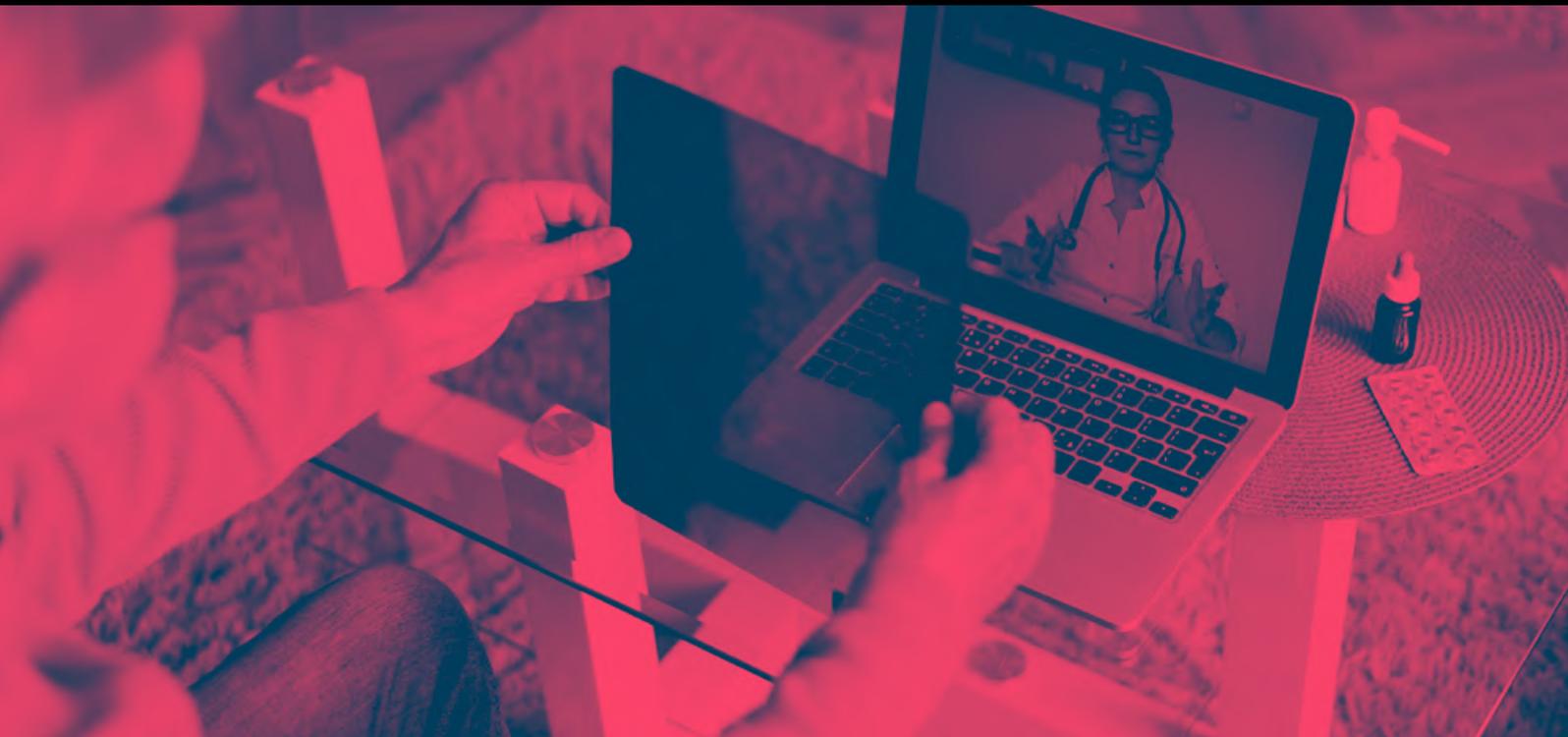




HEALTH INNOVATION & TECHNOLOGY IN LATIN AMERICA & THE CARIBBEAN



HEALTH INNOVATION & TECHNOLOGY IN LATIN AMERICA & THE CARIBBEAN



Copyright © 2024 Inter-American Development Bank ("IDB"). This work is subject to a Creative Commons license CC BY 3.0 IGO (<https://creativecommons.org/licenses/by/3.0/igo/legalcode>). The terms and conditions indicated in the URL link must be met and the respective recognition must be granted to the IDB.

Further to section 8 of the above license, any mediation relating to disputes arising under such license shall be conducted in accordance with the WIPO Mediation Rules. Any dispute related to the use of the works of the IDB that cannot be settled amicably shall be submitted to arbitration pursuant to the United Nations Commission on International Trade Law (UNCITRAL) rules. The use of the IDB's name for any purpose other than for attribution, and the use of IDB's logo shall be subject to a separate written license agreement between the IDB and the user and is not authorized as part of this license.

Note that the URL link includes terms and conditions that are an integral part of this license.

The opinions expressed in this work are those of the authors and do not necessarily reflect the views of the IDB, its Board of Directors, of the countries they represent, nor IDB Lab Donors Committee or the countries it represents.

Contents

Acknowledgment	6
Sector Overview	7
Methodology	8
1. Executive Summary	9
1.1 Regional Trends	11
1.2 Regional Challenges	12
1.3 Regional Landscape	16
2. LAC Health Challenges	22
2.1 Challenge Frameworks	23
2.2 People Challenges	25
2.3 System Challenges	28
2.4 Industry Challenges	31
3. Trends	34
3.1 Strategic Shifts	35
3.2 LAC Health Trends	44
3.3 Investment Trends	49
3.4 LATAM Health Tech 50	55
3.5 Regional Stakeholders	59
4. IDB Lab Portfolio Analysis	65
4.1 Historic Activity	66
4.2 Post-pandemic Activity	77
5. Appendices	79
5.1 Direct Investments	80
5.2 Fund Investments	87
5.3 References	89

Index of Figures

1	Sector Overview	
1.1	Challenges and Opportunities	11
1.2	LAC Health Technology and Innovation Trends	12
1.3	Industry Insight from Regional Stakeholders	14
1.4	The health innovation & technology ecosystem in LAC (2010-2023)	17
1.5	1,200 LAC Health Tech Companies by Sub-sector (Columns) and Cluster (Stacks)	18
1.6	1,200 LAC Health Tech Companies by Country (Columns) and Sub-sector (Stacks)	19
1.7	LAC Venture Capital Investment Trends, 2010-2023	21
2	LAC Health Challenges	
2.1	Challenges	24
2.2	WHO System Challenge Framework	29
3	Trends	
3.1	Strategic Shifts in Global Healthcare	36
3.2	Long-term Innovation-led Shifts in LAC Healthcare	37
3.3	Trend Measures	45
3.4	Trend Drivers	45
3.5	Trend Stages and Evolution	45
3.6	Health Trend Ranking	46
3.7	Key VC Investors in LAC Health	50
3.8	LAC Health Tech Venture Capital, Number of Funding Rounds, 2010-2023	51
3.9	LAC Health Tech Venture Capital, Total Value of Funding Rounds, 2010-2023	51
3.10	Major LAC Health Deals > US\$10M, 1993-2023	52
3.11	2023 LATAM Health Tech 50 and Comparison to 2021 and 2022 Cohorts	56
3.12	2023 LATAM Health Tech 50 Geographical Comparison to 2021 and 2022 Cohorts	56
3.13	2023 LATAM Health Tech 50	57
3.14	PPP in LAC	59
3.15	Health Giants in LAC	60
3.16	Major Finance Organizations in LAC	61
3.17	Foundations and Philanthropy	62
3.18	Tech Giants in LAC	63
3.19	Initiatives and Ecosystem Players in LAC	64

4	IDB Lab Portfolio	
4.1	Health IDB Lab Project Database	66
4.2	IDB Lab Health Innovation Direct Funding, 1998-June 2023, (Excludes VC Fund Funding)	67
4.3	IDB Lab Health Innovation Funding by Operational Type	68
4.4	IDB Lab Health Innovation Project Portfolio by Financial Instrument and Project Age Group	68
4.5	IDB Lab Health Innovation Project Portfolio by Sub-sector and Project Age Group	69
4.6	IDB Lab Health Innovation Project Portfolio by Country	70
4.7	IDB Lab Health Innovation Project Portfolio by Sub-sector and Financial Instrument	71
4.8	IDB Lab Health Innovation Project Portfolio by Country and Financial Instrument	71
4.9	IDB Lab Health Innovation Project Portfolio by Region and Project Age Group	72
4.10	IDB Lab Health Innovation Project Portfolio by Project Age Group and Economic Group	72
4.11	IDB Lab Health Innovation Project Portfolio by Region and Financial Instrument	73
4.12	IDB Lab Health Innovation Project Portfolio by Financial Instrument and Economic Group	73
4.13	VC Funds and Fund Managers where IDB Lab is a Limited Partner (LP)	74
4.14	Number and Amount of Indirect Investments from VC Funds where IDB Lab is an LP	75
4.15	Number of Indirect Investments from VC Funds where IDB Lab is an LP versus LAC Health Innovation Universe (1,000+)	76
4.16	Indirect Investments from VC Funds where IDB Lab is an LP by Country	76
4.17	Post-pandemic IDB Lab Health Innovation Projects	78
5	Appendices	
5.1	Direct Funding – Technical Cooperation	80
5.2	Direct Funding – Investment Grants	85
5.3	Direct Funding – Equity	85
5.4	Direct Funding – Loans	86
5.5	VC Fund Investments	87

Acknowledgment

We are delighted to present this comprehensive report, developed jointly between HoloniQ and IDB Lab which maps and identifies the challenges, trends and investments in health startups across Latin America

IDB LAB PROJECT TEAM

Gabriel Catan Burlac, Associate Investment Unit and Health Innovation Specialist, IDB Lab

Ruben Doboin, Senior Specialist Knowledge Unit, IDB Lab

Tuany Kaori Nakama, Senior Investment Officer, IDB Lab

Tetsuro Narita, Senior Specialist Investment Unit, IDB Lab

Moonkyung Cho, Associate Investment Unit, IDB Lab

The team would like to acknowledge the contributions from **Jennifer Nelson**, Senior Digital Health Specialist, IDB; **Cristina Simon**, Director Social Infrastructure, BID Invest; **Fermin Vivanco**, Lead Specialist Discovery Unit, IDB Lab and **Maria Sarrio Magenti**, Intern Discovery Unit, IDB Lab

HOLONIQ

Patrick Brothers, Co-CEO

Vernon Baxter, Vice President Health

Juanita Botero, Associate

PUBLICATION

Editing and Translation by **Fernando Santillan**, RedDog Narratives

Design by **Alejandro Scaff**

Published April 2024

Foreword

We are delighted to present this comprehensive report which maps and identifies the challenges, trends and investments in health startups across Latin America and the Caribbean. This project reflects IDB Lab's dedication to understanding, promoting and catalyzing innovation in the critical realm of healthcare. In this report we explore the dynamic landscape of health startups in Latin America, presenting the challenges, trends and investments that shape the entrepreneurial spirit driving healthcare innovation in the region.

With its rich diversity and complexity, and given the challenges faced by its health sector, Latin America and the Caribbean presents a fertile ground for health startups. By mapping and identifying the landscape we seek to provide a nuanced understanding of the opportunities and obstacles faced by these ventures; unraveling the threads of innovation and revealing the trends that propel the sector forward.

Understanding the many challenges faced by health startups is crucial to developing effective strategies for sustainable growth. This report sheds light on the regulatory, financial or logistical hurdles encountered by startups, offering insights for policymakers, investors and entrepreneurs.

At the same time, we analyze the investment landscape, recognizing the key role of financial support in nurturing startups. By identifying trends in funding mechanisms and exploring successful case studies, we aim to facilitate further investments that can contribute to the growth and scalability of innovative healthcare solutions.

This report is a testament to the collaborative spirit that defines IDB Lab. It is the result of shared knowledge, collective effort and a commitment to fostering an environment where health startups can thrive. This report can help envision a future where the challenges serve as steppingstones for progress, the trends guide strategic decisions and more investments propel Latin American and the Caribbean health startups to new heights. We hope this report inspires dialogue, informs decisions and paves the way for a vibrant and resilient health startup ecosystem in Latin America and the Caribbean.

Sincerely,



Irene Arias Hofman

CEO

IDB Lab

Methodology

This report is based on primary, secondary and tertiary research conducted between July and November 2023.

- **Interviews**

Qualitative research and interviews were conducted between July and November 2023 with public and private sector experts, startups, growth stage companies, investors and IDB staff.

- **Open Source Global Health Taxonomy**

The industry taxonomy used in this analysis is based on the Open Source Global Healthcare Landscape and can be found at www.globalhealthcarelandscape.org.

- **Company and Investment Data**

Company and investment data and analysis are based on HolonIQ's proprietary data platform, which includes company and deal classifications, amounts and investor profiles. The investment data includes deals up to December 1, 2023.

- **IDB Lab Funding Data**

IDB Lab funding data is as provided and approved by the IDB. IDB Lab funding was further classified by HolonIQ on a subjective five point scale to reflect the extent of health innovation. Each funding initiative was further classified based on the Open Source Global Health Taxonomy. All IDB Lab Funding data is accurate up to 1 May 2023.

- **Trends**

Analysis of the health trends impacting LAC is consistent with HolonIQ's framework for analyzing trends across all geographies and relevant sectors. Relevant market trends are analyzed and assessed against the following criteria.

Hype	Level of hype / interest in the issue
Likelihood	Likelihood of sustainable impact
Impact	Scope of impact generated



1. Sector Overview

1. Sector Overview

The health systems of Latin America and the Caribbean (LAC) are among those with the greatest challenges in the world. Home to over 650 million people, the region presents limited access to quality services and significant health disparities. The region's growing health burden is straining public services, driving high levels of out-of-pocket expenditure and degrading the population's health and wellbeing. There is, however, a significant opportunity to accelerate positive, systemic improvements in the health and wellbeing of LAC, specifically for poor, vulnerable and disadvantaged people and populations, through technology-led innovation.

Today, LAC lacks the necessary momentum and the scale of regional solutions required to secure a healthy and prosperous future for all. After a major drop in investment through 2023, health innovation and technology in LAC needs leadership, knowledge and capital to mobilize and accelerate the ecosystem.

Catalyzing the health innovation ecosystem will have far-reaching consequences. Health is an essential, yet under-appreciated driver of economic growth, social cohesion and the reduction of inequality. Innovation will play a central role in building the next generation of health systems.

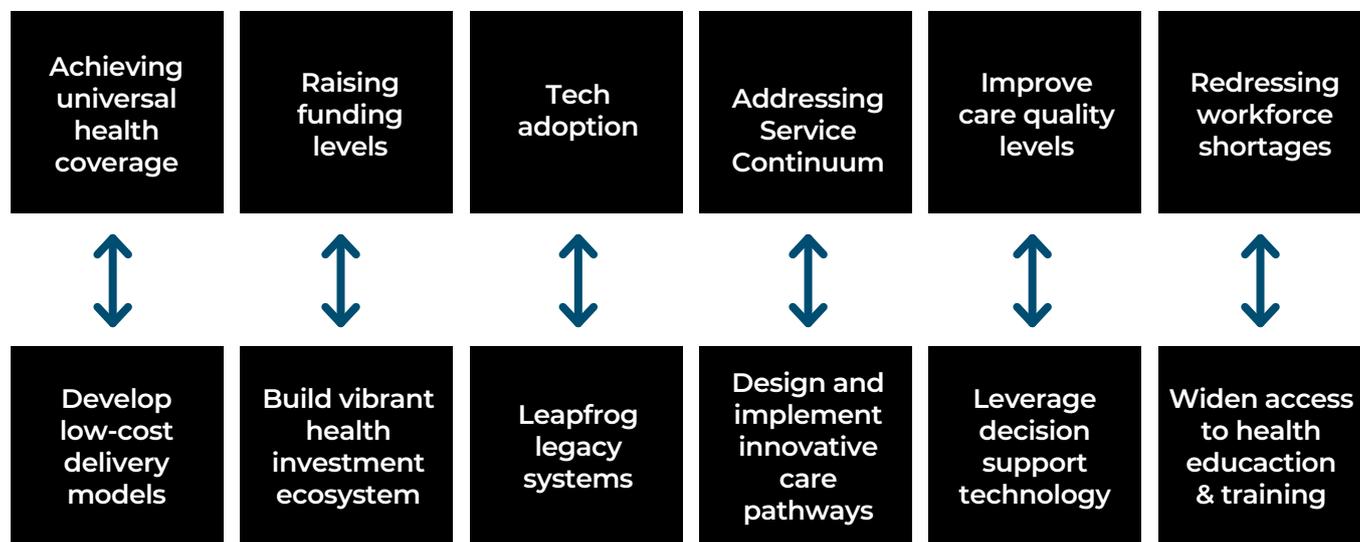
Raising health expenditure levels and standards of care to global norms would not only cost LAC vast amounts, but it would also compound systemic productivity and quality issues. Cost structures must be redesigned to achieve affordable healthcare. Innovative business models and effective technological implementation must be harnessed to improve efficiency and redesign the patient experience.

Several barriers stand in the way of achieving this paradigm shift in LAC health systems (see Figure 1.1). Change management and digital skills are essential for addressing issues of interoperability, regulatory complexity and data integrity. However, these skills are sorely lacking in the region and hard to acquire. Additionally, the effective procurement of technology or reform of commissioning structures are also notoriously difficult for governments if they act in isolation.

Unlocking health innovation across LAC will require a concerted and sustained effort from governments, investors and institutions. The scale of the challenge is matched only by the incredible potential for positive outcomes.

Figure 1.1. Challenges and Opportunities

Six Key Challenges for LAC



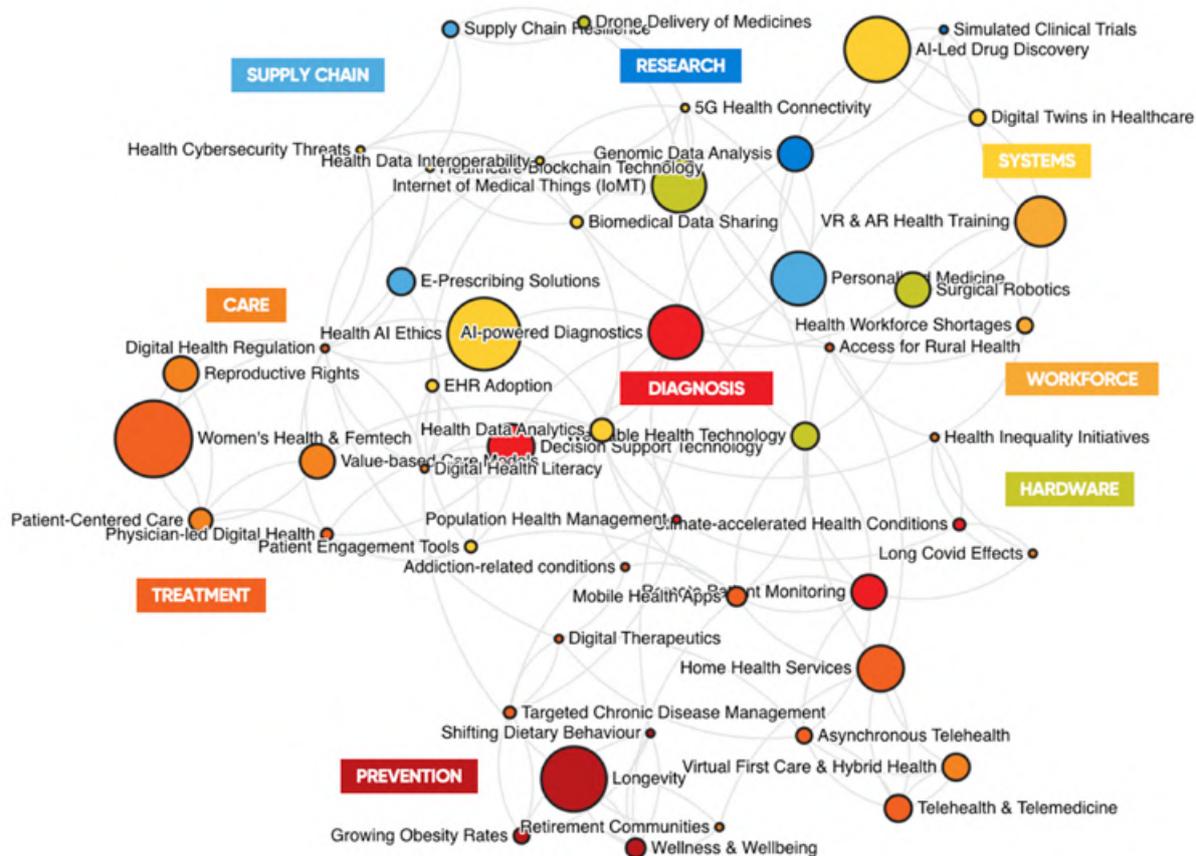
Six Key Opportunities for LAC

1.1 Regional Trends

Healthcare faces a multitude of trends that are impacting the market. HolonIQ has sifted through them and identified the 50 health innovation and technology trends that will shape the future of healthcare in LAC. From these 50 trends, this report identifies 15 strategic shifts across healthcare, digital health and biopharma that are outlined in further detail in section 3. An analysis of these 50 trends provides context on the forces driving the future of healthcare in LAC.

LAC healthcare is witnessing a period of significant strain on resources, but also one of fundamental change. Healthcare lags considerably behind peer industries in its adoption and integration of new technologies, as social, political, systemic and financial challenges hamper the successful rollout of innovations and new technology. Nevertheless, there is a thriving ecosystem where the successful application of new models, technologies and behavioral shifts are having a positive impact.

Figure 1.2 illustrates the LAC health trend environment, connecting the 50 trends identified in health innovation and technology that share similar underlying models, concepts or technologies. Trends are classified on several dimensions and scored on hype, likelihood and impact. Further detail on trends and strategic shifts is outlined in section 3.

Figure 1.2. LAC Health Technology and Innovation Trends

1.2 Regional Challenges

This report looks at LAC health challenges from three perspectives: people challenges experienced by the LAC population, system challenges inherited from the region's health frameworks and industry challenges.

People Challenges

The region's principal healthcare challenge is one of resources as health economies in LAC spend 6% to 7% of GDP on healthcare while the global average is 9% ([OECD](#)). The existence of large and often inaccessible rural areas also presents difficulty. A high percentage of the population struggles to access basic levels of care, and many public services suffer unsustainable strains.

The region presents unique people challenges for healthcare providers. LAC has the second highest obesity rate in the world, and increasing levels of urbanization are leading to more sedentary lifestyles. It is estimated that more than a quarter of the population is insufficiently active, contributing to the rise of lifestyle diseases.

LAC populations are disproportionately impacted by certain disease areas. Non-communicable diseases (NCD) such as cardiovascular diseases, diabetes, cancer and respiratory illnesses are the leading causes of death. NCD account for approximately 80% of all deaths in the region ([PAHO](#)). The region also faces capacity issues in responding to a growing demand for mental health care. Additionally, mental health services are frequently concentrated in urban centers, making them less accessible to those living in more isolated regions.



Latin America has the second **highest obesity rate globally**, with **24.2%** of its adult population classified as obese (WHO).

Childhood obesity rates have tripled in the last three decades, with around **7.3 million children** under the age of five being **overweight** or **obese** in the region.



By 2030, it is estimated that **15%** of the Latin American population will be **over the age of 60**, and this figure is projected to rise to **20%** by 2050.

The Pan American Health Organization (PAHO) estimates that around **30%** of the LatAm population suffers from some form of **mental disorder**.



Tuberculosis (TB) remains a significant concern, with LAC accounting for approximately one-third of all global TB cases.

NCDs, including **cardiovascular diseases**, **diabetes**, **cancer**, and **respiratory diseases**, account for around **80%** of all deaths in the region

Figure 1.3. Industry Insights from Regional Stakeholders

In building this report we collected insights from key regional stakeholders through open but unattributed discussions. Here is a selection of the most important insights on the current and future state of LAC's health innovation ecosystem.

“For many entrepreneurs there is a culture of trying to build the next Unicorn this means they're developing businesses to serve US or European markets rather than solutions for LAC's local markets.”

“We're very different from first world countries: major companies need to partner with locals who understand how it works. Companies invest a lot of money trying to solve the big problems, but they don't take the time to understand how it functions: or doesn't function.”

“Providing digital health isn't like streaming Netflix. Tortillas in Mexico aren't like tortillas in the US: you can't just build Chipotle.”

“Following COVID-19 there is a more positive perception of doctors in the ecosystem: they're more appreciated and play a more important role in driving innovation.”

“During the pandemic the growth of telehealth was a natural reaction: we're now experiencing the punch of reality.”

“There is a migration in the VC market towards Health Tech. There is expertise, energy and passion for tackling the problems and following the opportunities in health.”

“One of the main challenges in the region is funding; there are no specialized VC or impact health funds for the region. Those fully dedicated are only in specific countries, mainly Brazil.”

“The ecosystem is still too nascent for regional collaboration: I don't see many companies looking into geo expanding as they still have a journey ahead in their local market.”

“Within a household 80% of health decisions are made by a woman; around 70% of the health workforce are women. We know women are the principal caretakers but only 4% of women are in decision-making roles or managerial positions in the health sector.”

“We see a new generation of patients who want to be in control of their health, are more independent. There is a big opportunity to address this market.”

Demographic shifts are also having profound consequences. By 2030, it is estimated that 15% of the Latin American population will be over the age of 60, rising to 20% by 2050 ([United Nations](#)).

These pressures are exacerbated by the consequences of the COVID-19 pandemic on LAC health systems. As of July 2023, nearly 1.8 million people are believed to have died in LAC due to COVID-19. The country with the highest number was Brazil, reporting around 700,000 deaths, followed by Mexico with 334,000. The region was the most affected economically by the pandemic, with a 7% contraction of GDP (compared with a global average decline of 2.8%).

System Challenges

Only 77% of the region's population meets the World Health Organization's definition of Universal Healthcare Coverage (where "all people have access to the full range of quality health services they need, when and where they need them, without financial hardship"). And many LAC countries face some of the highest levels of out-of-pocket healthcare spending globally. Where public services are universally available there are often considerable waiting times, which drive patients to independent sector providers.

The prevalence and quality of healthcare information systems across LAC countries is also mixed. In many countries patient data is still captured using traditional paper-based methods, which limits the ability to obtain a system-wide view of healthcare activity. Where patient data is captured digitally there are typically issues with interoperability between competing electronic health records systems. The proliferation of digital solutions during COVID-19 may have widened access to health services –or made them more convenient– but it also complicated an already fragmented data ecosystem.

LAC faces systemic challenges around inequitable access to healthcare services. Disparities in healthcare access exist between urban and rural areas, different socioeconomic groups and indigenous populations. The lack of adequate healthcare infrastructure in remote regions contributes to this issue, leaving many vulnerable populations underserved. The availability and affordability of essential medicines and vaccines can also be a barrier to accessing healthcare in certain regions.

Out-of-pocket spending, or unplanned healthcare spending, is a significant component of healthcare financing in LAC, with individuals and families often bearing a considerable portion of healthcare costs. According to the WHO, out-of-pocket spending on healthcare in 2018 accounted for about 35% of total health expenditure in the Americas. High levels of out-of-pocket spending are a symptom of public and insurance-led systems that struggle to meet basic healthcare needs. In Mexico almost 40% of the population access care in this fashion, though this likely underestimates the number of patients taking a blended approach to healthcare costs. In many of the Caribbean countries this figure is well above 50%.

Industry Challenges

High demand for services coupled with relatively low levels of funding means health service providers face a range of challenges, including out-dated equipment, facility maintenance and hiring sufficient staff. In many LAC countries this is increasingly leading to a split between publicly- and privately-delivered services.

A lack of standardized protocols and variation in care quality are also commonplace across LAC health systems. These issues are often compounded by the regulatory environment, which can struggle to keep pace with changing technologies. Budgets for investment in innovative products and technologies are typically inadequate, although this is changing in

some countries. As technology adoption increases, so do concerns about data privacy and security. Ensuring the protection of patients' sensitive health information is essential and a major cultural consideration across the region.

The region presents several challenges for pharmaceutical and drug development companies and is a relatively underdeveloped market. Despite accounting for around 8.3% of global population, the region generates less than 4% of global pharmaceutical revenue. The geographical and political composition of LAC makes establishing efficient and reliable distribution networks challenging. Constraints on health funding also suppresses profitability for pharmaceutical companies. LAC also faces a growing issue with counterfeit medications. The WHO estimates that one in ten medical products in circulation in low- and middle-income countries is substandard or counterfeit. Latin America is the second highest producer of counterfeit medicines globally, behind Asia.

1.3 Regional Landscape

More than 1,200 health innovation and technology companies have been established in LAC over the last decade..

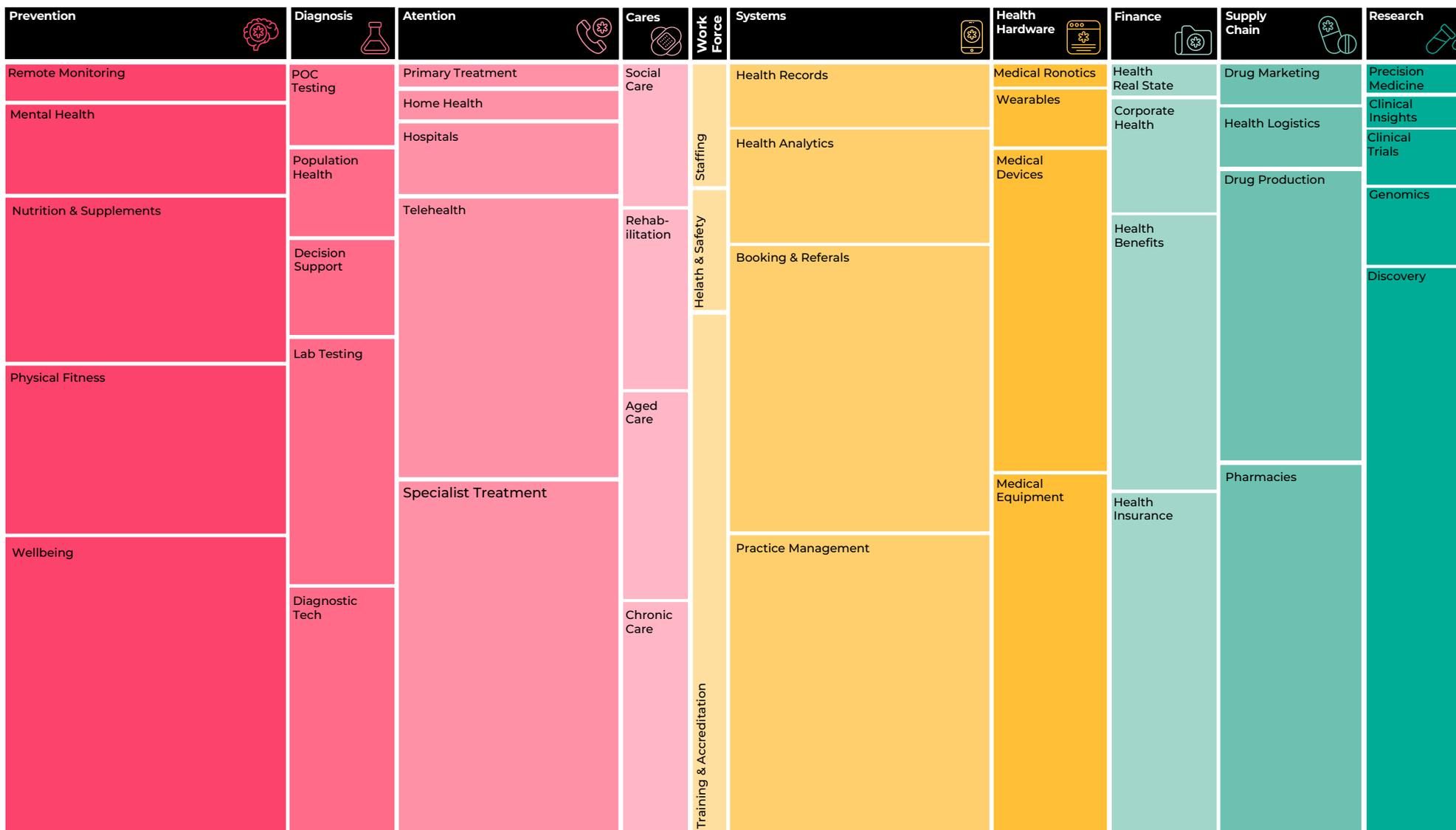
Brazil hosts around half of all health tech companies in LAC and also attracts just under half of the funding. Mexico has a 16% share of all LAC health tech firms, securing a lower relative share of funding. Argentina, Chile and Colombia together make up another 20% of the region's companies, and a slightly lower share of the region's funding.

Health systems across LAC represent a vast opportunity for innovators. The COVID-19 pandemic broke down many barriers for proponents of digitally enabled services, but the region is still at a nascent stage of digital adoption. Developing a comprehensive and connected electronic health record (EHR) database remains a key target for many LAC countries. Likewise, services that can provide telehealth consultations combined with the ability to dispense e-prescriptions have penetrated the market but are not universally available at accessible cost.

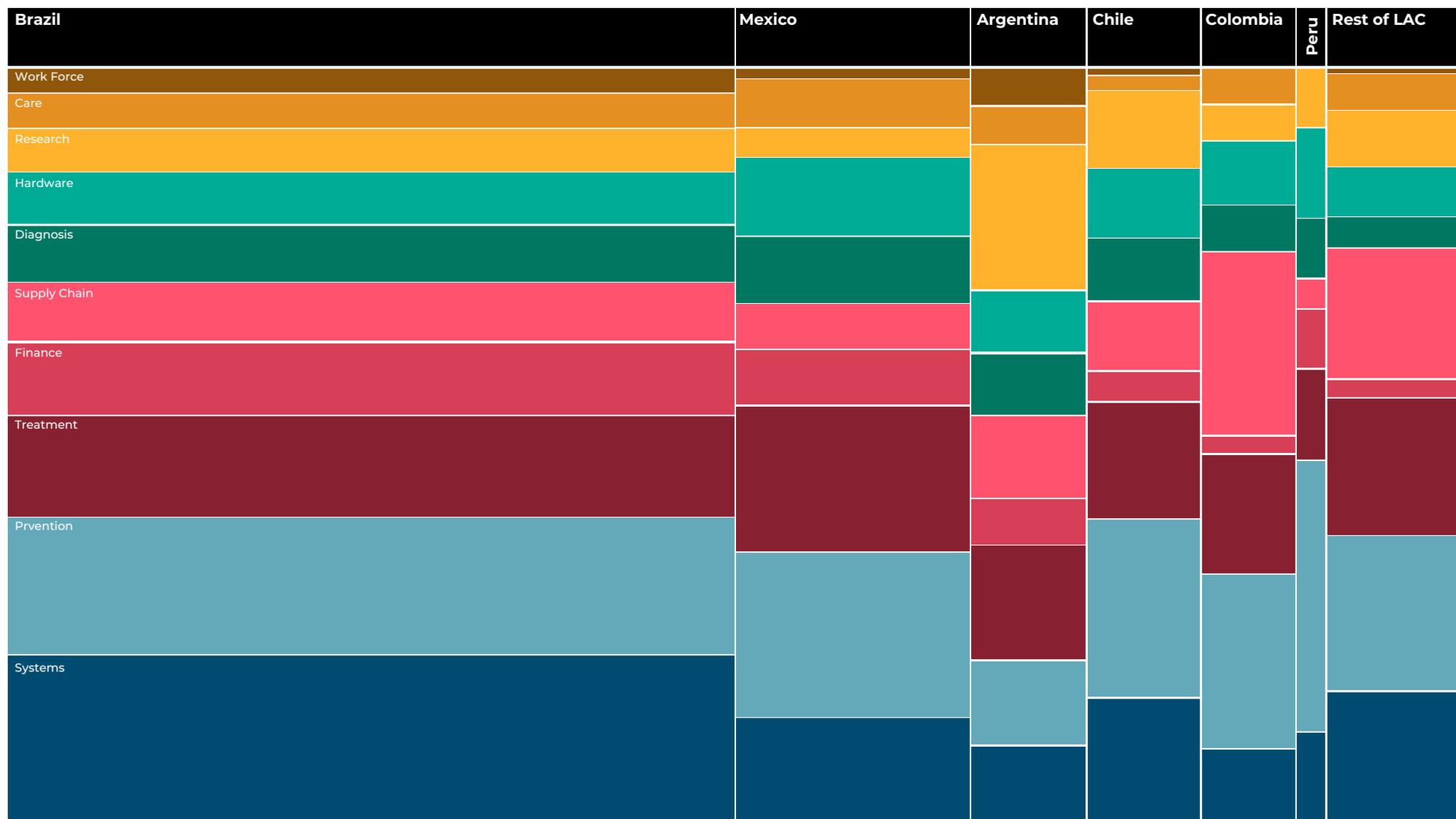
These three areas of digital health (electronic health records, telehealth consultations and e-prescriptions) will be fundamental to improve healthcare services in the region. But, from an innovation standpoint, these services are technologically straightforward with largely commoditized solutions. In telehealth, regional competition is largely about efficiently capturing the physician workforce and building systems that offer continuity of care across multiple channels. These systems also need to seamlessly connect with medical record and pharmacy networks.

Figure 1.4. The health innovation & technology ecosystem in LAC (2010-2023)

Figure 1.5. 1,200 LAC Health Tech Companies by Sub-sector (Columns) and Cluster (Stacks)



The LAC health tech universe has a significant focus on startups working in prevention, treatment and health systems. The pandemic has deepened the focus on areas such as diagnosis and research, and the region’s fintech boom is leading to greater activity in health finance. On the other hand, there is still relatively little activity across workforce and care, and North America and Europe continue to dominate research and hardware.

Figure 1.6. 1,200 LAC Health Tech Companies by Country (Columns) and Sub-sector (Stacks)

Brazil and Mexico dominate LAC's health tech ecosystem, while Argentina, Chile and Colombia all show established ecosystems. The Brazilian market contains a high volume of startups focused on health software solutions (systems), and prevention and treatment are important categories across every country in the region.

LAC's heavy burden of chronic disease creates a significant market opportunity for innovators focused on the prevention or effective management of life-long conditions. Chronic disease management (CDM) is a focus for health systems globally with proven models that reduce costs and improve outcomes for health populations. Technology platforms can be used to better monitor chronic care patients, reducing the frequency of physical consultations –but also flagging to providers when interventions are required.

In large parts of LAC, cost remains the greatest obstacle to accessing healthcare services. In the absence of satisfactory public services patients will turn to private providers even though the cost of consultation and treatment is paramount. The ubiquity of smartphones has created a favorable environment for a low cost telehealth provider operating on a large scale. Outside of telehealth, EHR (electronic health records) and digital pharmacies, LAC is witnessing the emergence of a range of innovative businesses focused on diagnostics, decision support and areas of region-specific clinical relevance –such as scanning for diabetic retinopathy.

Investment

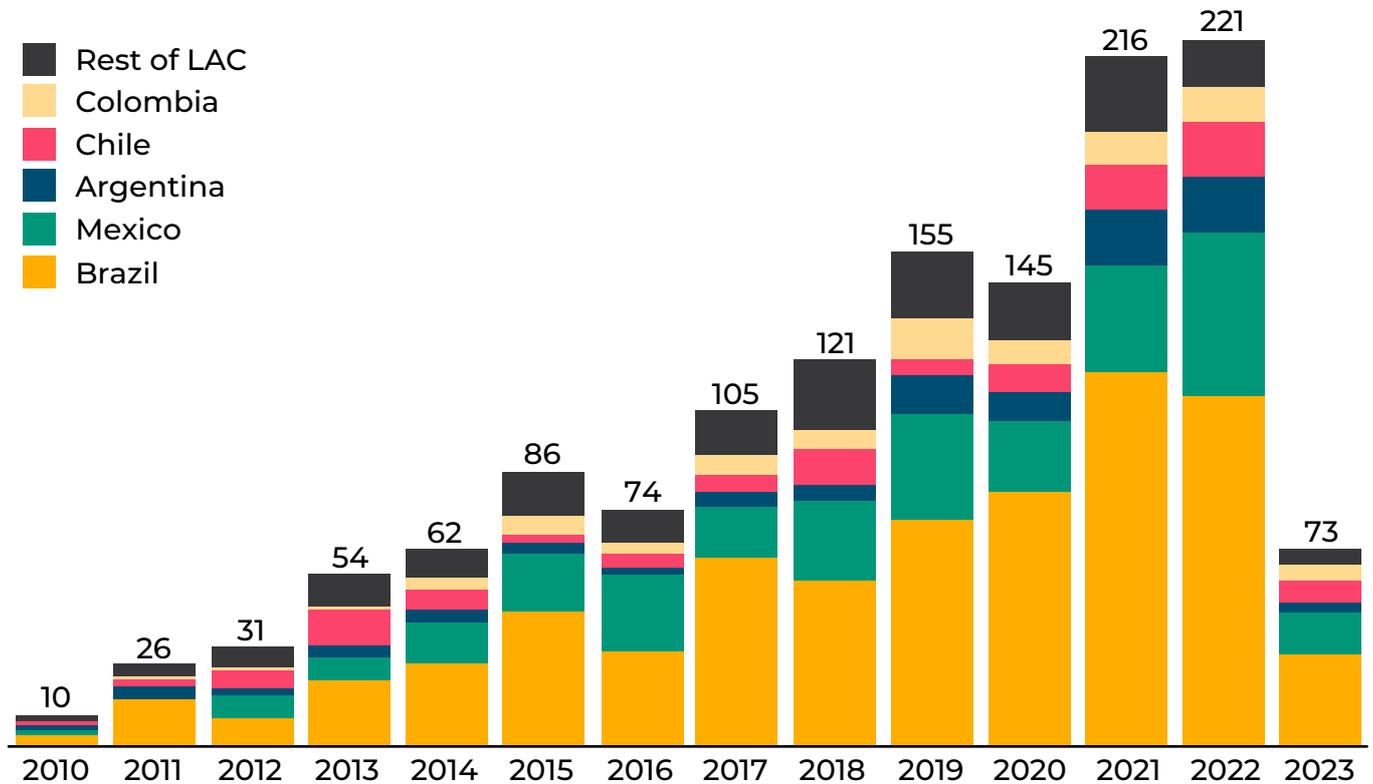
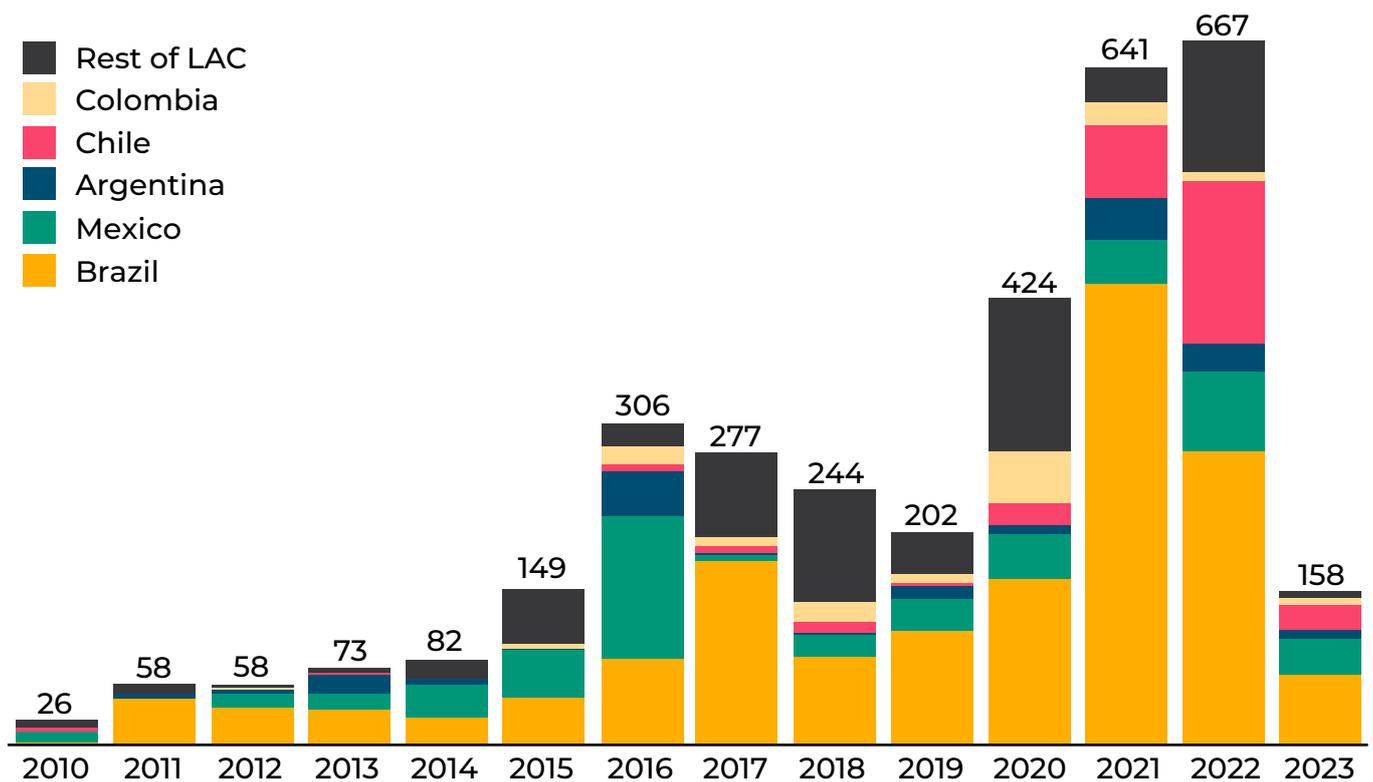
Since 2010, US\$3.3B has been invested in LAC health tech through more than 1,400 funding rounds. The number of funding rounds has grown steadily, reaching over 200 per year through the pandemic. However, in 2023, major shifts in venture capital funding globally have potentially set the region back a decade.

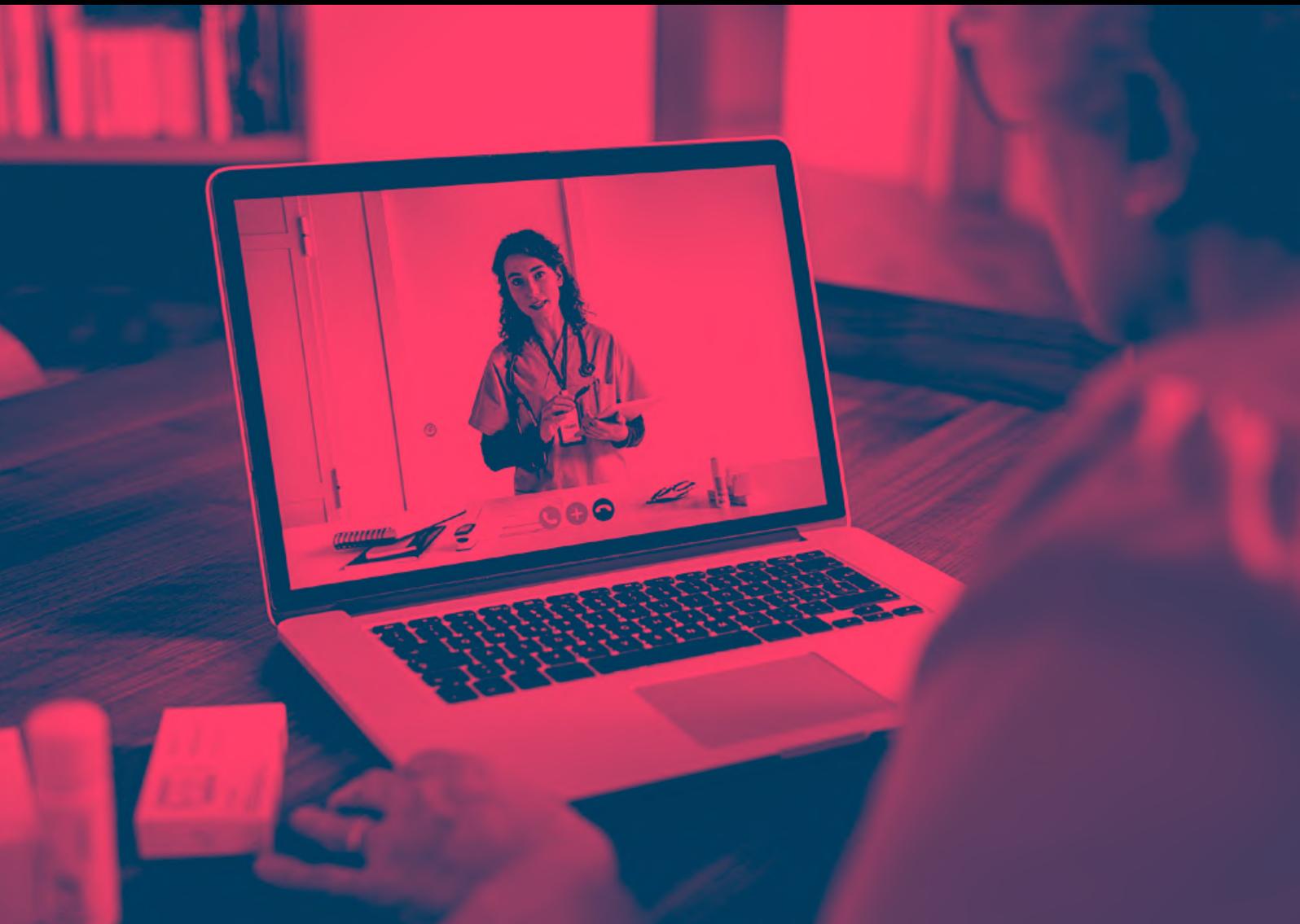
Despite the steady growth and strong funding in prior years, LAC's health investment market remains at an embryonic stage. Even with an uptick in activity during the pandemic there are very few dedicated health funds. Fintech and e-commerce continue to dominate the attention of private investors, while health is often seen as a prohibitively complex market.

The innovation ecosystem required to develop companies from seed to scale is also nascent. A lack of early-stage funding is suppressing the development of investable opportunities, and venture capital often targets a limited number of companies that have been able to achieve sufficient market penetration. Networks between entrepreneurs, investors and industry are being formed but will need to be further strengthened if innovative models are to scale across the region.

Early-stage funding is frequently cited as one of the most significant obstacles facing the LAC health innovation ecosystem. Grant funding for research and development is notoriously difficult to access. Biotech startups targeting the LAC region are often forced to launch and seek funding in the US before returning to local markets.

The LAC health tech venture capital (VC) ecosystem has developed significantly over the past decade; however, it witnessed a sharp correction in 2023 in line with global health VC activity.

Figure 1.7. LAC Venture Capital Investment Trends, 2010-2023**Health Tech Funding Rounds in LAC, 2010-2023****Health Tech Funding in LAC, 2010-2023 USD Millions**



2. LAC Health Challenges

2. LAC Health Challenges

Healthcare leaders across LAC face an array of challenges. The 650+ million people living in the region experience vastly uneven levels of healthcare provision. Universal problems persist, shaped by a combination of social, economic, demographic and geographic factors.

Health economies in LAC spend 6% to 7% of GDP on healthcare compared to a global average of 9%; this, among many other factors, results in large swathes of the population struggling to access basic levels of care and unsustainable strains in many public services.

High levels of obesity are leading to a major chronic disease burden and shifting demographics are changing patient profiles across the region, with demand for aged care and associated services steadily increasing. In fact, non-communicable diseases (including cardiovascular diseases, diabetes, cancer and respiratory diseases) account for around 80% of all deaths across LAC. Furthermore, the COVID-19 pandemic laid bare the weaknesses of health systems in LAC and surfaced the burgeoning mental health challenge faced by the region.

2.1 Challenge Frameworks

The [United Nations](#), [World Bank](#), [OECD](#), [World Health Organization](#), [Pan American Health Organization](#), [IFC](#), and [IDB](#)¹ have all extensively described and assessed the major health challenges faced by LAC and the digital health/health innovation landscape.

The purpose of this section is to synthesize the critical challenges identified in the aforementioned studies as context for analyzing health innovation and technology in the region.

¹ Also see [Going Beyond Normal Challenges for Health and Healthcare in Latin America and the Caribbean Exposed by Covid-19; How New Technologies Are Transforming Health Industry in Latin America and the Caribbean](#)

This report breaks down the various challenges into three key areas: people, system and industry challenges.

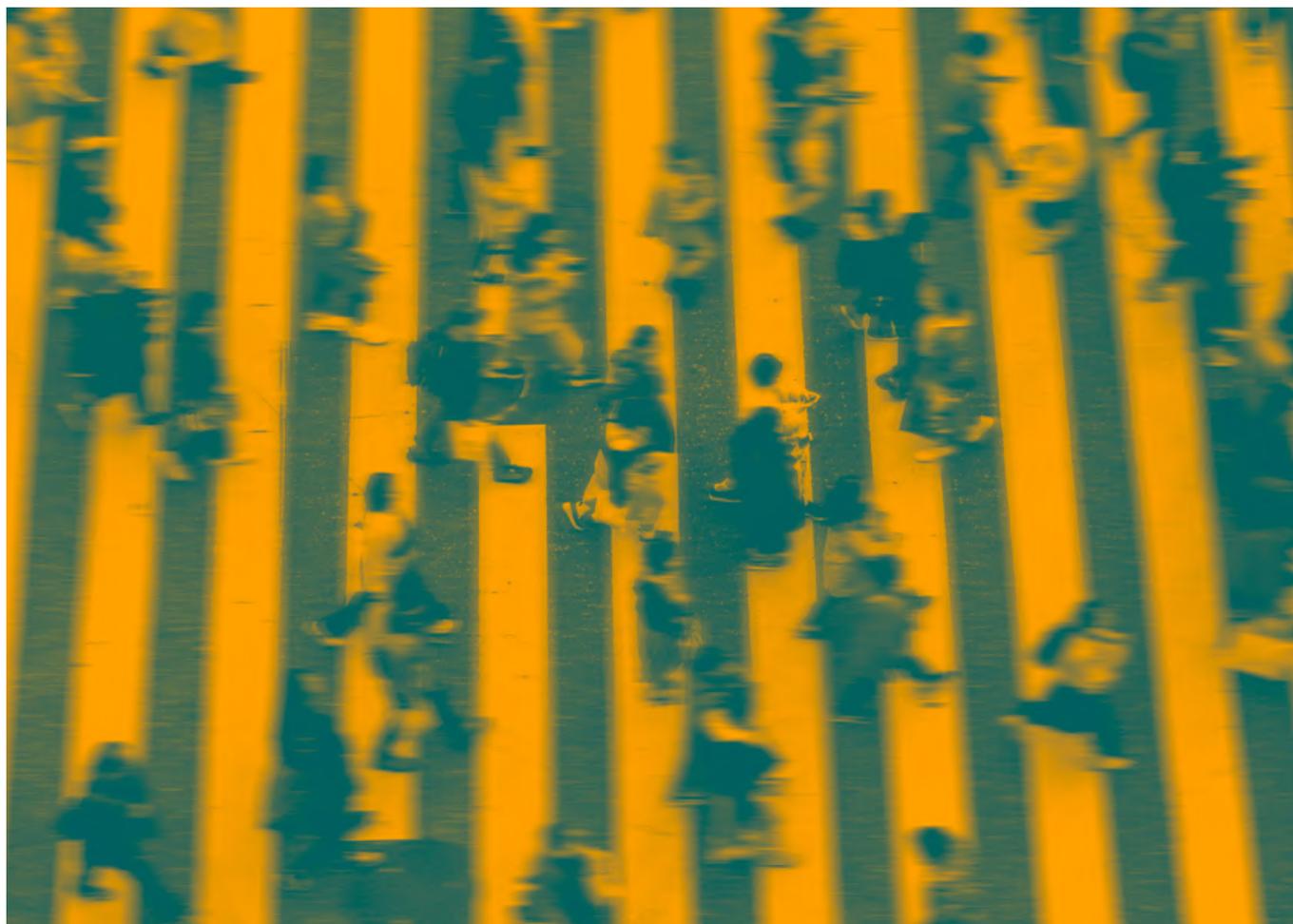
People challenges go to the heart of the population. They address issues such as obesity, mental health, cardiovascular diseases, diabetes, cancer, respiratory illnesses and an ageing population.

System challenges draws on the World Health Organization's framework of Health System Challenges (HSC). This framework considers a health system's challenges as measured against eight dimensions: information, availability, quality, acceptability, utilization, efficiency, cost and accountability.

Industry challenges focus on the providers and suppliers that make up the health market. They address challenges around digital transformation, rural health provision, aged care and counterfeit medicines.

Figure 2.1. Challenges

Dimension	Perspective
People	Challenges faced by individuals, families and communities in LAC
System	Challenges faced by national, state and local health systems
Industry	Challenges faced by public and private health providers and suppliers



2.2 People Challenges

LAC faces an obesity epidemic.

LAC has the world's second highest obesity-rate, which creates numerous challenges for its population and healthcare systems. Among other factors, rising obesity rates stem from changing dietary patterns, with processed food consumption skyrocketing across the region, and increasing levels of urbanization leading to more sedentary lifestyles.

It is estimated that more than a quarter of the region's population is insufficiently active, contributing to the rise of lifestyle diseases. With healthcare services straining under high levels of demand, there is a lack of available public health funds to help combat these trends. Healthcare budgets only have a small fraction allocated to preventive measures (with a focus on curative services). According to the World Health Organization (WHO), the region's obesity prevalence has tripled in the last four decades. Over 60% of the adult population is classified as overweight. Mexico, Brazil, Chile and Argentina have high obesity rates.

Chronic diseases are increasingly consuming health resources.

LAC populations are disproportionately impacted by certain disease areas. Non-communicable diseases (NCD) such as cardiovascular diseases, diabetes, cancer and respiratory illnesses are the leading causes of death.

NCD generate huge costs for health systems as many conditions require long term or life-long treatment. These diseases are often, but not exclusively, linked to lifestyle factors like unhealthy diets, physical inactivity, tobacco use and excessive alcohol consumption.

Studies have also shown that NCD disproportionately affect vulnerable and disadvantaged populations. Socioeconomic factors, such as income, education and access to healthcare, are key determinants in NCD prevalence and outcomes.

It is also typical for NCD patients to have multiple chronic conditions, or comorbidities, which drives further complications and costs for healthcare systems. Addressing comorbidities effectively requires a coordinated and multidisciplinary approach, which can prove problematic across LAC's fragmented provider landscape.

The pandemic revealed the true picture of mental health.

Many healthcare economies globally have recognized the pandemic as a watershed moment for mental health services. Demand for wellbeing and mental health care clearly pre-dated COVID-19 but the period's heightened uncertainty, isolation and sense of existential threat brought these services into focus.

During Argentina's general lockdown, people showed substantial anxiety and depressive symptoms. According to a paper in the [Lancet](#), 33% and 23% of participants in a survey reported possible depressive and anxiety syndromes. A national survey in Brazil found prevalence rates of depression and anxiety as high as 61% and 44%, respectively. One Mexican study documented symptoms of clinically significant post-traumatic stress in 28% of the population studied.

As in other geographies, mental health services across LAC are frequently overshadowed by or under-prioritized behind physical health issues. For many years, stigma, lack of awareness and limited access to services defined the mental health landscape. This remains the reality for many regional health systems but there are clear signs that progress is being made.

Demographic change is fundamentally shifting health demand.

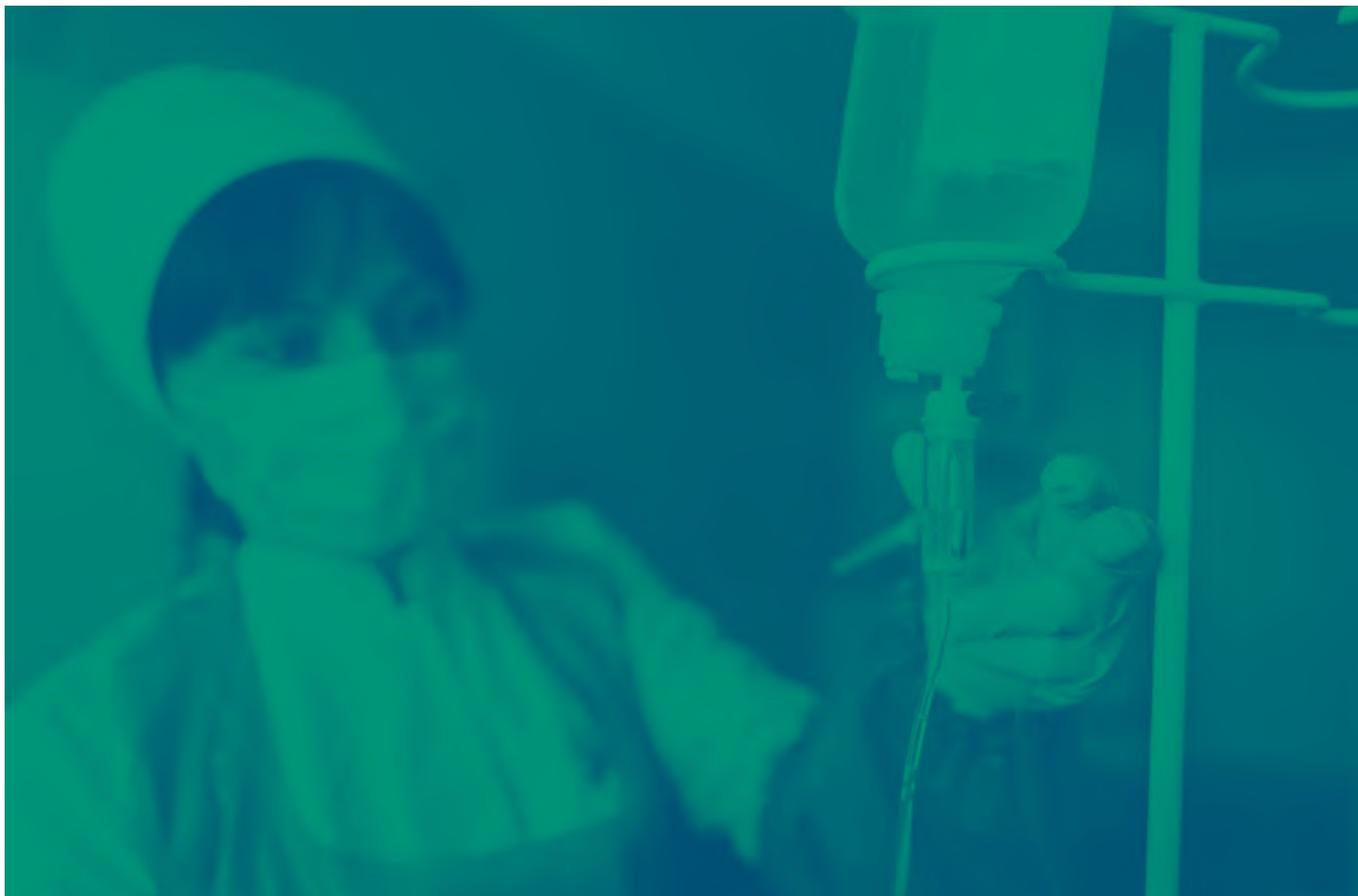
Shifts in the demographic makeup of populations are having profound consequences for health and care needs across the globe, and LAC is no exception. By 2030, it is estimated that 15% of the Latin American population will be over the age of 60, rising to 20% by 2050. These shifts are more pronounced in geographies like North America and Europe, while countries in LAC have comparatively underdeveloped silver economies. Despite its young profile, LAC is the fastest-aging region in the world. While it took 67 years for people over 65 to go from 10% to 20% of the total population of France, the same transition is expected to happen in only 32 years in the average country in the region.

This demographic transition poses further capacity challenges to the region's health systems, as older adults typically consume more healthcare resources. They also largely stop contributing to the taxpayer base once they reach retirement age. Already strained systems are therefore required to make greater investments into geriatric care, chronic disease management, long-term care services and mental health support for the frail elderly. It also creates a regional need for new healthcare infrastructure in the form of nursing homes, assisted living facilities and home-based care.

LAC is recovering from a heavy COVID-19 impact.

The long-term consequences of COVID-19 are still being understood, with initial assessments suggesting that Latin America was the region hardest hit by the pandemic. The health crisis sharply contracted economic growth. In clinical terms, the infection fatality rates were worse compared with higher-income European countries.

As of July 2023, nearly 1.8 million people in LAC are believed to have died due to COVID-19. The country with the highest number was Brazil, reporting around 700,000 deaths, followed by Mexico with approximately 334,000. Economically, the region was the most affected globally, with a 7% contraction of real GDP (compared with a global average decline of 2.8%). In the countries highlighted in this report, real GDP fell 3.3% in Brazil, 8.7% in Mexico, 9.9% in Argentina, 6.1% in Chile and 7.3% in Colombia. If a silver lining is to be found, it is that the heavy toll paid by LAC countries once again demonstrated to regional leaders the extent to which health is central to inclusive and sustainable, economic and social development.



2.3 System Challenges

LAC spans nearly 13% of the world's land surface area and diversity is an essential and inescapable element of its healthcare markets. Across its 33 countries there is a complex mix of health systems; some countries run publicly funded universal healthcare while others rely on social security contributions, private insurance or a mix of public and private provision. Still, healthcare systems face a host of similar challenges across the region, presenting opportunities and obstacles alike for innovators to build products and services that cater to LAC's unique requirements.

The region's principal challenge is inadequate access. Only 77% of the region's population meets the World Health Organization's definition of universal healthcare coverage ([PAHO, 2019](#)), and LAC countries have some of the highest global levels of out-of-pocket healthcare spending. Where public services are universally available there are often considerable waiting times; this is driving a vibrant and growing independent sector in the region –although quality issues persist. Lack of access to adequate healthcare is a major issue in the region, but a wider problem is poor quality care due to unskilled staff, inadequate surgical facilities or improperly managed chronic conditions.

Gaps in healthcare access are primarily driven by levels of available funding and geographical practicalities but there are also several systemic issues that hamper productivity. As with other health systems globally, the region faces a difficult task in accurately recording and harnessing the vast amount of data associated with patient activity. It is also exposed to the global shortfall of health workers.

Our analysis of system challenges draws on the World Health Organization's framework of Health System Challenges (HSC) –see Figure 2.2.

Figure 2.2. WHO System Challenge Framework (WHO, 2023)

Health System Challenges

1	Information	3	Quality	6	Efficiency
1.1	Lack of population denominator	3.1	Poor patient experience	6.1	Inadequate workflow management
1.2	Delayed reporting of events	3.2	Insufficient health worker competence	6.2	Lack of or inappropriate referrals
1.3	Lack of quality/reliable data	3.3	Low quality health commodities	6.3	Poor planning and coordination
1.4	Communication roadblocks	3.4	Low health worker motivation	6.4	Delayed provision of care
1.5	Lack of access to information or data	3.5	Insufficient continuity of care	6.5	Inadequate access to transportation
1.6	Insufficient utilization of data and information	3.6	Inadequate supportive supervision		
1.7	Lack of unique identifier	3.7	Poor adherence to guidelines	7	Cost
2	Availability	4	Acceptability	7.1	High cost of manual processes
2.1	Insufficient supply of commodities	4.1	Lack of alignment with local norms	7.2	Lack of effective resource allocation
2.2	Insufficient supply of services	4.2	Programs which do not address individual beliefs and practices	7.3	Client-side expenses
2.3	Insufficient supply of equipment			7.4	Lack of coordinated payer mechanism
2.4	Insufficient supply of qualified health workers	5	Utilization	8	Accountability
		5.1	Low demand for services	8.1	Insufficient patient engagement
		5.2	Geographic inaccessibility	8.2	Unaware of service entitlement
		5.3	Low adherence to treatments	8.3	Absence of community feedback mechanisms
		5.4	Loss to follow up	8.4	Lack of transparency in commodity transactions
				8.5	Poor accountability between the levels of the health sector
				8.6	Inadequate understanding of beneficiary populations

The fragmentation of health data is a barrier to progress.

The prevalence and quality of healthcare information systems across LAC countries is mixed. In many countries patient data is still captured using traditional paper-based methods. This limits the ability to obtain a system-wide view of healthcare activity. Where patient data is digitally captured there are typically issues with interoperability between competing electronic health records systems. The proliferation of digital solutions during COVID-19 may have widened access to health services –or made them more convenient– but it also complicated an already fragmented data ecosystem.

This lack of cohesion at a data level mirrors the provider landscape, where multiple operators –both public and private – deliver differing levels of services. This complexity can lead to inefficiencies, duplication of efforts and challenges in coordinating care across various healthcare providers. It also impacts the continuity of care for patients, especially those with chronic conditions.

LAC is failing to meet the universal healthcare coverage target.

The region faces fundamental challenges around inequitable access to healthcare services. Disparities in healthcare access exist between urban and rural areas, different socioeconomic groups and indigenous populations. Inadequate healthcare infrastructure in remote regions contributes to this issue, leaving many vulnerable populations underserved. In certain regions, the availability and affordability of essential medicines and vaccines can also be a barrier to accessing healthcare and improving outcomes.

Advances in cellphone data coverage and high-speed internet services are opening up new ways to serve these ‘healthcare deserts’, but limitations around access ultimately comes down to finite resources. In many parts of the region, insufficient healthcare funding and inefficient allocation of existing resources remain major obstacles to delivering quality healthcare services.

Out-of-pocket spending is among the highest globally.

Out-of-pocket spending, or unplanned healthcare spending, is a significant component of healthcare financing in LAC. In other words, individuals and families often bear a considerable portion of healthcare costs.

According to the WHO, out-of-pocket spending on healthcare accounted for about 35% of total health expenditure in the Americas in 2018. High levels of out-of-pocket spending are a symptom of public and insurance-led systems that struggle to meet basic healthcare needs. It also drives poorer healthcare outcomes because patients typically avoid incurring healthcare costs until the latest possible time.

Out-of-pocket healthcare spending varies significantly across countries in the region. In Mexico, almost 40% of the population access care in this way (although this probably underestimates the number of patients taking a blended approach to healthcare costs). In many of the Caribbean countries this figure is well above 50%.

Funding levels are variable and quality is hard to measure.

Healthcare funding in LAC varies across countries, but overall the region spends less on healthcare than the rest of the world. In 2019, average health expenditure per capita in LAC was approximately US\$1,300 while the global average was around US\$1,900. The region's limited healthcare funding has a direct impact on levels of service provision; additionally, many LAC countries also face challenges around effective governance and health policy formulation.

With many countries facing political instability, corruption and inconsistent policy implementation, healthcare is often a key political issue. Health reform programs are therefore vulnerable to abrupt change with new administrations.

This instability means there has been relatively little progress in shifting the focus of health systems from curative to preventive care. This is crucial to reducing the late detection of diseases, lowering treatment costs and improving morbidity rates, although these are notoriously difficult to implement in a cost-constrained environment. Insufficient screening can lead to adverse outcomes for patients across the region. For instance, cervical cancer is particularly prevalent, with Latin America accounting for nearly a quarter of global cases.

The global battle for healthcare resources is impacting LAC.

Many LAC countries face shortages of healthcare professionals, including doctors, nurses and other healthcare workers, or suffer from other healthcare economies attracting clinicians who are able to earn more in other systems. According to the WHO, as of 2019, the average density of physicians in the Americas (including Latin America) was 29.9 per 10,000 inhabitants, whereas the global average stood at 32.6.

There is strong global competition for healthcare workers. The WHO estimates a projected shortfall of 10 million health workers by 2030, mostly in low- and lower-middle income countries. This 'brain drain' on healthcare resources poses a significant challenge for many healthcare systems in the region, and rural areas remain particularly difficult to adequately staff.

2.4 Industry Challenges

Health service providers across LAC are typically resource constrained, impairing their ability to deliver high quality services at scale. High demand for services and relatively low levels of financial funding mean providers typically face challenges in upgrading medical equipment, maintaining facilities and hiring sufficient staff. In many LAC countries this is increasingly leading to a split between publicly- or privately-delivered services. Primary care provision is often accessed directly through out-of-pocket expenditure while acute services are typically delivered by public health systems with lengthy wait times.

The picture is obviously mixed across the region. Some countries, especially those with higher per capita GDP, have well-established healthcare facilities. Others face significant challenges in delivering consistent, high-quality care. Outdated facilities, a lack of standardized protocols and variation in care quality are commonplace across LAC health systems. These issues are often compounded by the region's slow adoption of technology and legacy medical record systems. As LAC's healthcare systems need to evolve in line with demographic changes, the region faces considerable challenges in improving the effectiveness and efficiency of deploying healthcare resources.

LAC health systems lag behind on technology and data.

Healthcare economies globally have persistent and systemic issues relating to the effective use of technology. The critical nature of healthcare services and the primacy of data confidentiality create a difficult environment for the effective adoption of technology-driven improvements. These issues are keenly felt in the region as digital tools and data infrastructure are outmoded or ineffective across LAC.

Many countries are still transitioning from paper-based medical records to electronic health records. Electronic health records (EHRs) improve data management, enable easier access to patient information and support better coordination of care among healthcare providers. However, legacy systems and issues of interoperability often prove a barrier to successful implementation.

COVID-19 proved a watershed moment for telemedicine in LAC, as in most of the world. Telehealth services allow patients to consult with healthcare professionals remotely, enhancing access to healthcare services and reducing the need for in-person visits. This has exceptional promise in LAC, as its application has benefits particularly for remote and underserved areas. Mobile applications and other health-related technologies are gaining popularity in the region, as we will examine in greater depth in section 3.

Despite the advances seen during the pandemic, there are still adoption challenges for digital health solutions. In certain areas of LAC, unreliable internet connectivity and limitations of infrastructure limit the effective roll-out of solutions. Budgets for technology investment are typically inadequate, although this is changing in many countries. The region also faces the same privacy challenges as other health systems. As technology adoption increases, concerns about data privacy and security likewise grow. Ensuring the protection of patients' sensitive health information is essential and a major cultural consideration across the region.

Rural and remote communities present a range of operational challenges.

Outside of the major urban areas, Latin America and Caribbean health systems have to grapple with complex logistical issues. Difficult terrain, limited road access and inadequate transportation infrastructure are found in rural and remote communities. Adequately providing communities with medical supplies, healthcare professionals and equipment remains a constant service challenge.

For health workers, urban centers typically offer better wages and opportunities. Attracting and retaining healthcare professionals in remote locations can be a struggle due to lower salaries and fewer career advancement opportunities.

Rural and remote regions also present unique cultural and linguistic barriers to effective healthcare delivery. The region has numerous indigenous populations with a variety of languages. Delivering healthcare services to these communities often requires a tailored approach aligned with local traditions and beliefs. A lack of health education is also a common problem as there may be low awareness of preventive measures, proper hygiene practices or the importance of seeking medical attention in a timely manner. Cultural beliefs and misconceptions can also influence health behaviors.

A constrained operating environment is stifling regional biotech and pharmaceutical investment.

The region presents several challenges for pharmaceutical and drug development companies in a relatively underdeveloped market. Despite accounting for around 8.3% of the global population, the region generates less than 4% of global pharmaceutical revenue. The geographical and political makeup of LAC makes establishing efficient and reliable distribution networks challenging. Constraints on health funding also suppresses profitability for pharmaceutical companies.

Governments and healthcare systems in the region often aim to provide affordable access to healthcare and medications for their populations. This can lead to negotiations over drug pricing and reimbursement rates, which might impact the profitability of pharmaceutical companies and potentially affect their willingness to introduce certain products to the market.

LAC also faces a growing issue with counterfeit medicines. The WHO estimates that one in ten medical products in circulation in low- and middle-income countries is substandard or counterfeit. Latin America is the second highest producer of counterfeit medicines globally, behind Asia. Large pharmaceutical companies can also struggle with political and economic instability in certain countries. Regulatory changes, currency fluctuations and trade disruptions all contribute to a complex operating environment.



3. Trends

3. Trends

50 health innovation and technology trends are shaping the future of healthcare in LAC. From these 50 trends, this report identifies 15 strategic shifts across healthcare, digital health and biopharma and provides rich context on the forces driving the future of healthcare in LAC.

3.1 Strategic Shifts

Strategic shifts represent profound and lasting transformations in how the world works and industries operate. They represent the cumulative impact of emerging changes in demand, consumer behavior, prices, new models, technological innovation, competition, policy and regulation.

Unlike shorter-lived trends that play out over many years, strategic shifts alter the very foundation of market dynamics, often over decades. Strategic shifts describe the origin and end state of the shift or the 'from' and 'to', indicating the transition from an established status quo to a new, often radically different, market reality.

The foundation of our health innovation and technology analysis in LAC is grounded in identifying the underlying trends and strategic shifts re-shaping healthcare. The future of health in LAC will evolve as one of many different potential scenarios. The scenarios all share in the strategic shift that will greatly impact the healthcare industry.

Figure 3.1 Strategic Shifts in Global Healthcare

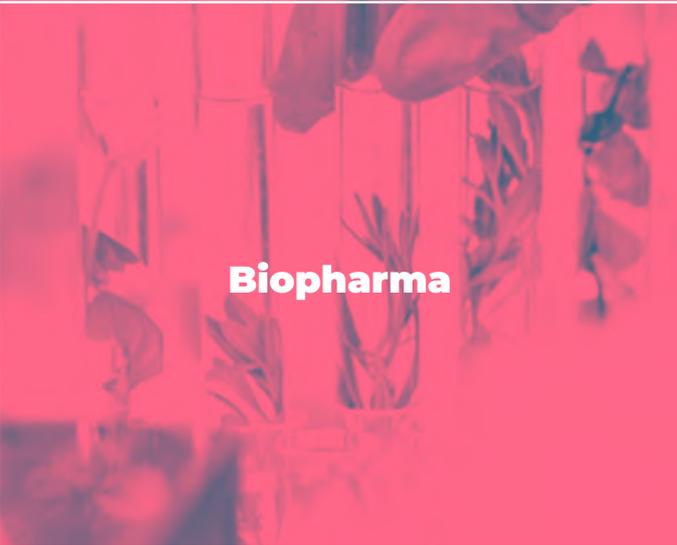
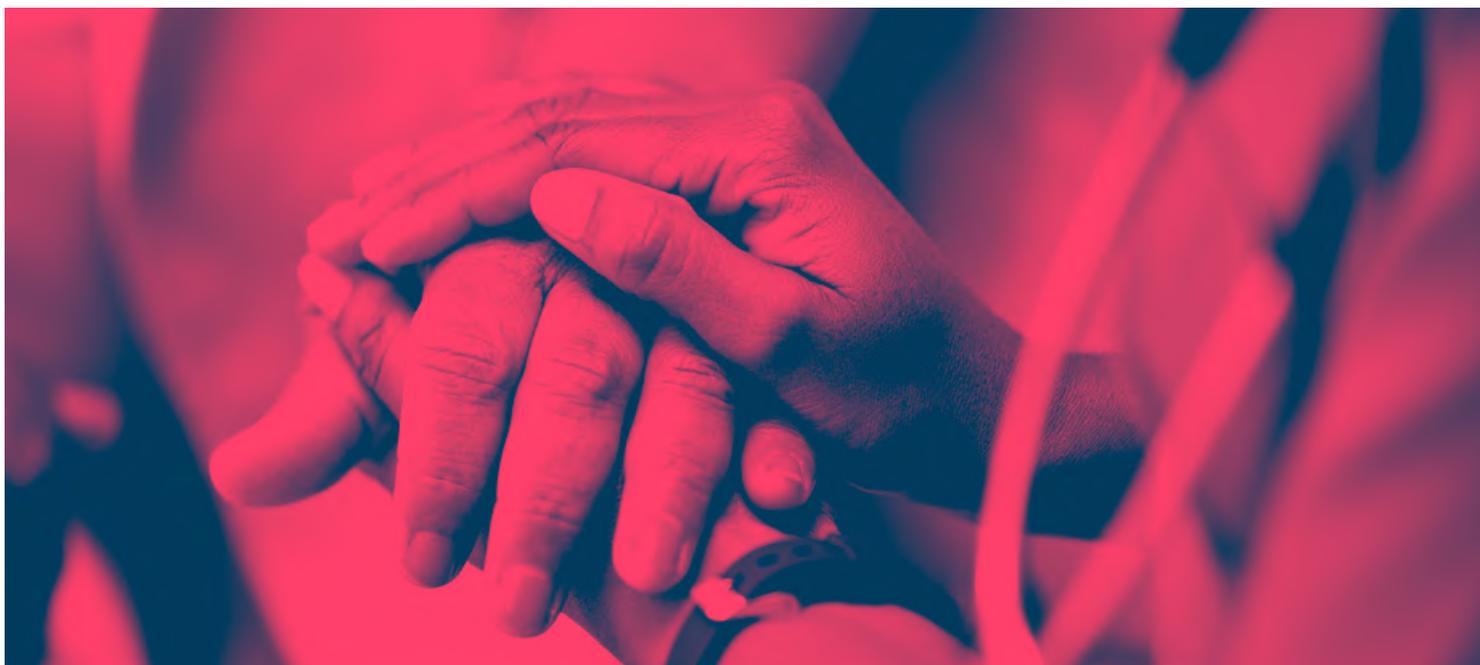
Sector	Strategic shift
 <p>Healthcare</p>	Value-based care
	Predictive health
	Retail healthcare
	Productivity crisis
	Global workforce shortage
 <p>Digital health</p>	Telemedicine & telehealth
	Connected health
	Data & analytics
	Patient engagement
 <p>Biopharma</p>	AI drug discovery
	Decentralized clinical trials
	Biosimilars & generics
	Politics of drug pricing
	Personalized medicine

Figure 3.2 Long-term Innovation-Led Shifts in LAC Healthcare

Shift	From	To
Value-based care	Payment by volume of services	Payment based on patient outcomes and experiences
Predictive health	Reactive healthcare system	Anticipation of health risks and trends
Retail healthcare	Delivering services within specialized medical facilities	Co-locating services in convenient, non-traditional settings such as pharmacies or retail stores
Productivity crisis	Systems burdened by high administrative costs and systemic inefficiencies	Services streamlined for operational efficiency and cost-effectiveness
Global workforce shortage	Projected shortfall of 10 million health workers by 2030	Gap is proactively addressed and mitigated
Telemedicine & telehealth	Patients physically visit healthcare providers	Technology is harnessed to administer services and information remotely
Connected health	Diagnostic information collected when patient presents with acute issue	Remote monitoring of key health inputs allowing for early intervention and improved outcomes
Data & analytics	Siloed information leading to a lack of understanding across health systems	Advanced technologies such as AI/ML powering new insights and productivity
Patient engagement	Poor patient education and compliance	Greater understanding and engagement of patients with chronic conditions
Healthcare interoperability	Multiple systems unable to communicate with each other	Connected systems capable on sharing information and improving productivity
AI drug discovery	Traditional pharmacological research methods that can take over a decade to develop a drug	Advanced algorithms and machine learning significantly accelerate the identification of potential new drugs
Decentralized clinical trials	Traditional trial framework, which necessitates patient presence at specific, often centralized, clinical sites	Enables patient participation from the comfort of their own homes, leveraging digital technologies.
Biosimilars & generics	Cost of patent-protected drugs kept high to recoup research costs	Mass production of low-cost medicines
Politics of drug pricing	Increasing tension between government and industry around drug supply and pricing	Governments and drug manufacturers working in tandem to control costs
Personalized medicine	A one-size-fits-all approach in healthcare, where treatments and healthcare decisions are standardized across the population	Tailored model that customizes healthcare and treatment decisions to an individual's genetic makeup and unique health characteristics



Healthcare Strategic Shifts

Healthcare systems are facing a productivity challenge in delivering traditional healthcare models. This is leading to a range of new approaches and structures.

> Value-based Care

Emphasizing patient outcomes and experience over the volume of services, rewarding efficient and effective services.

A strategic shift toward value-based care marks a transformative journey from a healthcare system traditionally centered on volume or quantity to one that prioritizes patient outcomes and experiences, or quality of care. This evolution marks a departure from a fee-for-service approach, where healthcare providers are reimbursed based on the number of procedures or tests they administer. It signifies a transition to a model that incentivizes and rewards efficient and effective services, with compensation linked to positive patient outcomes and a superior patient experience. This shift reflects a fundamental change in healthcare reimbursement structures and represents a broader philosophical realignment toward a more holistic, patient-centric approach to health and wellness.

> Predictive Health

Leveraging data and analytics to forecast health risks and trends, enabling early interventions.

A strategic shift to predictive health represents a long-term policy goal of moving from a reactive healthcare system, where interventions occur after health issues have presented themselves, to a proactive model that leverages advanced data and analytics to anticipate health risks and trends. This foresight enables early interventions, potentially before symptoms even arise. By moving from treating illness to preventing them, healthcare providers can offer more targeted and timely care. This approach ultimately aims to improve long-term health outcomes and reduce the need for acute, emergency treatments. This paradigm shift underscores the growing importance of predictive models in shaping the future of healthcare, transforming it into a more efficient, preemptive and patient-centric service.

> Retail Healthcare

Co-locating health services in convenient, non-traditional settings like pharmacies or retail stores.

A strategic shift toward retail healthcare is a significant realignment from the traditional model of delivering health services exclusively within specialized medical facilities to co-locating these services in convenient, non-traditional settings such as pharmacies or retail stores. This transition signifies a shift from healthcare environments that patients are accustomed to visiting. Instead, it embraces an integrated and accessible approach by embedding health services within the fabric of community retail spaces. By shifting from stand-alone clinical settings to encountering them during daily shopping routines, the healthcare industry is redefining its interactions with patient population, aiming to increase accessibility and convenience.

> Productivity Crisis

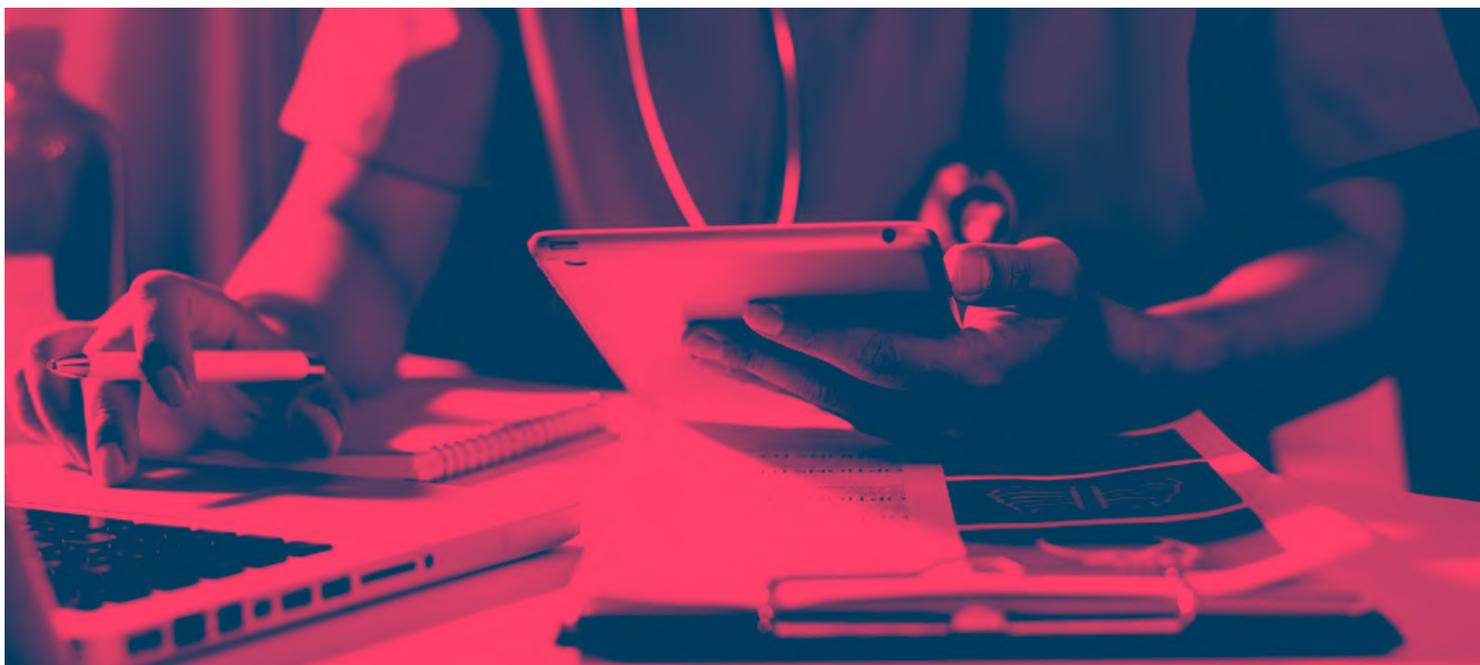
Addressing healthcare's high administrative costs and reducing inefficiency.

This strategic shift addressing the productivity crisis in healthcare is a decisive move from a system burdened by high administrative costs and systemic inefficiencies to one streamlined for operational efficiency and cost-effectiveness. It reflects the importance of transitioning from practices where waste and effort duplication are common to implementing solutions that cut through the red tape, optimize resource allocation and enhance service delivery. This strategic pivot aims to transform the healthcare landscape from being cost-prohibitive and administratively cumbersome to a more sustainable model that prioritizes both fiscal responsibility and patient care excellence.

> Global Workforce Shortage

Tackling the projected shortfall of 10 million health workers by 2030.

The strategic shift is fundamentally about navigating away from an impending crisis characterized by a projected shortfall of 10 million health workers by 2030 toward a future where this gap is proactively addressed and mitigated. It is a transition from passive acknowledgment of the looming deficit to actively implementing strategies to bolster workforce numbers, enhance training and improve retention. This shift is fundamental to creating robust healthcare infrastructures capable of providing comprehensive care. It involves an array of targeted interventions, including an expansion of educational capacities and incentives for health-related careers, as well as leveraging technology and innovative work models to maximize the efficiency and reach of the existing workforce. The challenge in LAC is exacerbated by health workers' low salaries due to insufficient public health budgets.



Digital Health Strategic Shifts

The pandemic acted as an enabler for digital health as long-standing technologies finally gained traction in the market. This catalytic episode has led to attitude shifts in the sector.

> Telemedicine & Telehealth

Harnessing technology to deliver medical services and health information remotely, making healthcare more accessible.

A strategic shift to telemedicine and telehealth represents a critical evolution from the traditional in-person delivery of medical services, where patients physically visit healthcare providers, to a modern paradigm where technology is harnessed to administer these services and health information remotely. This pivot from in-person consultations to virtual engagements minimizes the conventional constraints of geography and physical infrastructure allowing a more flexible and accessible healthcare model. By leveraging digital platforms and connectivity, the shift from on-site medical care to telehealth solutions aims to make healthcare more accessible, especially for remote or underserved regions, thus broadening the scope of who can receive care and how they receive it.

> Connected Health

Integrating health-related devices and systems to share and analyze data, provide continuous monitoring and enhance patient care.

A strategic shift toward connected health represents a transition from a disjointed healthcare system with siloed health-related devices and information to an integrated framework where devices and systems are interconnected to share and analyze data. This transition from isolated pockets of medical data to a cohesive network enables continuous monitoring and a more data-rich environment for enhancing patient care. It is a shift away from episodic and fragmented patient information to a continuous, holistic view of patient health, leveraging connectivity to improve diagnostic accuracy, treatment efficacy and overall health management. This allows a transformation from a reactive care model to a proactive and predictive one, driven by real-time data and insights.

> Data & Analytics

Collecting, processing and analyzing healthcare data to derive insights, assist decision-making and improve outcomes.

A strategic shift in health data and analytics underscores a transition from a healthcare landscape that traditionally relies on manual collection and fragmented analysis of health data to a sophisticated ecosystem where data is systematically collected, processed and analyzed to derive actionable insights. This evolution from basic data management to advanced analytics signifies a transition from intuition-based decision-making to an evidence-driven paradigm that enhances clinical decision-making and patient outcomes. By shifting from a reliance on anecdotal evidence and isolated datasets to embracing comprehensive analytics platforms, the healthcare industry is moving from a reactive stance to a predictive and preventive approach, thereby improving the efficiency and effectiveness of healthcare delivery.

> Patient Engagement

Encouraging active participation and collaboration between healthcare providers and patients in decision-making, treatment adherence and overall care.

A strategic shift in patient engagement is a substantial movement from a historically passive healthcare model, where providers make decisions with little input from patients, to an interactive framework that encourages active participation and collaboration between them. With this shift from provider-centric decision-making to shared decision-making, patients are no longer mere recipients of care but rather empowered partners in their health journeys. They are no longer merely instructed, they become integral stakeholders in their treatment adherence and overall care. By fostering active patient involvement, the healthcare system is evolving from a paternalistic approach to one that is more democratic and personalized, which can lead to better health outcomes and increased patient satisfaction.

> Healthcare Interoperability

Enabling the seamless exchange of health data and information among different healthcare systems.

A strategic shift in healthcare interoperability is a significant transition from a fragmented landscape where health data is trapped within separate healthcare systems to a unified ecosystem that enables the seamless exchange of health information across various platforms. This pivotal move from informational silos and proprietary boundaries to open, communicative networks reflects a transformation from the inaccessibility of critical patient data to a state where it flows freely among providers, thereby enhancing the continuity and quality of care. By bridging the gaps between different healthcare systems, the industry is shifting from a compartmentalized structure to an integrated approach, empowering healthcare professionals with comprehensive data to make well-informed decisions for patient care.



Biopharma Strategic Shifts

The biotech and pharmaceutical market is evolving due to political pressure, the patent cliff and new methods of drug discovery. These factors are driving major changes to the established order.

> AI Drug Discovery

Utilizing advanced algorithms and machine learning to accelerate the identification of potential new drugs.

A strategic shift toward AI drug discovery is a journey from traditional, slower pharmacological research methods to a cutting-edge paradigm where advanced algorithms and machine learning significantly accelerate the identification of potential new drugs. This transition from manual and time-intensive processes to a sophisticated, AI-powered approach aims to reduce lengthy development cycles and high costs with efficiency, speed and reduced expenditure. By embracing AI in drug discovery, the pharmaceutical industry is shifting from relying solely on human expertise and traditional research methods to leveraging data-driven insights that promise to revolutionize how new treatments are developed and brought to market.

> Decentralized Trials

Enabling patient participation from domestic settings by utilizing digital technologies.

A strategic shift to decentralized trials marks a pivotal move from the traditional clinical trial framework, which requires patients' presence at specific, often centralized, clinical sites. Instead, it embraces an innovative structure that enables patients' participation from the comfort of their own homes, leveraging digital technologies. This transition from site-centric to patient-centric trials represents a significant change from limited participant diversity and logistical challenges to a more inclusive, flexible and scalable approach. By incorporating telemedicine, remote monitoring and electronic data capture, the shift from conventional to decentralized trials aims to streamline the research process, enhance patient engagement and potentially accelerate the development of new therapies.

> Biosimilars & Generics

Developing cost-effective alternatives to brand-name medications to increase access to essential treatments.

A strategic shift toward biosimilars and generics is a concerted move from an industry reliant on brand-name medications, which often come with high costs and exclusive patent protections, to a market increasingly served by cost-effective alternatives that increase access to essential treatments. The reduction of high-priced originator drugs and the increase of biosimilars and generic medications implies more affordable options without sacrificing therapeutic efficacy. Thus, a context where patient access can be restricted by financial barriers gives way to a more equitable framework where life-saving medications are more readily available to a broader population.

> Politics of Drug Pricing

Intensifying political pressure to reduce the cost of pharmaceuticals.

The strategic shift in drug pricing politics is characterized by a move away from a period of relatively less political scrutiny over pharmaceutical costs to an era where there is mounting political pressure to reduce the cost of medications. The starting point is an environment where drug pricing was largely dictated by market forces and the need for pharmaceutical companies to recoup research costs. The new paradigm is one in which there is an increasing call for regulatory interventions and policy reforms to curb high drug prices. By acknowledging this shift, the pharmaceutical industry is navigating from a traditional pricing approach to a landscape that may be shaped by legislative actions aimed at making drugs more affordable and accessible. This shift reflects a change from the view that drug pricing is solely a commercial decision to it being a matter of public interest and political debate.

> Personalized Medicine

Tailoring healthcare and treatment decisions to an individual's genetic makeup and unique health characteristics.

A strategic shift toward personalized medicine represents a profound transition from a one-size-fits-all approach in healthcare, where treatments and healthcare decisions are standardized across the population, to a tailored model that customizes healthcare and treatment decisions to an individual's genetic makeup and unique health characteristics. This evolution from uniform medical protocols to individualized care plans signifies a move from generalized therapeutic strategies to nuanced, precision-based interventions. By capitalizing on advancements in genomics and diagnostics, the shift from conventional medicine to personalized medicine is poised to revolutionize patient care by enhancing treatment efficacy, minimizing side effects and improving overall health outcomes.

3.2 LAC Health Trends

The trends observed in LAC health underpin strategic shifts in the market that will evolve over time. This report identifies 50 health trends that capture the general direction in which each issue is developing or changing over a specific period.

Health systems across LAC represent a vast opportunity for innovators. Faced with countless challenges, the region's use of technology and data lags many health economies. Shortfalls in the availability and quality of publicly provided health services drive high levels of out-of-pocket spending in the region, with this spending overwhelmingly delivered by traditional primary care models. In Mexico, for example, it is common for patients to visit physicians that are co-located at pharmacies for on demand out-of-pocket services.

The COVID-19 pandemic broke down many barriers for proponents of digitally enabled services. Telehealth flourished with personal contact minimized and acceptance of technology evolved rapidly. There are signs in the market that the pace of change has slowed, and some areas of the region are reverting to pre-pandemic norms, but there are also concerted efforts across governments, NGO and providers to further build the innovation ecosystem in LAC health.

The extent to which LAC healthcare is embracing innovative new models varies greatly by region. Even within single countries there is significant variation between socio-economic groups and between urban and rural communities. The innovation picture is also patchy across the different sub-sectors of the health market. A legacy of COVID-19 is a concentration of resources on diagnosis and treatment while there is relatively little focus on prevention or the development of medical devices, health hardware or novel therapeutics. In many cases, digital solutions are also complicating the region's already fragmented and underdeveloped health data infrastructure. This leads to challenges reconciling legacy systems with new means of delivering services and tracking care pathways.

Figure 3.3. Trend Measures

Measure	Definition
Hype	Level of hype / interest in the issue
Likelihood	Likelihood of sustainable impact
Impact	Scope of impact generated

Figure 3.4. Trend Drivers

Primary driver
Political: governmental actions, policies and geopolitical factors
Economic: market dynamics, fiscal policies and macroeconomic indicators
Demographic: population characteristics such as age distribution, migration and diversity
Environmental: natural resources, climate conditions and ecological factors
Social: cultural norms, public opinion and societal values
Technological: advancements in science and technology
Legal: regulatory frameworks, laws and court decisions
Ethical: moral principles and ethical considerations

Figure 3.5. Trend Stages and Evolution

Stage	Description
Emerging	Theories, prototypes, nascent
Accelerating	Rapid awareness, growth, interest
Peak	Peak of expectations
Decline	Limitations become apparent
Productive	Practical applications and benefits
Maturing	Stability and acceptance
Tapering	Decline in growth

Figure 3.6. Health Trend Ranking

#	Score	Trend	Driver	Stage	Hype	Likelihood	Impact
1	8.53	Virtual first care & hybrid health	Technological	Accelerating	8.3	8.6	8.7
2	8.47	Decision support technology	Technological	Accelerating	8.7	7.7	9
3	8.37	AI-powered diagnostics	Technological	Accelerating	9	8	8.1
4	8.33	Telehealth & telemedicine	Technological	Accelerating	8.3	9	7.7
5	8.13	Remote patient monitoring	Technological	Accelerating	8.4	8.1	7.9
6	7.97	Health workforce shortages	Economic	Accelerating	7.3	9	7.6
7	7.90	Value-based care models	Technological	Emerging	8.5	7	8.2
8	7.87	E-prescribing solutions	Technological	Accelerating	8.2	8	7.4
9	7.93	Home health services	Social	Accelerating	8.7	7.4	7.7
10	7.90	Health data analytics	Technological	Accelerating	8.1	7.9	7.7
11	7.80	Targeted chronic disease mgmt	Social	Accelerating	7.1	8.1	8.2
12	7.77	Reproductive rights	Social	Accelerating	8.5	7.2	7.6
13	7.80	Growing obesity rates	Social	Accelerating	7.5	8.4	7.5
14	7.77	Physician-led digital health	Technological	Accelerating	7.2	7.7	8.4
15	7.83	AI-led drug discovery	Technological	Emerging	9.1	7.1	7.3
16	7.77	Personalized medicine	Technological	Emerging	9	6.7	7.6
17	7.70	Women's health & femtech	Social	Accelerating	9.4	6.4	7.3
18	7.53	Health AI ethics	Technological	Emerging	9.3	7	6.3
19	7.63	Climate-accelerated health issues		Accelerating	7.1	7.6	8.2
20	7.57	VR & AR health training	Technological	Accelerating	8.8	7.1	6.8
21	7.60	EHR adoption	Technological	Accelerating	7	7.9	7.9
22	7.47	Patient-centered care	Social	Accelerating	8	6.7	7.7
23	7.53	Health cybersecurity threats	Technological	Accelerating	6.2	8.4	8
24	7.50	Shifting dietary behavior	Social	Accelerating	6.8	8	7.7

#	Score	Trend	Driver	Stage	Hype	Likelihood	Impact
25	7.43	Health data Interoperability	Technological	Accelerating	5.7	8.5	8.1
26	7.40	Asynchronous telehealth	Technological	Maturing	7.4	8.3	6.5
27	7.37	Wearable health technology	Technological	Accelerating	8.3	6.7	7.1
28	7.37	Mobile health apps	Technological	Maturing	7.8	7.3	7
29	7.30	Genomic data analysis	Technological	Emerging	8.5	6	7.4
30	7.30	Longevity	Technological	Emerging	9.1	5.8	7
31	7.20	Healthcare blockchain technology	Technological	Emerging	6.7	7	7.9
32	7.07	Digital twins in healthcare	Technological	Emerging	7.7	6.5	7
33	6.97	Supply chain resilience	Political	Accelerating	7.7	6.9	6.3
34	7.00	5G health connectivity	Technological	Emerging	5	7	9
35	7.00	Patient engagement tools	Technological	Emerging	7	7	7
36	7.00	Biomedical data sharing	Technological	Emerging	7	7	7
37	7.00	Digital therapeutics	Technological	Emerging	5	7	9
38	7.00	Digital health regulation	Technological	Emerging	5	7	9
39	7.00	Simulated clinical trials	Technological	Emerging	5	7	9
40	6.80	Digital health literacy	Technological	Emerging	5.7	7	7.7
41	6.70	Access for rural health	Political	Emerging	6.3	6.5	7.3
42	6.73	Health inequality initiatives	Social	Accelerating	6.1	7.1	7
43	6.67	Long COVID-19 effects	Social	Productive	5.9	7.1	7
44	6.67	Internet of medical things (IoMT)	Technological	Emerging	9	5.3	5.7
45	6.50	Wellness & wellbeing	Social	Productive	7.9	5.7	5.9
46	6.27	Retirement communities	Social	Accelerating	5.7	7	6.1
47	6.27	Population health management	Social	Emerging	4.6	6.3	7.9
48	6.13	Surgical robotics	Technological	Emerging	8.5	5.1	4.8
49	5.90	Addiction-related conditions	Social	Peak	4	6.7	7
50	5.37	Drone delivery of medicines	Technological	Emerging	7.1	3.6	5.4

Digital health foundations are still being established across LAC.

The region's relatively underdeveloped digital health capabilities mean that there are still significant opportunities to roll out basic solutions across health economies. Establishing and implementing effective electronic health record (EHR) systems remains a key target for many LAC countries. In the direct-to-consumer marketplace, businesses offering telehealth consultations combined with the ability to dispense e-prescriptions are prospering. However, this is a poorly regulated field with uncertainty as to how business models will evolve.

Businesses providing effective and transparent digital health services can add value through customization and navigating local complexities, but the greatest factor in utilization of these fundamental digital services is local regulatory environments. Having shown expediency and flexibility during the pandemic, governments across LAC are now largely struggling to formalize the correct governance structures, regulatory frameworks and strategic visions to support and sustain digital health innovation.

Chronic disease management is driving innovation at scale.

LAC's heavy burden of chronic disease creates a significant market opportunity for innovators focused on the prevention or effective management of life-long conditions. Chronic disease management (CDM) is a focus for health systems globally, and there are proven models that reduce costs and improve outcomes for health populations. LAC starts from a low base as far as CDM is concerned, with strained service providers overwhelmingly focused on treatment.

The effective coordination of care services and the proactive engagement of patients can substantially reduce costs and improve outcomes. This is an area of significant potential impact for innovators in LAC. Technology platforms can be used to better monitor chronic care patients, reducing the frequency with which they need to in-person consultations while also flagging providers when interventions are required. This integrated approach requires patients to take more ownership of their health. When correctly incentivized, patients engaging with CDM platforms can help correct the cost curve of chronic care.

The low-income market is growing but old models persist.

For large sections of Latin American populations, cost remains the greatest obstacle to accessible healthcare. In the absence of satisfactory public services patients turn to private, more costly providers.

The ubiquity of smartphones has created a favorable environment for a large-scale, low cost telehealth provider. However, most of the leading players are currently focused on B2B solutions, viewing employment benefit plans as the most cost-effective route to market. The low-income market is primarily served by walk-in clinics frequently being co-located within retail settings such as pharmacies or supermarkets. Partnership models are beginning to emerge between digital innovators and legacy players as patient expectations around digital services evolve.

Advanced technologies have not yet impacted the region.

Outside of telehealth, EHR and digital pharmacies, LAC is witnessing the growth of innovative businesses focused on diagnostics, decision support and areas of region-specific clinical relevance, such as scanning for diabetic retinopathy. However, areas of advanced technology –such as artificial intelligence, genomics and robotics– still have relatively little traction in the region.

Entrepreneurs are increasingly focusing on the potential of AI across every aspect of LAC health, but the region's largely unstructured health data infrastructure represents a significant challenge for large language models. North American companies focused on harnessing the power of AI for healthcare largely do so using models developed for a reimbursement-based system. These operating models typically do not translate well to mixed or public health systems where capitated budgets and value-based care can be difficult to configure. Nevertheless, global momentum behind advanced technology in healthcare is having a halo effect, and investors and entrepreneurs are excited about its potential application across LAC's under-served health markets.

3.3 Investment Trends

LAC's health investment market remains at an embryonic stage. Despite an uptick in activity during the pandemic, health is often seen as a prohibitively complex market and there are very few dedicated health funds. Other investment areas such as fintech and e-commerce continue to attract much of the attention of private investors. The innovation ecosystem required to develop companies from seed to scale is also nascent. A lack of early-stage funding is an obstacle to the development of investable opportunities, as venture capital often targets a limited number of companies that have achieved sufficient market penetration. Networks between entrepreneurs, investors and the industry are being formed, though further strengthening is needed for innovative models to achieve scale across the region.

As with other global markets, LAC witnessed a peak in activity and valuations during the height of the pandemic. Assumptions made regarding the duration of COVID-19 restrictions and the extent of digital adoption across health systems have proven to be off the mark. The legacy of funding decisions made at the peak of the health crisis is still felt in the market today, creating a more cautious funding environment.

Despite these challenges, several governments in LAC have recognized the potential of startups to drive economic growth and innovation. This has created a favorable and commonplace environment for entrepreneurship, technology development and investment and policies targeted at growing the innovation ecosystem.

Figure 3.7. Key VC Investors in LAC Health

Investor	HQ
500 Startups	US
Aggir Ventures	Brazil
Astella	Brazil
Canary	Brazil
DNA Capital	Brazil
Domo	Brazil
DST Global	Global
Endeavor	Global
Green Rock	Brazil
Kaszek	Uruguay
Kortex	Brazil
Maya	Brazil
Monashees+	Brazil
QED	US
Softbank	Japan
VALOR	US
Y Combinator	US
Yayá Capital	Brazil

Accelerators, incubators and startup hubs are also emerging across the region, playing a crucial role in nurturing and supporting entrepreneurs.

The health investment landscape is slowly evolving.

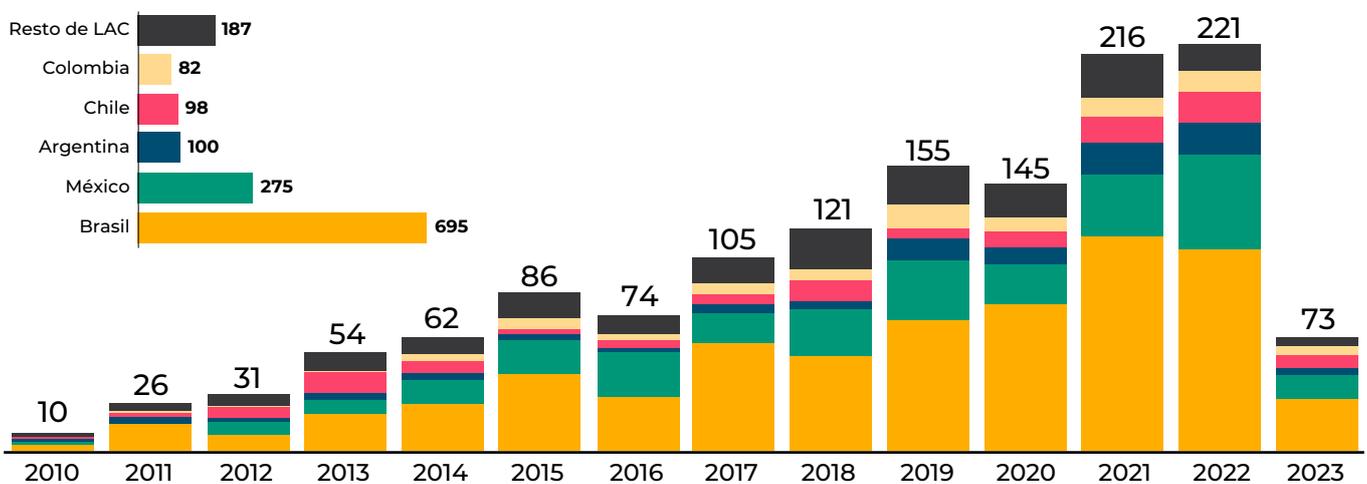
LAC presents a range of common issues for investors across every vertical: regulatory hurdles, lack of access to early-stage funding and concerns about political and economic instability. The health and life sciences sector offers unique and complex considerations for investors and entrepreneurs. Market accessibility issues mean LAC's best talent often looks to economies in North America or Europe to launch businesses, and the region can often prove impenetrable to foreign teams and international capital.

Solutions aimed at LAC's public health systems require team members with deep knowledge and contacts in those networks. Reaching decision-makers across LAC can be difficult, with many markets operating on a hyper-local basis. The atomized nature of health economies, both nationally and regionally, can make achieving scale a slow process. Navigating the complex range of stakeholders is often underestimated by startups in the region, and management teams are initially under-equipped for this aspect of a go-to-market plan.

The region's underdeveloped regulatory environment is also a barrier to investment. Many countries across LAC are currently formalizing governance structures for new healthcare models, creating a high degree of uncertainty around which services will be permitted and how. Once established, though, strong regulatory frameworks will bolster an investment appetite for the health sector.

Figure 3.8. LAC Health Tech Venture Capital, Number of Funding Rounds, 2010-2023

Funding Rounds, LAC Health Innovation and Tech Venture Capital Funding, 2010-2023



The LAC health tech venture capital (VC) ecosystem has developed significantly over the past decade; however, it witnessed a sharp correction in 2023 in line with global health VC activity.

Figure 3.9. LAC Health Tech Venture Capital, Total Value of Funding Rounds, 2010-2023, US\$ Millions

Funding Rounds, LAC Health Innovation and Tech Venture Capital Funding, 2010-2023

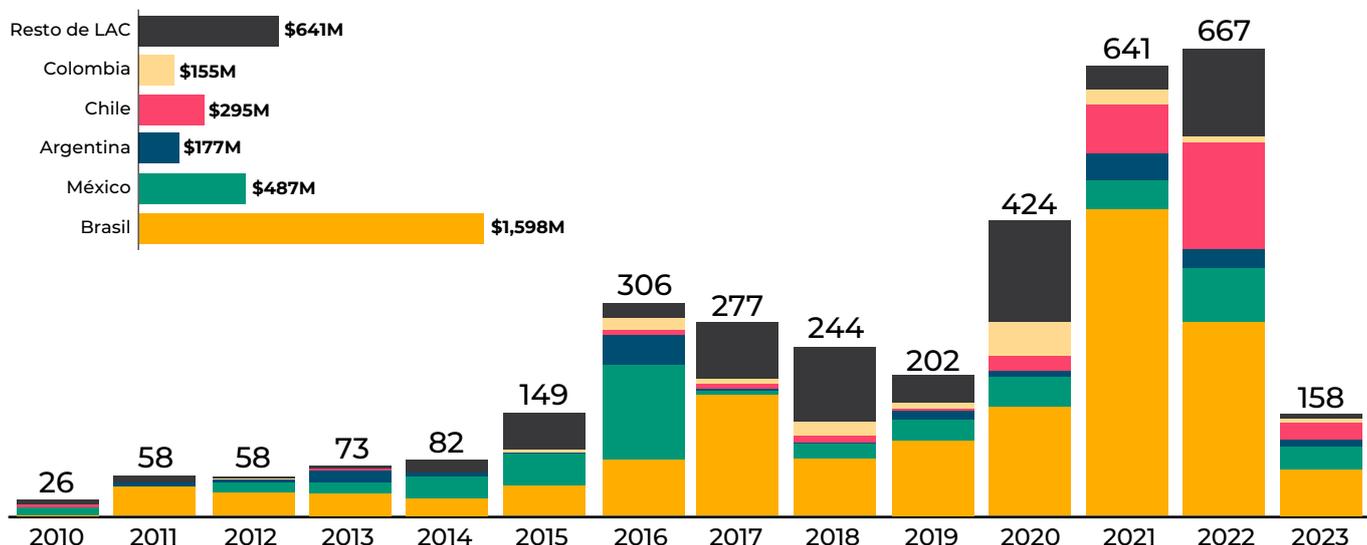


Figure 3.10 Major LAC Health Deals > US\$10M, 1993-2023

Company	Country	Cluster	Round/Type	Year	US\$ M
VelosBio	El Salvador	Drug production	Series B	2020	137.0
Alice	Brazil	Health insurance	Series C	2021	127.0
Betterfly	Chile	Health benefits	Series C	2022	125.0
Dentalia	Mexico	Specialist treatment	Series B	2016	109.8
Impulse Dynamics	Neth Antilles	Medical devices	Late-stage VC	2022	101.0
Dr Consulta	Brazil	Primary treatment	Series E	2017	93.0
Betterfly	Chile	Health benefits	Series B	2021	60.0
VelosBio	El Salvador	Drug production	Series A	2018	58.0
Memed	Brazil	Pharmacies	Series C	2021	55.7
Establishment Labs	Costa Rica	Medical devices	Late-stage VC	2017	55.0
Dr Consulta	Brazil	Primary treatment	Series C	2017	50.0
Addis Pharmaceutical	Argentina	Discovery	Late-stage VC	2016	42.0
Dr Consulta	Brazil	Primary treatment	Series D	2022	34.0
Alice	Brazil	Health insurance	Series B	2021	33.3
Beep Saúde	Brazil	POC testing	Series C	2022	30.7
Dr Consulta	Brazil	Primary treatment	Series B	2016	25.9
Tempo Participações	Brazil	Practice management	PE Growth	2007	25.8
BridgeCR, LLC	Colombia	Health records	Series B	2020	25.5
Dr Consulta	Brazil	Primary treatment	Series B	2016	25.0
Health Digital Systems	Mexico	Practice management	PE Growth	2014	25.0
Jacana	Jamaica	Drug production	VC Round	2019	23.1
Monroe Americana	Argentina	Health logistics	VC Round	1996	23.0
Splash Pharmaceuticals	El Salvador	Drug production	Series B	2008	22.5
ZeeCRO	Argentina	Discovery	VC Round	1995	22.0
Pixeon Medical Systems	Brazil	Health analytics	PE Growth	2013	21.2
Adavium Medical	Brazil	Medical devices	Series C	2016	21.0
Isotopen Technogien	Colombia	Discovery	VC Round	2016	21.0
Osana	Argentina	Decision support	Series A	2021	20.0
Labi Exames	Brazil	Lab testing	VC Round	2019	20.0
Pipo Saúde	Brazil	Health benefits	Series A	2021	20.0
Farmacias Personalizadas	Mexico	Pharmacies	Series B	2015	20.0

Company	Country	Cluster	Round/Type	Year	US\$ M
Aperion Biologics	Venezuela	Medical devices	VC Round	2015	20.0
Memed	Brazil	Pharmacies	Series C	2021	20.0
Sami	Brazil	Health insurance	Convertible Note	2021	19.8
Jacana	Jamaica	Drug production	VC Round	2018	19.2
Bionexo	Brazil	Practice management	PE	2018	19.0
Sofía	Mexico	Telehealth	Series A	2020	19.0
Memed	Brazil	Pharmacies	Series C	2022	18.4
Sami	Brazil	Health insurance	Series B	2023	18.4
SouSmile	Brazil	Specialist treatment	Series B	2021	18.0
Farmalisto	Colombia	Pharmacies	Series B	2020	18.0
Establishment Labs	Costa Rica	Medical devices	VC Round	2017	18.0
SiMCo Healthcare	Brazil	Bookings & referrals	VC Round	2021	17.5
Recepta Biopharma	Brazil	Discovery	PE	2012	17.2
Examedi	Chile	Home health	Series A	2022	17.0
Ethical Oncology Science	Paraguay	Discovery	Series A	2009	17.0
Osseon	Argentina	Medical devices	PE	2013	16.2
Alice	Brazil	Health insurance	Series A	2019	16.0
Sami	Brazil	Health insurance	Series A	2020	15.6
Profarma Specialty	Brazil	Health logistics	PE	2011	15.4
Medway	Brazil	Training & accreditation	Series A	2022	15.0
Establishment Labs	Costa Rica	Medical devices	PE	2016	15.0
Salauno	Mexico	Specialist treatment	Series B	2019	15.0
Clínicas del Azúcar	Mexico	Chronic care	Series C	2015	15.0
Capim	Brazil	Practice management	VC Round	2022	14.3
InvestFarma	Brazil	Pharmacies	VC Round	2022	14.2
Dr Consulta	Brazil	Primary treatment	Series A	2014	14.0
ISA	Brazil	Home health	Series A	2022	14.0
Minu	Mexico	Health benefits	Series A	2021	14.0
Inmediata	Puerto Rico	Practice management	PE	2014	13.1
Bariatric Partners	Argentina	Specialist treatment	VC Round	2005	12.5
Aperion Biologics	Venezuela	Medical devices	Series C	2008	12.4

The LAC market is starved of grants and pre-seed capital.

Early-stage funding is frequently cited as one of the most significant issues facing the LAC health innovation ecosystem. Grant funding for research and development is notoriously difficult to acquire. Biotech startups targeting the region are often forced to launch and seek funding in the US before returning to local markets. A number of the major pharmaceutical organizations are taking steps to address this through corporate venturing arms and innovation hubs, but these initiatives are mostly at early stages. The critical nature of healthcare means that it is also difficult –and expensive– to prove conceptual solutions, devices and therapeutics in real world settings. The market often lacks the equivalent of ‘sandboxes’ seen frequently in markets such as fintech, where solutions are tested in safe environments.

Valuations collapsed after a peak in 2020-21.

Global venture capital funding peaked in late 2021, fueled by a combination of pandemic restrictions, rapid digital adoption and quantitative easing measures that enhanced technology business valuations. Healthcare startups across LAC benefited from this rising tide as investor interest focused on the region’s vast healthcare challenges.

Many of the businesses that raised capital during this period have subsequently struggled to justify their lofty valuations, and the market is witnessing a degree of failure across digital health, as in many other industries. However, this is creating strong market conditions for consolidation of a fragmented provider landscape, and the best-placed startups are well positioned to procure assets and contract talent from rivals. This dynamic is playing out globally across healthcare markets, and LAC is experiencing similar challenges.

Business models are geared toward unicorn status and to serve US and Western Europe.

Health startups in LAC frequently look to the North American market for new models and megatrends that could be applied locally. With the world’s largest health economy situated to the north of LAC, this makes sense; but in practice it can also lead to execution and strategic issues for LAC startups.

The US market works primarily on a reimbursement model, while LAC startups that are ‘lifting and shifting’ often struggle to find a viable business model. This can frequently mean that businesses are conceived of and initially built in LAC before relocating to the US or Europe to achieve scale, draining the region of its best talent. The LAC market also faces challenges around exits for healthcare entrepreneurs. In larger countries such as Brazil and Mexico there are exit opportunities for health companies to trade players, but there have been very few mid-market and above transactions.

3.4 LATAM Health Tech 50

Every year, HolonIQ's Health Intelligence Unit identifies the top 1000 health tech startups around the world. The global 1000 is built region by region from over 10,000 nominations, applications and screenings to ensure the global cohort is diverse and to shine a light on the inspiring innovation happening around the world.

The purpose of the Global Health Tech 1000 is to identify the most promising, young, fast-growing and innovative startups in each major region of the world. To be eligible, startups must be less than 10 years old and headquartered in the region in question or predominantly focused on that market (e.g. > 80% revenue/customers). They must also be 'startups' ('pre-exit', i.e. not acquired, a subsidiary or listed) and not controlled by an investor group (e.g. via private equity buyout or controlling investment).

The HolonIQ Health Intelligence Unit and select market experts assess each organization based on HolonIQ's startup scoring rubric, which in brief covers the following dimensions.

Market: the quality and relative attractiveness of the specific market category in which the company competes.

Product: the quality, uniqueness and impact of the product itself.

Team: the expertise and diversity of the leadership team.

Capital: the financial health of the company and its ability to generate or secure sufficient funding.

Momentum: positive changes in the size, velocity and impact of the company over time.

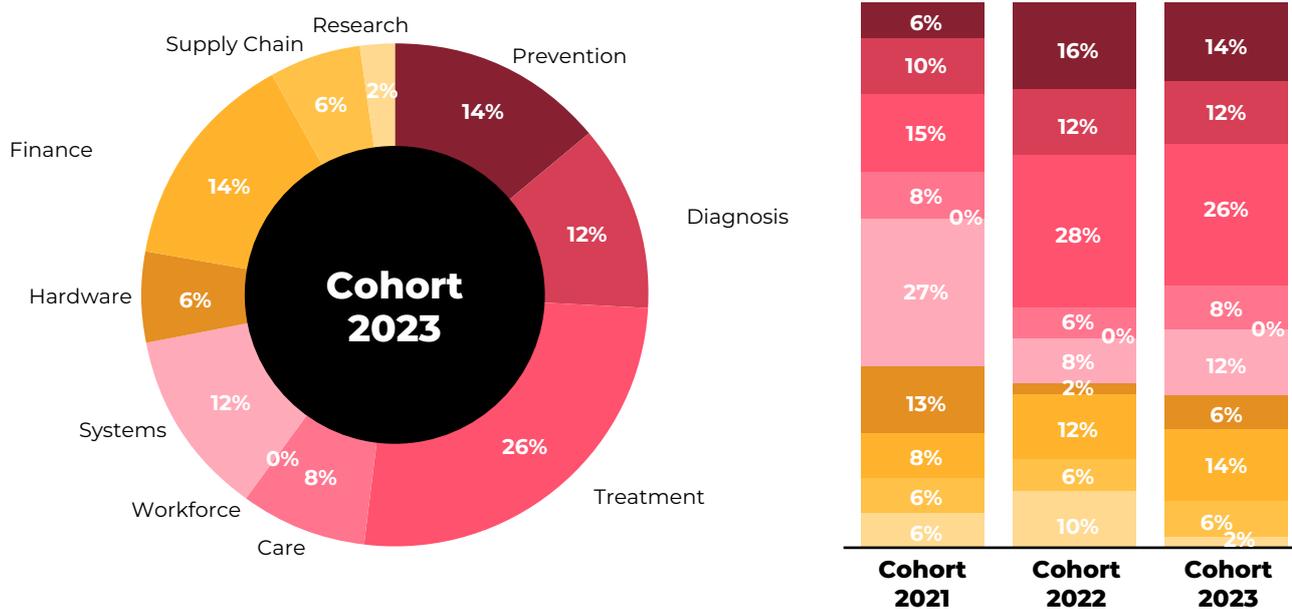
Following the same methodology, we selected 50 LAC startups that showcase a range of entrepreneurs and innovators from across the region, with a strong emphasis in 2023 on tech-enabled platforms to help deliver healthcare services effectively and safely, either remotely or in the home.

PREVENTION diagnostikare INSTAFIT omens™ terapify vittude yana zenklub	CARE Clivi genial care KLIVO PROSPERIA	HEALTH HARDWARE eden MEDU TRAINFES
DIAGNOSIS cardi-track isa mamotest NEURALMED vivanta WeeCompany	SYSTEMS alinea Conexa+ MEDIC TALKS osana welbe WURU	SUPPLY CHAIN farmalisto med mevo
FINANCE alice BETTERFLY (EB) MEDSI minu pipo saúde sami zendata	TREATMENT IDOC3 doc-doc examedi KEIRÓN kompa MIDOCONLINE moons nilo Placi PLENNA sofía theia vibe	RESEARCH oya care



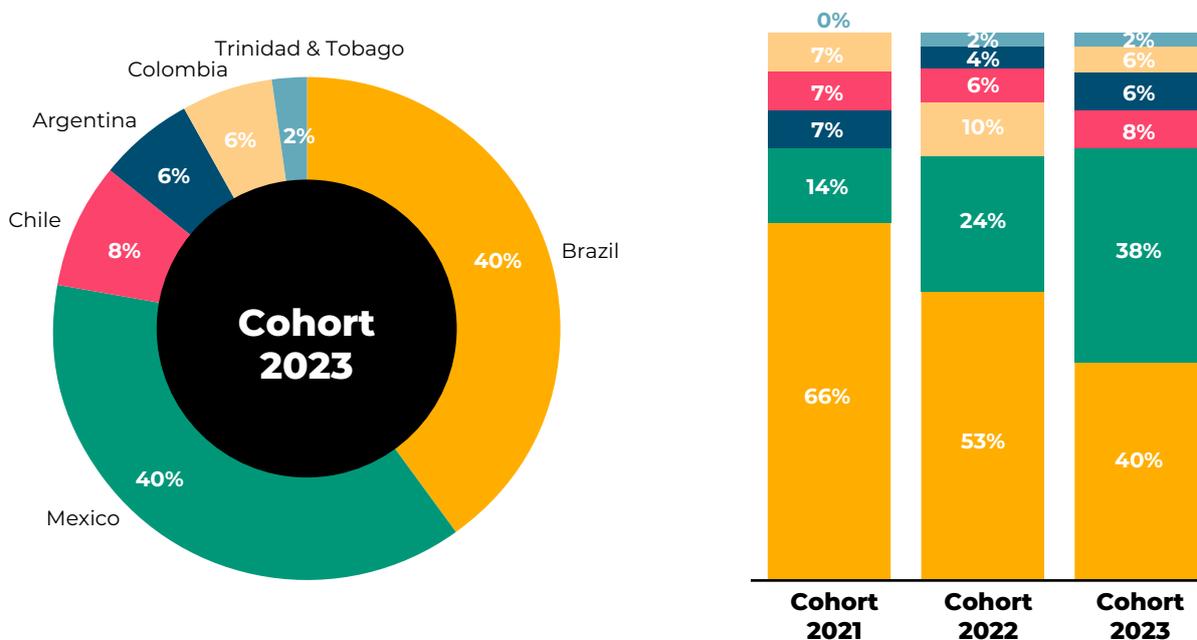
**2023
LATIN AMERICA
HEALTH TECH
50**
HolonIQ

Figure 3.11. 2023 LATAM Health Tech 50 and Comparison to 2021 and 2022 Cohorts



The 2023 LATAM Health Tech 50 is mainly focused on service provision: over 50% of the 2023 cohort is either in prevention, diagnosis or treatment.

Figure 3.12. 2023 LATAM Health Tech 50 Geographical Comparison to 2021 and 2022 Cohorts



Brazil and Mexico are the dominant health tech players in the region, with Mexico significantly closing the gap over recent years.

Figure 3.13. 2023 LATAM Health Tech 50

Company	Website	Founded	Cluster	Country
1DOC3	1doc3.com	2014	Telehealth	Colombia
Alice	alice.com.br	2019	Health insurance	Brazil
Alinea Health	alineahealth.com.br	2021	Health records	Brazil
Betterfly	gobetterfly.com	2018	Health benefits	Chile
Cardiotrack	cardiotrack.mx	2018	Population health	Mexico
Clivi	clivi.com.mx	2021	Chronic care	Mexico
Conexa Saúde	conexasaude.com.br	2017	Practice management	Brazil
Diagnostikare	diagnostikare.com	2019	Wellbeing	Mexico
Doc-doc	doc-doc.com	2018	Telehealth	Colombia
Eden	edenmed.com	2015	Wearables	Mexico
Examedi	examedi.com	2021	Home health	Chile
Farmalisto	www.farmalisto.com	2013	Pharmacies	Colombia
Genial Care	genialcare.com.br	2020	Social care	Brazil
InstaFit	instafit.com	2013	Nutrition & supplements	Mexico
ISA LAB	isalab.com.br	2017	Lab testing	Brazil
Keirón	keiron.cl	2019	Telehealth	Chile
Klivo	klivo.com	2019	Chronic care	Brazil
Kompa Saúde	kompa.com.br	2019	Telehealth	Brazil
Mamotest	mamotest.com	2013	Diagnostic tech	Argentina
Medictalks	medictalks.com	2020	Training & accreditation	Brazil
Medl	medl.co	2018	Pharmacies	T&T
Medsí	medsi.mx	2022	Health benefits	Mexico
MEDU Protection	meduprotection.com	2020	Medical devices	Mexico
Mevo	mevosauade.com.br	2016	Pharmacies	Brazil
Midoconline	midoconline.com	2016	Telehealth	Mexico

Company	Website	Founded	Cluster	Country
Minu	minu.mx	2019	Health benefits	Mexico
Moons	mymoosn.mx	2018	Specialist treatment	Mexico
NeuralMed	neuralmed.ai	2018	Decision support	Brazil
Nilo Saúde	nilosaude.com.br	2020	Telehealth	Brazil
Omens	omens.com.br	2020	Wellbeing	Brazil
Osana Salud	osanasalud.com	2019	Practice management	Brazil
Oya Care	www.oya.care	2020	Specialist treatment	Brazil
Pipo Saúde	piposaude.com.br	2019	Health benefits	Brazil
Placi	placi.com.br	2013	Hospitals	Brazil
Plenna	soyplenna.com	2021	Specialist treatment	Mexico
PROSPERiA	prosperia.health	2020	Chronic care	Mexico
Sami	samisaude.com.br	2018	Health insurance	Brazil
Sofía	sofiasalud.com	2018	Telehealth	Mexico
Terapify	terapify.com	2018	Mental Health	Mexico
Theia	theia.com.br	2019	Specialist treatment	Brazil
TRAINFES	trainfes.com	2013	Medical devices	Chile
ViBe Saúde	vibesaude.com	2018	Telehealth	Brazil
Vittude	vittude.com	2016	Mental Health	Brazil
Vivanta	vivanta.io	2022	Diagnostic tech	Mexico
WeeCompany	weecompany.net	2016	Population health	Mexico
Welbe Care	home.welbecare.com	2021	Practice management	Mexico
Wuru	wuru.site	2018	Health analytics	Argentina
Yana	yana.com.mx	2017	Wellbeing	Mexico
Zenda.la	zenda.la	2019	Health insurance	Mexico
Zenklub	zenklub.com.br	2016	Wellbeing	Brazil

3.5 Regional Stakeholders

Public Private Partnerships

Public-private partnerships (PPP) are key for addressing shortfalls affecting structural change across LAC health systems. Collaborations between government entities and private sector organizations are commissioned to deliver a wide range of healthcare services, infrastructure and technology solutions. However, the region's low level of healthcare funding and propensity for budget cuts can be a challenge for the successful implementation of PPP. Projects are also vulnerable to changes of governmental or ministerial regimes.

Figure 3.14. PPP in LAC

Initiative	Country
Hospital La Samaritana	Colombia
Agencia de Promoción de la Inversión Privada (ProInversión)	Peru
Hospital Félix Bulnes	Chile
Programa Mais Médicos	Brazil
El Salvador / Google Distributed Cloud	El Salvador
Hospital General de León	Mexico

Health Giants

Traditional hospitals remain the center of the healthcare universe. However, innovators, investors and policy-makers globally are focused on reconfiguring services so that, whenever possible, care is delivered in more appropriate, cost-effective settings. In this context, capacity constraints and lagging capital expenditures on existing healthcare facilities are also factors. Reconfiguration is difficult for the largest players. A wide variety of buy/build/partner models are now being deployed by the largest healthcare organizations.

Figure 3.15. Health Giants in LAC

Company	Country
Amil Participações (UnitedHealth Group)	Brazil
Fleury	Brazil
Grupo Nacional Provincial (GNP)	Mexico
Grupo Notre Dame Intermedica	Brazil
SulAmérica	Brazil
DASA (Diagnósticos da América)	Brazil
Cruz Blanca Seguros y Reaseguros	Chile
Seguros SURA	Colombia
Grupo Angeles Servicios de Salud	Mexico
Seguros Banorte Generali	Mexico
Grupo VidaCorp	Mexico
Rede D'Or	Brazil
Raia Drogasil	Brazil

Finance

Private capital plays a significant and growing role in the support of LAC healthcare delivery, both in terms of venture capital and supporting the growth of established businesses seeking to scale. LAC healthcare systems often face budget constraints and resource limitations. Private capital, when accessed appropriately, can be harnessed to upgrade infrastructure, invest in innovative technologies and help increase capacity across the system. The investment landscape in LAC is relatively nascent compared to North American markets, but private capital is likely to play an increasingly important role in coming years.

Figure 3.16. Major Finance Organizations in LAC

Company	Country
DNA Capital	Brazil
Greenrock	Brazil
aMoon	Global
LionBird	Global
Orbimed	US/Global
Pontifax	Israel/Global
The Carlyle Group	US/Global
Advent International	US/Global
KKR	US/Global
Kortex Ventures	Brazil
Aggir Ventures	Brazil
Yayá Capital	Brazil

Foundations

Charitable foundations play a crucial role in addressing the region's healthcare challenges, particularly in relation to areas where access to care is limited. Foundations provide significant financial support to health initiatives and in bridging funding gaps in public healthcare systems. In the region, foundations have historically invested in capacity building, which includes training healthcare professionals, building healthcare infrastructure and strengthening the overall healthcare system. This is particularly relevant in Latin America, where there is a shortage of trained healthcare workers and well-equipped facilities. Foundations are also playing a considerable role in the support of technology-led innovation across healthcare systems. Private and public research centers and universities also play a major part in supporting the innovation ecosystem.

Figure 3.17. Foundations and Philanthropy

Company	Country
Bill & Melinda Gates Foundation	US/Global
Partners In Health (PIH)	US/Global
Fundación Carlos Slim	LAC
Jhpiego	LAC
Clinton Health Access Initiative (CHAI)	US/Global
Global Fund	US/Global
Médecins Sans Frontières (Doctors Without Borders)	US/Global
Smile Train	LAC

Tech Giants

The specialty and regulated nature of the healthcare market provided shelter for companies from the tech giants for many years. Microsoft and Google, for example, have only had supporting roles to healthcare market incumbents. Recent years, though, have seen a power shift as the major technology companies have deployed financial and technological resources into establishing platforms in the sector. We expect all of the major players to accelerate their ambitions in healthcare in 2023 and beyond.

Figure 3.18. Tech Giants in LAC

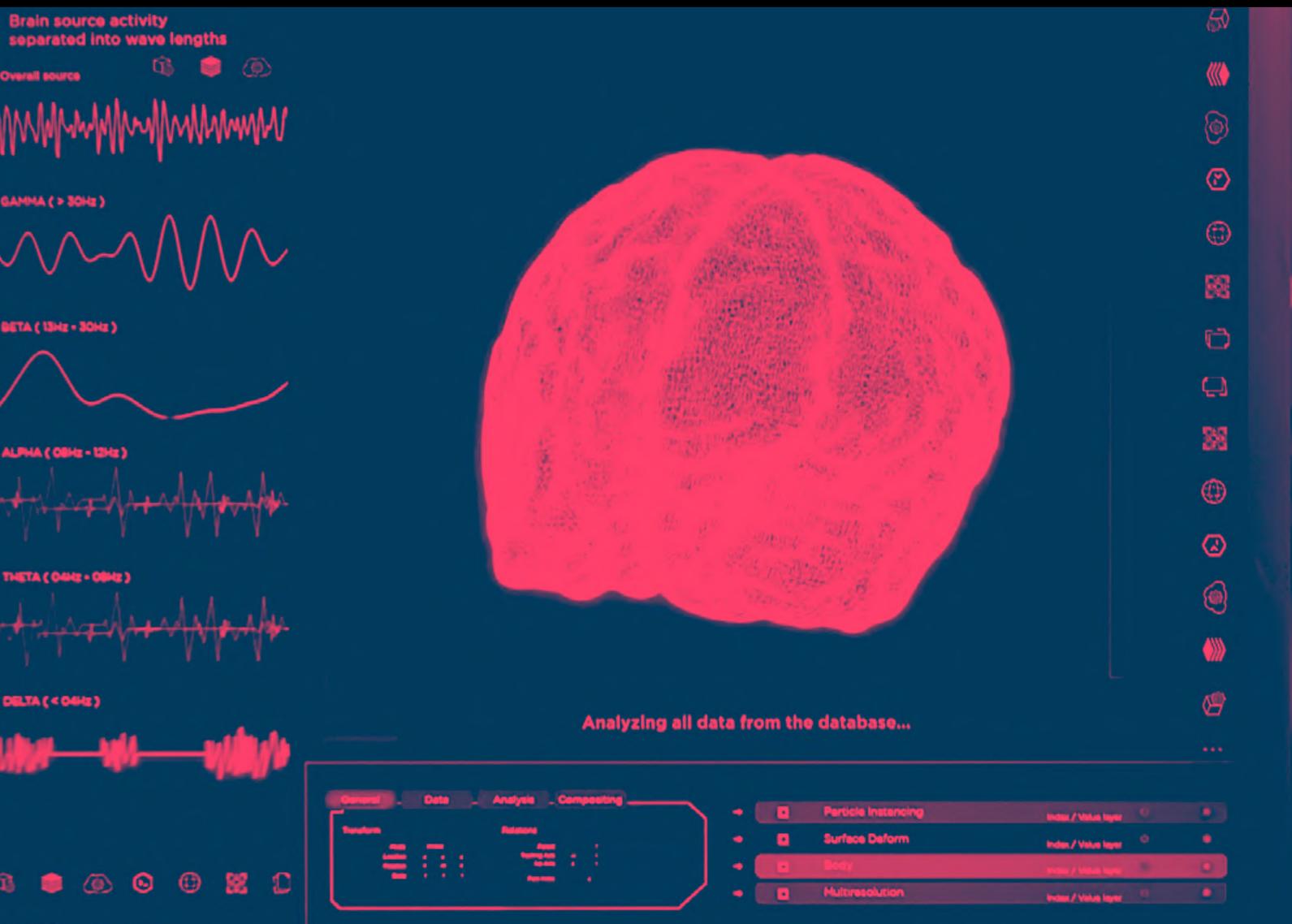
Company	Country
Google	US
Microsoft	US
Amazon	US
Meta (Facebook)	US
Apple	US
IBM	US
Cisco Systems	US

Initiatives

Considering the size of the LAC health market, there are very few dedicated health funds. Investment in most markets is conducted by generalist or technology-led funds or by not-for-profit ecosystem players. Professional advisory services also have few specialists compared to other regions. This is slowly starting to change across the region as investors move away from more saturated markets such as fintech in search of strategic value in the healthcare market.

Figure 3.19. Initiatives and Ecosystem Players in LAC

Company	Country
MHI Mesoamerican Health Initiative	LAC
LACChain	LAC
eretz.bio	LAC
PAHO Pan American Health Organization	LAC
Moonshots for Development	LAC
RECAINSA	LAC
New Ventures Capital	LAC



4. IDB Lab Portfolio Analysis

4. IDB Lab Portfolio Analysis

IDB Lab has a strong track record of investments in health innovation initiatives and startups across the region. Investing in health, one of IDB Lab's five verticals, shows the commitment to increase access, improve quality of care and find new innovative ways for service delivery.

4.1 Historic Activity

As part of this report we reviewed a database of 4,239 unique 'projects' (unique project ID) – both active and exited – and scored the projects from 0 of 5 based on their alignment with our working definition of health innovation.

We found 114 unique project ID (including investments into 21 VC funds) that scored between 2 and 5 on a 5-point scale for health innovation alignment. We estimate ~2-3% of IDB Lab's all-time project portfolio has been deployed to health innovation. IDB Lab's work in the healthcare sector has principally been focused on widening access to healthcare services. Of the 67 exited projects in IDB Lab's portfolio, nearly 40% were involved in the direct treatment of patients across LAC. IDB Lab's mission of improving lives in the region is reflected in its previous focus on areas of high impact intervention, such as primary care treatment and pre-natal care. IDB Lab's other areas of focus include supporting projects and initiatives in preventive healthcare, improving diagnostic pathways and helping the region to address its globally high levels of chronic diseases.

IDB Lab's support of low-cost models such as Clínicas del Azúcar's provision of customized services to combat diabetes and its complications, reflect its intention to target patients at the base of the socio-economic pyramid. It has also previously supported a small number of technology-led innovations. For instance, Neuralmed, a provider of AI-based intelligent radiology services, is making a significant impact in the Brazilian health market following IDB Lab's investment in the business.

Figure 4.1. Health IDB Lab Project Database

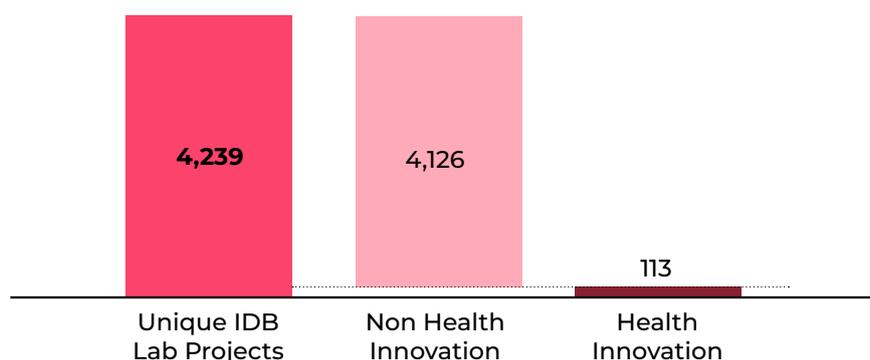
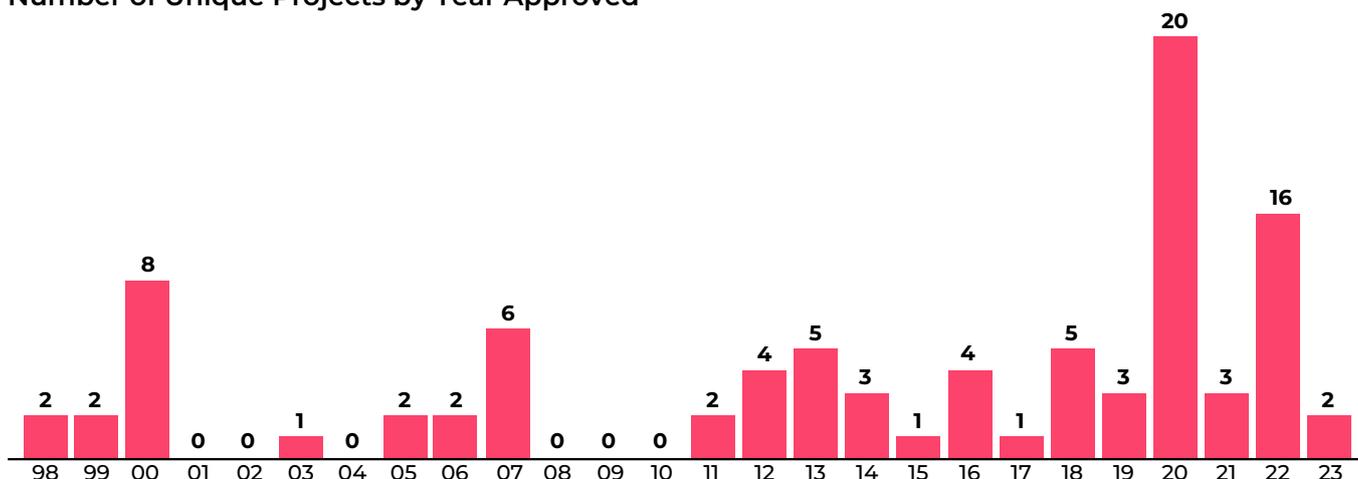
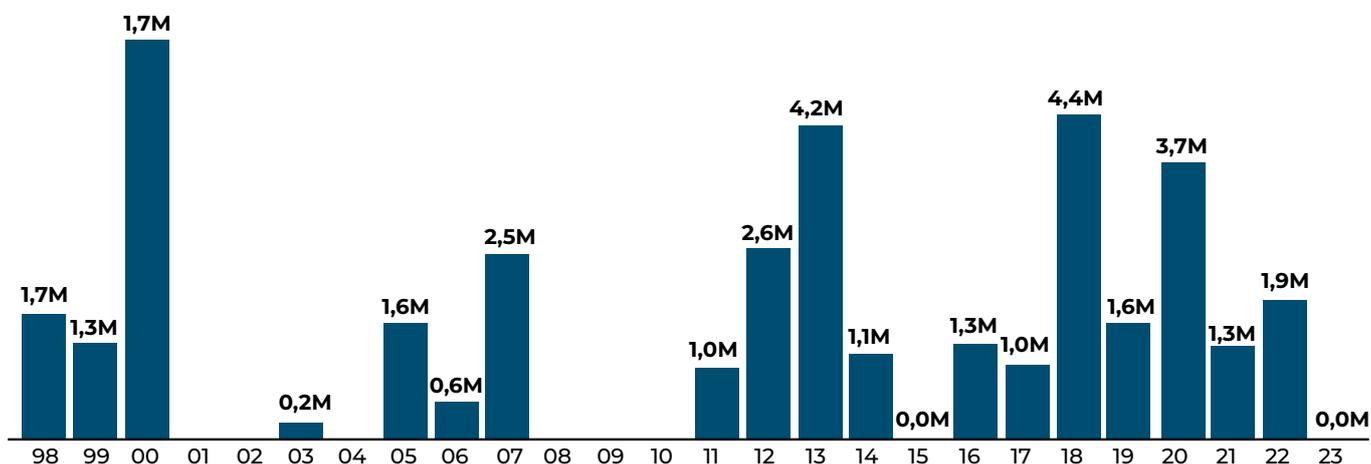


Figure 4.2. IDB Lab Health Innovation Direct Funding, 1998-June 2023, (Excludes VC Fund Funding)

Number of Unique Projects by Year Approved



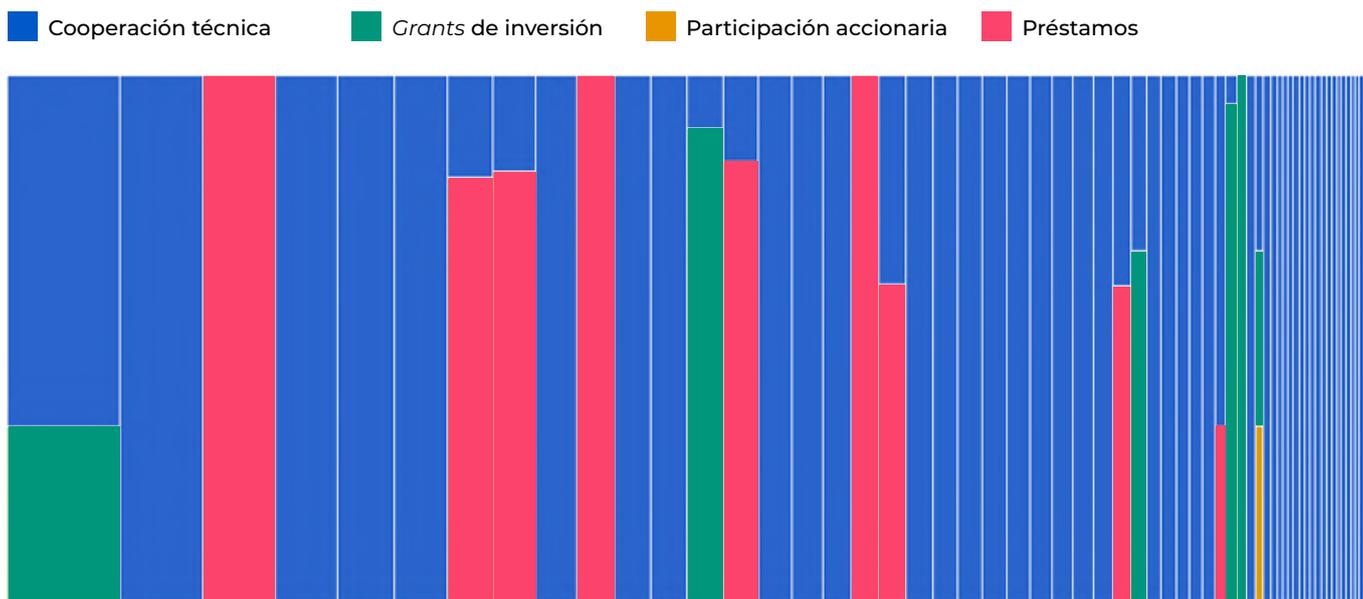
Total Disbursed Funding USD by Year of Disbursement



An important distinction to point out in IDB Lab's historic funding activity is that one unique project can have many different operational investment types. Figure 4.3 displays each of the 71 unique projects as columns, sized by the amount of total funding disbursed for that project. Each column is broken down into different operational funding types. The figure illustrates how a mix of operational funding types is often used to fund projects.

Figure 4.3. IDB Lab Health Innovation Funding by Operational Type

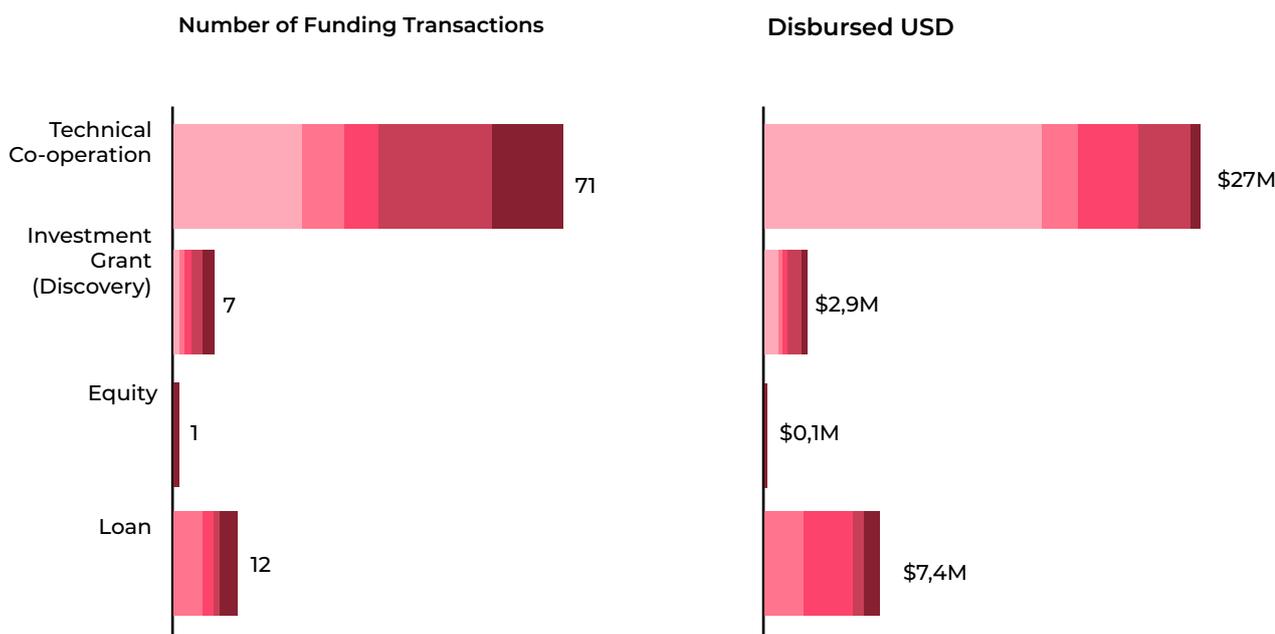
71 Unique Projects (Columns) sized by Disbursed Funding and colored by Operational Funding Type (Stack)



Due to the mix of operational funding types, projects and the individual funding transactions, this analysis follows the individual operational funding transactions. Figure 4.4 below compares the transactions produced in different periods: those approved 10 years or more ago (up to 2013), those of the 2014-2016 period, and then a subsequent period leading up to the pandemic (2017-2019), during the pandemic (2020-2022) and after it. The pandemic is, obviously, an important period for analysis in the healthcare industry.

Figure 4.4. IDB Lab Health Innovation Project Portfolio by Financial Instrument and Project Age Group

Legend: 10 Years + (light pink), 2014-2016 (medium pink), Pre Pandemic (bright pink), Pandemic (dark pink), Post Pandemic (darkest pink)



Direct Funding

IDB Lab has funded more than 90 distinct projects over the prior 10 years, dispersing US\$36M in capital to health projects.

Figure 4.5 shows the distribution of those projects by sub-sector and project age group following HolonIQ's open source taxonomy. The bars follow each of the ten sub-sectors. On the left-hand side are the number of projects. On the right-hand side are the total amount in dollars invested in those projects.

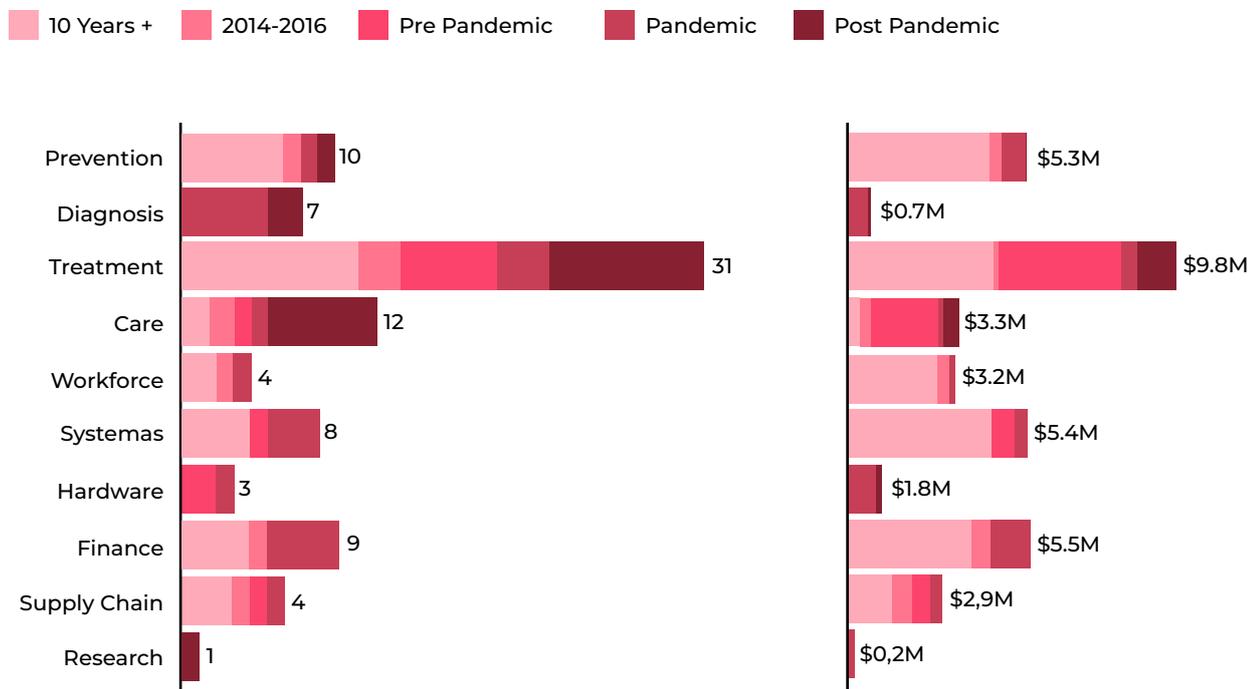
Each bar is shaded to show how the number of projects and the amount invested has changed over time following categories that look back beyond ten years, the period 2014 to 2016, the pre pandemic period of 2017 to 2019, the pandemic covering 2020 through to 2022 and the post-pandemic period.

Looking at the number of projects and funding it is clear that the overwhelming focus has been in improving treatment. However, this has changed over time, particularly with a significant amount of recent activity in diagnosis and care.

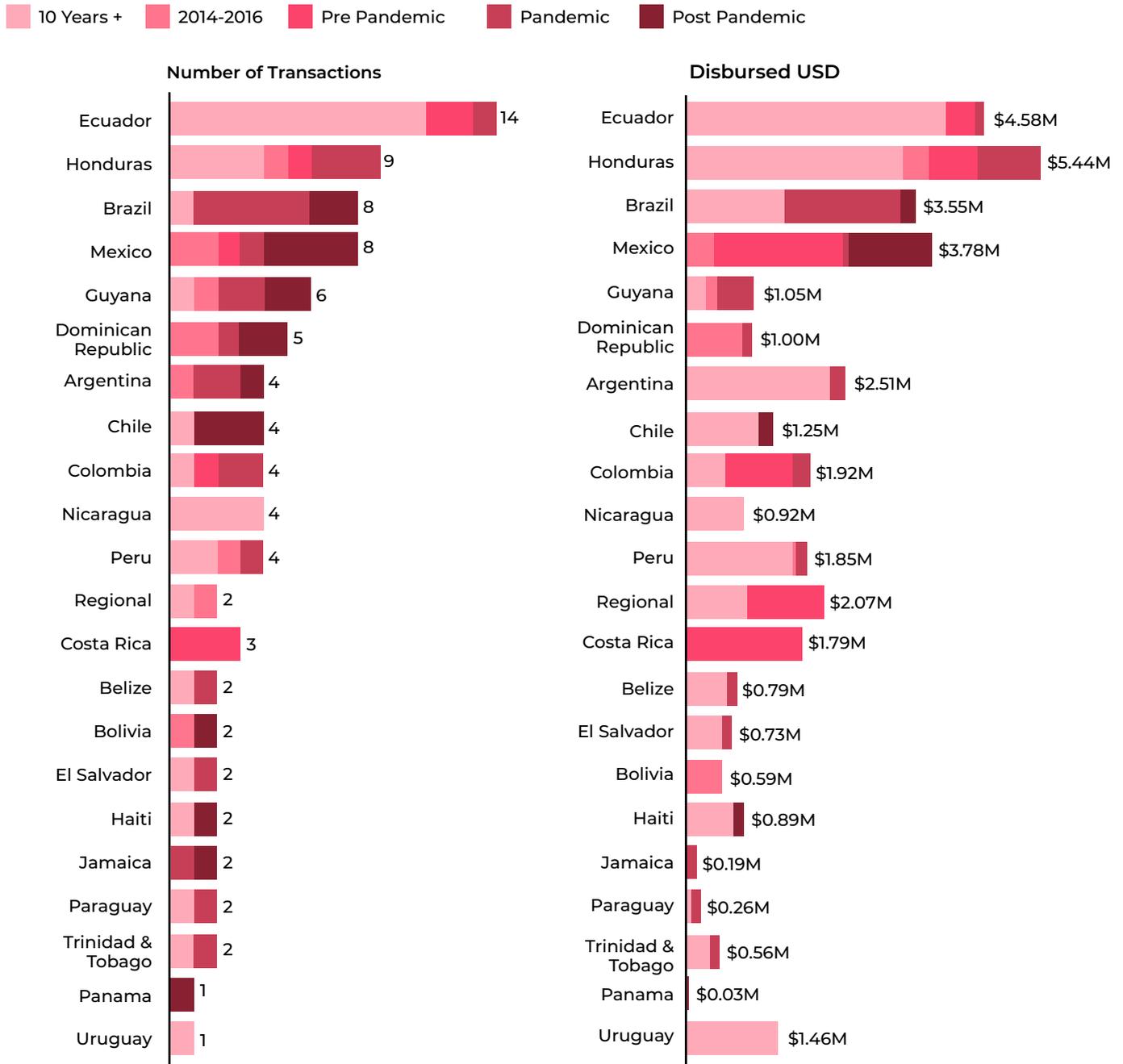
This reflects the period of intense activity during COVID-19 where IDB Lab was able to assist with the dissemination of diagnostic capacity in the region but also the ongoing need to support other areas, such as chronic disease management.

A full list of all direct funding from IDB Lab is included in Appendix 5.1.

Figure 4.5. IDB Lab Health Innovation Project Portfolio by Sub-sector and Project Age Group

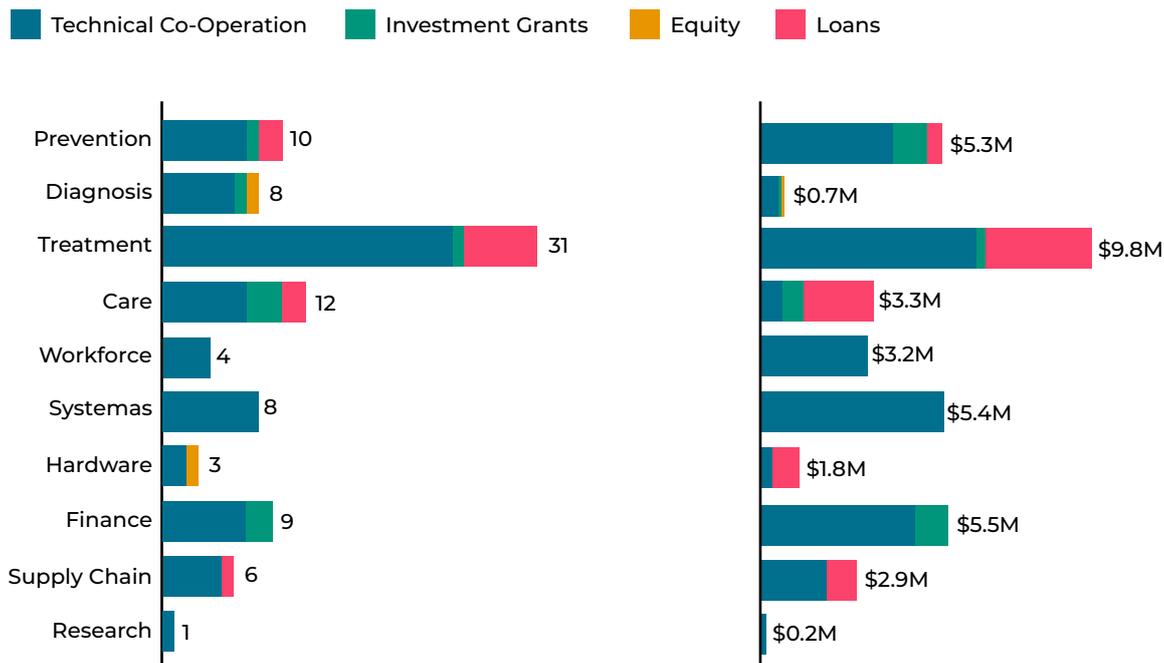


Projects focused on expanding access to services (treatment) have dominated IDB Lab's project portfolio to date. IDB Lab's work in care and prevention reflect its efforts to address conditions such as diabetes –both in terms of chronic disease management and public awareness.

Figure 4.6. IDB Lab Health Innovation Project Portfolio by Country

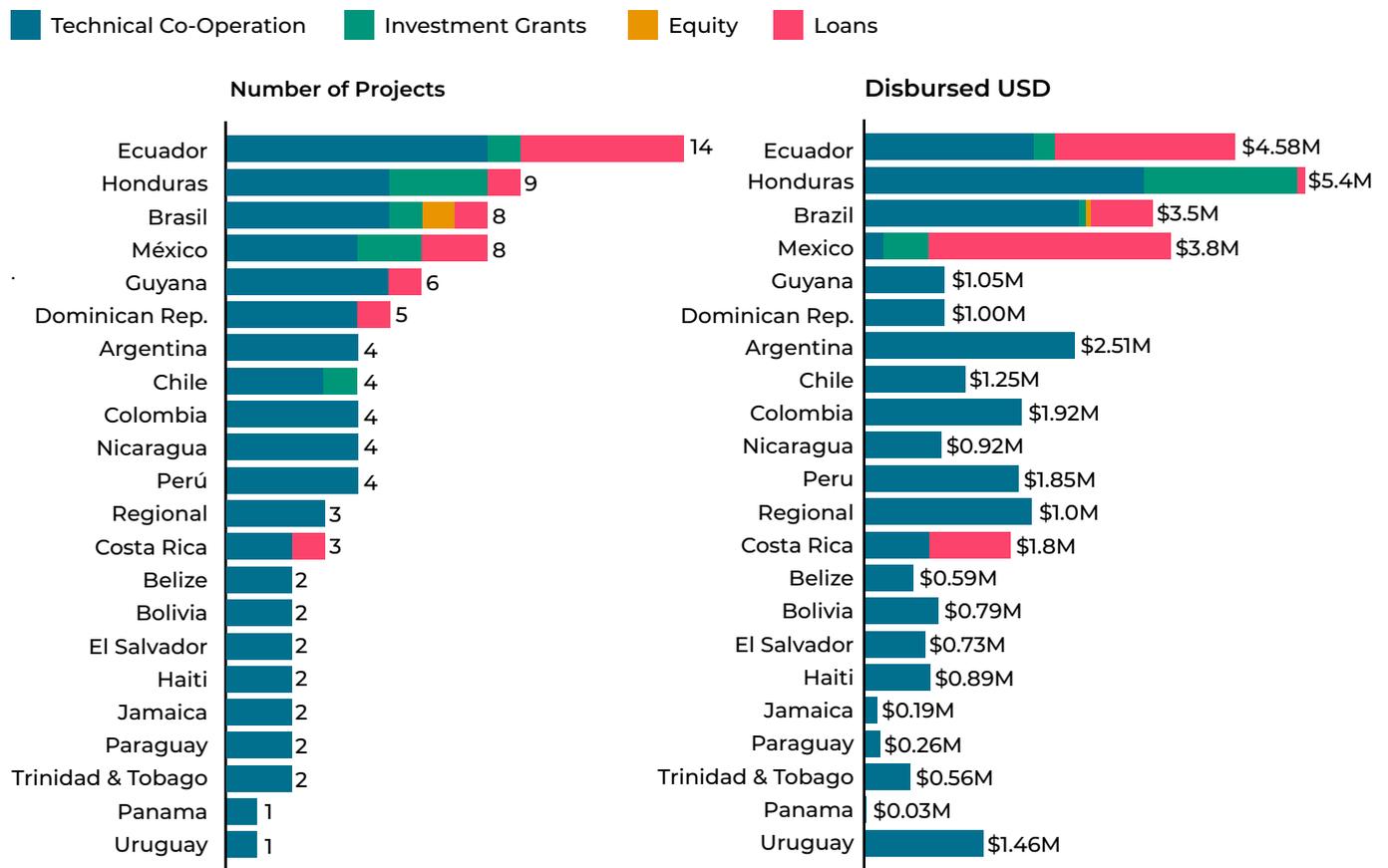
Areas of LAC with great economic hardship –such as Honduras and Ecuador– have seen higher focus from IDB Lab, a testament to its goal of making impactful interventions.

Figure 4.7. IDB Lab Health Innovation Project Portfolio by Sub-sector and Financial Instrument

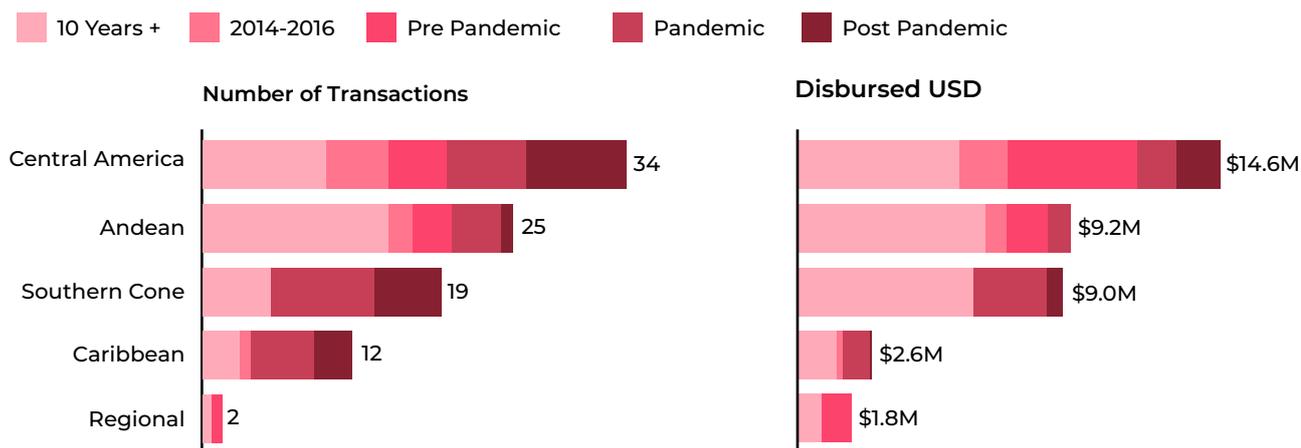
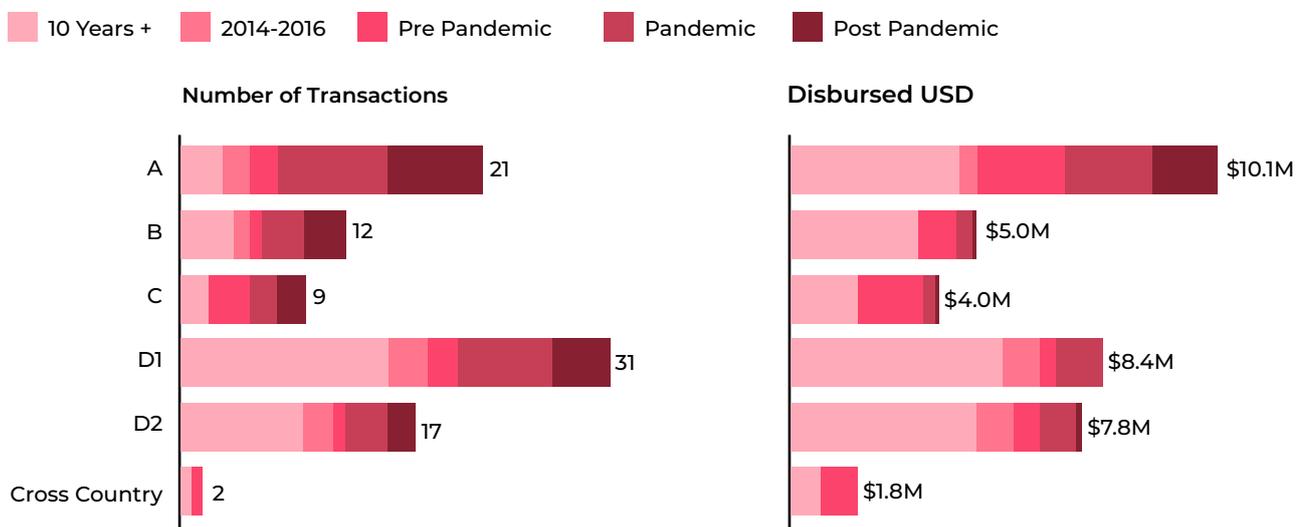


Treatment has received the most activity and capital, frequently delivered by IDB Lab via technical cooperation and loans.

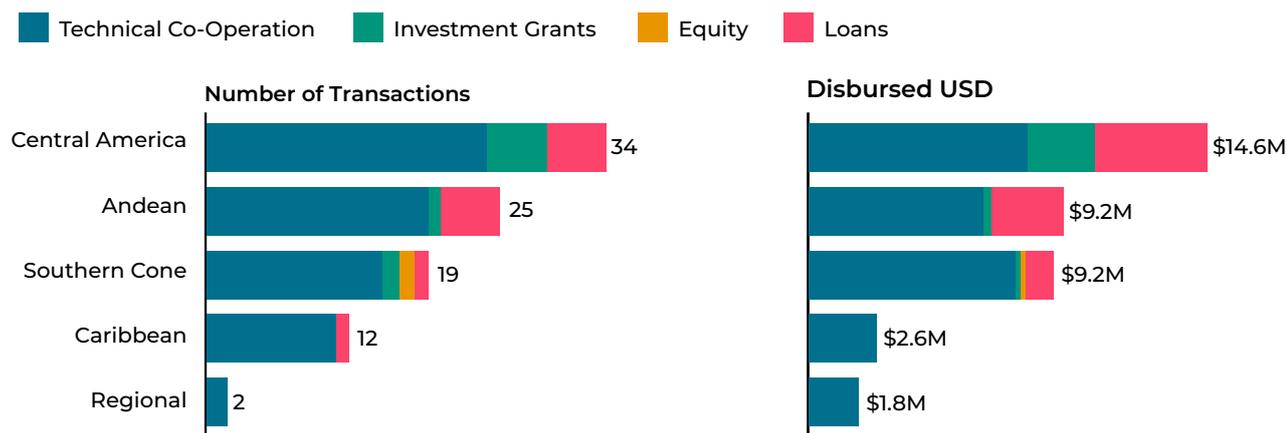
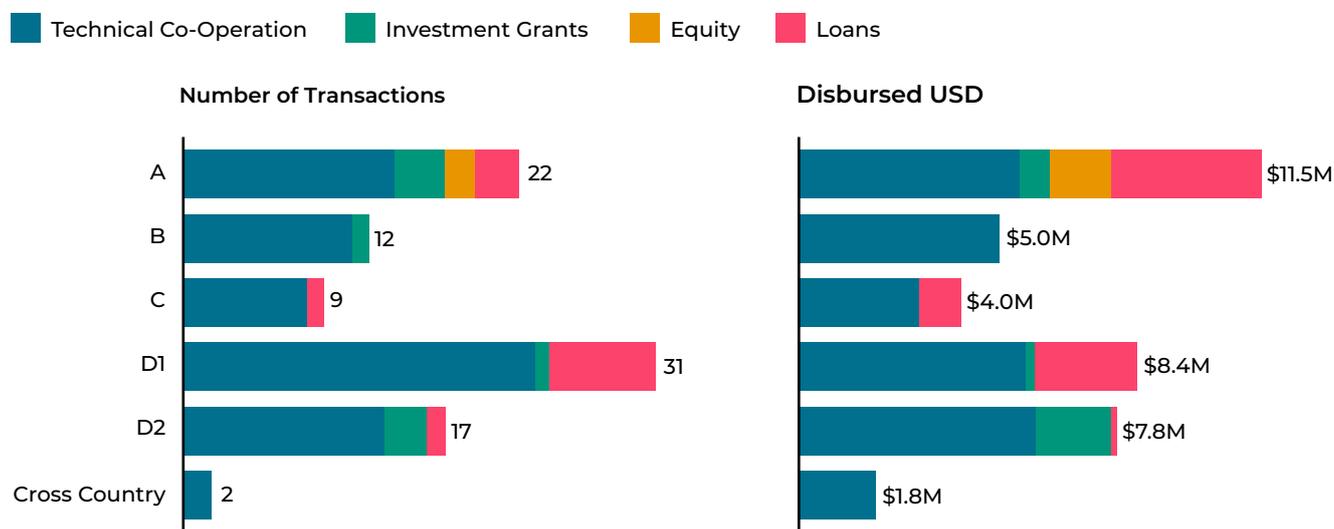
Figure 4.8. IDB Lab Health Innovation Project Portfolio by Country and Financial Instrument



Ecuador has received the most activity by volume of projects but with smaller investment lots than larger LAC economies like Brazil and Mexico. Honduras has also been a country of focus for IDB Lab.

Figure 4.9. IDB Lab Health Innovation Project Portfolio by Region and Project Age Group**Figure 4.10. IDB Lab Health Innovation Project Portfolio by Project Age Group and Economic Group**

Typically, the areas of LAC with the least resources received attention from IDB Lab during the pandemic but it was harder to channel significant resources into markets with fragmented health systems. (Mexico is included in the definition of Central America).

Figure 4.11. IDB Lab Health Innovation Project Portfolio by Region and Financial Instrument**Figure 4.12. IDB Lab Health Innovation Project Portfolio by Financial Instrument and Economic Group**

During the pandemic period, IDB Lab's activity increased with many smaller projects intended to bring relief to areas of need across LAC (e.g., through the provision of personal protective equipment, testing capacity or other COVID-19-related treatments).

Indirect Investments

In recent years, IDB Lab has funded 21 VC funds that are active in the health sector (and other sectors) for a total of US\$84 million. Of this funding, we have been able to trace investments into 58 health companies.

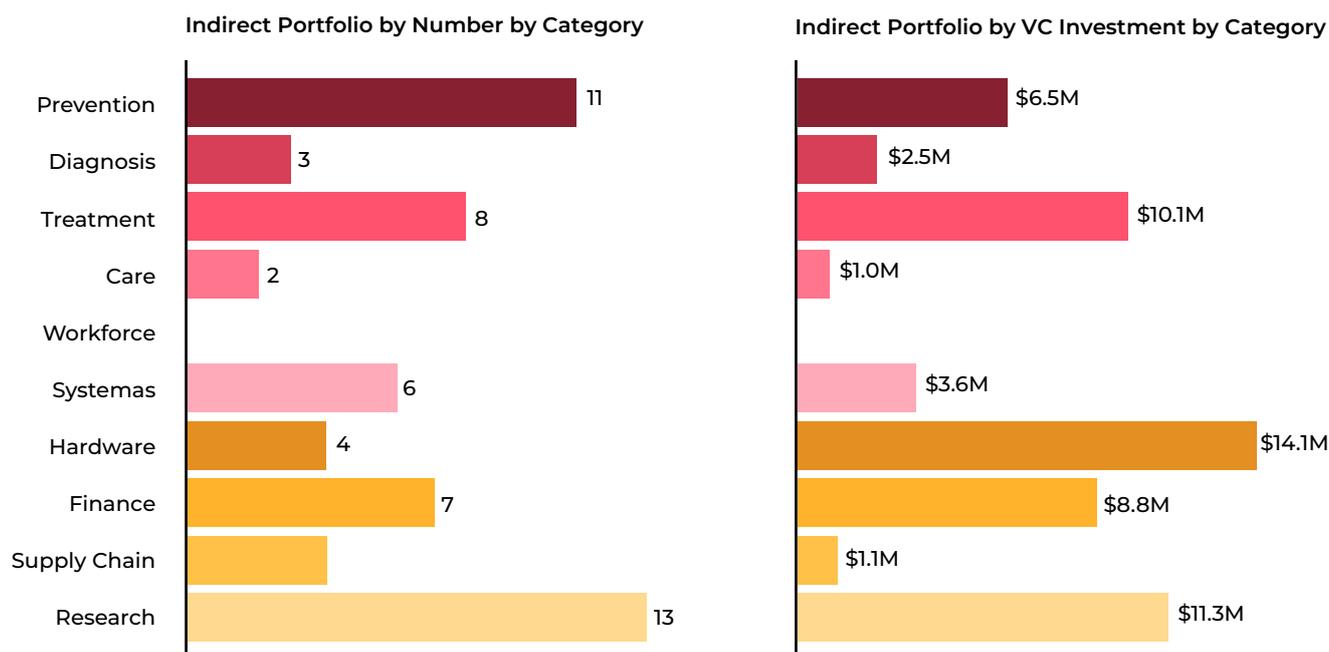
On a pro rata basis, based on data provided by IDB Lab, approximately US\$5 million of IDB Lab capital (~6% of US\$84M) has been deployed into those assets. These investments are concentrated in Brazil and in Mexico, followed by Argentina, Chile, Colombia and other markets.

Appendix 5.2 includes the full list of all funds that IDB Lab has invested in that have then subsequently invested in health innovation and technology companies.

Figure 4.13. VC Funds and Fund Managers where IDB Lab is a Limited Partner (LP)



Figure 4.14. Number and Amount of Indirect Investments from VC Funds where IDB Lab is an LP



Indirect Portfolio

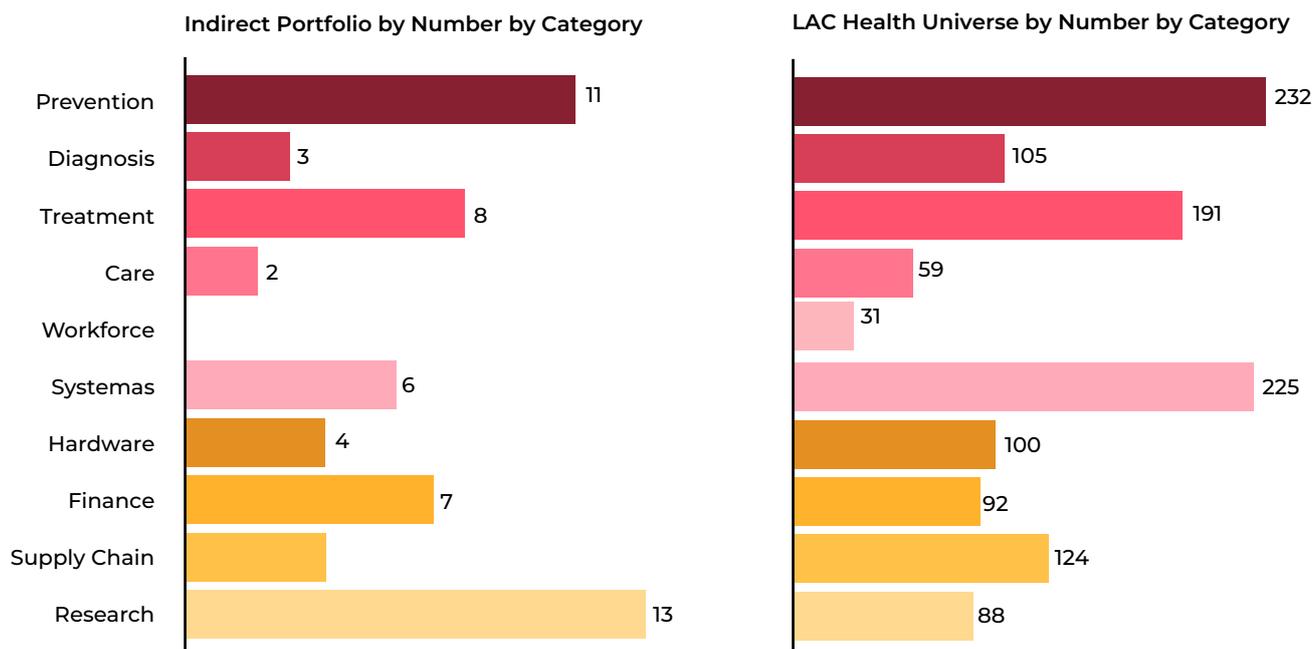
The focus of IDB Lab's indirect portfolio of companies differs from IDB Lab's direct portfolio. The indirect portfolio has a stronger focus on finance and research companies.

When we consider the portfolio against the wider LAC health universe, there is a high level of investment in prevention, which is consistent with the overall market.

The indirect portfolio does not include any workforce investments, and investment in the systems category is low compared to the universe. This also reflects that in the overall universe there is a proliferation of low quality health startups focused on systems. This is evident in the selection and evaluation of funds when reviewing those assets.

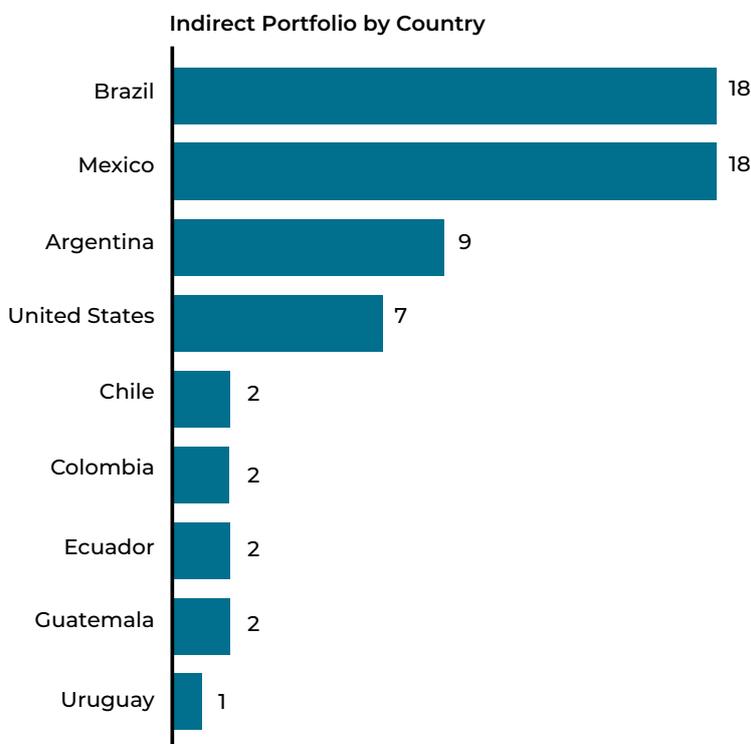
The indirect portfolio has a large exposure to research. This is specifically related to one fund which has a focus on genomics and advanced technology. As such, it has a disproportionate weight in the indirect IDB Lab portfolio relative to the overall universe.

Figure 4.15. Number of Indirect Investments from VC Funds Where IDB Lab is an LP Versus LAC Health Innovation Universe (1,000+)



The VC funds IDB Lab supports invest more heavily into areas such as research and systems than IDB Lab or the general market, reflecting the specialized knowledge required to understand these sub-sectors.

Figure 4.16. Indirect Investments from VC Funds Where IDB Lab Is an LP by Country



The role of Brazil and Mexico as the two biggest regional players are reflected here (classifying country on a company HQ-basis), with IDB Lab's fund partners also backing US-registered businesses servicing the LAC market.

4.2 Post-pandemic Activity

IDB's Lab's active investments across the region also reflect its primary focus on treatment: 12 of 30 active projects are concentrated on this sub-sector. However, recent investments, loans and grants show the influence of technology-led service delivery models following the COVID-19 pandemic. IDB Lab's support of projects such as DocMobil, a healthtech platform for Haiti's rural population, or its initiative to bring digital health to pregnant women in peri-urban areas of Bolivia represent the extent to which perceptions of technology have shifted in the region. As with historic projects, IDB Lab's current activities also reflect the region's challenge with non-communicable diseases and chronic care. Support of organizations such as Salauno, which is committed to eliminating unnecessary blindness in Mexico, show how technology can be harnessed to address specific conditions. IDB Lab's current portfolio of investments also reflects a recently increased focus on aged care. Initiatives such as ANA Care, which aims use technology to improve dependent care for the low-income segment of the older population, reflects the importance of care for frail older adults to IDB Lab's mission.

Figure 4.17. Post-pandemic IDB Lab Health Innovation Projects

Project name	Instrument	Approval date	US\$ '000
Digital health for pregnant women in peri-urban areas of Bolivia	Grant	Apr 23	\$400
Early diagnosis of diabetic retinopathy in Chilean health service using devices & AI	Grant	Mar 23	\$308
PRO Mujer: credit, prev health & dig skills to empower women micro-entrepreneurs	Debt + Grant	Dec 22	\$2,000
Salauno: commitment to eliminating unnecessary blindness in Mexico	Debt + Grant	Dec 22	\$2,000
MEDS: open innovation for primary care and predictive diagnostics	Debt + Grant	Dec 22	\$1,195
NeuralMed: detection of COVID-19 pulmonary alterations on chest X-rays using AI	Direct equity	Oct 22	\$75
Care integration in frail older adults	Grant	Aug 22	\$255
Leveraging ICT solutions for preventive strategies in aging population in LAC	Grant	Jul 22	\$50
DocMobil: healthtech platform for Haiti's rural population	Grant	Jul 22	\$150
Prevention of blindness and visual impairment in Brazil by utilizing smartphone attachment medical devices for ophthalmology	Grant	Jun 22	\$630
ANA Care: improving dependent care for the low-income older pop through tech	Debt + Contingency recovery grant	May 22	\$751
Open seniors	Debt + Contingency recovery grant	Mar 22	\$700
Innovative community-based care giving for older adults in Jamaica	Grant	Jan 22	\$300



5. Appendix

5.1 Direct Funding

Direct funding includes provision of grants, debt, direct equity and contingent recovery grants.

Figure 5.1. Direct Funding – Technical Cooperation

Project	Project name	Country	Cluster	Date	US\$ '000
TC9806350	Development of private sector health	Peru	Health records	Sep 98	\$1,471
TC9809180	Development of private sector health	Peru	Health records	Sep 98	\$204
TC9305261	Subsidize health programs	Colombia	Primary treatment	May 99	\$630
TC9811945	Support for health services acquisition	Belize	Primary treatment	Dec 99	\$669
TC9808182	Private health plans regulation	Brazil	Health insurance	May 00	\$1,550
TC9907008	Occupational health & safety program	Argentina	Health & safety	Jul 00	\$2,260
TC9911188	Development of social health franchises	Ecuador	Primary treatment	Aug 00	\$436
TC9911188	Development of social health franchises	Ecuador	Primary treatment	Aug 00	\$230
TC9905048	Strength. private health care providers	Nicaragua	Primary treatment	Oct 00	\$0
TC9905048	Strength. private health care providers	Nicaragua	Primary treatment	Oct 00	\$576
TC9905048	Strength. private health care providers	Nicaragua	Primary treatment	Oct 00	\$0
TC9905048	Strength. private health care providers	Nicaragua	Primary treatment	Oct 00	\$347
RG-M1009	ICT4BUS pilot project (VE) FUNDES pharmacy sector	Venezuela, Regional	Pharmacies	May 03	\$226

Project	Project name	Country	Cluster	Date	US\$ '000
CH-M1006	Productivity and management tools in the Chilean hospital market	Chile	Practice management	Nov 05	\$1,150
TT-M1001	Improving health, safety & environmental standards among SMEs in the energy sector	Trinidad & Tobago	Health & safety	Dec 05	\$405
EC-S1007	Financing, technical and health services for women in rural communities	Ecuador	Primary treatment	Oct 06	\$200
HO-S1009	Economic empowerment of women living with HIV/AIDS in Bahia de Tela	Honduras	Chronic care	Aug 07	\$200
UR-M1021	Productivity and management improvements in healthcare system	Uruguay	Practice management	Nov 07	\$1,460
EC-S1009	Promoting rural businesses in the rice-growing cantons of Guayas	Ecuador	Wellbeing	Dec 07	\$298
EC-S1017	Expanding access to medical care for low-income patients	Ecuador	Hospitals	Dec 11	\$153
RG-M1207	Micro finance integrated business model for health services	Regional, Nicaragua, Ecuador, Honduras, Haiti	Health insurance	Feb 12	\$845
ES-M1042	Health microinsurance in El Salvador	El Salvador	Health insurance	May 12	\$578
EC-S1018	Franchises for rural pharmacies in Ecuador	Ecuador	Pharmacies	Dec 12	\$212
GU-M1043	Improving child nutrition through social franchising	Guatemala	Wellbeing	Sep 13	\$340
HA-M1048	Carte Avantage Santé: expansion of basic healthcare services to low-income pop.	Haiti	Primary treatment	Sep 13	\$753
HO-M1038	Promoting sustainable business models for clean cookstoves dissemination	Honduras	Wellbeing	Nov 13	\$2,019
PR-M1029	Business models for water purification systems in schools and health centers	Paraguay	Wellbeing	Dec 13	\$108

Project	Project name	Country	Cluster	Date	US\$ '000
BO-M1055	Health micro-insurance in Bolivia	Bolivia	Health insurance	Mar 14	\$587
GU-M1056	Prenatal care in a backpack for a healthy pregnancy	Guatemala	Wellbeing	Jul 14	\$143
HO-M1046	Healthy rural households	Honduras	Specialist treatment	Oct 14	\$399
PE-M1100	BASICSERV: pre-natal care in a backpack. A social business model for healthy pregnancy in Peru	Peru	Primary treatment	Jan 15	\$21
DR-M1049	Innovative health service delivery systems in rural DR	Dominican Republic	Training & accreditation	Mar 16	\$540
DR-T1152	Building the capacities of young people to develop interactive digital technologies	Dominican Republic	Chronic care	Nov 16	\$340
ME-T1314	Affordable diabetes healthcare services for the BOP	Mexico	Chronic care	Dec 16	\$138
RG-T2850	Mitigation in urban health inequities through solutions public-private partnership (PPP)	Regional	Primary treatment	Mar 17	\$998
EC-T1403	Novulis: closing the access gap to dental health services in Ecuador	Ecuador	Specialist treatment	Jun 18	\$150
CO-T1483	Antioquia innovates in healthtech for the low-income population	Colombia	Telehealth	Oct 18	\$1,000
CR-T1197	Technology to improve healthcare in Central America	Costa Rica	Primary treatment	Nov 18	\$241
CR-T1210	Leveraging natural capital: Costa Rica biomaterials hub	Costa Rica	Drug production	Dec 19	\$863
HO-T1352	TECH4DEV: strengthening the entrepreneurial ecosystem to improve technology solutions in the health, education and security sectors	Honduras	Health analytics	Dec 19	\$1,000
ES-T1323	Medix Lab: virtual reality lab for nursing education	El Salvador	Training & accreditation	Mar 20	\$150
CO-T1581	InnspiraMed: ventilators for critically ill patients infected with COVID-19	Colombia	Medical devices	Apr 20	\$140

Project	Project name	Country	Cluster	Date	US\$ '000
AR-T1247	Diagnostic test SARS-CoV-2 and other respiratory viruses	Argentina	Lab testing	Apr 20	\$125
CO-T1582	Prototype of the medical guidance platform for all	Colombia	Telehealth	May 20	\$150
JA-T1190	Telehealth and consultation in Jamaica	Jamaica	Telehealth	May 20	\$142
AR-T1248	Development of CRISPR-based diagnostic test for SARS-CoV-2	Argentina	POC testing	May 20	\$130
TT-T1101	MEDL delivers	Trinidad & Tobago	Pharmacies	May 20	\$150
DR-T1212	Collective omnihealth mass assistance and corona virus	Dominican Republic	Decision support	May 20	\$122
BL-T1136	Equipping government health facilities in Belize with leading digital health solutions for COVID-19	Belize	Practice management	May 20	\$120
EC-T1453	Big data for efficient management against COVID-19	Ecuador	Health analytics	Jun 20	\$134
BR-T1454	NeuralMed: detection of COVID-19 pulmonary alterations on chest X-rays using artificial intelligence	Brasil	Diagnostic tech	Jun 20	\$75
PE-T1448	TUMI Genomics: next generation sequencing (NGS) diagnosis for COVID-19	Peru	Genomics	Jun 20	\$150
BR-T1453	Allm: cross-border telemedicine to strengthen responses to COVID-19 with an existing digital health solution for stroke care	Brazil	Telehealth	Jun 20	\$150
ME-T1440	Find COVID-19: fast, low-cost diagnosis using real-time disease surveillance technology	Mexico	POC testing	Jul 20	\$65
BR-T1457	Open innovation for the health sector in the fight against COVID-19	Brazil	Wellbeing	Jul 20	\$870
PR-T1298	Pilot hospital digital in the framework of COVID-19	Paraguay	Practice management	Oct 20	\$150
GU-T1313	Qüilo: financial inclusion through technology for informal workers	Guatemala	Primary treatment	Dec 20	\$250

Project	Project name	Country	Cluster	Date	US\$ '000
HO-T1376	Innovative energy solutions for health service delivery in Honduras	Honduras	Health logistics	Dec 20	\$150
GU-T1327	ALMA: automated medical logistics assistant to improve access to health services in Guatemala	Guatemala	Health logistics	Oct 21	\$725
JA-T1203	Innovative community-based care-giving for older adults in Jamaica	Jamaica	Aged care	Jan 22	\$300
CH-T1268	Open seniors	Chile	Aged care	Mar 22	\$350
ME-T1485	ANA Care: improving dependent care for the low-income older population through technology	Mexico	Aged care	May 22	\$87
BR-T1504	Prevention of blindness and visual impairment in Brazil by utilizing smartphone attachment medical devices for ophthalmology	Brasil	Medical devices	Jun 22	\$630
HA-T1306	DocMobil: healthtech platform for Haiti's rural population	Haiti	Telehealth	Jul 22	\$150
PN-T1303	Leveraging ICT solutions for preventive strategies in aging population in LAC	Panama	Wellbeing	Jul 22	\$50
AR-T1294	Care integration in frail older adults	Argentina	Aged care	Aug 22	\$255
DR-T1257	MEDS: open innovation for primary care and predictive diagnostics	Dominican Republic	Primary treatment	Dec 22	\$195
GU-T1339	PRO Mujer: credit, preventive health and digital skills to empower women micro-entrepreneurs	Guatemala	Primary treatment	Dec 22	\$250
ME-T1501	Salauno: commitment to eliminating unnecessary blindness in Mexico	Mexico	Specialist treatment	Dec 22	\$250
CH-T1284	Early diagnosis of diabetic retinopathy in Chilean health service using medical devices and artificial intelligence-based pre-reports	Chile	Diagnostic tech	Mar 23	\$308
BO-T1405	Digital health for pregnant women in peri-urban areas of Bolivia	Bolivia	Specialist treatment	Apr 23	\$400

Figure 5.2. Direct Funding – Investment Grant

Project	Project name	Country	Cluster	Date	US\$ '000
ME-G1023	ANA Care: improving dependent care for the low-income older population through technology	Mexico	Aged care	May 22	\$664
CH-G1008	Open seniors	Chile	Aged care	Mar 22	\$400
HO-G1259	Innovative energy solutions for health service delivery in Honduras	Honduras	Health logistics	Mar 21	\$500
HO-G1257	Innovative energy solutions for health service delivery in Honduras	Honduras	Health logistics	Jan 21	\$1,400
BR-G1009	NeuralMed: detection of COVID-19 pulmonary alterations on chest X-rays using artificial intelligence	Brazil	Diagnostic tech	Jun 20	\$75
EC-G1002	Scaling quality dental health	Ecuador	Primary treatment	Dec 19	\$280
ME-G1013	Affordable diabetes health care services for the BOP	Mexico	Hospitals	Dec 16	\$275
HO-G1004	Promoting sustainable business models for clean cookstoves dissemination	Honduras	Wellbeing	Nov 13	\$1,017

Figure 5.3. Direct Funding – Equity

Project	Project name	Country	Cluster	Date	US\$ '000
BR-Q0029	NeuralMed: detection of COVID-19 pulmonary alterations on chest X-rays using artificial intelligence	Brasil	Diagnostic tech	Oct 22	75

Figure 5.4. Direct Funding – Loans

Project	Project name	Country	Cluster	Date	US\$ '000
GU-L1190	PRO Mujer: credit, preventive health and digital skills to empower women micro-entrepreneurs	Guatemala	Primary treatment	Dec 22	\$1,750
ME-L1324	Salauno: commitment to eliminating unnecessary blindness in Mexico	Mexico	Specialist treatment	Dec 22	\$1,750
DR-L1159	MEDS: open innovation for primary care and predictive diagnostics	Dominican Republic	Primary treatment	Dec 22	\$1,000
BR-L1558	TIMPEL	Brazil	Specialist treatment	Jul 20	\$750
CR-L1138	Technology to improve healthcare in Central America	Costa Rica	Primary treatment	Nov 18	\$1,000
ME-L1286	Clínicas del Azúcar: technology and customized services to combat diabetes and its complications	Mexico	Chronic care	Oct 18	\$2,000
EC-L1184	Franchises for rural pharmacies in Ecuador	Ecuador	Pharmacies	Dec 12	\$938
EC-L1183	Expanding access to medical care for low-income patients	Ecuador	Primary treatment	Dec 11	\$800
EC-L1175	Promoting rural businesses in the rice-growing cantons of Guayas	Ecuador	Wellbeing	Dec 07	\$350
EC-L1175	Promoting rural businesses in the rice-growing cantons of Guayas	Ecuador	Wellbeing	Dec 07	\$100
HO-L1138	Economic empowerment of women living with HIV/AIDS in Bahia de Tela	Honduras	Chronic care	Aug 07	\$100
EC-L1173	Financing, technical and health services for women in rural communities	Ecuador	Primary treatment	Oct 06	\$300

5.2 Fund Investments

Fund investments are VC funds across LAC in which IDB Lab has invested

Figure 5.5. VC Fund Investments

Project	Project name	CO	Inst	\$US\$ M
RG-Q0105	Equity investment in Monashees X: empowering the regional VC ecosystem	Monashees X L.P	Nov 22	\$3.0
RG-Q0094	Equity investment in Valor Venture Fund IV: cutting-edge innovations to leverage inclusion	Valor Ventures Fund Iv L.P	Jul 22	\$5.0
RG-Q0095	GridX Fund II: leveraging deeptech for social and economic development	Inter-American Development Bank	Jun 22	\$3.0
RG-Q0061	500 Luchadores III Fund	Quinientos Luchadores Llc	Jun 20	\$3.0
RG-Q0062	Fueling regional entrepreneurship and innovation: investment in DILA's Venture Capital Fund	Dila Iv L.P. Managed By Dila S.A. De C.V.	Jun 20	\$4.0
RG-Q0060	Valor Venture Fund III: cross-border strategy leveraging impact	Valor Venture Parthners Iii Lp	Mar 20	\$4.0
RG-Q0050	Magma Fund II	Magma Partners Ii, Llc	May 19	\$4.0
BR-Q0023	Equity investment in Redpoint eVentures Fund II: technology as an enabler to achieve high impact and scalable results	Redpoint Eventures	Mar 19	\$4.0
CH-Q0006	Proposal for a capital investment for the Vulcano Fund	Dadneos S.A.	Nov 18	\$2.0
RG-Q0047	Carao Ventures Fund I	Carao Ventures S.A.	Nov 18	\$3.5
AR-Q0017	CITES I: transforming disruptive science and technology into scalable businesses	Centro De Innovación Tecnológica, Empresarial Y Social	Oct 18	\$3.0

Project	Project name	CO	Inst	\$US\$ M
RG-Q0046	Pomona Impact Fund II: a regional impact fund	Pomona Impact	Jul 18	\$3.5
RG-Q0040	Impact investing fund for tech-driven social enterprises	Nxtp Labs	May 17	\$5.0
RG-Q0026	Equity investment in the Angel Ventures Pacific Alliance Fund/AVPAF	Angel Ventures Lp	Aug 16	\$4.0
BR-Q0015	The Capital Tech VC Fund	Invest Tech Participações E Investimentos Ltda.	Dec 14	\$5.0
RG-Q0023	Endeavor Catalyst. the multiplier effect: taking entrepreneurs from founders to funders	Catalyst Gp Inc.	Dec 14	\$3.7
BR-Q0013	Vox Capital Impact Investing Fund I	Vox Capital Consultoria E Assessoria Ltda	Sep 12	\$4.0
ME-Q0006	Angel Ventures Mexico Fund	Angel Ventures Mexico L.P.	Nov 11	\$4.0
BR-Q0012	Emerging Enterprises Investment Fund C-Venture Premium	Cventures Empreendimentos Inovadores E Participações S.A.	Nov 11	\$4.0
BR-Q0008	Investment in the seed equity fund Performa Investimentos	Performa Investimentos	Aug 10	\$2.0
ME-Q0005	Equity investment in the Alta Ventures Mexico Fund	Inter-American Development Bank	Jun 10	\$5.0
BR-Q0009	Partnership between the MIF and Burrill & Company LLC	Burrill & Company	Nov 09	\$5.0

5.3 References

Bagolle, A., Casco, M., Nelson, J., Orefice, P., Raygada, G. y Tejerina, L., "[The Golden Opportunity of Digital Health for Latin America and the Caribbean](#)", IADB, Washington, DC, 2022.

IDB Invest, "[How New Technologies Are Transforming Health Industry in Latin America and the Caribbean](#)", BID Invest, Washington DC, 2023.

International Monetary Fund, "[World Economic Outlook, October 2023: Navigating Global Divergences](#)", IMF, Washington, 2023.

Kanavos, P., Colville Parkin, G., Kamphuis, B. and Gill, J., "[Latin America Healthcare System Overview. A comparative analysis of fiscal space in healthcare](#)", LSE, 2019.

Latitud, [The Latam Tech Report](#), 2022.

Luciani, S., Agurto, I., Caixeta, R. and Hennis, A., [Prioritizing noncommunicable diseases in the Americas region in the era of COVID-19](#), Rev Panam Salud Publica, 2022; 46: e83.

McKinsey & Company, "[Perspectives on healthcare in Latin America](#)", 2011.

OECD/The World Bank, "[Health at a Glance: Latin America and the Caribbean 2020](#)", OECD Publishing, Paris, 2020.

OECD/The World Bank, "[Health at a Glance: Latin America and the Caribbean 2023](#)", OECD Publishing, Paris, 2023.

Pan American Health Organization, "[Advancing towards universal health in Latin America and the Caribbean: Lessons from the COVID-19 pandemic](#)", December 2022.

Saigí-Rubió, F., "[Promoting telemedicine in Latin America in light of COVID-19](#)", Pan American Journal of Public Health, 2023, <https://doi.org/10.26633/RPSP.2023.17>.

United Nations Organization, "[Population 2030. Demographic challenges and opportunities for sustainable development planning](#)", United Nations, New York, 2015.

United Nations Organization, Sustainable Development Goals, "[Goal 3: Ensure healthy lives and promote well-being for all at all ages](#)".

World Bank, "[Building Resilient Health Systems in Latin America and the Caribbean : Lessons Learned from the COVID-19 Pandemic](#)", World Bank, Washington, DC, 2023.

World Bank, "[Digital-in-Health: Unlocking the Value for Everyone](#)", World Bank, Washington, DC, 2023.

World Bank, "[World health statistics 2023: monitoring health for the SDGs, sustainable development goals](#)", World Bank, Washington, DC, 2023.

World Health Organization (WHO), "[Classification of digital interventions, services and applications in health: a shared language to describe the uses of digital technology for health](#)", 2nd ed, 2023.

