Updated conceptual and operational framework for integrated health service delivery networks in the Americas

A technical consensus of the Inter-American Development Bank, the World Bank, and the Pan American Health Organization to strengthen integrated health service delivery networks in the Region of the Americas

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Washington, D.C., 2025

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ISBN: 978-92-75-13069-8 (PDF)
ISBN: 978-92-75-23069-5 (Print version)

Suggested citation: Pan American Health Organization, Inter-American Development Bank, and The World Bank. Updated conceptual and operational framework for integrated health service delivery networks in the Americas. A technical consensus of the Inter-American Development Bank, the World Bank, and the Pan American Health Organization to strengthen integrated health service delivery networks in the Region of the Americas. Washington, D.C.: PAHO; 2025. Available from: https://doi.org/10.37774/9789275130698.

Cataloguing-in-Publication (CIP) data: Available at http://iris.paho.org; https://www.iadb.org/en, and https://www.worldbank.org/ext/en/home.

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Acknowledgments

The Pan American Health Organization, the World Bank, and the Inter-American Development Bank express their deepest gratitude to the ministries of health of the countries of the Region of the Americas for the valuable insights, knowledge, and expertise they contributed to the preparation of this technical document.

Likewise, the commitment and dedication of country teams, advisors, experts, and consultants who participated in the review, discussion, and validation of the contents of this publication are acknowledged, ensuring its technical relevance and applicability to the various realities existing in the Region.

This publication is the result of a joint effort, reflecting the spirit of interinstitutional collaboration and a shared commitment to strengthening health systems, developing integrated health service delivery networks, and advancing toward universal health with equity, quality, and sustainability.

Abbreviations

A4PHC	Alliance for Primary Health Care in the Americas
IHSDNs	integrated health service delivery networks
NCDs	noncommunicable diseases
PAHO	Pan American Health Organization
PHC	primary health care

Foreword

Universal health is a collective goal that requires sustained, person-centered, structural transformation. In this context, integrated health service delivery networks (IHSDNs) represent one of the most strategic and operational expressions of primary health care (PHC), as they translate PHC principles into concrete interventions for reorganizing services and ensuring effective access to continuous, high-quality care throughout the life course. This publication presents the technical consensus: *Updated conceptual and operational framework for integrated health service delivery networks in the Americas,* the result of a wide-ranging, collaborative process led by the Alliance for Primary Health Care in the Americas (A4PHC).

This publication brings together lessons learned, accumulated evidence, and recent experiences, including lessons learned from the COVID-19 pandemic, which revealed the structural weaknesses of segmented and fragmented systems, but also reaffirmed the value of putting in place integrated, resilient service delivery networks with a strong territorial basis. This update redefines the components of IHSDNs and proposes a revamped conceptual and operational framework, underpinned by attributes such as effective coordination, results-based management, digital transformation, and social participation. It also incorporates innovative elements such as progressive network maturation, a territorial approach, and the strengthening of multilevel governance.

The consolidation of IHSDNs is not only a technical challenge but also a political, institutional, and cultural one. It involves overcoming historical inertia, shifting away from disease-centered models of care, and reconfiguring how health services are planned, funded, managed, and evaluated. This publication recognizes that there is no single path or universal model, and proposes a flexible, adaptable framework that respects the institutional and territorial realities of each country while promoting common principles of equity, solidarity, participation, and quality. This technical consensus is, therefore, both a call to action and a guide to accelerate the transformation of health systems, from the local to the national level, in line with the health needs of the peoples of the Americas.

The A4PHC reiterates its commitment to the development of more accessible, integrated, people-centered health systems. The objective of this publication is to facilitate understanding, adaptation, and implementation of the new IHSDN framework and to serve as a useful tool for decision-makers, managers, and technical teams who are leading health transformation processes in their respective territories. We trust that this joint effort will contribute to solid progress toward more equitable, sustainable health systems that are prepared to deal with current and future health challenges in the Region of the Americas.

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Introduction

The conceptual foundations of integrated health service delivery networks (IHSDNs) in the Americas date back to 2009 and the adoption of Pan American Health Organization (PAHO) Resolution CD49.R22, which formally recognized primary health care (PHC) as the cornerstone for reorganizing fragmented health systems *(1, 2)*. This resolution emerged after a decade of regional consultations and policy discussions, culminating in a consensus that described how fragmentation of services perpetuated inequitable access, inefficient use of resources, and unfavorable health outcomes. By grounding IHSDNs in the tenets of PHC, PAHO sought to operationalize these networks through coordinated, person-centered models of care capable of addressing both individual and collective health needs *(1, 2)*.

The adoption of this resolution led to its implementation in a wide range of contexts. Several countries in the Region of the Americas moved forward with the implementation of IHSDN-based models of care, achieving significant progress in reducing access gaps, strengthening coordination across levels of care, and leveraging data for health management *(3)*. These experiences have included deployment of multidisciplinary teams, incorporation of community health workers, standardization of care pathways, and strengthening of information and prevention systems at the local level *(4, 5)*.

Despite these advances, the COVID-19 pandemic exposed some persistent challenges. The segmentation of health systems hindered coordination of essential services during the emergency – with population groups in conditions of vulnerability being particularly affected *(6)* – and such segmentation still limits the operational consistency of IHSDNs *(7, 8)*. Although in many countries health care is organized on a territorial basis, in which the population is assigned to or registered with health services in a specific geographic area, these policies often are not fully implemented due to segmented subsystems, fragmented services, and poor territorial organization, leading to difficulties in accessing quality care *(3)*. Coordination between management levels and care services also remains limited and is generally restricted to the public sector *(9, 10)*. Moreover, people sometimes seek care directly at hospitals, although most of their needs and demands could be met in primary care facilities with adequate response capacity *(9)*.

Approximately one-third of the population in the Region has limited access to health care *(11)*, with a disproportionate concentration of unmet health needs in Indigenous communities, rural

areas, and low-income areas. These issues are occurring in a context in which the Region faces emerging challenges, such as the rise of noncommunicable diseases (NCDs), population aging, and epidemiological changes associated with the social determinants of health (Box 1) *(12)*.

BOX 1. Emerging challenges for integrated health service delivery networks

The Region of the Americas faces increasing challenges as a result of accelerated population aging and the epidemiological transition. By 2030, the number of people over 60 will exceed the number of children under 5, a trend that has driven a 31% increase in mortality from noncommunicable diseases (NCDs) since 2000.[a] Currently, NCDs account for 81% of all deaths in the Region, with cardiovascular diseases causing 34.8% of those deaths.

This situation is compounded by the presence of comorbidities: 65% of older adults live with multiple chronic conditions that need to be managed through coordinated, multidisciplinary interventions. The economic impact is also significant. Costs associated with NCDs from 2010 to 2030 are expected to reach USD 47 trillion, while productivity losses associated with diabetes could amount to USD 2.1 trillion by 2030.[a]

In light of this situation, and considering the need to address other priorities such as maternal and child health, vector-borne diseases, and the risks of epidemics and natural disasters, health systems capable of integrating individual care, public health strategies, and responses to the social determinants of health are required.[b] Integrated health service delivery networks provide a strategic response by facilitating coordination among different social actors, including healthcare providers, to deliver health promotion, prevention, recovery, rehabilitation, and palliative care services. Simultaneously, they promote social participation and intersectoral collaboration among health services, public health agencies, and organizations working to address the social determinants of health, with the aim of improving access to services and enhancing the continuity and quality of care.[b]

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a Pan American Health Organization. Leading causes of death and disease burden in the Americas: noncommunicable diseases and external causes. Washington, D.C.: PAHO; 2025. Available from: https://doi.org/10.37774/9789275128626.

b Valentijn PP, Schepman SM, Opheij W, Bruijnzeels MA. Understanding integrated care: a comprehensive conceptual framework based on the integrative functions of primary care. Int J Integr Care. 2013;13:e010. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC3653278/.

As is clear from the preceding paragraphs, while significant progress has been made in the development of IHSDNs in the Region, gaps persist that require renewed multilateral action. In this context, the Alliance for Primary Health Care in the Americas (A4PHC), which brings together PAHO, the World Bank, and the Inter-American Development Bank, provides a strategic opportunity to strengthen and accelerate the transformation of health systems and make them more integrated, resilient, and people-centered models of care, focusing on persons, families, and communities.

This multilateral initiative seeks to coordinate technical and financial efforts, promote innovation, and support countries in overcoming persistent gaps in access and quality in their health services *(13)*. As part of this joint effort, the present report introduces a new conceptual and operational framework for IHSDNs in the Americas, consisting of strategic actions and comprehensive interventions that can be adapted to the diverse scenarios and realities of every country and territory in the Region.

1 Innovations included in this update

This proposal presents an innovative update to the document *Integrated health service delivery networks: Concepts, policy options and a road map for implementation in the Americas*, published by PAHO in 2011 *(2)*. In addition to introducing novel elements that respond to the current challenges faced by health systems, this version draws on the experience accumulated, resolutions adopted, technical documents developed, and lessons learned over more than a decade (Table 1).

One of the main changes consists of strengthening governance as a process guiding institutional transformation; another is the explicit defining of responsibilities and roles at all three levels of management: macro, meso, and micro. This distinction enables more effective coordination between the strategic, tactical, and operational levels of a health system, strengthening their capacity to respond in a comprehensive, integrated manner to the health needs of the population and the social determinants that drive them.

Another innovative aspect is the adaptation of IHSDNs for the implementation of person-, family-, and community-centered models of care, with a life course approach. This approach has been embraced in several resolutions and technical documents in recent years (Table 1) and, in this update, it is consolidated as an organizing principle for IHSDNs. Such models guide service delivery toward more accessible, effective, and equitable care, based on the development of competencies for the delivery of a comprehensive continuum of care.

Additionally, this version incorporates processes for the organization of networks on a territorial basis, linking management of the health situation with intersectoral and intergovernmental actions and social participation. This entails the adaptation of health services to the particular demographic, epidemiological, social, and cultural conditions of each territory, promoting universal access and well-being through integrated public policies and the implementation of a Health in All Policies approach.

Another key improvement in this update is change management, which is at the center of IHSDN development. Emphasis is placed on the need to facilitate adoption of new organizational and operational practices to minimize resistance, promote a results-oriented culture, and foster collective action aligned with the strategic objectives of the network.

This proposal departs from the traditional hierarchical model of care levels (primary, secondary, and tertiary) and instead suggests a more flexible organizational structure that integrates services of different types and complexity. Such a transformation promotes continuity of care, cross-cutting clinical and administrative processes, and greater adaptability to local realities and therefore facilitates the consolidation of a dynamic, people-centered network that operates in a more coherent, effective, and efficient manner.

Finally, this update incorporates a dedicated strategic feature related to the digital transformation of the health sector, which is viewed as an enabling condition for the integrated operation of IHSDNs. Emphasis is placed on telehealth and the use of emerging technologies such as artificial intelligence, alongside the development of interoperable health information systems, strengthening of data management, cybersecurity, ethical use of personal data, and digital health literacy *(14)*. These elements are essential to supporting clinical, administrative, and public policy decisions based on timely and reliable evidence.

These changes are reflected in a revamped set of domains and essential attributes of IHSDNs that will enable this updated framework to be implemented. Overall, this proposal seeks to strengthen the integration, equity, quality, and sustainability of health systems through an institutional and operational architecture that is better suited to contemporary challenges.

TABLE 1. Pan American Health Organization documents and resolutions related to the development of integrated health service delivery networks, 2014–2022

Document or resolution	Year	Description
Strategy for Universal Access to Health and Universal Health Coverage[a]	2014	Promotes equitable access to quality services, strengthened governance, improved financing, and multisectoral coordination.
Sustainable Health Agenda for the Americas 2018–2030 (SHAA2030)[b]	2018	Defines 11 objectives for transforming health systems, placing priority on people-, family-, and community-centered services.
Report of the High-Level Commission: Universal Health in the 21st Century: 40 Years of Alma-Ata[c]	2019	Reaffirms primary health care as a strategy for addressing the social determinants of health and ensuring community participation.
PAHO Strategic Plan 2020–2025[d]	2020	Prioritizes equity and a multisectoral approach to reduce inequities, aligned with SHAA2030 and the Sustainable Development Goals.
The Essential Public Health Functions in the Americas: A Renewal for the 21st Century[e]	2020	Proposes a comprehensive approach that combines individual, collective, and intersectoral services to strengthen health systems.
Operational Framework for Primary Health Care: Transforming Vision into Action[f]	2021	Emphasizes leadership, governance, financing, and care models to implement PHC and strengthen IHSDNs.
Strategy for Building Resilient Health Systems and Post-COVID-19 Pandemic Recovery to Sustain and Protect Public Health Gains[g]	2021	Addresses the structural weaknesses exposed by the COVID-19 pandemic and promotes PHC, the essential public health functions, and sustainable financing.
Policy on Integrated Care for Improved Health Outcomes[h]	2022	Promotes the integration of services to improve outcomes, strengthening IHSDNs and PHC through a digital approach and community participation.

Document or resolution	Year	Description
Expanding Equitable Access to Health Services: Recommendations for Transforming Health Systems toward Universal Health[i]	2022	Provides recommendations for transforming systems through new models of care and intersectoral collaboration.
Policy for Recovering Progress toward the Sustainable Development Goals with Equity through Action on the Social Determinants of Health and Intersectoral Work[j]	2022	Proposes intersectoral and community actions to reduce inequities, highlighting health as a linchpin of sustainable development.
Plan of Action for Strengthening Information Systems for Health 2024-2030[k]	2024	Promotes the implementation of lines of action to strengthen the management and governance of information systems for health.

PHC: primary health care; IHSDNs: integrated health service delivery networks.

Sources:

a Pan American Health Organization. Strategy for Universal Access to Health and Universal Health Coverage [Resolution CD53.R14]. 53rd PAHO Directing Council, 66th Session of the Regional Committee of WHO for the Americas; 29 September–3 October 2014. Washington, D.C.: PAHO; 2014. Available from: https://iris.paho.org/handle/10665.2/7652.

b Pan American Health Organization. Sustainable Health Agenda for the Americas 2018–2030. 29th Pan American Sanitary Conference, 69th Session of the Regional Committee of WHO for the Americas; 25–29 September 2017. Washington, D.C.: PAHO; 2017. Available from: https://iris.paho.org/handle/10665.2/49170.

c Pan American Health Organization. Universal Health in the 21st Century: 40 Years of Alma Ata. Report of the High Level Commission. Washington, D.C.: PAHO; 2019. Available from: https://iris.paho.org/handle/10665.2/50960.

d Pan American Health Organization. Strategic Plan of the Pan American Health Organization 2020–2025: Equity at the Heart of Health. Washington, D.C.: PAHO; 2020. Available from https://iris.paho.org/handle/10665.2/52473.

e Pan American Health Organization. The Essential Public Health Functions in the Americas. A Renewal for the 21st Century. Conceptual Framework and Description. Washington, D.C.: PAHO; 2020. Available from: https://iris.paho.org/handle/10665.2/53124.

f World Health Organization, United Nations Children's Fund (UNICEF). Operational Framework for Primary Health Care: Transforming Vision into Action. Geneva: WHO, UNICEF; 2021. Available from: https://iris.who.int/handle/10665/337641.

g Pan American Health Organization. Strategy for Building Resilient Health Systems and Post COVID-19 Pandemic Recovery to Sustain and Protect Public Health Gains [Resolution CD59.R12]. 59th PAHO Directing Council, 73rd Session of the Regional Committee of WHO for the Americas; 20–24 September 2021. Washington, D.C.: PAHO. 2021. Available from: https://iris.paho.org/handle/10665.2/58304.

h Pan American Health Organization. Policy on Integrated Care for Improved Health Outcomes [Document CSP30/10]. 30th Pan American Sanitary Conference, 74th Session of the Regional Committee of WHO for the Americas; 26–30 September 2022. Washington, D.C.: PAHO; 2022. Available from: https://www.paho.org/sites/default/files/csp30-10-e-policy-integrated-care_0.pdf.

i Pan American Health Organization. Expanding Equitable Access to Health Services: Recommendations for Transforming Health Systems toward Universal Health. Washington, D.C.: PAHO; 2022. Available from: https://iris.paho.org/handle/10665.2/55659.

j Pan American Health Organization. Policy for Recovering Progress toward the Sustainable Development Goals with Equity through Action on the Social Determinants of Health and Intersectoral Work [Document CSP30/8]. 30th Pan American Sanitary Conference, 74th Session of the Regional Committee of WHO for the Americas; 26–30 September 2022. Washington, D.C.: PAHO; 2022. Available from: https://www.paho.org/sites/default/files/csp30-8-e-policy-sustainable-development-goals_0.pdf.

k Pan American Health Organization. Plan of Action for Strengthening Information Systems for Health 2024–2030 [Document CD61/7]. 61st PAHO Directing Council, 76th Session of the Regional Committee of WHO for the Americas; 30 September–4 October 2024. Washington, D.C.: PAHO. 2024. Available from: https://iris.paho.org/handle/10665.2/64384.

2 Theory of change of integrated health service delivery networks

In this publication, an IHSDN is defined as a set of organizations and health services that coordinate and integrate their roles and interventions to address the health needs of a defined population within an assigned territory. These networks provide comprehensive, accessible, continuous, available, high-quality, person-, family-, and community-centered care with a life course approach. They are also accountable for the outcomes obtained and for the health status of the population served.

IHSDNs provide comprehensive care encompassing health promotion, disease prevention, health recovery, rehabilitation, and palliative care at varying levels of complexity. In addition, they carry out public health interventions, incorporate health programs and appropriate technologies, and address the social determinants of health through intersectoral and intergovernmental actions and social participation, for which they have appropriate governance, management, organizational, and financing mechanisms in place.

The strategic objectives of IHSDNs are as follows:

- **Improve equitable access to quality health services:** Ensure that all persons, regardless of their socioeconomic status, geographic location, or cultural context, can access quality, safe, timely, person-, family-, and community-centered healthcare services, without facing any barriers to such access.

- **Strengthen continuity of care:** Ensure that individuals receive comprehensive care throughout their life course, with seamless transitions between different levels of complexity and various settings, incorporating actions from priority health programs and public health interventions. Continuity of operations to preserve response capacity in the event of emergencies or disasters must also be ensured.

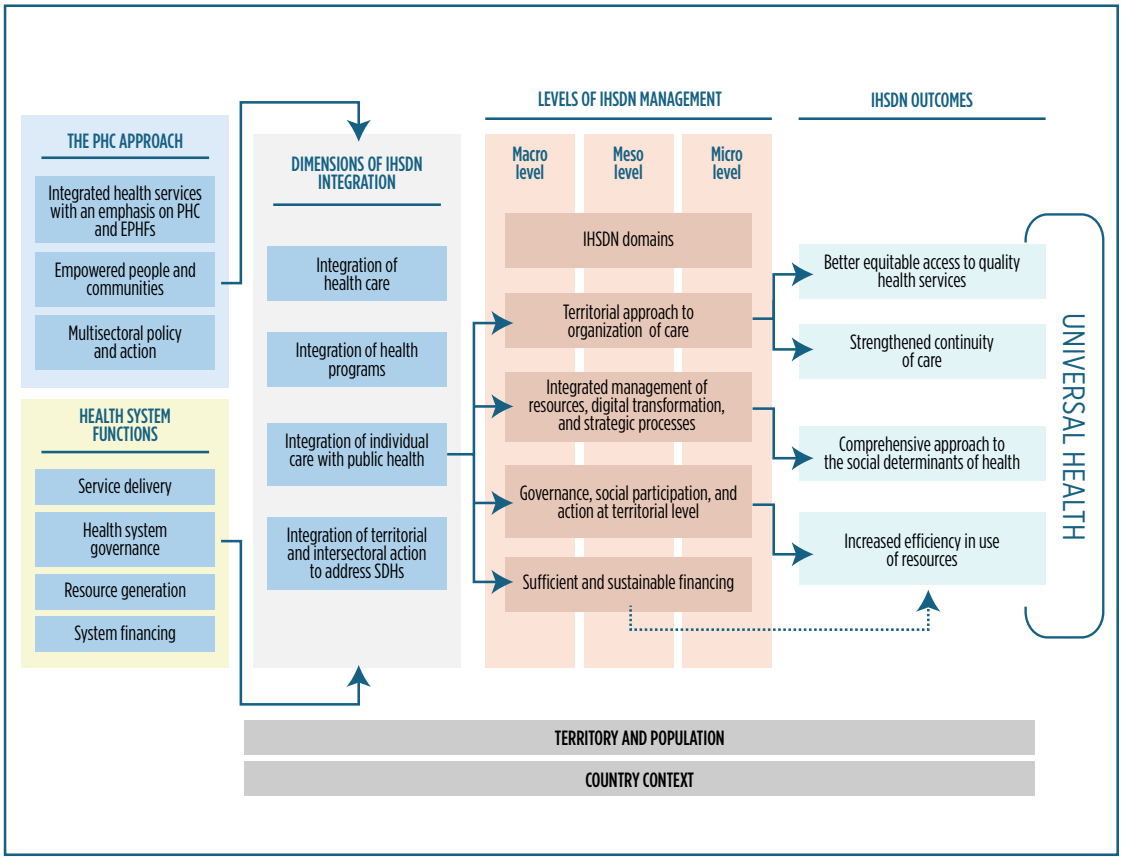
- **Increase efficiency in the use of resources:** Optimize available human, technological, financial, material, information technology, organizational, educational, and collaborative resources to avoid deficiencies and duplication of efforts and improve operational efficiency in the delivery of health services.

- **Address the social determinants of health:** Facilitate coordination between different sectors (health, education, and social services, among others) and promote community involvement to comprehensively address the social determinants of health and improve the health status of the population.

Figure 1 presents the proposed conceptual and operational framework for the implementation of IHSDNs, structured according to the key elements guiding its development. This framework is based on the core tenets of PHC and the essential functions of health systems, as expressed through the four dimensions of IHSDN integration. These dimensions form the basis for the organization of the strategic domains that guide activities at the macro, meso, and micro levels, adapted to the context at the local territorial and national levels. The overarching goal of this framework is to advance toward universal health. Interaction between the domains

and dimensions of integration enables concrete outcomes to be achieved, such as equitable access to quality health services, continuity of care, efficient use of available resources, and promotion of intersectoral coordination. All of the above is framed within the political, social, economic, and cultural context of each country, which determines both the baseline situation and the possibilities for transformation. This approach makes it possible to consolidate IHSDNs as a comprehensive, flexible tool for reconfiguring health systems around the real needs of persons, families, and communities and for advancing progressively toward fairer, more efficient, sustainable systems *(2, 15–19)*.

FIGURE 1. Conceptual and operational framework for the implementation of integrated health service delivery networks



EPHFs: essential public health functions; IHSDNs: integrated health service delivery networks; PHC: primary health care; SDHs: social determinants of health.
Source: Adapted from World Health Organization, United Nations Children's Fund (UNICEF). Operational Framework for Primary Health Care: Transforming Vision into Action. Geneva: WHO, UNICEF; 2021. Available from: https://iris.who.int/handle/10665/337641.

In recent years, various countries in the Region have undertaken processes aimed at strengthening their health systems through the implementation of IHSDNs because of the potential of these networks to overcome fragmentation, improve equity in access, and optimize the use of resources. These actions have translated into institutional reforms, new service organization models, investment in primary care, and strategies for territorial coordination of the levels of care. In this context, several regional experiences have contributed to promoting and consolidating these advances, including the Mesoamerica Health Initiative (Box 2).

BOX 2. The Mesoamerica Health Initiative

The Mesoamerica Health Initiative/Salud Mesoamerica Initiative (SMI) is a public-private partnership aimed at improving access to quality health care for 1.8 million women and children in Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama, and in the state of Chiapas in Mexico. SMI is an innovative development model supporting the transformation of national health systems to expand coverage, access, and use of health services among the poorest women and children in Mesoamerica.

The implementation of SMI has prompted a functional and operational reorganization of service networks in priority areas, which has improved the response capacity of health facilities, the availability of trained human resources, the use of essential technologies, the continuity of care, and coordination with community activities. It has also introduced results-based incentives and rigorous evaluation mechanisms that facilitate continuous improvement and sustainability of achievements.

This model demonstrates how an approach adapted to the political, social, and economic context of each country can be used to further the integration of services centered on the real needs of people and communities. SMI is thus a concrete manifestation of the IHSDN theory of change and demonstrates that it is indeed possible to transform health systems to make them more fair, efficient, and sustainable and to advance toward the realization of the right to health for all.

Source: Salud Mesoamerica Initiative [Internet]. Available from: https://www.saludmesoamerica.org/en.

3 Integrated health service delivery networks as an instrument for integration

IHSDNs represent a paradigm shift in the organization of health systems, designed to overcome fragmentation through the territorial and functional unification of services. By promoting coordination across spheres of management and levels of complexity, as well as integration with the public health and social support sectors, IHSDNs reconfigure systems around person-, family-, and community-centered models *(2)*. This transformation replaces disjointed approaches with networks that proactively respond to the health needs of the population through four interdependent dimensions of integration *(2)*:

1. **Integration of health care:** The integration of care ensures seamless coordination across different levels of complexity, with primary care facilities acting as care coordinators. The aim is to eliminate access barriers, ensure smooth transitions between services, and provide joint responses to the health needs of the population *(19)*. The integration of care includes mechanisms and practices that ensure continuity of care with a life course and a person-, family-, and community-centered approach (e.g., standardized clinical practice guidelines and protocols based on electronic health records which serve as a link between primary and specialty care services). This dimension of integration also requires structures for functional coordination between different healthcare providers, which strengthens the comprehensiveness of care, the implementation of specific actions to reduce barriers that hinder access to quality services and care, and the assignment of the population to healthcare providers on a territorial basis to ensure continuity of care.

2. **Integration of health programs:** The aim of integrating programs is to overcome fragmented, disease-specific initiatives and integrate them into comprehensive care models centered on the needs of the population *(20)*. To achieve effective integration, structural organization must be combined with operational adaptability *(21)*. This entails establishing governance frameworks that harmonize policies and mechanisms for planning and funding, as well as developing procedures for oversight across programs. At the same time, a balance must be struck between standardization and flexibility. While IHSDNs provide a guiding framework, their success largely depends on their ability to adapt to the local context. Integration must extend beyond service delivery, encompassing supply chains, support services (including laboratories and blood banks), staff training, and information systems. Experience has shown that gradual integration, based on participatory needs assessments and iterative follow-up, is key to avoiding loss of program effectiveness *(22)*.

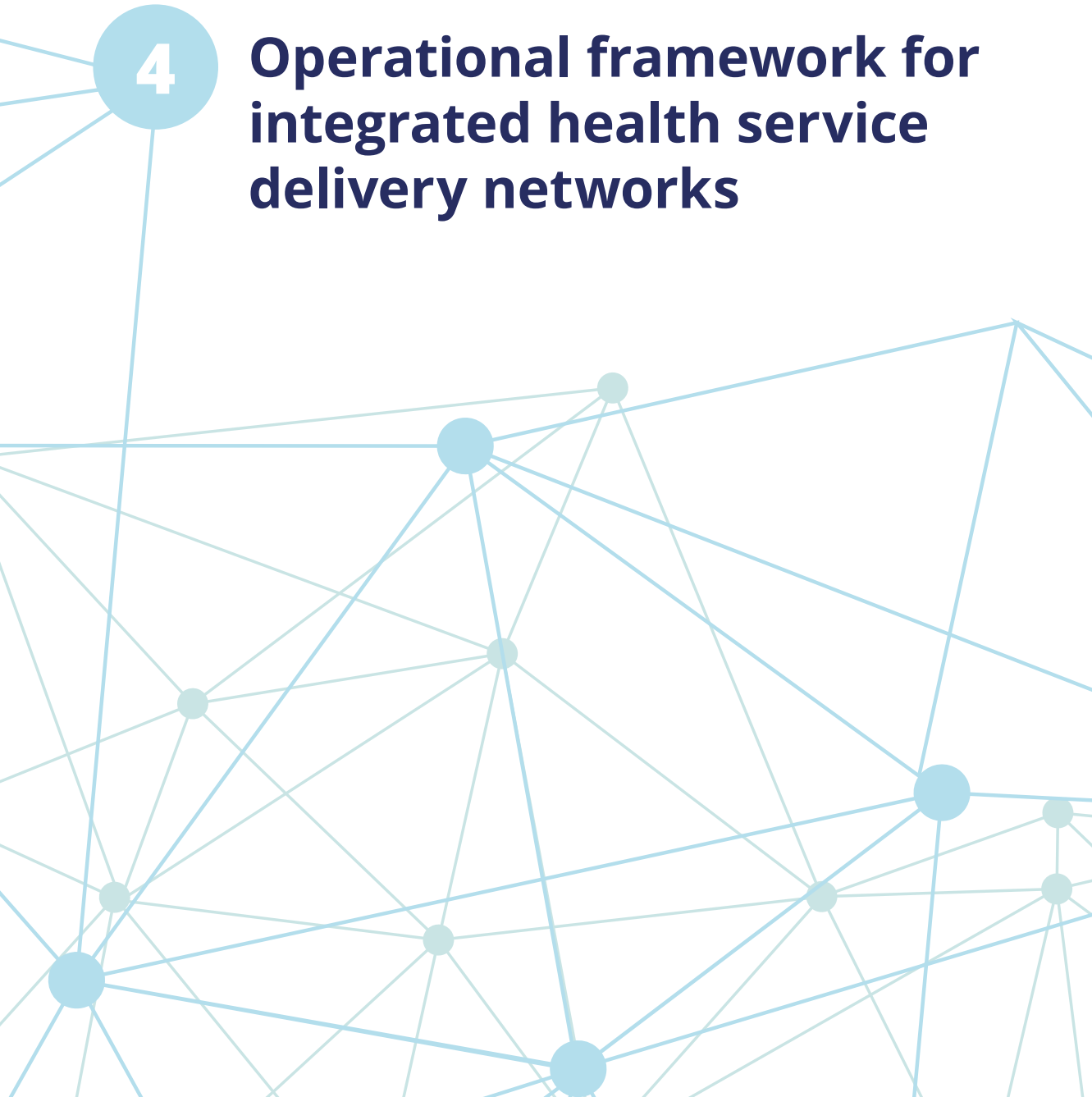
3. **Integration of individual care with public health:** This dimension integrates individual services with population-level actions, ensuring that IHSDNs respond to both individual and collective health needs *(23)*. It is based on the coordination of interventions aimed at risk prevention; health promotion; epidemiological surveillance; and preparedness,

response, and adaptation to emergencies, natural disasters, and climate change, in line with the essential public health functions framework *(23)*. Key components include participatory risk assessment, which involves communities, primary care teams, and public health agencies in territorial mapping and epidemiological surveillance activities; training of multidisciplinary teams in public health competencies to ensure that all facilities are equipped to manage risks; and the use of interoperable systems that integrate clinical and public health data, supplemented by predictive analysis tools to identify comorbidities. This approach is operationalized through participatory processes to identify major public health issues in the territory, with the collaborative involvement of actors at all levels of the system. This facilitates a coherent, effective, territory-based response, aligned with local priorities and needs.

4. **Intersectoral integration:** Intersectoral integration mobilizes alliances between sectors to address the structural causes of inequities in health. It involves coordinating efforts with and across sectors such as education, housing, labor, transportation, production, environment, and the justice system to address social determinants of health and factors that may affect the well-being of the population *(24)*. This dimension of integration is operationalized by identifying active intersectoral policies; implementing collaborative projects between sectors such as health, education, housing, and social support; and ensuring the allocation of specific resources by each of the sectors involved. These activities enable the development of coordinated, sustainable responses aimed at enhancing the comprehensive well-being of the population. The foregoing is accompanied by systematic evaluation of the impacts of intersectoral policies on health, as shown by indicators such as reductions in diseases influenced by social determinants of health and improvements in living conditions and collective well-being.

The four dimensions of IHSDN integration are not merely conceptual postulates; they translate into operational activities that directly impact key organizational and operational processes of the network. The identification of these dimensions is the result of a regional consensus and a normative trajectory that has prioritized intersectoral coordination; person-, family-, and community-centered care; and resilient health systems (Table 1).

4 Operational framework for integrated health service delivery networks



The operational framework comprises the set of functions, strategies, and processes that structure and guide the organization and operation of an IHSDN. This framework is organized into functional domains, attributes, and management levels, which interact to ensure efficiency, accessibility, and quality in service delivery (Table 2). The implementation of this framework requires a multilevel approach in which national policies are adapted to realities in the catchment area or territory concerned, ensuring both strategic and operational coherence *(4, 17, 18)*.

TABLE 2. Domains and attributes of integrated health service delivery networks

Domains		Attributes	
1	Territorial approach to organization of care	1	Catchment area (territory) and assigned population
		2	Person-centered health care throughout the life course
		3	Effective mechanisms for coordination of care
		4	Delivery of responsive, quality health services
2	Integrated management of resources, digital transformation, and strategic processes	5	Infrastructure and equipment suitable to meet health needs
		6	Human resources management for health
		7	Management of medicines and other health technologies
		8	Management of administrative and logistical support services
		9	Digital transformation of the health sector
3	Governance, social participation, and intersectoral action	10	Governance of IHSDNs
		11	Territorial management of IHSDNs
		12	Effective social participation
		13	Results-based management
		14	Monitoring and information systems for health
		15	Change management
4	Sufficient and sustainable financing	16	Sufficiency and integration of financing
		17	Resource allocation and payment systems
		18	Investment for IHSDN development

IHSDNs: integrated health service delivery networks.
Source: Prepared by the authors.

The domains represent the functional and structural pillars that underpin the organization and operation of IHSDNs. They interrelate to create synergies that strengthen the integration of policies, organizations, and services, optimizing resources and improving health outcomes. There are four domains:

1. Territorial approach to the organization of care.
2. Integrated management of resources, digital transformation, and strategic processes.
3. Governance, social participation, and intersectoral action.
4. Sufficient and sustainable financing.

The attributes, in turn, represent the strategic processes that make up each domain. Each attribute describes an essential quality that must be managed and strengthened to ensure the cohesion and efficiency of the IHSDN.

One key element for the implementation of the framework is the use of differentiated approaches for each level of management: macro, meso, and micro. This distinction makes it possible to organize and coordinate strategic activities according to the scope and role of the different actors within the health system.

This multilevel structure is essential to ensure the coherence, continuity, efficiency, and relevance of interventions and to align national policies with the realities and the actual needs of the population in the territory concerned. This functional distinction among levels does not imply fragmentation, but rather an organized integration and identification of responsibilities that enables effective governance of the network *(16, 23, 25)*.

Box 3 describes the different levels of management.

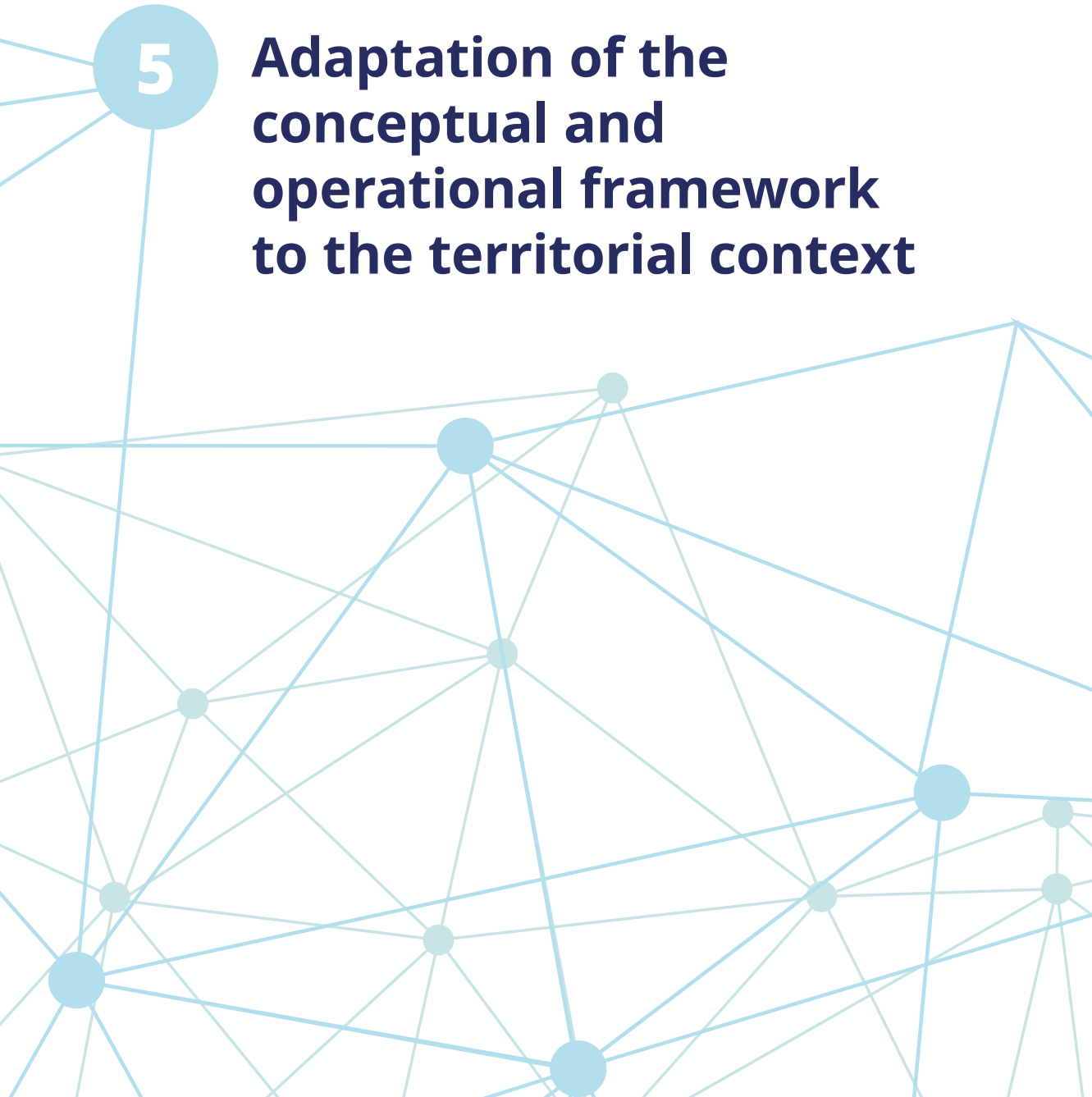
BOX 3. Levels of management

The levels of management are as follows:

Macro management: Occurs at the strategic, normative level and focuses on policy development and adaptation and on system regulation.
Meso management: Occurs at the level of the organizations that make up the network and focuses on coordinating services and activities within a given area or territory.
Micro management: Occurs at the operational level of health care and services; includes clinical management, organization of resources, and direct interactions with people.

Source: Adapted from Valentijn PP, Schepman SM, Opheij W, Bruijnzeels MA. Understanding integrated care: a comprehensive conceptual framework based on the integrative functions of primary care. Int J Integr Care. 2013;13:e010. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC3653278.

5 Adaptation of the conceptual and operational framework to the territorial context



To apply the conceptual and operational framework proposed in this publication to different countries and health systems, the particularities of each context must be considered. While the essence of the PHC strategy and the PHC-based approach must be maintained, their implementation should be flexible and tailored to the specific conditions and needs of each area or territory.

This requires a deep understanding of national, subnational, and local realities and of the structural, institutional, and cultural variability of health systems. Contextual adaptation must consider the specific characteristics of care models, the organization of system financing, institutional capacities, the availability and distribution of resources, and the epidemiological, demographic, social, and geographic situation.

The approach to this adaptation should ensure that it will be possible to respond to any urgent problems occurring in the territory, while also taking into account the long-term strategic outlook. This entails prioritizing attributes that address immediate needs while ensuring that interventions are in line with a comprehensive development perspective.

Multiple challenges may arise in the implementation of IHSDNs, including the need for structural transformation in the organization, financing, and delivery of health services. To overcome these barriers, health authorities will need to strengthen governance, coordinate multiple actors, have adequate methodologies in place to design health investment plans *(26)*, ensure adequate and sustainable financing, and promote innovation both in management and in the use of resources and information technologies.

Some of the most significant barriers include resistance to change, fragmentation of existing services, and budget constraints, all of which should be addressed through sustained leadership, strategic management, transparency, and a comprehensive view of the present and the future.

One of the most complex challenges is the territorialization of health services – i.e., adaptation of the delivery of care and services to the specific characteristics of each region.

Innovation is key to overcoming the challenges of implementing IHSDNs. Each country will need to develop and adopt new strategies that promote the effective integration of technology into its health services. This includes the use of digital technologies to achieve interoperability of information systems, the implementation of results-based funding models, and the creation of work environments that foster intersectoral collaboration. Innovation must become a driving force for a transformation process leading to a health system that is more equitable, efficient, and focused on the needs of the population.

The transformation into integrated networks also requires personnel who are trained not only in clinical care but also in results-oriented healthcare management, the use of technologies, the implementation of a comprehensive care model, person-centered approaches, quality management, and change management. It is also essential to provide incentives for the retention of personnel in rural and remote areas, as this will strengthen the implementation of models of care that are suited to these territories and adapted to their cultural context.

As health systems expand and integrate, their environmental impact must also be considered. Incorporating sustainable care and management practices is crucial, especially to ensure proper management of infectious waste and to reduce the carbon footprint of health facilities.

IHSDNs are not merely a modality or strategy for organizing health services, but rather a transformative approach that places the individual, the family, and the community at the core of all activities. IHSDNs promote the integration of structures, systems, and processes through collaborative, inter-professional, and intersectoral work as a keystone for improving population health. This transformation is rooted in the recognition of health as a human right and the imperative to adopt a vision that sees health not as an expense but as an essential investment for strengthening human capital, productivity, and the sustainable well-being of society. Overcoming fragmented structures and moving toward a comprehensive, PHC-based model of care requires strong governance to ensure that access is universal, that needs are met, and that the social determinants of health are addressed effectively.

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In the face of fragmentation of health systems, persistent inequities, and the challenges exposed by the COVID-19 pandemic, moving toward more integrated, resilient models of care is a priority for countries in the Region of the Americas. Integrated health service delivery networks (IHSDNs) provide a solid strategy for reorganizing services around individuals, families, and communities, ensuring effective access to and continuity and quality of care, in accordance with the tenets of primary health care.

This publication – developed jointly by the Pan American Health Organization, the World Bank, and the Inter-American Development Bank within the framework of the Alliance for Primary Health Care in the Americas (A4PHC) initiative – summarizes an update to the conceptual and operational framework for IHSDNs in the Region of the Americas. The product of a wide-ranging cooperative process that built on over a decade of accrued experience and regional evidence, the strategy proposes a revamped, flexible framework that can be adapted to the varied institutional and territorial realities of the countries of the Region.

The update introduces key innovations, such as strengthening multilevel governance, progressive network maturation, change management, digital transformation, and a territorial approach incorporating social participation. It also lays out a robust theory of change, a set of updated core domains and attributes, and operational guidelines that integrate individual-level care, public health, and intersectoral action.

Through a clear, evidence-based approach, this publication offers decision-makers, managers, and technical teams a practical tool for planning, adapting, and implementing strategies to strengthen the equity, sustainability, and responsiveness of health systems in the Region of the Americas.

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