

Perspectives on the healthcare market in Brazil

Patria Presentation

November 2023



We bring 9 provocations about the Brazilian healthcare sector...

Services



Payers and providers

The **healthcare industry is 20 years behind** most other industries (including government) in the implementation of digital solutions and productivity

There is a strong **dehospitalization movement** with clear benefits to the healthcare payors

Payers and providers are unlikely to stop fighting each other leading to continued **compressed margins, unless claims rate ease up** – solutions such as network management can help improve

The trends towards **consolidation will continue** at a slow ride

There is a significant opportunity to continue **scaling specialty providers across Brazil** leveraging initiatives such as: vision benefits management and new points of care

Ecosystem

There are many **emerging ecosystems in Brazil**, however these will consolidate into 2 or 3. Are you one of those? Or do want to join forces with one of them?

Distributors

Players can no longer count on the tax game (subsidy) and need to fundamentally **rethink the model** (e.g., more specialties relevance, additional services and vertical integration)

Clinical Trials (specialties)

We are underleveraging the **opportunity to do clinical trials** across our diverse and very sizeable population in Brazil

Wellness

Today Brazil is a leader in wellness and beauty and in the next decade we expect **multiple categories and services to emerge** (e.g., Fitness, Mindfulness and better sleep)

Generics and OTC

Continuation of current trends expected: small subset of **players leading the market with limited competitive moves** and opportunities for entry

Products (Life Sciences)



...and potential levers for each of these trends

Services



Payers and providers

- 1 Healthcare industry is 20 years behind
- 2 Dehospitalization movement
- 3 Compressed margins, unless claims rate ease up
- 4 Consolidation will continue
- 5 Scale specialty providers across Brazil

Efficiency and cost reduction, digital and AA implementation in operations with 1-20% of potential impact

Programmatic M&A integration

Growth strategies

Products (Life Sciences)



Ecosystem

- 6 Emerging ecosystems in Brazil

Business building, new alliances and corp. dev. with 5% additional revenue per customer

Distributors

- 7 Rethink the model

Digital and efficiency in ops. and verticalization to create an ecosystem with 1-10% of impact

Clinical Trials (specialties)

- 8 Opportunity to do clinical trials

Real world evidence supported by AA

Wellness

- 9 Multiple categories and services to emerge

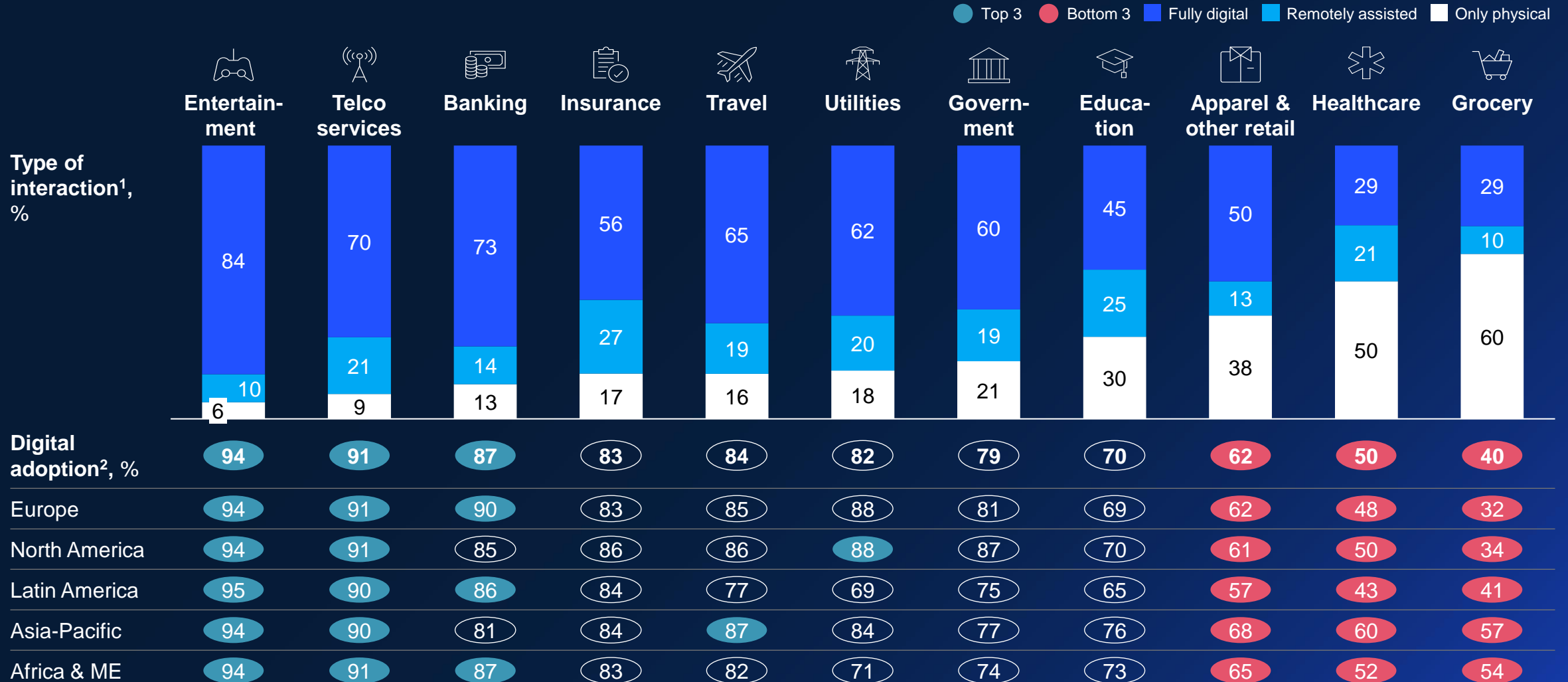
Growth strategies

Generics and OTC

Players leading the market with limited competitive moves

Limited opportunity

1. Healthcare is lagging industries in digitization





1. Q: How have you interacted with these services in the past 6 months? Options: Fully digital without human assistance (e.g. web, app); Digital with human assistance (e.g. call center, live chat, email); Physical (e.g. branch, store, stand, agent)
















2. Sum of users that have interacted fully digitally or digitally with remote assistance with each industry

Source: McKinsey & Company Global Digital sentiment insights

1. Brazilian healthcare system is one of the least digitized in the world

Not exhaustive

Digital maturity assessment  High  Low

Countries	Digital connectivity index, index 2020	EMR maturity, avg. HIMSS EMRAM (2016) ⁴	Country archetype, archetype
 Singapore	97	5.3	Pioneer
 Netherlands	82	4.7	Leader
 Japan	81	1.7 ¹	Pioneer
 South Korea	78	1.7 ¹	Pioneer
 UAE	77	3.1	Leader
 Switzerland	75	3.6 ²	Leader
 Sweden	75	3.6 ²	Leader
 Denmark	75	5.3	Leader
 US	75	5.4	Pioneer
 Spain	74	3.9	Leader
 Ireland	66	3.6 ²	Leader
 Finland	66	3.6 ²	Leader
 Mexico	54	2.0	Follower
 Brazil	52	2.0	Follower
 India	39	1.7 ¹	India archetype

Brazil healthcare system falls short on the adoption of Electronic Medical record and digitization of its processes

1. Singapore, Japan, South Korea, China, India – Average for APAC 2. Switzerland, Ireland, Sweden, Finland, France, Belgium, Germany, Spain, Norway, Luxembourg, Italy, Russia – Average for Europe | 3. Israel, Saudi Arabia – Average for Middle East | 4. Quartile of global cloud spending per capital

1. This creates many opportunities to improve productivity by combining digital tools and operational transformation

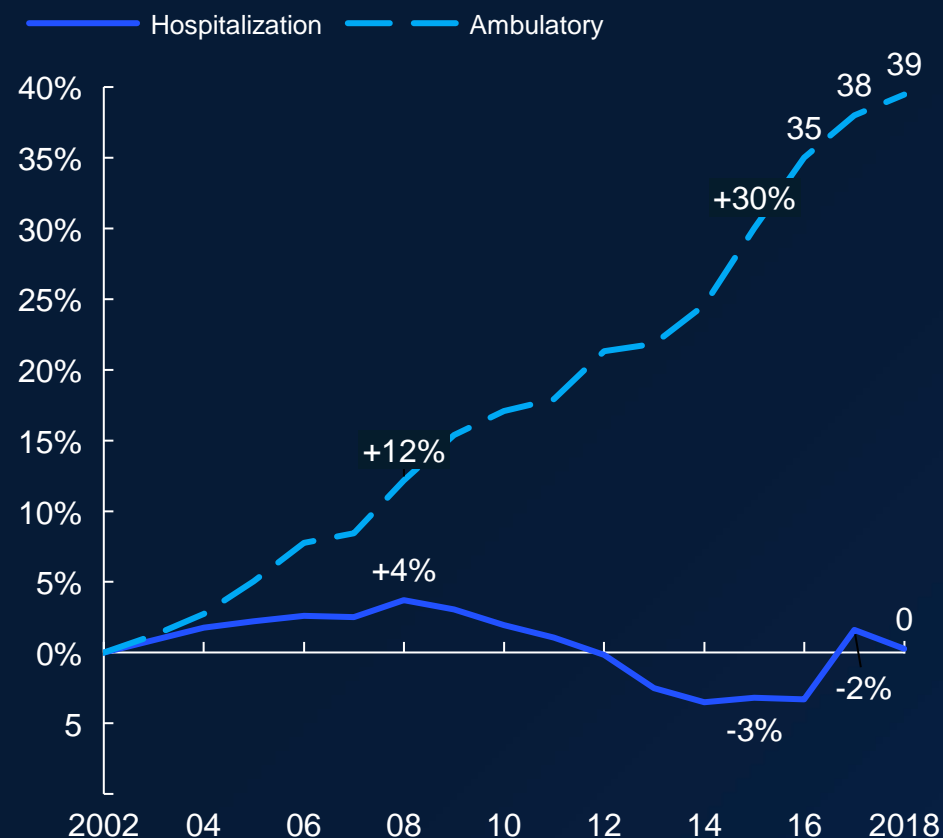
Efficiency can be explored by different levers to capture full potential of the enterprises



	Labor costs Optimize allocation of personnel considering demand by service area and timing	5-7% reduction of Personnel, Medical Contracts and Drugs & Materials
	Clinical Operations Review of clinical processes optimizing medical, material and drugs allocation	
	Support Functions Standardize processes among functions and leverage automation	10 - 13% reduction of SG&A
	Procurement Review of purchase agreements and efficiency of the services provided	4-7% of cost reduction on COGS (except for Personnel) and SG&A
	Capital Optimization Optimize medical equipment and real estate	10-20% of capex reduction
	Footprint review Optimize hospitals and clinics footprint for the different formats, evaluating transform the assets and divestment	Varies depending context

2. Given the benefits that dehospitalization brings, penetration is less than you can imagine

US hospital admissions and outpatient visits,
% change vs. 2002



Patient migration drivers



Improved care indicators such as re-hospitalizations and complications



Migration of patients to outpatient care



Increased adherence to prescription and treatment



Advances in therapeutics and innovative technologies



Increased patient engagement in health and wellness



In Brazil, migration to Outpatient centers is more timid but growing

Between 2019 and 2020, demand for **home care** grew **15%**

In 2022, **homecare companies** grew **35%** (in patients)

Groups and **healthtechs** have led this movement

PREVENT
SENIOR

sami



64% of cases were solved in primary care

Hospitalization refers to services provided when patients are kept overnight for treatment, but not for observation. Ambulatory refers to services provided by hospitals that provide medical services that do not require internment or night stay

3. The current context has impacted payers performance, pressuring them to review their business models and operations

Global and Brazil trends

Description

Increases in healthcare spend	<ul style="list-style-type: none"> • Increased inflation, especially for medical products • Aging and new habits, increasing chronic diseases and the demand for healthcare • Increased people's attention to preventative care
Customer centricity	<ul style="list-style-type: none"> • Link customers using digital/mobile to facilitate healthcare options and experiences (e.g., provider selection) • Personalization integrated with health and wellness propositions that reward healthy behaviors
Market competition	<ul style="list-style-type: none"> • Concentration on few payers (top 7: 40% of premiums) and accelerated consolidation of some players (HapVida) • Hundreds of smaller payers and cooperatives with profitability challenges
Verticalization	<ul style="list-style-type: none"> • Payers are acquiring other players across the value chain, (e.g., hospitals, clinics and regional payers) • This vertical integration has allowed payers to shift the setting of care to lower cost locations, e.g., primary care facilities, telemedicine
New business models	<ul style="list-style-type: none"> • Insurers with business models anchored in the digitization of interaction and accelerated promotion of remote care (e.g., Alan, Oscar) • Payers focused on access to providers, facilitating the digital/physical connection and remote provision of telemedicine (e.g., Savia)
Fraud increases	<ul style="list-style-type: none"> • High fraud index driven by multiple economic and social factors resulting in ~R\$ 25 to R\$ 30 billion cost for payers
Pressure on performance	<ul style="list-style-type: none"> • Increased administrative expenses due to rising inflation, increasing the need to improve efficiency • Search for better claims ratio and new efficiency measures • Financial results offset operational results challenges

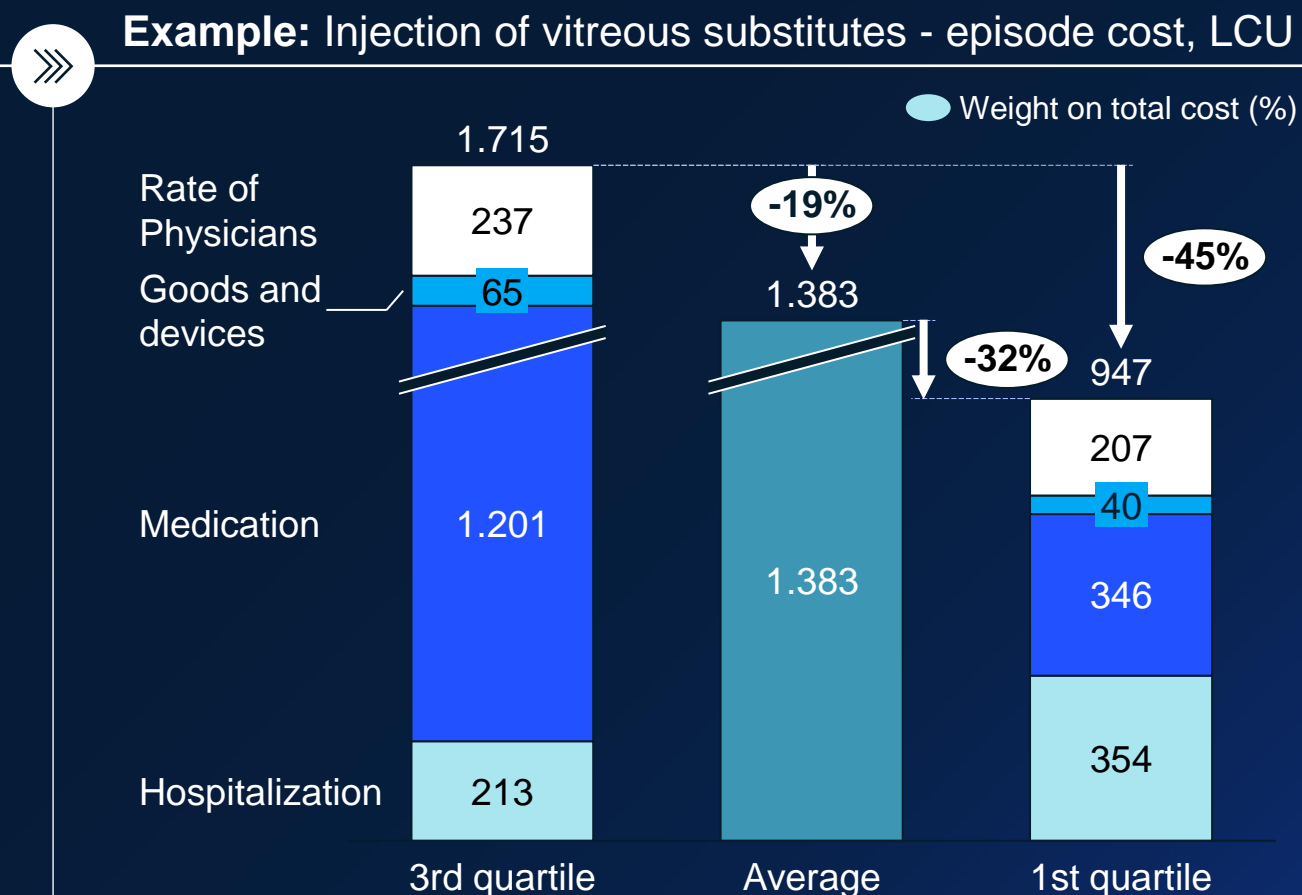
3. Negotiating with healthcare providers reduces the cost of claims

Operating model: Provider management

Client case

Approach

- Calculate costs of clinical episodes across the network
- Split costs of clinical episodes by category
- Assess network cost variability for a given clinical episode



Significant cost gap between healthcare providers - 20-30% savings potential

Some specialties have **significant price variability** within the network

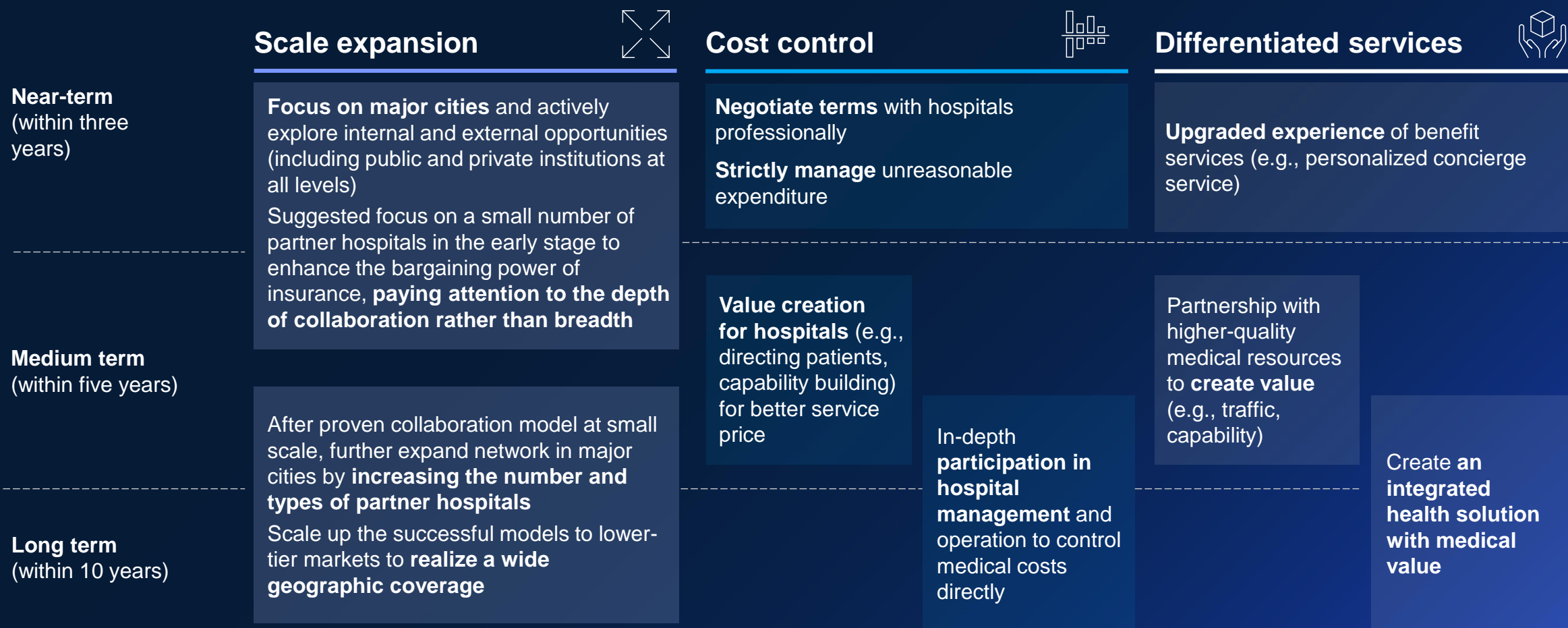
Medicines are a critical source of cost difference in this case

Basis for negotiation, allowing for cost reduction

3. In terms of effective network management, development priorities vary by phase



China's insurance companies generally have **limited impact** on hospital networks, especially for large public hospitals, and there is no significant difference between companies. Currently, the collaboration model between commercial insurer and hospitals is generally limited to pre-negotiated contracts of service outsourcing, with no **deep cooperation**. The small scale of China's CHI weakens its bargaining power, **so it is difficult to build customized services or control medical cost effectively**.



5. Specialty care providers have important opportunities, e.g., for vision care competitors can increase their presence through 4 main growth strategies

[Deep dive on the sequence](#)

Vision benefits management

Insurance and healthcare payers that cover more basic exam and glasses/contact lenses coverage, more complex treatment such as for glaucoma and cataracts



Specialized care centers

Hospitals focused on high volumes of surgery and complex treatment in large cities, with research development efforts to position as a vision care reference



New points of care

Partnership with retailers to open clinics in supermarkets specially to ease the access



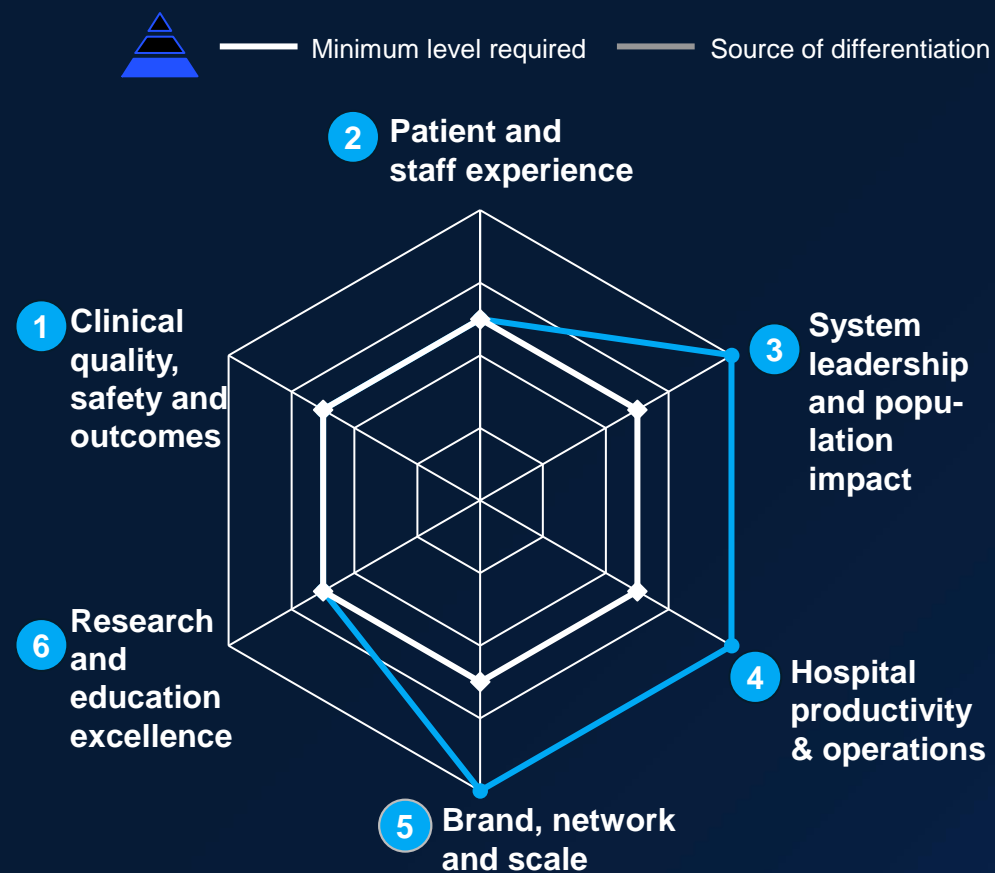
Disease awareness

Strategies focused on patients to increase treatment demand and adherence through partnerships with healthcare insurance, payers and pharmaceutical industries

5. High volumes of surgery enabled Aravind to set the national standard for eye care in India



Value proposition



Approach to deliver patient-centric care

Identify challenge

- Cataracts were a major source of blindness in India, which could be avoided by timely intervention and surgery
- Lack of awareness, poor accessibility, high cost (particularly for cataract surgeries) and attitude that the poor not a financially sustainable customer to serve exacerbate the challenge

High volumes

- Outreach program where in doctors reach out to remote villages to conduct eye camps
- Achieves high quality at a low cost through high service volumes and innovation (i.e., mass marketing, industrial engineering innovations)

Performance management

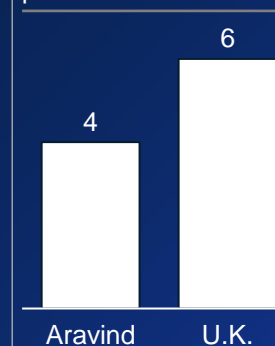
- Holistic performance management framework to enable adherence to quality standards

Example impact

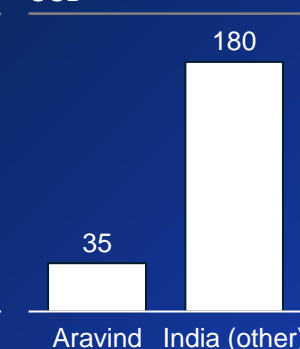
Largest and most productive eye care facility in the world across these following dimensions

- Quality**
- Productivity and operations**
- Cost**
- Access**

Infection rate per 10,000 patients, 2003, percent



Approximate cost for cataract surgery, USD



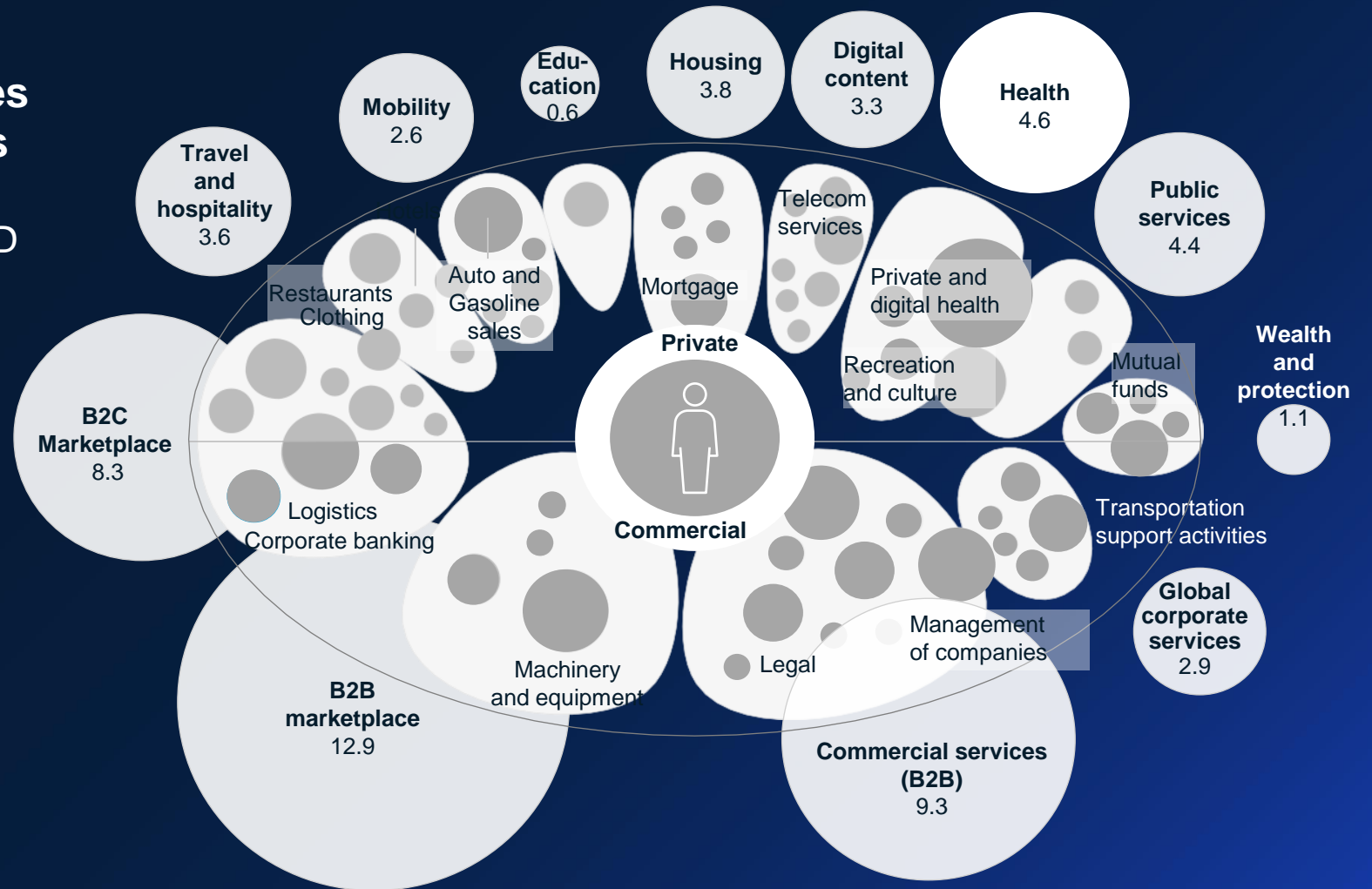
6. Healthcare ecosystems are expected to gain greater market share in the coming years...

Healthcare ecosystems will be leaders in growth

The global economy is merging with **12 major ecosystems** that will account for **30% of global revenues by 2025¹**





Healthcare ecosystems belong to the **top 5 income-generating ecosystems**

> **Total sales estimates (2025), billions USD**



1. Estimates based on corporate sales data, GDP industry breakdowns and expert assumptions. Circle sizes show approximate revenue pool sizes, smallest circle means less than USD 100 billion in revenues. Not all industries and subcategories are shown.

6. ...but there will be space for the most robust ones in Brazil, as we see in USA

USA healthcare ecosystems	Revenues USD, 2022	Description	Brazilian healthcare ecosystems
McKesson	276,7 B	Distributes medical supplies, systems, pharmaceuticals, and provides an extensive infrastructure network for the Healthcare sector focusing on technological solutions	KoraSaúde
Optum	71 B	UnitedHealth Group subsidiary since 2011 with technology and related services, pharmacy care services and various direct healthcare services	+MaterDei Rede de Saúde
 Providence St. Joseph Health Tegria	27,6 B	Healthcare system founded in 1859 and merged with St. Joseph Health in 2016, operating 51 hospitals and medical clinics, +800 non-acute facilities, assisted living facilities and technology development for healthcare in Tegria	REDE D'OR
 Tenet Health	20 B	65 hospitals, over 450 healthcare facilities, and operates Conifer Health Solutions, which provides healthcare support services to health systems and other clients	DASA 
BON SECOURS MERCY HEALTH	11 B	Healthcare system in the U.S. following the 2018 merger of Bon Secours Health System, Inc. and Mercy Health. Operates 47 hospitals and other health care services in U.S. and Ireland	 Gente, Saúde e Bem-estar. RaiaDrogasil S.A. GRUPO DPSP

6. To capture value at scale requires developing a healthcare ecosystem that connects different actors around the patient's needs

Healthcare ecosystems integrate value chain participants offering a seamless journey and reducing journey fragmentation



End-to-end experience

Optimize ecosystems that connect services to seamless Journeys, retention consumers

15% new customers acquired through ecosystem users



Digitization

Optimize a digital platform integrating the patient journey involving players from several links of the chain



New business model

Integrate best-in-class health solutions with mutual value creation across all ecosystem partners e.g., new customer-centric services, data & analytics, and PaaS

5% additional revenue per customer









Partnership

Optimize capillarity through partnerships with regional players and use of new sales channels

Varies depending context

7. The distribution business is migrating towards specialization, additional services and vertical integration

Disruption	Trend	Example	
	Industry focus on specialty products	 McKESSON Empowering Healthcare	Distribution solution Specialized drug ordering web platform, offering real-time pricing and inventory levels, tracking, billing and payment, and customized reports
	Portfolio of value-added services to drive relationships in the value chain <ul style="list-style-type: none"> Marketing (marketing, IT, business relationships with hospitals, pharmacies) Hospital solutions (medicine compounding centers, comprehensive surgical services) 	 AmerisourceBergen	E2E solutions Additional services during manufacturing and distribution processes: development, commercial pre-launch and market maturation plan
	Vertical integration to provision of health services (infusions, home care, compounding, adherence)	 FRESENIUS MEDICAL CARE	Vertical integration into home care Fresenius has focused on the integration of products and services for dialysis. In 2019 acquired NxStage by expanding its home care offer
	Distribution and supply chain services for CGT and long-term post-treatment monitoring services	 TELUS Health	Patient monitoring An increase in trial volume has resulted in a need for long-term patient monitoring beyond traditional modalities, with organizations wanting to be equipped to track patients for 10+ years or manage and analyze complex data
	Emergence of fully digital B2C channels		Express Scripts, benefits manager Pharmacy Benefits Manager: request, direct delivery, tracking and management of medications (recharge reminders)
Disruption	Emergence of B2B portals for the integration of small participants within marketplaces	 JDH 京东健康	B2B Open Market Serving more than 120 K downstream pharmacies and clinics.

1. McKinsey COVID-19 Survey: EU Physician Experiences, Expectations, and Perspectives on Pharma Engagement; survey in the field in May and September 2020

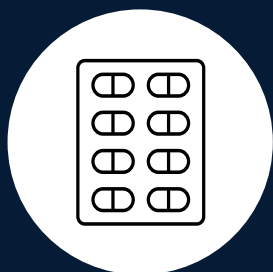
2. CIGNA Newsroom: CIGNA Moving from volume to value, 2019.

Sources: Interviews with experts, research of press and company public information

8. Clinical trial geographic footprint expansion mainly driven by interest in accessing international patient populations and lower-cost labor

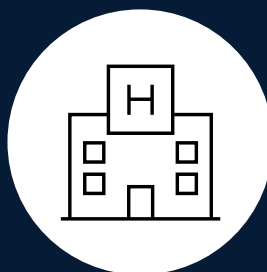
Key drivers	Description of driver
 International patient populations	Sponsors are running an increasing number of multi-national trials (especially for Phase 2 and 3) that require heightened patient volumes , which are more accessible internationally
	Well-established regions (e.g.; North America and Western Europe) are saturated in-patient recruitment, leading players to seek more fertile enrollment environments
	Regulatory requirements are pushing CROs to seek diverse patient populations in new geographical markets
	Russia in Ukraine war has long-term impacts on biopharma CT – these countries together contribute with 3.6% of global sites in CT performed by the innovative biopharma industry and an estimated 5% of global patients in those trials
 Low-cost labor	Rising margin pressures are causing sponsors (and thus CROs) to seek low-cost, qualified medical professionals (physicians, clinicians, investigators, etc.)
	CROs are increasingly outsourcing administrative / corporate governance tasks to avoid high-salary environments in Western EU and North America
 Robust patient enrollment	High medical costs could drive strong patient enrollment in order to access inexpensive trial medication and high-quality medical services (doctor visits, laboratory testing, etc.)
 Heightened global view post-COVID	COVID-19 has increased awareness of global disease transmission and highlighted how a regionally-specialized footprint can inhibit drug discovery and clinical testing efficacy

8. Brazil could benefit from clinical trials' geographical expansion given its attractive environment for clinical research



Relevant Pharma market

Brazil has the **7th largest pharma market** globally, which attracts pharma companies to conduct trials and commercialize products in the country



Public Healthcare System (SUS)

The Brazilian Public Healthcare System (SUS) provides a **gateway for patient recruitment** and represents a **huge potential client for Pharma Companies** (if products are incorporated into the system)



Heterogenous population

Brazil's **heterogenous population provides a diversified pool to test health technologies**, providing ample data on effectiveness and potential side effects



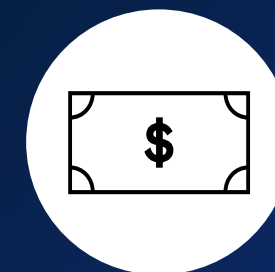
Excellent research centers and collaboration

There is a **robust infrastructure in the country and many existing networks** that provide collaboration opportunities



Improved ethical and research regulations

The **regulatory system is aligned to reference countries** and has advanced significantly in the last years



Cost of clinical trials

Clinical trials have a **relatively lower cost** in Brazil when compared to reference countries, especially due to low cost of labor force

8. Brazil ranks in 18th place in global clinical trials

Clinical trials¹ in Top 20 countries started in 2019

		Appx. share of global trials ²	Country population, M
#1 - United States	9.840	33%	332
#2 - China	1.999	7%	1412
#3 - France	1.562	5%	68
#4 - Canada	1.363	5%	38
#5 - United Kingdom	1.166	4%	68
#6 - Spain	1.020	3%	47
#7 - Germany	867	3%	83
#8 - Italy	744	3%	59
#9 - Korea, Republic of	617	2%	51
#10 - Belgium	580	2%	12
#11 - Turkey	542	2%	85
#12 - Egypt	511	2%	109
#13 - Netherlands	492	2%	17
#14 - Denmark	476	2%	6
#15 - Australia	450	2%	26
#16 - Poland	415	1%	38
#17 - Taiwan	403	1%	23
#18 - Brazil	390	1%	214
#19 - Switzerland	358	1%	8
#20 - Japan	343	1%	125

1. Trials that were terminated, withdrawn or suspended were excluded from the database 2. Does not account for overlap due to multi-site trials

9. We identified 7 key trends in Wellness in the post pandemic world

■ Deep dive on the sequence



Wellness as priority

and consumer are spending more in Fitness, Better Health, Mindfulness and better sleep products are the new avenues for growth – 38% of consumers desire additional products in Better Mindfulness



The future is about a seamless fusion of services and products, and the trajectory of expenditure is poised to pivot significantly towards the realm of services – 63% are expecting to spend more in services versus 57% in products



Wellness platforms can work as an acquisition strategy

for companies that focused on healthcare with clinics and hospitals on its business portfolios



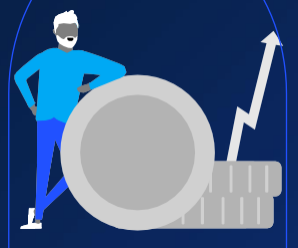
Natural is out of steam, consumers are more likely to choose higher effectiveness over natural components - 26 out of 33 categories have effectiveness preference



Consumers are embracing experimentation, investing time in researching the attributes and benefits of wellness products before making their choices – 77% spend time researching attributes or benefits before deciding what to buy



The reign of established brands continues, especially in the better appearance categories - 78% prefer established brands over others



Added well being benefits products are the next growth frontier

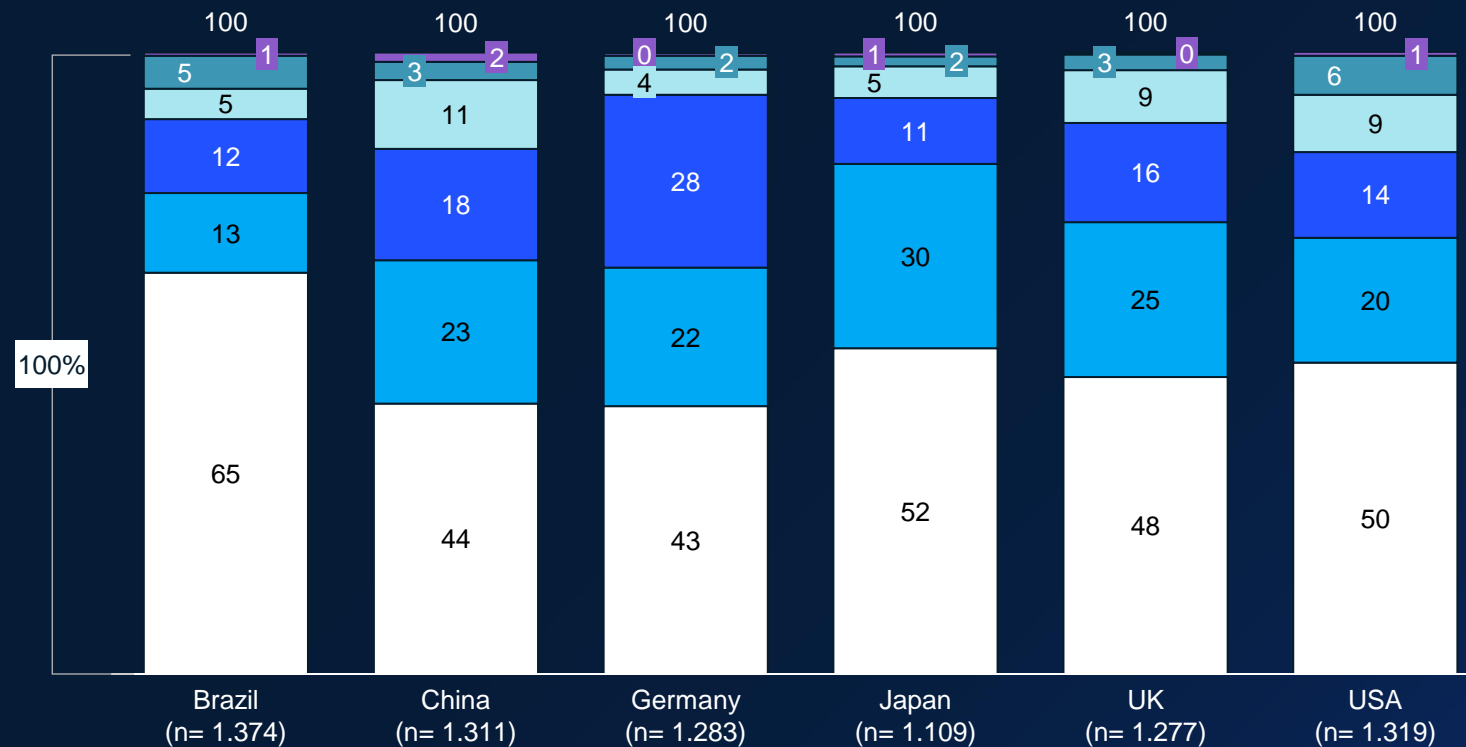
(e.g. vitamin enhanced water, nutrient enhanced shampoo) – 77% are willing to pay more for enhanced products

9. Health, appearance and fitness are the biggest expenses of Brazilians, with demand for services increasing in recent years

■ Sleep
 ■ Mindfulness
 ■ Nutrition
 ■ Fitness
 ■ Appearance
 ■ Health

Wellness spending by category¹

% of annual spending on wellness products and services



- Underserved market
- Prioritization of well-being is increasing faster than the level of well-being of consumers
- Willingness to pay tends to remain or increase
- Migration to digital channels
- Increased demand for services that meet mental and physical health needs

1. Question: Approximately how much money have you spent on each of the following in the past 12 months? Figures may not sum to 100%, because of rounding.

9. Incentives to win over users from wellness platforms can be provided based on membership advantages



Customer advantages from using partner platforms

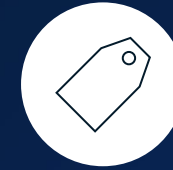
Partial or full **assumption of subscription or premium version costs** for selected partners (e.g., assumption of costs given regular training participation)

Tokens issued to insured to use for partner platforms (e.g., 5 tokens per year where one token can be redeemed for a free month membership with any partner app)



Advantages in insurance terms for partner platform users

Contribution refunds (e.g., cash back) or **extended cost reimbursement** (e.g., for certain preventative services) for partner platform users (e.g., given regular use)



Special offers exclusively available to insurance members


Special platform-specific offers for insureds (e.g., live courses with familiar sports personalities)

Exclusive bundles (e.g., platform links with content, enabling training and nutrition plan integration)



9. There are multiple domains to explore across products and services in the wellness space


(X%) Share of Wellness wallet reported by consumers

(↑) Spend comparison from 2021 survey

Appearance 31%  Fitness

 13% Health

 45% Mindfulness  7% Nutrition

 3% Sleep

 1%

Illustrative examples across categories:

											
Consumer health journeys	Skin care	Physio	Acute healthcare	Preventative healthcare	Infant health	Men & women's health	Oral care	Eye care	Cognition and mental health	Nutrition	Sleep
OTC	Dermatological OTC	Joint relief	Analgesics Cold & Cough GI	Natural Alternatives	Baby OTC Products	Sexual Health Products	Therapeutic Mouthwash	Artificial Tears	Cognition enhancement	Digestive OTC (e.g., Tums)	Sleep medication
Supple-ments	Skin Care Supplements CBD	Sports nutrition	Natural / homeopathic alternatives	VMS	Pediatric Supplements	Prenatal supplements	Probiotics Tooth enhancing supplements	Eye care supplements	Cognition Solutions (e.g., Gingko biloba)	Probiotics Gut Health Weight Loss Proteins	Sleep supplements (e.g., melatonin)
Consumer goods	Masks	Weight Sets Body Weight / Resistance	Smart thermometers	Vitamin-fortified food & beverages	Formula	Condoms	Specialized Toothpaste	Contact Lenses Contact lens solution	Adult coloring books	Specialized Nutrition Products	Bedding, eye masks
Devices/ diagnostics	UV Sensors Cleansing Devices	Activity Tracker Bikes Treadmills Other Mediums	At-home consumer testing (e.g., HIV, colon screening, general health)	Smart Breathalyzers	Smart Monitors (UltraSound, Cameras) Structures (Bassinets) Bottles	Telehealth Reproductive Health	Personalized Orthodontary Dental Insurance	Contacts	Abilify MyCite	Home Fitness Smart Scales	Snoring prevention devices, Sleep aid devices (wearables), bed sensors
Digital tools	Skin surface samplers	Activity Trackers Classes Mobile apps	Specialized D2C Smart Health Trackers Telehealth	Immunity and general health tracking apps	Measurement Applications	Sexual and Reproductive Medical Information	Dental Tracking Tools	Recognition Apps DTC retailers	Online Meditation Tools	Health Tracking Blood Testing Home Fitness Applications	Tracking & aid software/apps
In-person services	Specialized Dermatological Clinics	Gyms Physical Therapy Chains	In-store Clinics Urgent Care Centers	Biometric Screening Labs	Baby Care Classes Birthing Classes	In-Store Screenings	Dental Clinics	Eye Clinics	Health Spas Therapists	Diet Counseling Centers	Sleep studies

5 core messages to leave you with today

1

Payers and providers

The efficiency and digitization gap in the industry should be addressed to **keep business sustainability**, reducing impact of claims on results

2

Distributors

Market pressures players to **evolve their business models** through verticalization and specialties

3

Clinical Trials

Unexplored **opportunities on clinical trials** could expand healthcare market in Brazil

4

Ecosystem

The **market opportunity is limited** for players that could identify supplementary and strong alliances to offer solutions tailored on consumer needs

5

Wellness

Consumers want more holistic wellness with **effective offerings** and have **underserved needs** in mindfulness, sleep and holistic health

McKinsey
& Company

