestic and donor sources

Guiding principles for integration

Building from PATH's experiences and lessons learned in advancing integration in health care across a variety of settings, we recommend several **guiding principles to support planning, design, and implementation of integrated systems and services**.

Plan

Foster consensus on rationale for integration, including broad stakeholder engagement around the key problem or issue being solved and key desired results.

Understand the enabling environment and context for integration, including change management needs and who can serve as champions.

Consider scale and sustainability of the integrated model/approach from the beginning of the planning process.

Align financing to enable integrated packages of services for broader impact.

Design

Determine the right model/approach to integration—where is best to start, recognizing approach may evolve over time.

Utilize co-creation methods in the design of integrated models, ensuring tailoring to local context and priorities, applying a life-course approach, and incorporating multisectoral perspectives.

Focus on the hardest-to-reach populations through differentiated approaches grounded in principles of inclusion and tailored care (i.e., youth, people with disabilities, LGBTQIA+).

Implement

Measure outcomes that contribute evidence to understanding the value proposition, impact, and cost of integration.

Incorporate learning and iterative adaptation into implementing new models of integration.

Leverage community-led monitoring to ensure high-quality and responsive integrated service delivery

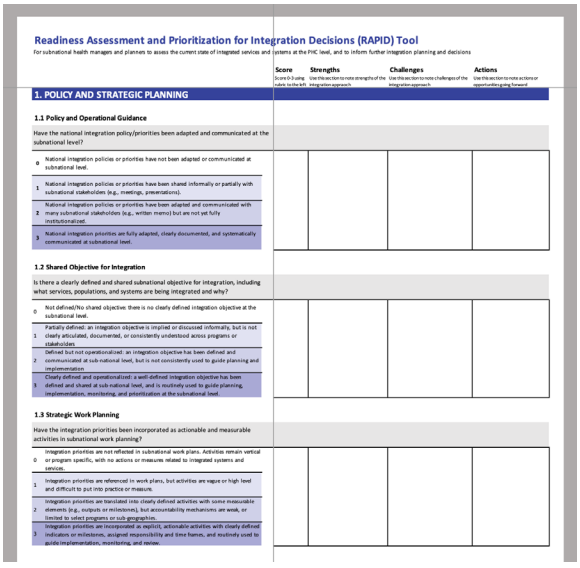
Assessing integration readiness: A selection of tools and resources

Context is critical: integration is not appropriate in all settings, may not be the "right" solution at a given time, and could create unintended consequences if not carefully aligned with the underlying goals of a given health program. Putting integration into practice therefore requires more than a stated desire to integrate; it requires a clear articulation of what is being integrated and why, an understanding of the systems and service-level adaptations needed to support those objectives (how), and mechanisms to assess progress and identify where course correction is required.

Integration readiness refers to the extent to which primary health care systems are positioned to advance a defined integration objective or goal given the current configuration of their services and systems. Readiness should not be viewed as a fixed or binary (yes/no) state. Rather, it is best understood as a position along a continuum—from vertically organized or siloed arrangements to increasingly coordinated and converging models of care that may, over time, become routine and standardized. Assessing integration readiness involves examining the current state across key system and service domains to understand where integration is already occurring, where it remains limited or constrained, and which gaps require focused attention to strengthen and sustain integration. The purpose of a readiness assessment is not to determine whether integration should occur, but to inform how and where to prioritize integration efforts.

Readiness Assessment and Prioritization for Integration Decisions (RAPID) tool

To support this process, PATH developed the Readiness Assessment and Prioritization for Integration Decisions (RAPID) tool to enable structured, practical assessment of integration conditions at the subnational level. The tool is designed for use by district or regional health managers and teams to identify domains where integration is less advanced and foundational work is needed, as well as domains where integration is more advanced and can be reinforced, sustained, or leveraged for learning. The tool is explicitly action oriented, with space to document strengths, gaps, and concrete actions to advance integration priorities in line with defined program objectives.



Readiness Assessment and Prioritization for Integration Decisions (RAPID) Tool

For subnational health managers and planners to assess the current state of integrated services and systems at the PHC level, and to inform further integration planning and decisions

	Score (0–3 along rubric to the left)	Strengths (Use this section to note strengths of the integration approach)	Challenges (Use this section to note challenges of the integration approach)	Actions (Use this section to note actions or opportunities going forward)
1. POLICY AND STRATEGIC PLANNING				
1.1 Policy and Operational Guidance				
Have the national integration policy/priorities been adapted and communicated at the subnational level?				
0 National integration policies or priorities have not been adapted or communicated at subnational level.				
1 National integration policies or priorities have been shared informally or partially with subnational stakeholders (e.g., meetings, presentations).				
2 National integration policies or priorities have been adapted and communicated with many subnational stakeholders (e.g., written memo) but are not yet fully institutionalized.				
3 National integration priorities are fully adapted, clearly documented, and systematically communicated at subnational level.				
1.2 Shared Objective for Integration				
Is there a clearly defined and shared subnational objective for integration, including what services, populations, and systems are being integrated and why?				
0 Not defined/No shared objective: there is no clearly defined integration objective at the subnational level.				
1 Partially defined: an integration objective is implied or discussed informally, but is not clearly articulated, documented, or consistently understood across programs or stakeholders				
2 Defined but not operationalized: an integration objective has been defined and communicated at sub-national level, but is not consistently used to guide planning and implementation				
3 Clearly defined and operationalized: a well-defined integration objective has been defined and shared at sub-national level, and is routinely used to guide planning, implementation, monitoring, and prioritization at the subnational level.				
1.3 Strategic Work Planning				
Have the integration priorities been incorporated as actionable and measurable activities in subnational work planning?				
0 Integration priorities are not reflected in subnational work plans. Activities remain vertical or program specific, with no actions or measures related to integrated systems and services.				
1 Integration priorities are referenced in work plans, but activities are vague or high level and difficult to put into practice or measure.				
2 Integration priorities are translated into clearly defined activities with some measurable elements (e.g., outputs or milestones), but accountability mechanisms are weak, or limited to select programs or sub-geographies.				
3 Integration priorities are incorporated as explicit, actionable activities with clearly defined indicators or milestones, assigned responsibility and time frames, and routinely used to guide implementation, monitoring, and review.				

The assessment contains **33 questions across 11 domains**, including policy and strategic planning, leadership and governance, financing and resource allocation, health workforce, data and health information systems, laboratory systems, supply chain and commodities management, quality improvement and change management, service delivery, community engagement, and referral and linkage. These domains represent

what is being integrated—the components that must work together to deliver comprehensive, people-centered care across the life stages.

Each question is scored along a **four-point continuum (0–3)**, reflecting increasing degrees of integration from not integrated (fragmented, siloed, program specific) to fully integrated (well-established, routine, optimized) systems and services. In alignment with the conceptual framework, this light-to-dark continuum captures *how* integration is occurring in practice and recognizes that progress is often uneven across different components of the health system.

The tool generates both question-level and overall integration scores. While the overall score provides a useful high-level snapshot, the primary value of the tool lies in domain- and question-specific analysis, which highlights where specific integration elements are working well or need attention. Quantitative scores are complemented by qualitative inputs on strengths, weaknesses, and priority actions to ensure that findings are specific and relevant and inform planning, resource allocation, and prioritization of integration efforts.

Used alongside the conceptual framework for integration and other technical resources referenced in this guide, the RAPID tool brings conceptual integration guidance to life, and supports decision-making tailored to a country or subnational unit's specific context. It helps teams identify where to focus, what to address, and how to move incrementally toward strengthened integrated primary health care; and can also be used for monitoring to assess integration scores over time. Linking back to the conceptual framework for integration, this tool may be useful in guiding policymakers and health system planners in defining the levels of integration (system, organizational, service) and degree of integration (coordination, co-location, convergence) for integration options.

This tool was originally designed as a planning, prioritization, and monitoring tool for use at the sub-national level in low- and middle-income country contexts and can be adapted for particular use cases and levels of the health system as well as tailored to specific integration goals and objectives.

Additional tools and resources

Below we summarize several other existing tools and approaches that complement PATH's RAPID tool, which stakeholders can further adapt to their context in considering integration readiness and whether and/or when to adopt an integrated model.

Results for Development and Population Services International developed a **five-step process for considering vertical program integration with PHC systems**, which is designed to be embedded in routine health policy and planning processes to advance integration-related decision-making.[20] The five steps include:

1. **Articulating the objectives of integration**—explain how an integration initiative contributes to broader health-sector objectives, including effectiveness and efficiencies, while also articulating objectives that are responsive to advocates and civil society priorities for ensuring access to high-quality, people-centered services.

2. **Understanding the status quo**—conduct a detailed analysis of the current relationship between the vertical program and the PHC system, including enablers and constraints, that can help foster dialogue around options for integration.

3. **Identifying integration options**—develop a set of options, which may be incremental and adaptive in nature, and detail what will change and what will stay the same with respect to roles and responsibilities, flow of funds, accountability mechanisms, training and workload, and patient experience and access.

4. **Assessing the options and making decisions**—assess technical, practical, fiscal, and political considerations of integration options through a consultative decision-making approach.

5. **Monitoring implementation and making adjustments**—monitor each stage of integration, measure effects and whether desired results are being achieved, and adjust or course correct as needed.

The Local Government Association of the United Kingdom developed an integration self-assessment tool as a practical tool to support local health and care leaders "to critically assess their ambitions, capabilities, and capacities to integrate services to improve the health and well-being of local citizens and communities."[23] The tool is organized into four modules that include a series of open-ended self-assessment questions:

- **Essentials for the integration journey**—questions on shared commitment, capacity/capabilities, accountability, and other key domains such as change models and partnership arrangements.
- **Readiness for delivering integration**—questions on shared vision, decision-making, models of care, financing, and other key enablers of integration such as digital infrastructure and workforce.
- **Effective governance for delivering integration**—questions on decision-making authorities, roles and responsibilities, stakeholder engagement, and information flows.
- **Effective program management for delivering integration**—questions on consensus and shared vision, culture shifts, program planning, and monitoring.

WHO's implementation guidance on integrating NCDs into other types of health programming outlines acceptability and feasibility as key parameters for assessing the context for integration readiness and goodness of fit:[7]

- **Acceptability**—refers to stakeholder and community member input on new models of integration, including provider perspectives on workflow and workload, resources, and infrastructure needed to ensure efficiency and quality of integrated services; or community perspectives on wait time, service availability, and experience of care or satisfaction.
- **Feasibility**—refers to resource availability, training, and incentive considerations for new models of integration with respect to screening, referral, and treatment protocols.

Based on a systematic review, Topp et al. (2018) identified effective elements of service integration and synthesized the contextual enablers and essential health systems capabilities necessary for preparing for service integration, which they propose could form the basis of an "integration preparedness tool."[24] Key capabilities are as follows:

- **Health services are sufficiently functional**—consider availability of physical space, community trust, adequate supply chain of drug and laboratory services, and local government support.
- **Health care workers are willing and able to integrate services**—consider having staff buy-in and motivation, adequate training and incentives, supportive supervision, and continuous quality improvement plans in place to support adaptive management.
- **Technical tools available and suitable**—consider creation and validation of clinical decision support tools, policies to enable integration, robust monitoring and evaluation (M&E) (including ability to assess unintended consequences of integration), and sustainability metrics.
- **Decision-making processes are devolved**—consider local government capacity, flexibility to offer new service-delivery models, stakeholder coordination, and community involvement in design.

Measuring integration: where to start?

Countries differ in disease burden, health system maturity, financing arrangements, and PHC reform objectives. Integration measurement approaches must be sufficiently flexible to reflect these realities while still capturing common, actionable dimensions of progress that foster decision-making. Global experience suggests that integration measurement is most useful when it supports country learning, adaptation, and policy dialogue rather than enforcing uniform benchmarks or disease-specific reporting requirements that may not align with national or subnational priorities.[25,26,27]

As countries begin to operationalize and expand integrated health services and systems, they will need to consider how to measure the progress and performance of their integration efforts. Measurement provides a structured way to monitor progress and understand whether integration is achieving its intended effects—that is, whether the accessibility, reach, and quality of health services is improving and whether the systems and enabling factors are effectively aligned—and where additional adaptation or support may be required over time.

This section outlines a pragmatic approach to measuring integration within PHC. It situates integration measurement within broader PHC measurement efforts, clarifies how readiness and prioritization informs what should be measured, and proposes a structured framework and illustrative indicators that countries can adapt to their own integration goals and contexts.

Aligning measurement with local context and integration priorities

Given the context-specific nature of integration and the need for flexibility, integration is best understood and measured as an intermediate outcome assessed through observable changes in how services are organized, delivered, and supported, rather than solely through long-term health outcomes that are influenced by multiple contextual factors beyond integration.[25,28,29] For example, integration measurement might attempt to determine the degree to which a facility or health system successfully utilizes shared workflows; whether integrated services and systems enable stronger continuity of care; and to what extent health information systems, workforce capacity, and financing arrangements are aligned. This framing is consistent with WHO and UNICEF guidance that situates integration within broader PHC capacity and performance and encourages countries to select and adapt indicators based on national priorities and system gaps.[26] Measuring integration therefore requires looking beyond whether individual services are delivered to whether care is delivered in a coordinated, continuous, and comprehensive manner, supported by aligned policies, financing, workforce, training and coordination, health information systems, and governance.

Measurement helps make these dynamics visible. When designed thoughtfully, integration measurement supports learning and improvement by identifying where integration is functioning well, where it is uneven or constrained, and how integrated models evolve over time. Its primary purpose is not to label systems as integrated or not integrated but to inform decision-making and resource allocation, guide course correction, and strengthen accountability for delivering more coherent and people-centered care.[26,27,30]

Measuring PHC performance and integration

Over the past decade, several global frameworks have been developed to guide the measurement of PHC performance and impact.[26,27,31] These frameworks emphasize that PHC should be measured as a system, linking enabling structures and inputs to service delivery processes, outputs, outcomes, and longer-term health impacts. They highlight core PHC functions—such as accessibility, continuity, comprehensiveness, coordination, quality, equity, and resilience—and connect these functions to broader system objectives, including effective coverage, financial protection, and population health.

While these existing measurement frameworks provide a strong foundation for understanding overall PHC performance, they do not explicitly consider integration as a defining characteristic of PHC.[18,25] Integration is not an endpoint in itself but a way of organizing the health system that shapes how PHC services are delivered and experienced. Measuring integration, then, requires a complementary lens that focuses on how services and system components work together in practice.

PHC performance measurement asks whether essential services are available, accessible, and effective. Integration measurement asks how those services are organized and delivered together, whether system enablers are aligned to support coordinated care, and whether clients experience care as connected rather than fragmented. Importantly, meaningful changes in integration may be observed in workflows, coordination, and service experience before improvements in population-level outcomes are evident, underscoring the need to measure integration as part of an incremental and adaptive reform process.

Including integration readiness as part of the measurement continuum

Integration readiness assessments (see previous section, page 10) provide an important foundation for designing a measurement approach by clarifying current system conditions, identifying strengths and constraints, and helping to determine which aspects of integration are feasible to advance at a given point in time.[24,25]

Rather than functioning as a performance scorecard, readiness assessments inform measurement by shaping expectations and guiding indicator selection. In contexts where foundational elements such as policy alignment, workforce capacity, information systems, referral mechanisms, or financing arrangements are still developing, integration measurement may appropriately emphasize structures, inputs, and early process indicators. As integrated models mature, measurement can expand to capture how integration functions in practice and what results it is producing.

As integration is neither linear nor uniform across system components, progress may occur at different speeds across services and levels of the health system, and measurement approaches should be flexible enough to reflect this reality.

Defining and prioritizing what to measure

Before selecting indicators, clarifying objectives and priorities is essential.[25,26,30,32] This means health policymakers and health system leaders and managers need to define explicitly what is being integrated, where integration is expected to occur within the health system, and what changes integration is intended to produce. These choices shape which dimensions of integration are most relevant to measure and help ensure that measurement efforts remain focused and useful.

Key considerations include identifying priority services or service areas for integration (i.e., integrating HIV, tuberculosis, and malaria screening and management with PHC; integrating HIV, syphilis, and hepatitis B screening and management in antenatal care; and strengthening NCD screening and care in outpatient services); determining whether integration efforts are focused at the community, facility, referral, community,

and/or system level; clarifying the primary aims of integration (such as expanding access, improving continuity and quality, increasing efficiency, or strengthening resilience); and specifying priority populations (such as pregnant women, children under 15 years old, or older adults and the elderly) or service platforms (i.e., antenatal care, outpatient delivery, under- 5 clinics, and mobile outreach). Attention to system enablers and constraints—such as the workforce, data systems, supply chains, financing, and governance—also helps ensure that measurement reflects both service delivery and the underlying conditions that support or limit integration.

Prioritization at the country level is important because integration is context specific and incremental. Measurement approaches that are tailored to national priorities and data capacity are more likely to generate actionable insights and support learning and policy dialogue than broad or overly standardized indicator sets.

Adapting a framework and illustrative core indicators for measuring integration

This section presents a practical framework and a set of illustrative core integration indicators that countries can adapt to monitor progress toward integrated PHC services and systems. The framework is designed to be simple, intuitive, and usable with existing data systems while still capturing the system-wide nature of integration.

The illustrative integration indicators presented here are not intended to introduce a new measurement framework. Rather, they draw directly from existing global PHC measurement approaches and apply an explicit integration lens to those frameworks.[26,27,30,31] The indicators focus on whether services and system components are aligned and functioning together in practice, using measures that are largely drawn from routine data sources and familiar PHC monitoring tools.

The framework

The framework follows a similar results-chain logic as that used for other PHC measurement frameworks—that is, **structures and systems, inputs, processes, outputs, outcomes, and impacts**. This logic reflects how integration is enabled, implemented, and experienced over time. Indicators are intentionally limited in number and framed to be:

- Easy to understand by planners, managers, and frontline teams.
- Adaptable to different service packages, populations, and levels of the health system.
- Grounded in routinely available data sources, such as health management information systems (HMISs), facility assessments, supervision tools, administrative records, and simple client feedback mechanisms.

Countries are encouraged to select a small core set (8 to 12 indicators) that aligns with their integration objectives and system readiness and to consider the remaining indicators as optional or additions to be phased in as integration matures.

The illustrative indicators prioritize the use of routine data sources wherever possible, including registers and logbooks, HMISs, supportive supervision tools, administrative and financial data, and community-led monitoring mechanisms. As integration is an incremental process, repeated measurements will be essential for tracking progress, identifying bottlenecks, and informing course corrections. In practice, countries are encouraged to select, adapt, and apply the indicators that align with their integration objectives, health system contexts, and data availability.

The indicators

The following illustrative indicators draw on global PHC measurement frameworks[26,27,30,31] and literature on integration measurement, including systematic reviews of integrated care measurement.[18,25,29]

Indicator	Definition	Data sources
STRUCTURES AND SYSTEMS (ENABLING ENVIRONMENT)		
Do policies, financing, and governance arrangements support integrated PHC?		
PHC policies or guidelines explicitly support integrated service delivery	Existence of current national or subnational policies, strategies, or guidelines that describe integrated delivery of priority services within PHC.	Policy and guideline reviews.
Financing mechanisms support delivery of integrated PHC services	Presence of pooled, aligned, or coordinated financing arrangements that allow providers to deliver multiple services within a single PHC platform.	Budget documents, financing policies, program reviews.
Essential PHC services are covered by health insurance benefits package	Coverage of essential PHC services is explicitly supported by national or employer-supported health insurance benefits packages (and which better enables integrated service delivery through PHC platforms).	Health insurance documents, policies, program reviews.
Integration is included in national or subnational M&E frameworks	Inclusion of integration-related indicators or objectives in routine M&E or performance review processes.	National M&E plans, performance review reports.
Mechanisms for community engagement and accountability are linked to integrated PHC	Existence of functional platforms for incorporating community or client feedback into integrated PHC planning and review.	Program documentation, meeting minutes, community scorecards.
INPUTS (CAPACITY TO DELIVER INTEGRATED SERVICES)		
Are facilities and teams equipped to deliver integrated care?		
Facilities are ready to deliver an integrated PHC service package	Percentage of facilities meeting minimum readiness criteria (staffing, space, equipment, commodities) for the defined integrated service package.	Facility assessments, supervision checklists.
Essential medicines, commodities, and priority diagnostics are available for integrated services	Percentage of facilities with tracer commodities* available to deliver the integrated PHC service package.	Logistics management information systems, facility inventories, stock cards.
Workforce capacity is sufficient for integrated service delivery	Percentage of facilities with at least one provider trained to deliver more than one service within the integrated package.	Training records, human resource information systems.
Patient records support continuity of care across services	Percentage of facilities using patient records (paper or electronic) that capture information across multiple services.	Facility assessments, logbook/register review, HMIS documentation.
Integrated, interoperable data systems are functional	Percentage of facilities with functional, shared patient records or interoperable data systems across services and delivery locations.	Facility assessments, data system review, HMIS documentation.

*Tracer commodities are a small, representative set of essential medicines, diagnostics, or supplies used to assess whether a health facility or system is ready to deliver a broader package of services. These are defined by the country based on local priorities.

Indicator	Definition	Data sources
PROCESSES (FUNCTION OF INTEGRATION IN PRACTICE)		
Are services and system functions working together at the point of care?		
Standardized integrated clinical protocols and workflows are in use	Percentage of facilities using standardized screening, triage, or clinical pathways that cover multiple services.	Facility assessments, supervision checklists.
Functional, closed loop referral mechanism enables linkage	Percentage of facilities with documented referral pathways linking PHC to higher or complementary levels of care, and evidence that referrals are completed with feedback to the referring provider.	Facility assessments, referral registers, patient records.
Team-based coordination supports delivery of integrated care	Percentage of facilities holding routine multidisciplinary meetings or case reviews related to integrated services.	Facility records, supervision reports.
Data are routinely used to manage integrated services	Percentage of districts or facilities that review integration-related data and document actions at least quarterly.	Review meeting minutes, supervision reports.
OUTPUTS (NEAR-TERM RESULTS OF INTEGRATION)		
Is integration improving access and service delivery experience?		
Integrated services are available at PHC facilities	Percentage of facilities routinely offering at least two priority health services from different health/disease areas or domains in the same facility.	Facility assessments, reports, checklists, HMIS documentation.
Multiservice contact is delivered during a single visit	Percentage of eligible clients receiving two or more services from the integrated package during a single visit.	Registers, reports, HMIS documentation, client records.
Clients report receiving coordinated care	Percentage of clients reporting that services received were coordinated and connected.	Simple exit interviews, client surveys.
Continuity of care exists for ongoing conditions	Percentage of clients with chronic or ongoing conditions who have documented follow-up or repeat visits within the recommended interval.	Registers, patient records.
OUTCOMES (SYSTEM OBJECTIVES)		
Is integration contributing to stronger PHC performance over time?		
Effective coverage level of selected priority services	Percentage of the target population receiving priority services with minimum quality and continuity standards met, as defined nationally. (Note: Countries may define effective coverage using simple proxies—such as number of follow-up visits completed, treatment initiated, and referrals completed—rather than tracking full outcomes, such the number cured.)	HMIS documentation, population surveys.
Opportunities are missed for delivering priority integrated services	Percentage of clients attending PHC who are eligible for one or more priority services but do not receive those services during the visit or through referral.	Registers, service statistics.

Indicator	Definition	Data sources
Financial protection is in place	Percentage of clients reporting out-of-pocket payments for services included in the integrated PHC package.	Client surveys, administrative data.
Continuity of essential PHC services maintained during system shocks	Percentage of change in use of selected essential PHC services during a defined shock period compared to a pre-shock baseline. (Note: Countries should define both the shock period and the set of essential PHC services to be monitored—for example, outpatient or antenatal care, chronic care follow-up, immunization.)	HMIS documentation, routine service statistics.
IMPACTS (LONGER-TERM SIGNALS)		
Are integrated PHC systems contributing to sustained population health gains?		
Trends in priority health outcomes are improved	Trends in selected mortality or morbidity indicators relevant to the integrated service package.	HMIS documentation, civil registration and vital statistics, surveys.

These indicators are intended to be illustrative rather than exhaustive. Countries should adapt definitions, thresholds, and disaggregation based on local priorities, data availability, and system maturity. Used together, the indicators provide a coherent picture of whether integration is being enabled and implemented effectively and whether it is contributing to stronger, more people-centered PHC.

Country spotlights: Integration in practice

Integration unfolds differently across contexts, shaped by each country's health priorities, system capacities, and population needs. The following country spotlights illustrate how integration principles translate into practice—from policy reform and digital transformation to community-led design and emergency response.

These examples showcase diverse integration approaches: vertical programs transitioning into primary health care platforms, digital tools enabling continuity across the life course, readiness assessments guiding phased implementation of integrated models, and communities co-designing services that reflect their realities. Together, they demonstrate that integration is neither uniform nor static, but rather an adaptive process of aligning services, systems, and people to deliver more coordinated, comprehensive, and people-centered care.

Each country spotlight highlights the rationale for integration, type and degree of integration, impact, enablers, and measurement considerations—offering insights for policymakers, program managers, and implementers working to strengthen integrated primary health care in their own contexts.

List of spotlights

1. Ethiopia Streamlining essential services through integrated health campaigns

2. India Integrating systems and policy for urban primary health care transformation

3. Indonesia Advancing integrated, life-course primary health care through digitally enabled community health workers (kaders)

4. Kenya Assessing integration readiness within county-level primary care networks

5. Kenya Maintaining quality service delivery with integration of HIV and hypertension services

6. Senegal Integrating malaria surveillance in the Emergency Operation Center to enhance outbreak response

7. Ukraine Integrating TB services into public-sector primary health care

8. Vietnam Fostering community-led design of integrated HIV and PHC services

COUNTRY SPOTLIGHT | **ETHIOPIA**

Streamlining essential services through integrated health campaigns

IMPLEMENTATION PERIOD

2024 to 2025 (ongoing)

TYPE OF INTEGRATION

Service Delivery: Immunization, nutrition, and maternal and child health delivered through integrated community outreach campaigns.

Organizational and Professional: Clear coordination through the Ethiopian Collaborative Action Strategy; accountability and aligned roles at national and regional levels.

Systems: Governance, human resources for health, digital tools and information systems, community engagement, and joint financing.

DEGREE OF INTEGRATION

Convergence: Multiple immunization and maternal and child health services delivered together through harmonized outreach campaigns rooted in PHC, with shared accountability and routine monitoring systems.

Photo | A health extension worker provides outreach for postnatal care and vaccinations in Ethiopia. PATH.

DESCRIPTION

Ethiopia's Ministry of Health (MOH) has advanced integrated health campaigns as a core strategy for strengthening primary health care (PHC), improving efficiency, and expanding equitable access to essential services. Building on national policies, including the Health Sector Transformation Plan II and the Essential Health Services Package, and informed by lessons from COVID-19 and earlier regional initiatives, the MOH adopted and operationalized the Ethiopian Collaborative Action Strategy in 2024. This national approach unites previously siloed immunization, nutrition, maternal and child health, family planning, and health education campaigns under a single, PHC-focused model. Integrated campaigns use shared microplanning, logistics, and monitoring systems and are delivered through PHC facilities, outreach platforms, and Ethiopia's health extension workers (HEWs). PATH supports this government-led effort through technical assistance, coordination support, and documentation of lessons to guide sustained scale-up.

RATIONALE FOR INTEGRATION

Fragmented, vertical health campaigns created inefficiencies, duplicated efforts, and missed opportunities to provide comprehensive, people-centered care across the life course. Disease-specific outreach campaigns were resource intensive, disruptive to routine PHC services, and burdensome for health workers and communities. Additionally, data systems were not fully integrated, limiting the ability to track service uptake and make evidence-based decisions. The COVID-19 pandemic also served as a major inflection point, underscoring the need for integrated service delivery to promote continuity of care during times of serious system shocks and increase the country's resilience. As a result, the MOH prioritized integration as a practical solution, using campaigns not as standalone interventions but as a mechanism to strengthen PHC delivery, optimize limited resources, and improve coverage of high-impact services, particularly for children and underserved populations.

IMPACT

Ethiopia's integrated health campaigns have demonstrated meaningful gains in efficiency, coverage, and system resilience:

Expanded service reach. Nationwide integrated campaigns have delivered immunization alongside vitamin A supplementation, deworming, nutrition screening, and maternal and child health services, reaching millions of children and women through a single delivery platform.

Improved efficiency. Harmonized microplanning, logistics, and supervision reduced duplication across campaigns and minimized disruptions to routine PHC services.

Photo | A health worker administers a vaccine to an infant in Ethiopia. PATH.

Stronger use of PHC infrastructure. The model continues to leverage Ethiopia's extensive PHC network—more than 17,000 health posts, 3,500 health centers, and 42,000 HEWs—to deliver integrated services closer to communities, including in pastoralist and hard-to-reach areas.

Enhanced outbreak response. Integrated campaigns supported rapid response to measles, polio (including nOPV2), and other public health threats, while simultaneously delivering routine preventive services.

Improved identification of unmet needs. Campaigns have identified and linked children and mothers to follow-up care for nutrition, completing immunization series, maternal health conditions, and other priority needs, strengthening continuity beyond the campaign period.

ENABLERS

Strong government leadership and coordination at national and subnational levels.

Leverage of existing platforms for PHC, including the Health Extension Program.

Strategic alignment and collaboration of development partners and donors.

Use of digital health management information systems (eCHIS, DHIS2) for monitoring and real-time performance tracking.

Supportive supervision and mentorship, including on-site field supervision and daily review meetings.

Community engagement through HEWs and local leaders to mobilize and build trust.

MEASUREMENT CONSIDERATIONS

Ethiopia monitors integrated campaigns using a combination of both qualitative and quantitative indicators, including coverage of bundled services, identification and follow-up of zero-dose and underimmunized children, and campaign efficiency measures such as cost, workforce time, and logistics utilization. Real-time digital dashboards and independent monitoring complement routine reporting, allowing the MOH to assess not only coverage but also equity, efficiency, and contribution to broader PHC-strengthening objectives.

LOOKING AHEAD

Ethiopia plans to further institutionalize integrated campaigns as part of its PHC strategy, expand integration to additional service areas—including noncommunicable diseases and mental health—and strengthen interoperability of digital systems. Continued government leadership, partner alignment, and investment in PHC capacity will be central to sustaining and scaling this approach.

COUNTRY SPOTLIGHT | **INDIA**

Integrating systems and policy for urban primary health care transformation

IMPLEMENTATION PERIOD

2022 to 2024

TYPE OF INTEGRATION

Service delivery: Expanded package of PHC services.

Systems: Information systems, supply chain, human resources for health, leadership and management, community.

DEGREE OF INTEGRATION

Convergence: This reform focused on providing an expanded package of services at the same facility location through a multidisciplinary PHC team.

Photo | A successful collaboration between the City Programme Management Unit, Bhubaneswar, Odisha, and PATH, organizing regular outreach camps through mobile health units to deliver high-quality services directly to urban communities. PATH/Manoj Sahoo, Aman Raj.

DESCRIPTION

In partnership with the Government of India and state governments, PATH supported the expansion of PHC services in 17 cities across five states (Jharkhand, Madhya Pradesh, Maharashtra, Manipur, Odisha). Service offerings moved beyond the historic emphasis on reproductive health, maternal health, nutrition, and child health to include an expanded package of services: NCDs; mental health; eye, ear, nose, and throat; palliative and geriatric care; emergency and trauma management; and oral health. This has enabled access to integrated, high-quality preventive, promotive, and curative care closer to people's homes.

RATIONALE FOR INTEGRATION

Under its flagship Ayushman Bharat initiative, the Government of India has made the integration of services within PHC a clear priority. This is based on the goal of achieving universal health coverage and evidence highlighting the health benefits and cost effectiveness of integrated services.

IMPACT

Overall, 76% of service providers were trained and capacitated on the expanded package of services, and 92% of facilities in the project implementation areas delivered an integrated model of care. This contributed to a 32% increase in facilities stocked with essential drugs and diagnostics, and a 112% increase in the population accessing care.

ENABLERS

Robust political will and policy support. The program thrived due to strong political commitment from the national government, which established a supportive policy environment and clear mandates for the integration of PHC services.

Collaborative stakeholder engagement. Partnerships with key stakeholders, including public health organizations like PATH, were instrumental in translating policy into effective on-ground implementation, facilitating seamless service integration, and strengthening program acceptance.

Sustainable financing mechanisms. Allocation of dedicated funding under the National Health Mission enabled uninterrupted service delivery.

Continual improvement mechanism through supportive supervision checklist and dashboard. PATH developed a checklist and dashboard that helped government stakeholders in prioritizing the areas for corrective action and mobilizing government support.

MEASUREMENT CONSIDERATIONS

The supportive supervision mechanism offered a structured tool to assess facilities quarterly on drug supply, human resource availability, and capacity to provide health services. These data were reported at the subnational and district levels to facilitate evidence-based decision-making and adaptive management.

All health facilities connected with the government's data portal for daily and monthly service delivery reporting.

COUNTRY SPOTLIGHT | **INDONESIA**

Advancing integrated, life-course primary health care through digitally enabled community health workers (kaders)

IMPLEMENTATION PERIOD

2023 to 2025 (ongoing)

TYPE OF INTEGRATION

Service delivery: Integrated services aligned with life course stages.

Organizational and professional: Co-designed intervention package with MOH, PATH, CHWs *(kaders)*, and local authorities; strengthened community-facility linkages; and shared performance data across CHWs, PHC facilities, and village leadership.

Systems: Interactive, case-based training; digital decision support; interoperable data systems; dashboards; and continuous quality improvement embedded within community health systems.

DEGREE OF INTEGRATION

Convergence: Integrated screening, referral, and follow-up care by CHWs across the life course through home visits and integrated health posts *(posyandu)*, linked with PHC facilities *(puskesmas)* and supported by shared digital tools.

Photo | Health workers practice supportive supervision methods using Kader Kita data in Surabaya, Indonesia. PATH.

DESCRIPTION

Indonesia's Ministry of Health (MOH) launched *Integrasi Layanan Primer* (ILP) in 2023 as a major primary health care (PHC) reform, redefining community health worker (CHW) service packages around age and life stage (pregnant and postpartum women, infants and toddlers; school-age children and adolescents; and adults and the elderly), shifting away from vertical, disease-specific delivery. While ILP established life-course service packages delivered through community platforms (home visits and health posts) with referral to PHC facilities, early implementation revealed gaps in CHW competency, decision support, supervision, and data use. To address these challenges, MOH and PATH—with support from the Gates Foundation—co-designed and tested ILP+, an enhanced intervention package to strengthen ILP at the community level, support scale-up, and improve impact in urban Surabaya (East Java) and rural Keerom (Papua).

ILP+ focuses on four interlinked components: (1) strengthening CHW life-course competencies through **interactive, case-based training**; (2) enabling **actionable, digital decision support through Kader Kita**, a mobile app guiding screening, referral, and follow-up during home visits and integrated health post sessions; (3) improving **performance data visibility and use through dashboards** for CHWs, facility teams, and local leaders; and (4) standardizing **continuous quality improvement** through routine reflection, skills reinforcement, and digital engagement via Kader Kita. ILP+ operationalizes Indonesia's life-course PHC reforms by equipping CHWs with the skills, tools, and supervision needed to deliver integrated care closer to households, while strengthening the community-to-facility continuum.

RATIONALE FOR INTEGRATION

Indonesia's PHC and CHW systems were historically organized around vertical programs, contributing to late diagnosis, fragmented follow-up, and missed opportunities for prevention across the life course. In late 2023, the MOH launched ILP to address these challenges by redefining service packages around age and life stage, requiring new competencies, workflows, and data systems. Although ILP established a strong policy foundation, early implementation highlighted gaps in CHW competencies, supportive supervision, and actionable data use. To address these challenges and strengthen ILP delivery in practice, ILP+ was designed to test practical improvements in workforce capacity, digital decision support, continuous quality improvement, and actionable data use, ensuring that integrated life-course care could be delivered consistently at the community-facility interface.

Photo | Community health workers participate in peer-to-peer learning for using the Kader Kita app to record *posyandu* activities in Keerom, Indonesia. PATH.

IMPACT

Early results indicate meaningful progress toward integrated, community-centered PHC:

Strengthened CHW capacity. Nearly 2,300 CHWs trained using interactive, case-based ILP+ curricula, with measurable gains in confidence, protocol adherence, and competency.

High uptake of digital tools. Approximately 80% of trained CHWs actively use the Kader Kita app for screening, referral, and follow-up across life-course health needs.

Reaching underserved populations. More than 25,000 people have been screened in the first 6 months of Kader Kita use, with nearly one in two reached through home visits only, including school-age children, adolescents, and older adults who otherwise might not have been reached at health centers.

Improved risk identification and management. Most conditions identified are manageable at community level, with "red flag" cases—primarily among adults and older adults—supporting earlier chronic disease management rather than emergency care.

Improved linkage and follow-up. Up to half of clients flagged during community screenings subsequently accessed PHC services, indicating stronger referral pathways.

Improved health care utilization and outcomes. There have been early indications of improvements in diabetes diagnoses and management and antenatal care coordination and uptake.

ENABLERS

Strong MOH leadership through PHC reform.

Co-creation with CHWs, district health offices, and communities using human-centered design approach.

Alignment with nationally defined CHW competencies and PHC service packages.

Intuitive digital tools designed by Kader Kita for real-world community contexts, including offline functionality.

Ongoing supportive supervision and use of dashboards for performance monitoring and learning.

MEASUREMENT CONSIDERATIONS

The project uses mixed methods to assess integration and impact, including CHW training completion and competency assessments, digital tool uptake and use patterns, referral and follow-up tracking, and qualitative feedback from CHWs, supervisors, and community members. While attribution to downstream health outcomes remains challenging due to data limitations, early evidence demonstrates improved service reach, coordination, and workforce capability—critical precursors to sustained PHC integration and improved outcomes over time.

LOOKING AHEAD

Indonesia plans to continue scaling ILP nationwide, with more than half of PHC facilities already implementing elements of the reform. PATH will continue supporting national adoption of ILP+ through enhanced competencies in health care screening, supervision models, expanded digital decision support, and interoperability with national health information systems. Continued investments in workforce capacity, digital infrastructure, quality improvement, and optimized resourcing will be essential to sustaining integrated life-course PHC delivery at scale.

COUNTRY SPOTLIGHT | **KENYA**

Assessing integration readiness within county-level primary care networks

IMPLEMENTATION PERIOD

July 2025 to present

TYPE OF INTEGRATION

Organizational and Professional: Strong governance and coordination through the county PHC technical working group, subcounty health management team oversight, multidisciplinary teams, and community health committee–led implementation.

Systems: Standardized integration readiness assessment tool applied across health system domains; results used to identify and prioritize actions for systems strengthening and improved integration.

DEGREE OF INTEGRATION

Co-location and Coordination: Initial application of readiness assessment tool indicates Kisumu County PCNs are in early-stage integration, with most achieving either co-location or coordination. No PCN has yet reached convergence or full integration.

Photo | A health care worker describes the operations of a health facility to the Kisumu County PHC integration study team. PATH.

DESCRIPTION

To operationalize its national PHC strategy and universal health coverage agenda, in 2021, Kenya's Ministry of Health called for the development of primary care networks (PCNs) as an organizing hub-and spoke framework. Kisumu County was an early adopter, having now established eight fully functional PCNs aligned with its administrative subcounties, which are led by a county-level PHC technical working group, PCN-level multidisciplinary teams, and community health committees. The primary aim of PCNs is to improve integration of services and systems by co-locating and sharing resources, mentorship, laboratory networks, commodities, referrals, and outreach, thereby strengthening accessibility, quality, and efficiency, and ultimately the delivery of PHC services across the life course.

In July 2025, the Kisumu County Department of Health and PATH co-led a collaborative process to develop a PCN integration assessment tool to identify and prioritize opportunities for improving integration within PCNs. The iterative process of developing the tool involved initial brainstorming, design workshops, piloting, revisions, and field validation, resulting in questions across six primary domains: governance, workforce capacity, financing, infrastructure, service delivery, and community engagement. Domains were weighted to reflect their importance, and overall total scores classified PCNs into coordination (limited), co-location (partial), or convergence (full) integration stages.

RATIONALE FOR INTEGRATION:

Kisumu County leaders recognized the importance of integration for ensuring patients receive coordinated, community-level care across the life course, and for improving efficiency and reducing duplication at the systems level. Despite substantial progress establishing PCN frameworks and structures, services remained fragmented and it was unclear where and how PCNs needed to advance and operationalize stated integration objectives. Developing and implementing a tailored, PCN-level integration readiness tool offered a way to establish a measure of PCN performance, identify system-wide and PCN-specific gaps, guide resource allocation and partner support, and strengthen accountability for PHC reform.

Photo | Kisumu County PHC integration study team liaising with hospital staff. PATH.

IMPACT

The first countywide application of the PCN integration assessment tool in September 2025 generated actionable insights, including:

Early-stage integration across all PCNs. Half of PCNs scored at the lowest level of integration (coordination) and half at partial integration (co-location), with none reaching full integration (convergence).

Financing as a critical constraint. All PCNs scored zero on financing for integration; dedicated PCN financing was identified as a major barrier affecting performance across other domains.

Operational gaps in service delivery and infrastructure. Moderate but inconsistent scores revealed weaknesses in shared protocols, referral mechanisms, dashboards, and interoperability.

Variable workforce readiness across PCNs, demonstrating that where staff are trained, motivated, and have clear integration roles, integration can advance even in the absence of dedicated financing.

ENABLERS

Strong leadership and governance foundations. Through multidisciplinary teams, community health committees, and the county PHC technical working group.

Countywide PCN structures supporting standardized supervision, daily operations, data use, and accountability.

Robust community health platforms and strong community engagement.

Partner collaboration supporting tool development, field testing, and capacity-building.

National-level Ministry of Health engaged for priority alignment and potential scale-up.

MEASUREMENT CONSIDERATIONS

The integration readiness tool applies a standardized scoring framework across PCNs, enabling comparative assessment and prioritization of support. The tool is designed to be repeated every six months (triangulating across inputs from PCN-level multidisciplinary teams, reports, meeting minutes, logbooks, and budgets), allowing counties to track progress, direct investments, and guide targeted support for lower-performing PCNs and the domains that need attention.

LOOKING AHEAD

Kisumu County leaders are considering tool refinements based on lessons learned, and are documenting insights to inform scale-up in Kenya and beyond, with plans to repeat the assessment every 6 months to track progress.. Findings highlight the need for dedicated integration financing for PCNs, prompting exploration of pooled financing models that would allow high-revenue facilities to support PCN-wide integration functions.

COUNTRY SPOTLIGHT | KENYA

Maintaining quality service delivery with integration of HIV and hypertension services

IMPLEMENTATION PERIOD

2021 to 2022

TYPE OF INTEGRATION

Service delivery: HIV and NCD.

Systems: Information systems, financing.

DEGREE OF INTEGRATION

Co-location: Services across two health areas are offered within the same health visit, and data from that visit are recorded within one data system.

Photo | The project integrated blood pressure screening in clinics to support people living with HIV, who often have comorbidities like hypertension. PATH.

DESCRIPTION

In partnership with Resolve to Save Lives and the Government of Kenya, PATH worked to implement hypertension (HTN) screening at HIV clinics within three facilities across two counties in Kenya—Kisumu and Nyamira. The HIV-HTN project, titled Together We Care (Pamoja Tunajali), aimed to apply people-centered approaches to screen over 90% of people living with HIV (PLHIV) attending targeted clinics in three hospitals in Western Kenya, improve case finding, and link them to HTN care. The program delivered high-quality HTN prevention, screening, treatment, and care in alignment with Kenya's national guidelines for cardiovascular care, while maintaining high-quality HIV care.

RATIONALE FOR INTEGRATION

Despite the growing recognition of the high prevalence of NCDs among PLHIV, there is still limited evidence on the models for integrated approaches at the facility and community settings and the benefits of providing integrated HIV and NCD services. The integration of these services is important given the data on the increased risk for cardiovascular disease among PLHIV. Additionally, prior work on integration of HIV and HTN has shown significant success in screening men 20 to 50 years old—which is historically a challenging population to reach.

IMPACT

The integrated model demonstrated successful case finding in reaching PLHIV with HTN, resulting in a nine-fold increase in HTN identification with integrated care. Of the 3,916 PLHIV screened for HTN, 860 (22%) were newly diagnosed and only 97 (2%) were already known to have HTN. The project's success has led to the adoption of the integration model by the Ministry of Health, the US President's Emergency Plan for AIDS Relief (PEPFAR)/USAID, and HIV implementing partners across the country as mainstream activities in care and treatment.

ENABLERS

Building on existing data infrastructure. The program developed a module for diabetes and HTN indicators for the Kenya electronic medical record that was initially established with PEPFAR support. The program also developed a screening register and an HTN cohort register.

Medicines provided at no cost. Availability and affordability of NCD medications is a barrier to integration. Thus, a key enabler was the provision of HTN medications to individuals at no cost; future scale-up planning will need to include adequate financing of NCD medicines to enable an integrated HIV/HTN model.

MEASUREMENT CONSIDERATIONS

Monitoring the expanded reach of the newly introduced health services and the ongoing high-quality provision of the initial health service are both priorities. Focusing on HTN case finding while maintaining viral load suppression among PLHIV is critical for ensuring that quality of care is maintained in this integrated approach.

COUNTRY SPOTLIGHT | **SENEGAL**

Integrating malaria surveillance in the Emergency Operation Center (EOC) to enhance outbreak response

IMPLEMENTATION PERIOD

2020 to 2023

TYPE OF INTEGRATION

Organizational: Partnership across two government units.

Systems: Information systems, human resources for health, leadership and management.

DEGREE OF INTEGRATION

Coordination: At the national level, this model relied on close communication across the NMCP and EOC for joint planning, resource pooling, and implementation decisions.

Co-location: At the subnational level, the NMCP and EOC partnership supported surveillance efforts through ongoing data sharing and collective priority setting, as well as mini-EOC "shock rooms," where physical co-location brought together NMCP and EOC staff to facilitate data review and decision-making.

Photo | A malaria case investigator holding a cellular telephone to submit data he has collected, which is used by the integrated EOC team in monitoring for outbreaks. PATH/Gabe Bienczycki.

DESCRIPTION

The goal is to integrate malaria surveillance within the EOC to (1) enhance the capacity of the EOC to manage public health emergencies, including malaria, and (2) enhance the capacity of the National Malaria Control Program (NMCP) to respond to malaria outbreaks in low- and high-transmission settings and implement more efficient and effective prevention activities in high-transmission settings.

RATIONALE FOR INTEGRATION

The Senegal Ministry of Health envisioned leveraging a preexisting, effective data platform and associated human resources focused on pandemic preparedness monitoring to cross-train on malaria as an ongoing public health threat (and a way to maintain epidemiology and data analysis skills).

IMPACT

A prospective process evaluation documented an ongoing high-level commitment from the Government of Senegal, and government stakeholders perceived that the EOC strengthened its ability to respond to public health emergencies through this integration.

During the implementation period, all five regional EOCs activated emergency responses to a total of six localized disease outbreaks, including avian flu, dengue fever, and Crimean–Congo hemorrhagic fever. The development and training of standard operating procedures created through this project can be adapted for all disease outbreaks.

ENABLERS

Innovative partnerships. Early recognition of the mutual benefits that each organizational entity (NMCP and EOC) could offer the other through integration as opposed to working in silos was advantageous.

Subnational leadership. Decentralizing the response to public health emergencies to the subnational level strengthened the organizations' ability to respond effectively.

MEASUREMENT CONSIDERATIONS

When an integration framework that outlines the expectations, roles, and responsibilities of each organization involved in the collaboration is elaborated and clearly communicated, programs can better assess the mechanisms leading to successful integration as well as program challenges.

Average time between outbreak detection and emergency response activation can provide data about the efficacy of the emergency response and provide the operational capacity to use data to respond to health threats.

COUNTRY SPOTLIGHT | **UKRAINE**

Integrating TB services into public-sector primary health care

IMPLEMENTATION PERIOD

2019 to 2025 (ongoing)

TYPE OF INTEGRATION

Service delivery: TB screening, diagnosis, treatment delivered through PHC providers and facilities.

Organizational and professional: Capacity-building and collaboration between PHC providers and specialized TB services.

Systems: Digital tools, information systems, diagnostic/laboratory connectivity, health workforce strengthening, domestic financing.

DEGREE OF INTEGRATION

Co-location and coordination: Integration is supported by shared digital systems that enable PHC teams to screen and prioritize high-risk clients, receive automated GeneXpert test results, and coordinate referrals with specialized TB facilities.

Photo | A multidisciplinary team conducting X-ray examination in Odesa Oblast, Ukraine. PATH/Yevhen Astaforov.

DESCRIPTION

PATH's US government–funded Support TB Control Efforts in Ukraine project has systematically facilitated the integration of tuberculosis (TB) prevention, screening, diagnosis, and management into Ukraine's public-sector primary health care (PHC) system. Implemented during a period marked by health system reform, COVID-19, and ongoing war, the project focuses on operationalizing Ministry of Health (MOH) policies to decentralize and integrate TB services into PHC in order to improve early detection, reduce missed cases, and ensure timely, people-centered care for people with TB, drug-resistant TB, and HIV/TB co-infection, as well as prevention services for people with TB infection and others at elevated risk, particularly internally displaced persons and other underserved populations.

The Ukraine MOH health reforms placed PHC at the center of its strategy with a mandate to bring previously siloed areas of health care, such as TB, into the core PHC service package. Key components of the integration approach included (1) **strengthening PHC workforce capacity** through the provision of accredited continuing professional education at three regional training hubs, task shifting to nurses, and updating **curricula** to align with MOH regulatory priorities; (2) adopting **lower-cost training models**, including blended learning and cascaded training that utilizes PHC doctors and nurses as regional- and facility-level facilitators; (3) deploying **mobile and digital diagnostics**, including portable digital X-ray units, artificial intelligence (AI)–supported radiology systems, and connectivity of molecular diagnostic (GeneXpert) machines; (4) **prioritizing high-risk populations** for systematic screening and decentralized TB infection testing; (5) expanding **digital adherence technologies** to support outpatient treatment; and (6) strengthening **community-based psychosocial support** and stigma reduction. Together, these efforts positioned PHC providers as a central entry point for TB detection, referral, and treatment continuity, aligned with national health policy priorities.

RATIONALE FOR INTEGRATION

As part of Ukraine's health reform, policies encouraged shifting TB services from a hospital-based model toward decentralized, ambulatory treatment delivered through PHC and financed through the national health insurance system. While this created a strong foundation for sustainability, PHC providers initially lacked the tools, skills, and operational workflows to implement TB services in routine practice. At the same time, a reduction in specialized TB doctors increased reliance on PHC as the first—and often only—point of contact. The project responded by making catalytic investments in targeted technical, operational, and workforce support to operationalize TB integration within PHC. This approach strengthened the delivery of domestically financed TB services within routine PHC rather than creating parallel delivery models, while ensuring that decentralization translated into real gains in access and continuity of care.

Photo | Training of primary health care nurses in Lviv, Ukraine. PATH/Yevhen Astaforov.

IMPACT

Despite war-related disruptions, these efforts have led to tangible gains in service integration and system resilience. The project successfully supported the translation of health policies into practice at the PHC level, achieving the following results from October 2024 to September 2025 alone:

Early detection and diagnosis. Mobile and portable X-ray screening reached more than 38,000 people, resulting in 174 TB diagnoses and timely treatment initiation.

Faster reporting times. Radiology information systems expanded to 11 hospitals and AI tools processed more than 110,000 X-rays, reducing reporting times from several days to under 48 hours.

Improved treatment continuity. More than 5,000 patients were supported through digital adherence technologies, with approximately 90% of those completing treatment achieving successful outcomes.

Strengthened workforce resilience. Task shifting enabled nurses to continue TB screening and follow-up when TB doctors left conflict-affected regions.

National scale. The project expanded from an initial 12 regions to all government-controlled territories, responding to population displacement and evolving needs.

ENABLERS

Practical digital innovations linked and embedded within existing medical information systems.

Continuous training and mentorship of PHC doctors and nurses, including use of low-cost, blended learning approaches and cascaded training models.

Clear prioritization of those most at risk for TB to manage workload and improve cost effectiveness.

Strong collaboration across PHC providers, TB facilities, laboratories, and communities.

MEASUREMENT CONSIDERATIONS

TB outcomes are tracked through national PHC and TB information systems, and success is determined by monitoring standard national TB indicators for screening, case detection, treatment initiation, and treatment completion. These are complemented by operational metrics, including time from a patient's first visit to a definitive TB test, uptake of ambulatory treatment from day one, and treatment adherence supported through digital tools. Together, these measures help document how integrated PHC models contribute to improved access, quality, and sustainability of TB services. Although the project promotes comprehensive, people-centered care for people diagnosed with TB, broader PHC service utilization is influenced by multiple actors and reforms, and system-wide integration effects are expected to become more measurable over a longer time horizon, particularly once wartime disruptions subside.

LOOKING AHEAD

The project will continue to invest in training-of-trainers approaches to decentralize training capacity, enable ongoing refresher training, and support the maintenance of competencies over time. In parallel, efforts will focus on strengthening mobile service delivery, improving digital and referral systems, and optimizing the practical use of existing equipment, digital tools, and clinical guidance through mentorship, supportive supervision, and workflow refinement. Together, these efforts will address remaining implementation gaps while supporting broader PHC strengthening and system recovery, further embedding TB services within routine PHC and positioning PHC to deliver more comprehensive, people-centered care in line with evolving MOH priorities.

COUNTRY SPOTLIGHT | **VIETNAM**

Fostering community-led design of integrated HIV and PHC services

IMPLEMENTATION PERIOD

2020 to 2024

TYPE OF INTEGRATION

Service delivery: Expanded package of PHC services through key population-owned and -led one-stop-shop social enterprise clinics.

DEGREE OF INTEGRATION

Convergence: These clinics provide expanded, holistic care services driven by client priorities. The services are provided in a single setting under a collective leadership and management structure.

Photo | A doctor providing consultation about services provided at one of the one-stop-shop clinics supported by USAID/PATH STEPS and led by the key population organization, Glink, in Ho Chi Minh City. PATH for USAID/STEPS.

DESCRIPTION

In partnership with the Ministry of Health, the USAID/Healthy Markets and STEPS projects supported the development, launch, and scale-up of sustainable one-stop-shop clinics to offer key populations a suite of integrated services, including HIV testing, pre-exposure prophylaxis (PrEP), antiretroviral treatment, and services for tuberculosis, viral hepatitis, sexually transmitted infections (STIs), NCDs, dental care, dermatology, mental health counseling, addiction management, and transgender health care.

RATIONALE FOR INTEGRATION

Key populations were seeking more holistic health care services outside the public sector that were convenient, confidential, and inclusive. Their health care needs span far beyond HIV, and the main reason for seeking care is often not HIV related. One-stop-shop clinics, a model for comprehensive, integrated PHC services, were created with a clear goal to address the needs of key populations (including men who have sex with men, transgender women, and their partners).

IMPACT

Since October 2020, these integrated clinics have served more than 37,400 clients. Most clients initially visited for PrEP or HIV testing, with more than half obtaining additional services at the clinic: 75% received STI testing services, 43% were screened for hepatitis B, 48% were screened for hepatitis C, and 51% received mental health counseling. Furthermore, one-stop-shop clinics played a key role in PrEP access, with 26% of new PrEP clients enrolling after first seeking other PHC services. Mental health screening and care resulted in increased antiretroviral treatment and PrEP retention. The approach also resulted in an increase in transgender women seeking health care, including PrEP services. In addition, the social enterprise nature of these clinics has allowed key population organizations to sustain their services beyond donor funding.[33]

ENABLERS

Robust evidence generation. PATH utilized pilot program data to inform the Government of Vietnam of the merits of an integrated key population-led clinic model. This approach is now encoded in the national HIV law and strategy, with more than 35 clinics and pharmacies available nationwide.

Inclusive design. Since 2015, PATH and key population organizations have worked together to iteratively develop and expand the health care offerings at these integrated clinics. This has been done through incorporating clinic- and community-led continuous quality improvement collaboratives with built-in client feedback mechanisms, as well as mini surveys to assess service preferences, needs, and willingness to pay.

MEASUREMENT CONSIDERATIONS

It is meaningful to measure the impact of offering integrated services as an entry point to HIV service uptake, service retention, and service satisfaction, and vice versa.

Annex

Overview of integration frameworks, including taxonomies and key concepts

GRÉPIN & REICH (2008)

Conceptualizing integration: a framework for analysis applied to neglected tropical disease control partnerships

Many different options exist for integration. To understand the differences, this framework can be used to conceptualize the options based on differences in *domain*, *level*, and *degree* of integration:

Domain relates to what is being integrated (i.e., activities, policies, organizational structure).

Level relates to where integration is occurring (i.e., global, national, local).

Degree relates to how integration is occurring (i.e., coordination, collaboration, consolidation).

- **Coordination:** Communication and information exchange among distinct programs for the purpose of simplifying the implementation of the respective programs. For example, programs could work together at the national level to develop an annual plan for implementation (i.e., in the activity domain and at the national level).
- **Collaboration:** Increased cooperation among disease-specific programs. In addition to increased coordination, this could include the sharing of resources or personnel. For example, multiple programs could purchase vehicles and other equipment together that could then be used by all the programs (i.e., in the activity domain and at the national and regional levels).
- **Consolidation:** Implementation of a portion of or an entire program by another program. Consolidation implies the replacement of either a portion of or the entire program by a new effort or entity. For example, rather than conducting multiple single-disease training sessions for district-level health workers, regional-level health workers could instead offer a single once-a-year training session for multiple-disease programs (i.e., in the activity domain and at the implementation level).

HEATH ET AL. (2013)

A Review and Proposed Standard Framework for Levels of Integrated Healthcare

Based on a review of levels of integration in health care, this issue brief proposes a functional standard framework for classifying integration according to six levels of collaboration/ integration, with key elements, advantages, and disadvantages of each:

- Levels 1 & 2: **Coordinated** (key element is communication).
- Levels 3 & 4: **Co-located** (key element is physical proximity).
- Levels 5 & 6: **Integrated** (key element is practice change).

VALENTIJN ET AL. (2013) and BAUTISTA ET AL. (2016)

Understanding integrated care: a comprehensive conceptual framework

Instruments measuring integrated care: a systematic review of measurement properties

Building from the Rainbow Model for Integrated Care (RMIC),[17] a systematic review of published literature investigated how stakeholders interpret and measure integrated care.[18] Results informed the development of the systematic review framework, an expanded version of the RMIC to operationalize the concept and measurement of integrated care. RMIC measurement tools have been validated in multiple settings.

- **Clinical integration** (micro level): The coordination of person-focused care in a single process across time, place, and discipline.
- **Organizational integration** (meso level): Interorganizational relationships, including common governance mechanisms, to deliver comprehensive services to a defined population.
- **Professional integration** (meso level): Interprofessional partnerships based on shared competences, roles, responsibilities, and accountability to deliver a comprehensive continuum of care to a defined population.
- **Systems integration** (macro level): A horizontally and vertically integrated system, based on a coherent set of (formal and informal) rules and policies between care providers and external stakeholders for the benefit of people and populations.
- **Functional integration** (micro, meso, and macro levels): Focuses on support functions such as financial, management, and information systems.
- **Normative integration** (micro, meso, and macro levels): The development and maintenance of a common frame of reference, such as shared values, culture, and vision.

The RMIC also adopts the continuum of integration model,[28] which describes the **degree of integration** in terms of a continuum that spans the two extremes of **full segregation** and **full integration**, articulated as follows:

- **Linkage** takes place between existing organizational units. It aims at an adequate referral of patients to the right unit at the right time and good communication between the professionals involved to promote continuity of care. The different units and professionals understand who is responsible for each type of service, and there is no cost shifting between them. Clinical guidelines describing what shall be done by whom, and when, are examples of mechanisms used in this form of integration.
- **Coordination** is a more structured type of integration, but it still operates largely through existing organizational units. The aim is to coordinate different health services, to share clinical information, and to manage the transition of patients between different units.
- **Cooperation** implies that resources of different organizational units are pooled to create a new organization. The aim is to develop comprehensive services attuned to the needs of specific patient groups. The comprehensive services are managed through the new organization, which includes close cooperation between different professional groups.

GOODWIN (2016)

Understanding integrated care

Various conceptual frameworks and taxonomies have been developed to characterize integrated care; typically, these have examined:

- The **type** of integration (i.e., organizational, professional, cultural, technological).
- The **level** at which integration occurs (i.e., macro, meso, and micro levels).
- The **process** of integration (i.e., how integrated care delivery is organized and managed).
- The **breadth** of integration (i.e., to a whole population group or specific client group).
- The **degree** or **intensity** of integration (i.e., across a continuum that spans between informal linkages to more managed care coordination and fully integrated teams or organizations).

UNAIDS AND WHO (2022)

Integration of Mental Health and HIV interventions—Key considerations

Models of integrated services include:

- Level 1: **Clinical** and **community** integration.
- Level 2: **Professional** integration; **organizational** integration.
- Level 3: Integration of **service delivery systems**.

WHO (2023)

Integrating the Prevention and Control of Noncommunicable Diseases in HIV/AIDS, Tuberculosis, and Sexual and Reproductive Health Programmes: Implementation Guidance

Various types of integration have been defined, three of which are relevant to this primer:

- **Functional:** Administrative and support functions and activities (financial, medicines, management and information systems) structured and integrated for the primary process of service delivery.
- **Service:** Integration, coordination, and organization of (mainly) clinical health services.
- **Organizational:** Coordination of organizations through contracts, strategic alliances, knowledge networks, or mergers to deliver comprehensive services to a defined population.

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