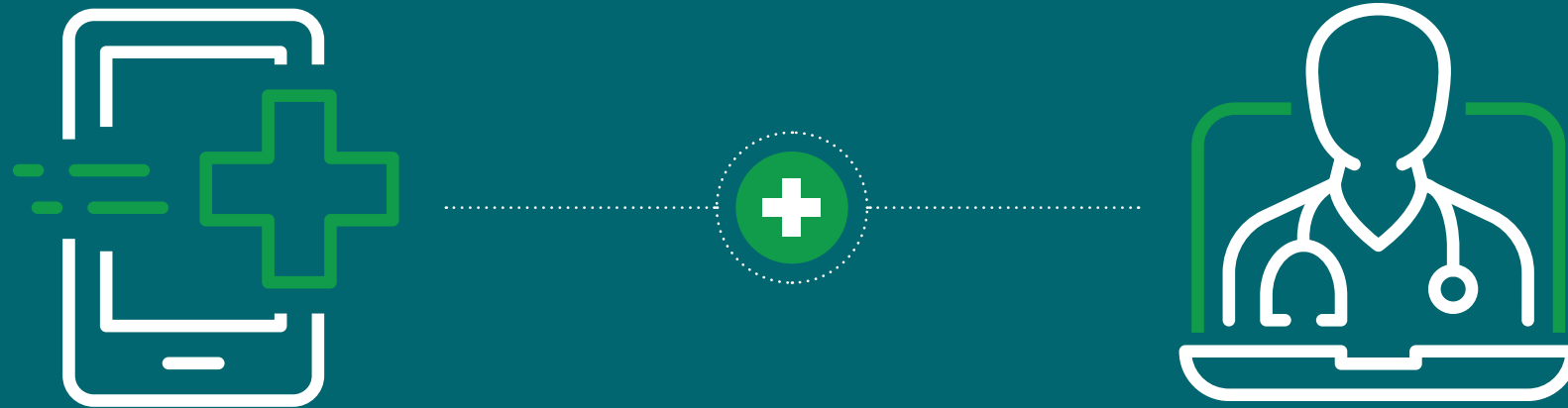




A Digital Pill for Revolutionizing Healthcare



OCTOBER 2023





Boston Consulting Group (BCG) partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG was the pioneer in business strategy when it was founded in 1963. Today, we work closely with clients to embrace a transformational approach aimed at benefiting all stakeholders—empowering organizations to grow, building sustainable competitive advantage, and driving positive societal impact.

Our diverse, global teams bring deep industry and functional expertise and a range of perspectives that question the status quo and spark change. BCG delivers solutions through leading-edge management consulting, technology and design, and corporate and digital ventures. We work in a uniquely collaborative model across the firm and throughout all levels of the client organization, fueled by the goal of helping our clients thrive and enabling them to make the world a better place.



B Capital is a multi-stage global investment firm that partners with extraordinary entrepreneurs to shape the future through technology. With more than \$6 billion in assets under management across multiple funds, the firm focuses on seed to late-stage venture growth investments, primarily in the enterprise, financial technology healthcare, and climate tech sectors.

B Capital was founded in 2015 by Eduardo Saverin and Raj Ganguly. Shortly thereafter, they were joined by Howard Morgan as Chair and Co-founder and Kabir Narang joined as Founding General Partner. B Capital's vision of providing an unparalleled platform to help the world's most promising startups scale and transform their industries could not be achieved without the guidance of Sheila Patel as Vice Chair, who joined in 2021.

B Capital leverages an integrated team across nine locations in the US and Asia, as well as a strategic partnership with BCG, to provide the value-added support entrepreneurs need to scale fast and efficiently, expand into new markets, and build exceptional companies.



Foreword

The move towards higher spend per capita on healthcare has emerged as a key barometer of economic development and growth. This demonstrates the importance of healthcare from a government policy perspective, as well as the increasing prioritization of healthcare by individuals and corporates. In India, this curve has been moving upwards in recent years, driven by a confluence of forces, from a per capita healthcare spend of \$45 in 2014 to \$68 in 2021. However, it very much lags the healthcare spend compared to other large economies – thus reflecting the gap and potential in the sector.

India suffers from ‘dual disease’ burden with acute disease burden growing at 6%, while chronic disease burden (diabetes, cardiac diseases,

respiratory diseases etc.) growing at 9% overtook the acute disease burden in 2014. In this context, and with a growing middle class and awareness of health, as well as increasing government expenditure on health (from 1.4% in 2018 to 2.2% in 2022), we expect the overall healthcare market to grow from \$167Bn in 2022 to \$458Bn in 2030.

With a growing spend, Indian healthcare still suffers from the classical challenges which is called the Iron-Triangle in healthcare – challenges of access, affordability, and quality. The healthcare infrastructure in India is well below WHO standards (1.2 beds per ‘000 people compared to the WHO standard of 5). In spite of investments in recent years in increasing medical colleges and institutions, skilled professionals – general

practitioners and specialists will remain a constrained resource in India for the foreseeable future (0.7 physicians per ‘000 people compared to WHO standard of 1). Given that these shortcomings will not be overcome in a short period of time, leveraging technology remains the one viable way to circumvent the country’s lack of physical care infrastructure at scale. Driven by COVID, rapid digitization, increasing penetration of smartphones and the internet, the pace of digital innovation in Indian healthcare is accelerating and an increasing number of founders are creating innovative platforms focused on these specific patient and doctor needs. Global and local investors have helped support this trend with record levels of funding since 2021.

Foreword

The government, too, has taken a series of progressive steps and initiatives, such as the bold and ambitious Ayushman Bharat Digital Mission that aims to create a unified digital healthcare stack to promote digital health and improve healthcare outcomes. In particular, the mission aims to create a secure exchange of medical data between different stakeholders in the healthcare ecosystem. Such a platform will help expand the reach of digital health solutions while ensuring better clinical outcomes for patients across India's diverse population segments.

Driven by the above factors, the evolution of digital healthcare in India is at a critical point in its

journey. It offers a fantastic opportunity for digital-native founders and incumbents to reimagine how healthcare will be delivered in the future. We can expect a transformation in how patients will seek and receive care. We expect a trajectory change in how doctors and healthcare providers will seek to give acute and chronic care. We also expect the payers – i.e., health insurance companies to integrate into this ecosystem to create efficiency and better patient outcomes. While it is difficult to crystal ball gaze, our estimates suggest that the digital health market in India can grow 10x from \$2.7Bn in 2022 to ~\$37Bn by 2030. In this report, we have outlined key drivers that will lead to continued innovation and investment

opportunities, especially at the early stage, while providing an insight into where the challenges lie. These trends around technology-led innovation are what we envision will become the digital pill for revolutionizing healthcare in India.



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Boston Consulting Group



Karan Mohla
General Partner
B Capital Group



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01

Introduction

Healthcare delivery ripe for disruption in India

 India is perfectly poised for growth...



Healthcare 2022

3%

Healthcare spending % of GDP

~37%

Insured Households

~55%

of Healthcare spend that is OOP

Prescriber-guided, late diagnosis and treatment...

...in a rapidly-evolving healthcare landscape



Healthcare 2030

6%

Healthcare spending % of GDP

~69%

Insured Households

~36%

of Healthcare spend that is OOP

Reimbursement-guided, early disease
management, tech-enabled scale benefits

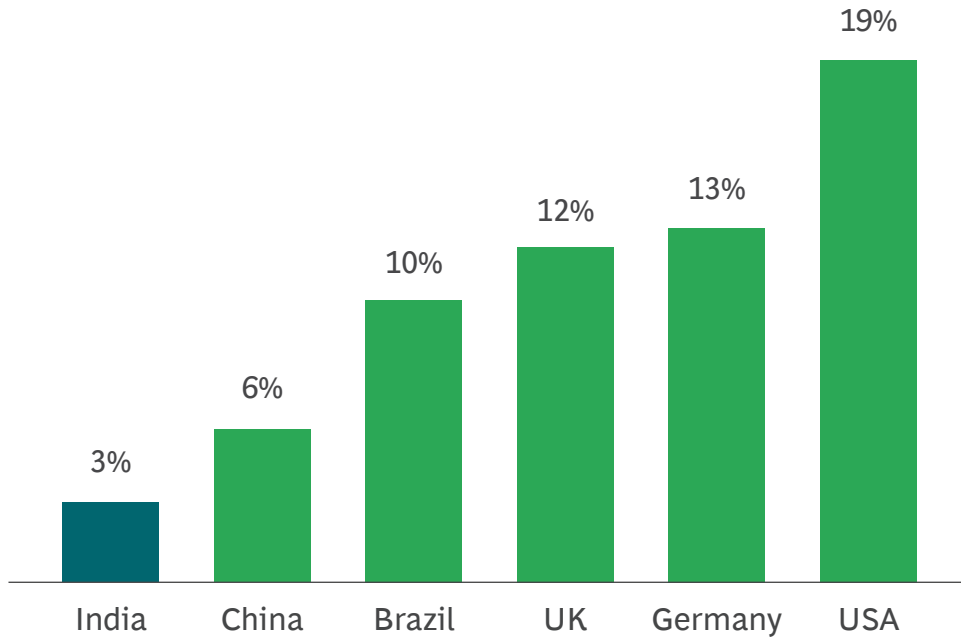


India has low health expenditure but expected to rise going forward



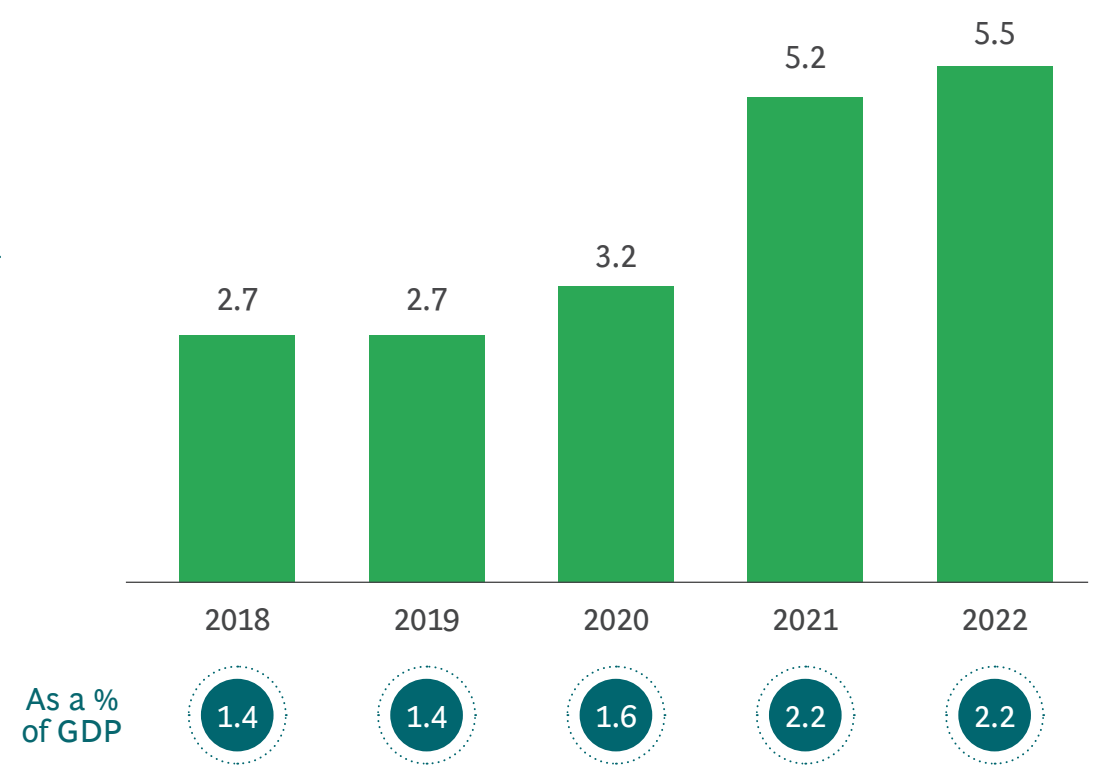
India lags major economies in overall healthcare spending as % of GDP

Current Health Expenditure as a % of GDP¹



Government healthcare spending in India on the rise with aim to increase spend to 2.5% of GDP by 2025

India Government Health Expenditure (INR Lakh Crore)



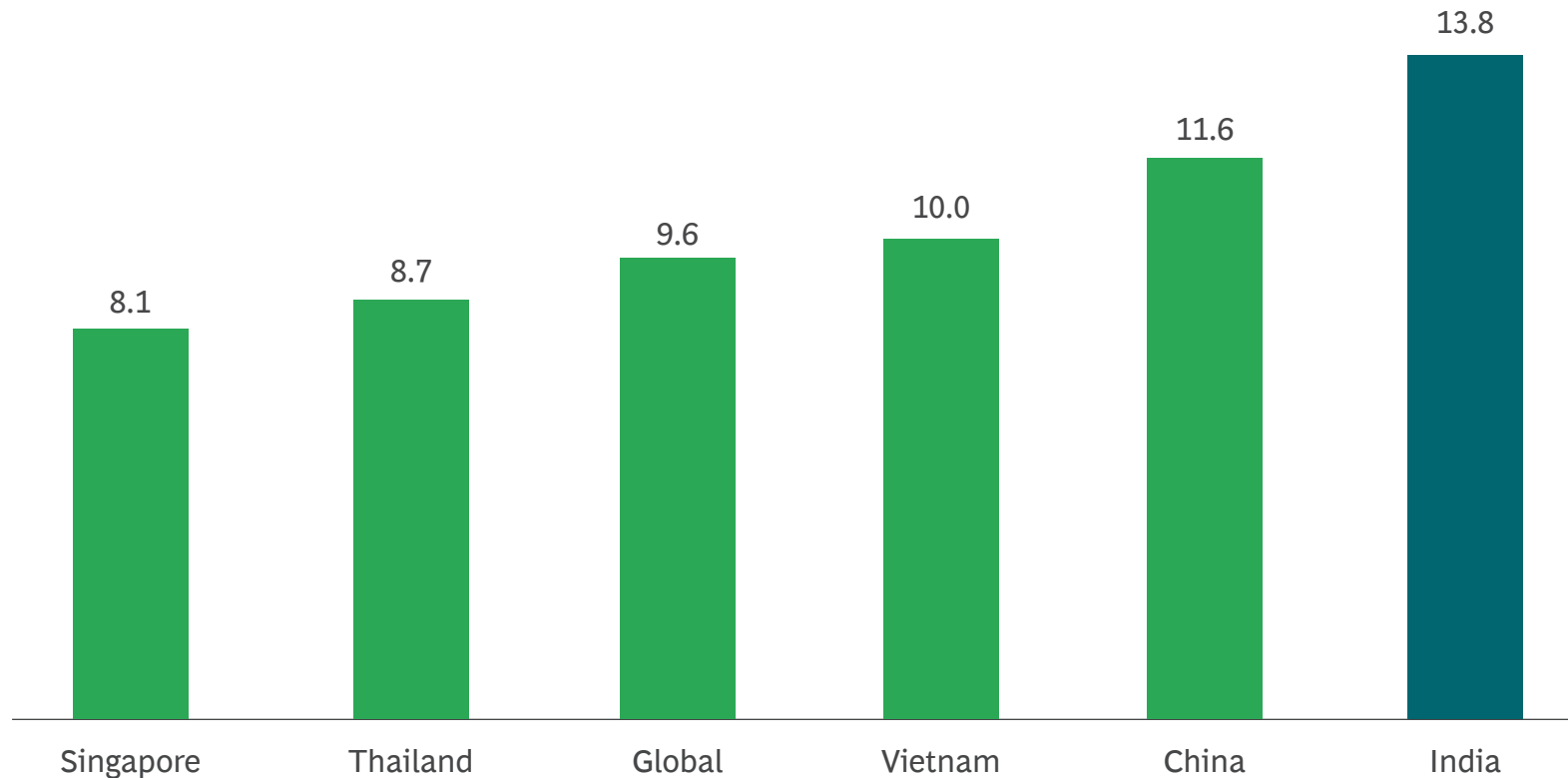
1. Data as of 2020

Source: World Health Organization; Global Health Expenditure Database; CRISIL Research; CEIC Data



India witnessing highest healthcare inflation despite fall in COVID-related hospitalizations

YoY Medical Cost Inflation, 2021 (%)



“Despite COVID-19 related hospital admissions going down in the recent past, medical inflation in India has continued to rise.

Routine surgeries have seen their pricing go up by 8-10%. Consumable pricing is up 17-18%. Medical inflation is passed on to consumers.

— Business Today”

Source: MOFSL; Mercer Marsh Benefits; Business Today

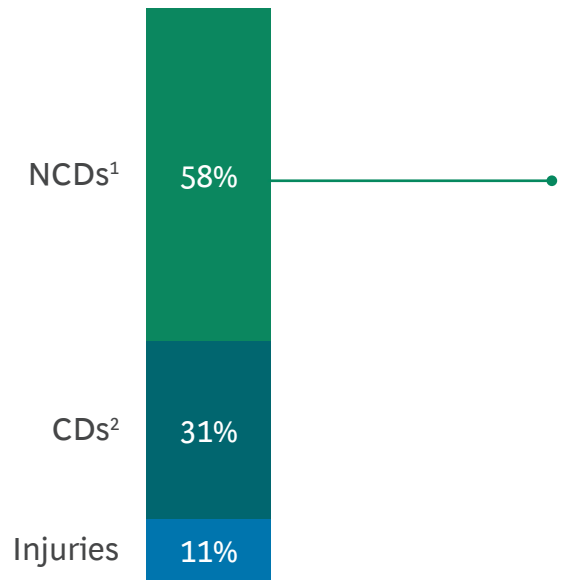


High chronic disease burden in India

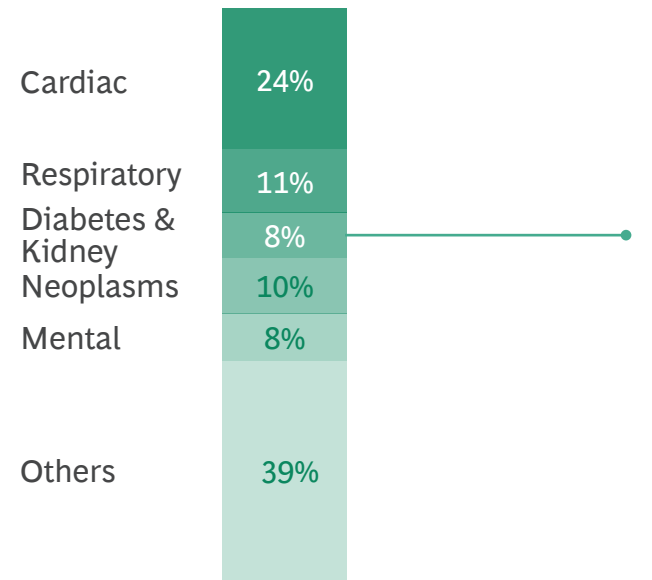
Chronic diseases, such as cardio and diabetes comprise the major disease burden in India

India now has the 2nd largest diabetes population, most of them are not treated

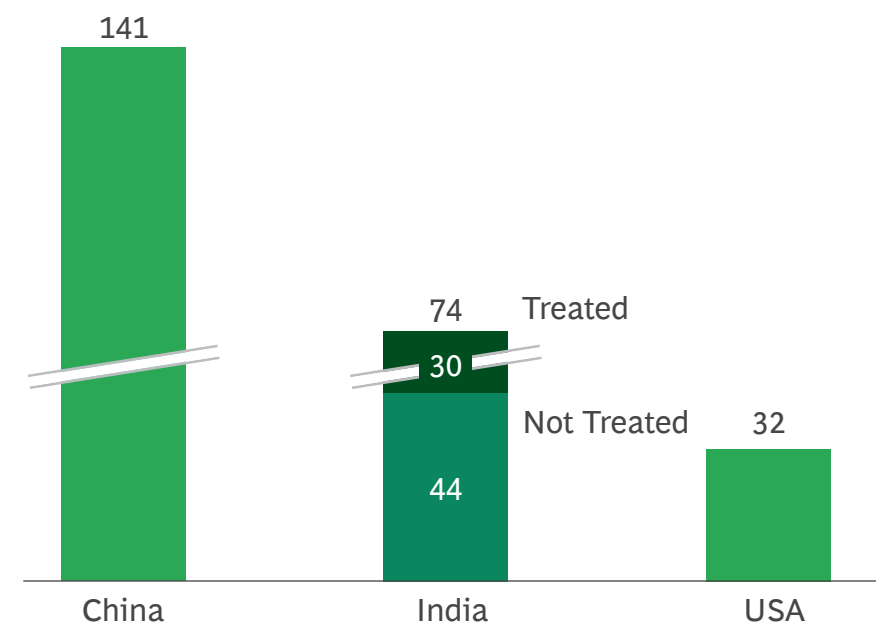
Breakdown of Disease Burden in India (%)



Breakdown of NCD Disease Burden in India (%)



Type 2 Diabetes³ Prevalence (Mn Patients) – Top 3 Countries



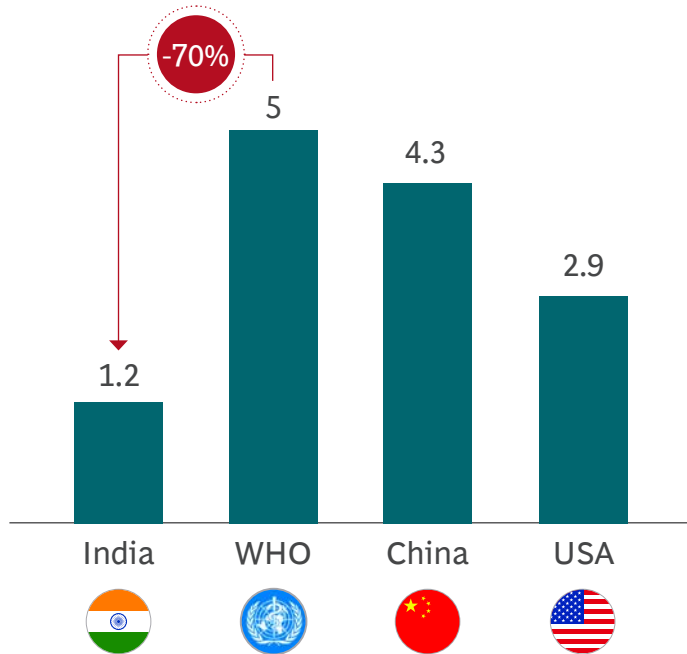
1. Noncommunicable Diseases; 2. Communicable Diseases; 3. T2D Diabetes Market Contributes to ~92% of Overall Diabetes Market 4. Data as of 2021

Source: Our World in Data; BCG Analysis

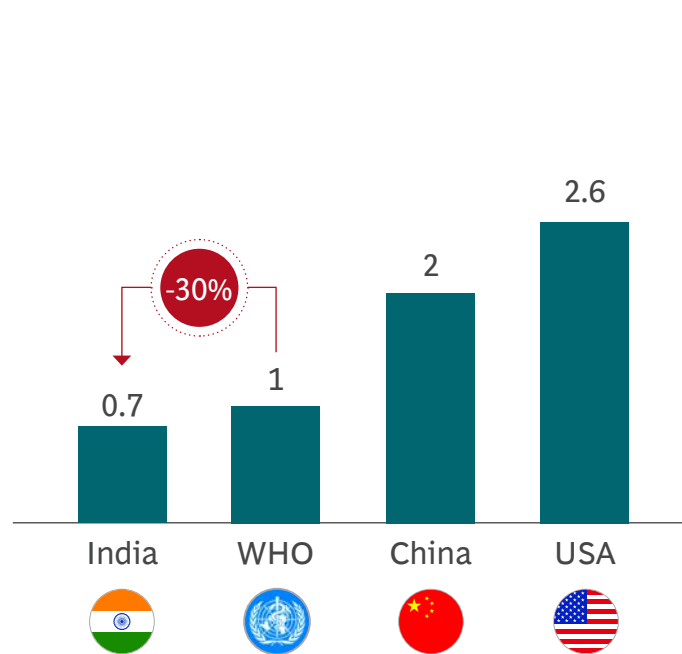
Healthcare is under-resourced in India



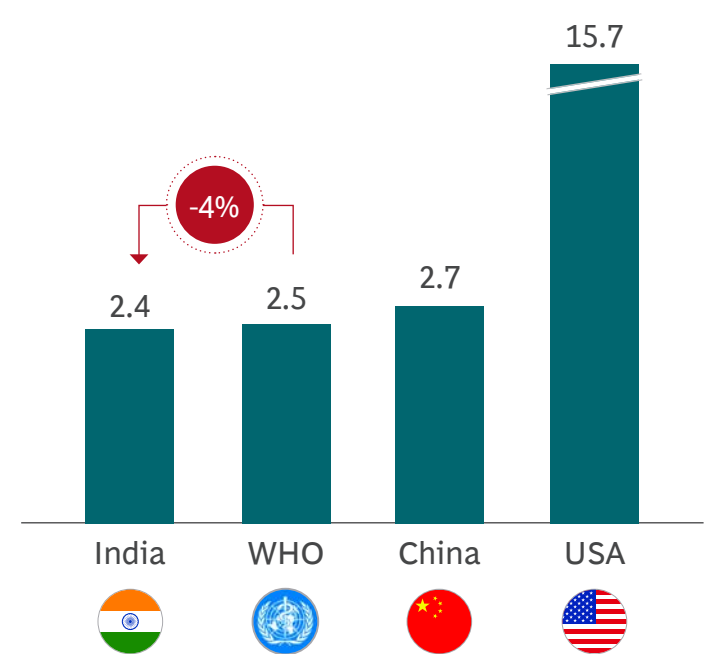
Number of Beds per 1,000 People



Number of Physicians per 1,000 People



Number of Nurses & Midwives per 1,000 People



Note: Data as per estimation in 2021
Source: WHO World Health Statistics; WHO Database; CRISIL Research; BCG Analysis

Unique structural challenges across Indian healthcare value chain

Healthcare Market Entity

Providers

Pharmacy

Diagnostics Lab

Insurance¹



USA

~7K

~30K

~25K

4.1%



India

70K

~800K

~100K

0.4%

Key Complexities in the Indian Healthcare Market

Inadequate infrastructure

Fragmented supply chain

Inadequate infrastructure in Tier 2 cities

Limited awareness

Lack of specialist doctors in Tier 2+ cities

Poor inventory management

Lack of digitization for report sharing

Lack of OPD coverage

Absence of centralized medical records

Low availability of critical Rx drugs in Tier 2+ cities

Dependence on physical channels

Cumbersome claims management process

1. Retail Insurance Penetration
Source: Secondary research



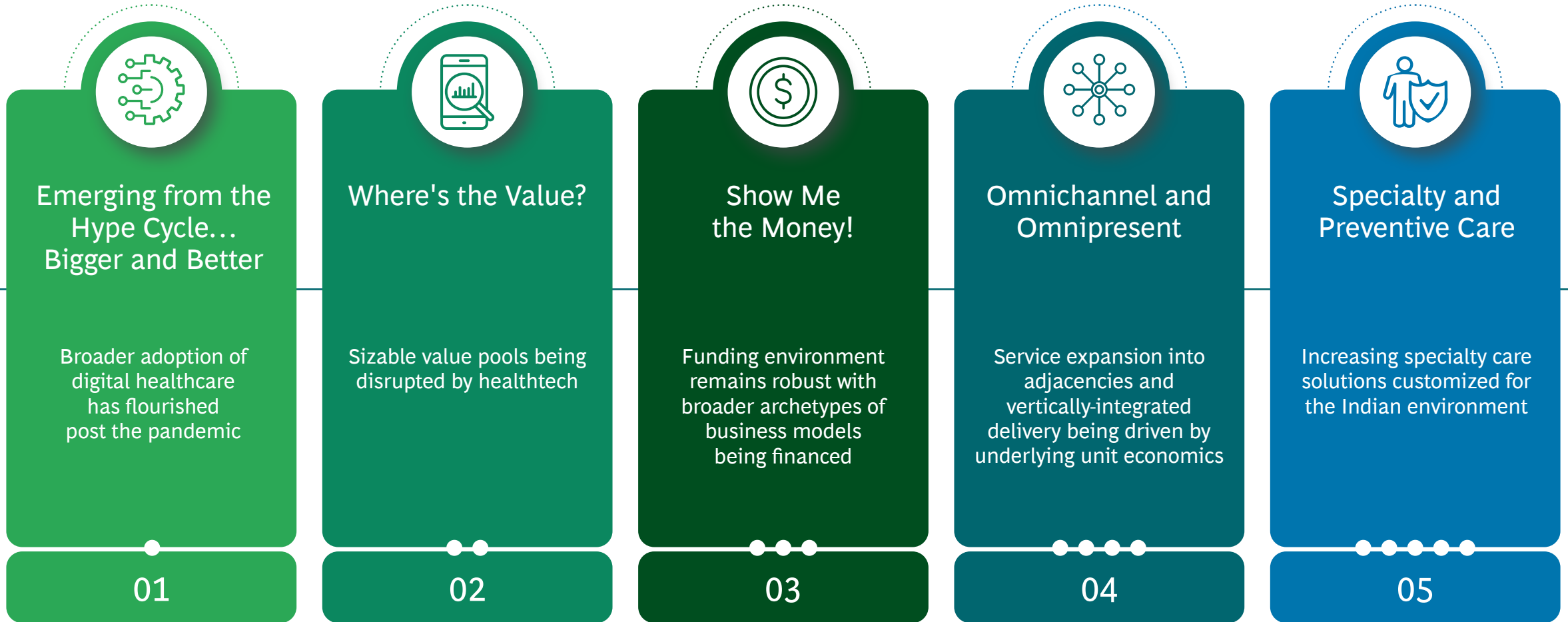
02

Riding the Waves

Emerging themes shaping the digital health landscape

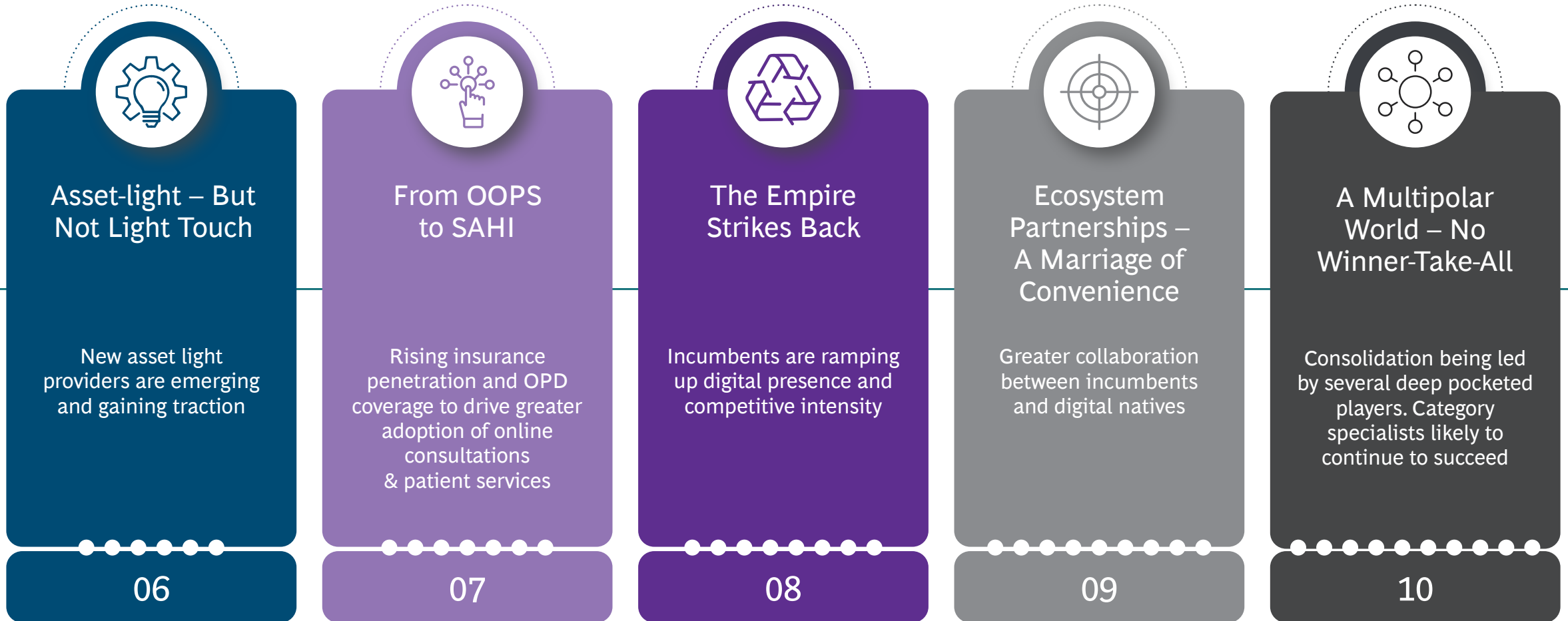


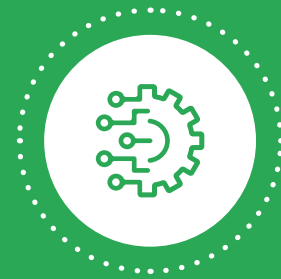
10 Key Themes shaping the path in digital healthcare





10 Key Themes shaping the path in digital healthcare

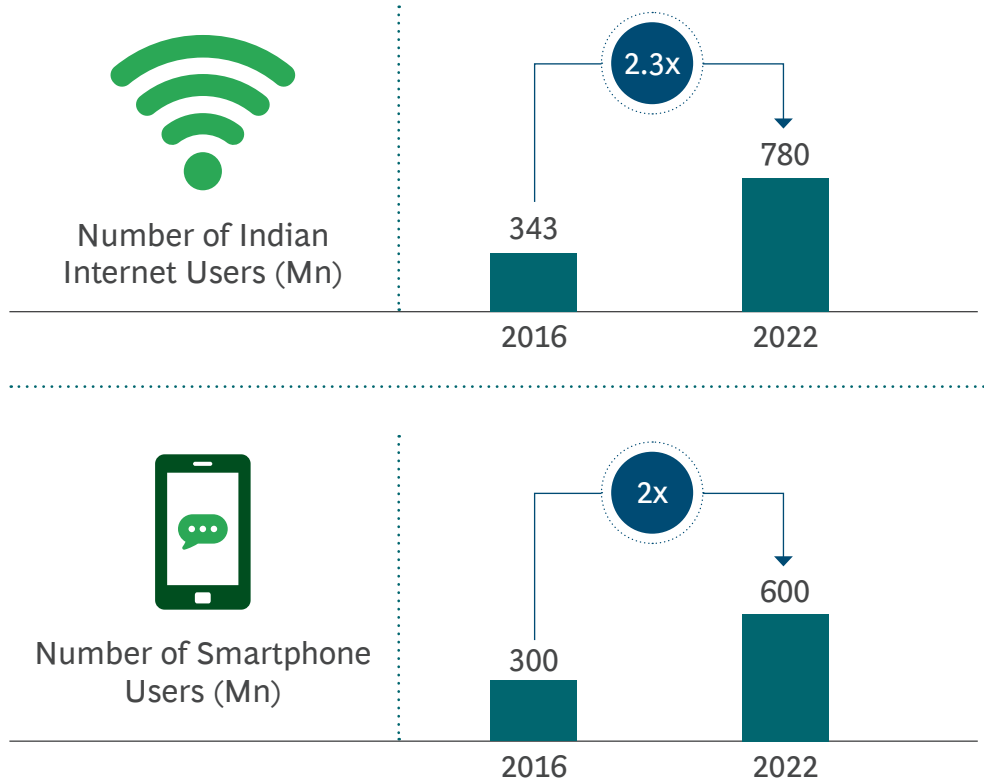




Emerging from the Hype Cycle... Bigger and Better

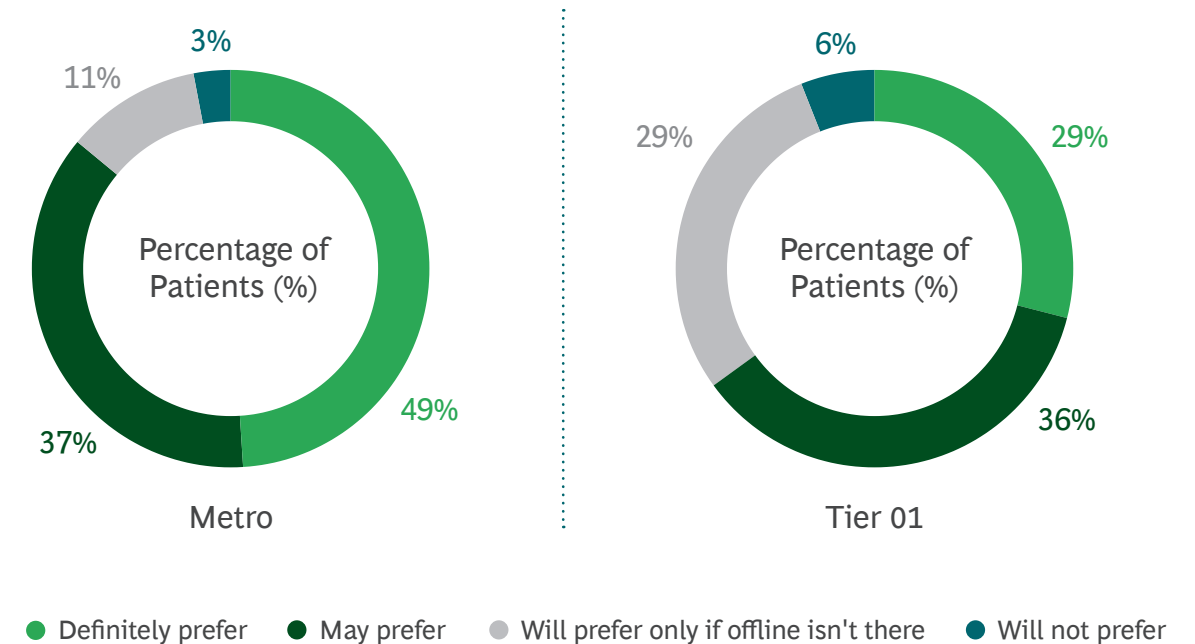
Rapid tech penetration and rising consumer preference for online healthcare delivery will catalyze adoption of digital health

Internet & smartphone adoption



Preference for online consultations in the future

How likely are you to prefer taking doctor consultation through digital for first consultation?



Source: Indus Valley; India Times; Live Mint; BCG Survey 2020 (conducted in June 2020 covering 400 respondents); BCG Analysis

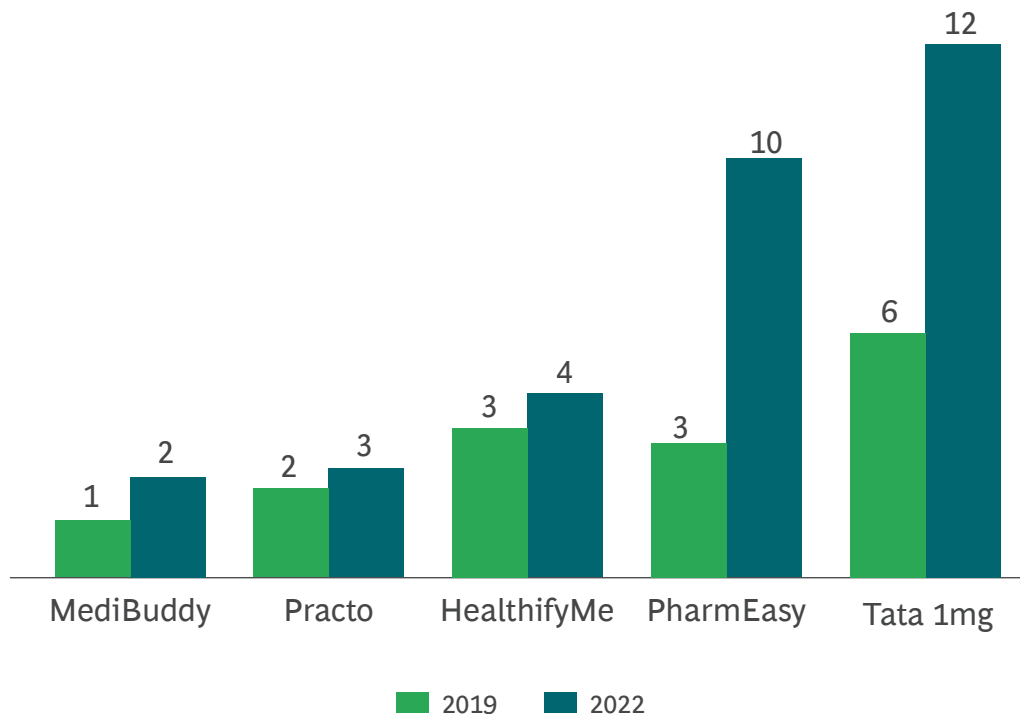


Digital healthcare adoption has continued to grow strongly post the pandemic, irreversibly changing consumer behavior



Usage of digital health platforms continues to grow post the pandemic

Average Monthly Active Users [MAU] (Mn)



Key factors leading to rise in usage of digital healthcare adoption



Pandemic-Induced Adoption

People unable to access physical outlets, doctors or pharma stores offline due to lockdown and contagion constraints



Retention Led by Price & Convenience

Users found digital platforms cheaper while offering a wider range of options, higher service quality and greater convenience vs. physical counterparts

Source: App Annie; BCG Analysis



Government leading digital health initiatives to ensure healthcare accessibility and affordability in India

Phase 1 - Battle-tested effectiveness of digital systems to combat COVID

COVID contact tracing, self-assessment and real-time advisories to citizens

Aarogya Setu

218Mn+

Total Installs

40 Days

Reached First 100Mn+ Installs

Easy vaccine administration - find vaccine centers, book slots & receive digital certificates

Co-WIN

10Mn+

Registered Citizens

2Bn+

Total Vaccines Administered

Phase 2 - Leveraging digital to provide access and affordable care to all

National telemedicine program to provide primary care to remote areas

eSanjeevani OPD

100Mn+

Patients Served

200K+

Providers Onboarded

Health insurance scheme to provide free secondary & tertiary care for EWS

PM-JAY

500Mn+

Beneficiaries of PM-JAY

INR 5Lakhs

Insurance cover per year per family

Phase 3 - Building integrated digital health infrastructure to improve care

Bringing existing healthcare ecosystem online via unique digital IDs and digitizing all parts of the value chain

Ayushman Bharat Digital Mission

380Mn+

Health IDs created

20Mn+

Health Facilities Registered

1.7Mn+

Health Professionals Registered

Notes: Data as on 29 April 2023
Source: Co-win, Aarogya setu, NHA, ABDM website

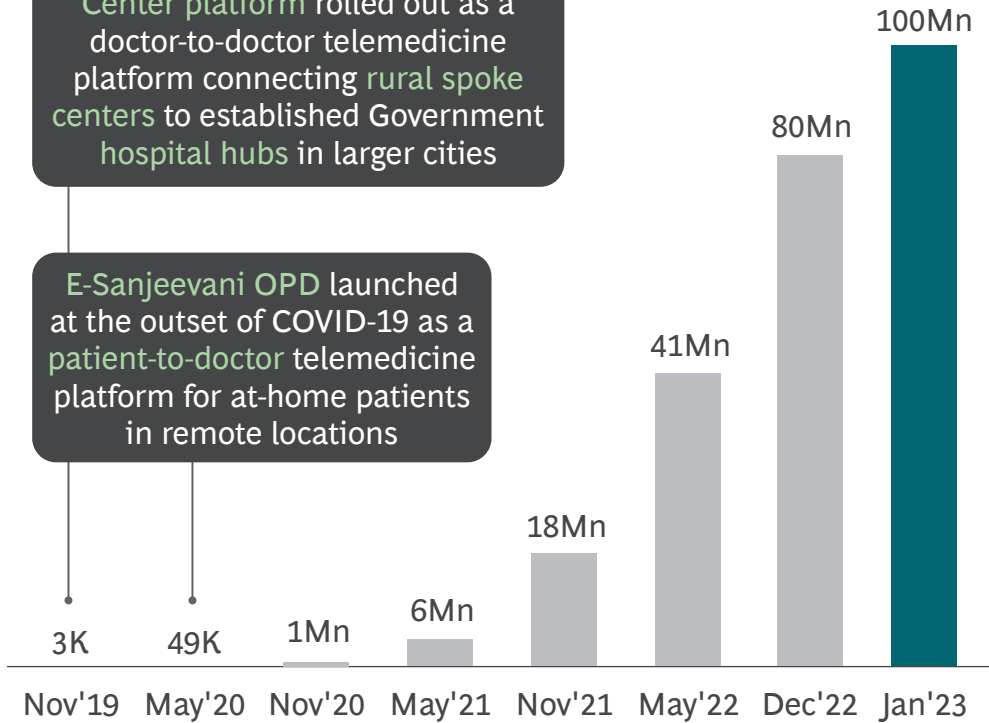


Government teleconsultation platform eSanjeevani already reaching 100Mn+ patients

Patients reached through eSanjeevani Consultations

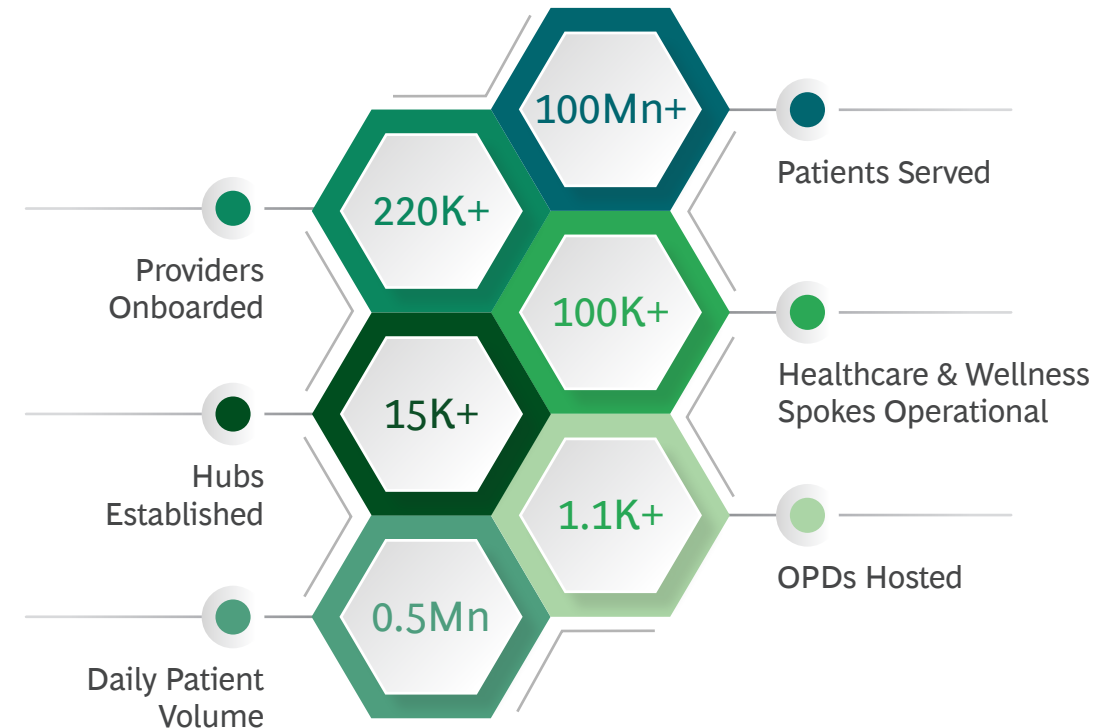
E-Sanjeevani Health & Wellness Center platform rolled out as a doctor-to-doctor telemedicine platform connecting rural spoke centers to established Government hospital hubs in larger cities

E-Sanjeevani OPD launched at the outset of COVID-19 as a patient-to-doctor telemedicine platform for at-home patients in remote locations



Sources: eSanjeevani; MoHFW; Secondary Research

Impact





Significant Government push for integrated digital health infrastructure with Ayushman Bharat Digital Mission (ABDM)

Implemented in Phase 1



1. Personalized Health ID

- Enables interoperability & sharing of data across providers and platforms



2. Standardized Healthcare Provider Registry

- Enables higher quality of care & tracking of outcomes over time
- Drives accountability across healthcare professionals and providers



3. Longitudinal Patient Health Records

- Allows for longitudinal care & predictive solutions
- Patient to be sole owner of his/her data; consent-enabled sharing

Phase 2 and Beyond



4. Coverage and Claims Platform

- Enables OPD insurance, reduced cost of claims and higher genuineness
- Faster and cheaper settlements for insurers would further reduce cost of insurance for customers



5. Open Telemedicine and E-Pharmacy Network

- Promotes open-source models allowing interoperability and choice to users
- Private players invited to build own platform



6. Health Data Analytics

- Enables creation of better disease control programs
- Creates new opportunities for research and clinical advancements

Sources: Secondary Research



Where's the Value?



Indian Healthcare value pools to expand to \$450Bn+ by 2030







\$450Bn+ Indian Healthcare Market Size (2030)

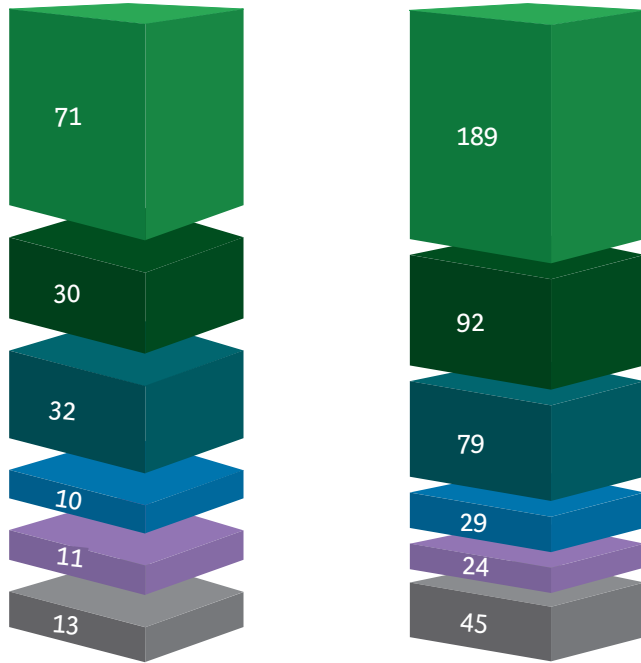
Total Health

\$167Bn

\$458Bn

13%

-  IP Delivery
-  OP Delivery
-  Pharma¹
-  Diagnostics
-  Medtech
-  Others²



13%

15%

12%

14%

12%

18%

----- 2022 ----- 2030 ----- CAGR -----

Driven by 5 Major Trends



Higher focus on **preventive care** and health management post COVID-19 led spike in awareness



Rising **lifestyle disease** prevalence with rising urbanization



Rapidly expanding **government access initiatives** and push for digitization of healthcare infrastructure



Growing **insurance coverage** making healthcare more accessible to larger population

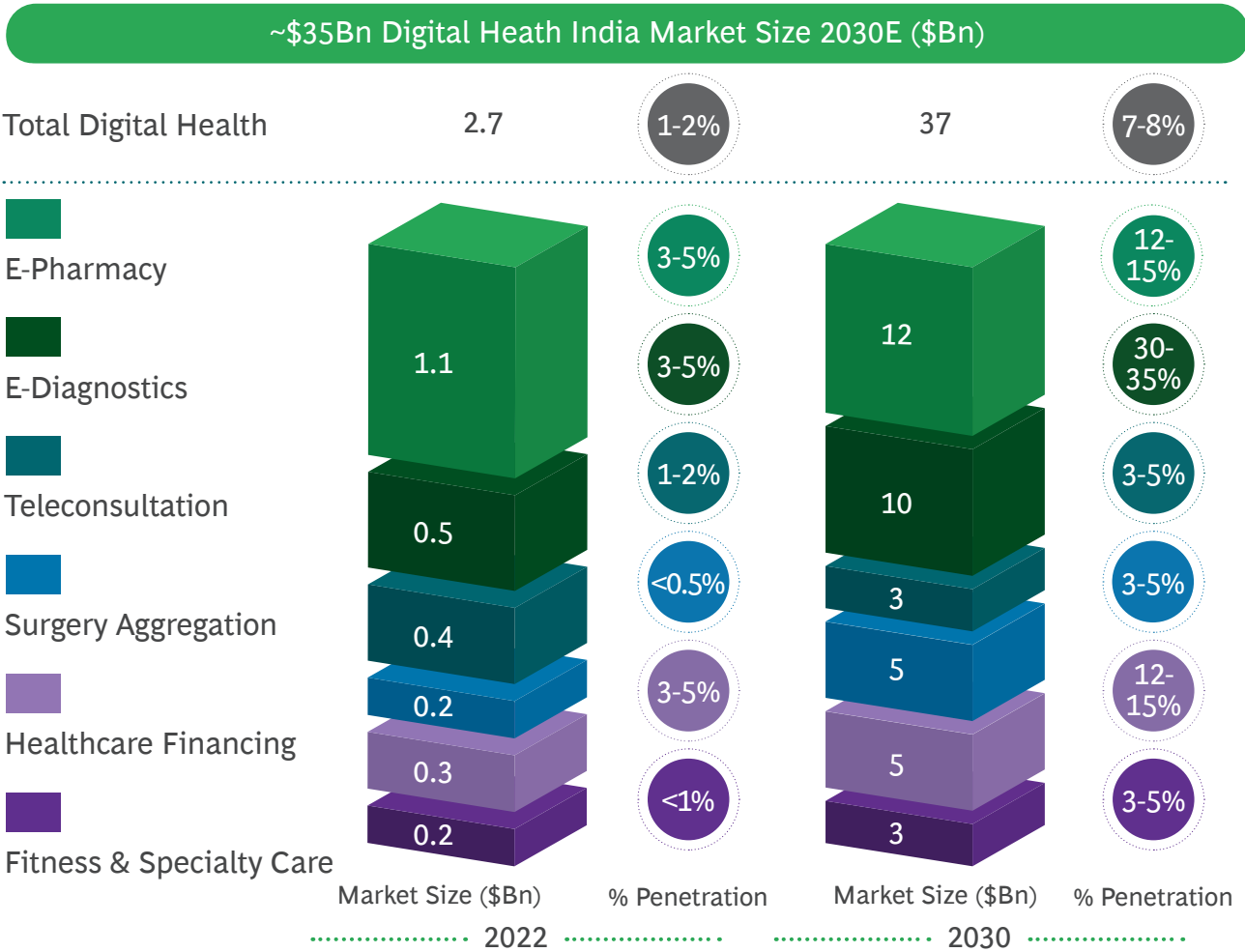


Increased **digitization of unorganized** distribution and services market unlocking scale benefits

1. Pharma market size calculated basis MRP value 2. Includes fitness, alternative medicine, preventive care etc. Source: Jefferies, RedSeer, UBS Equities, Expert Interviews, Annual Reports, BCG Analysis



Total size of heathtech market to increase to ~\$35Bn by 2030

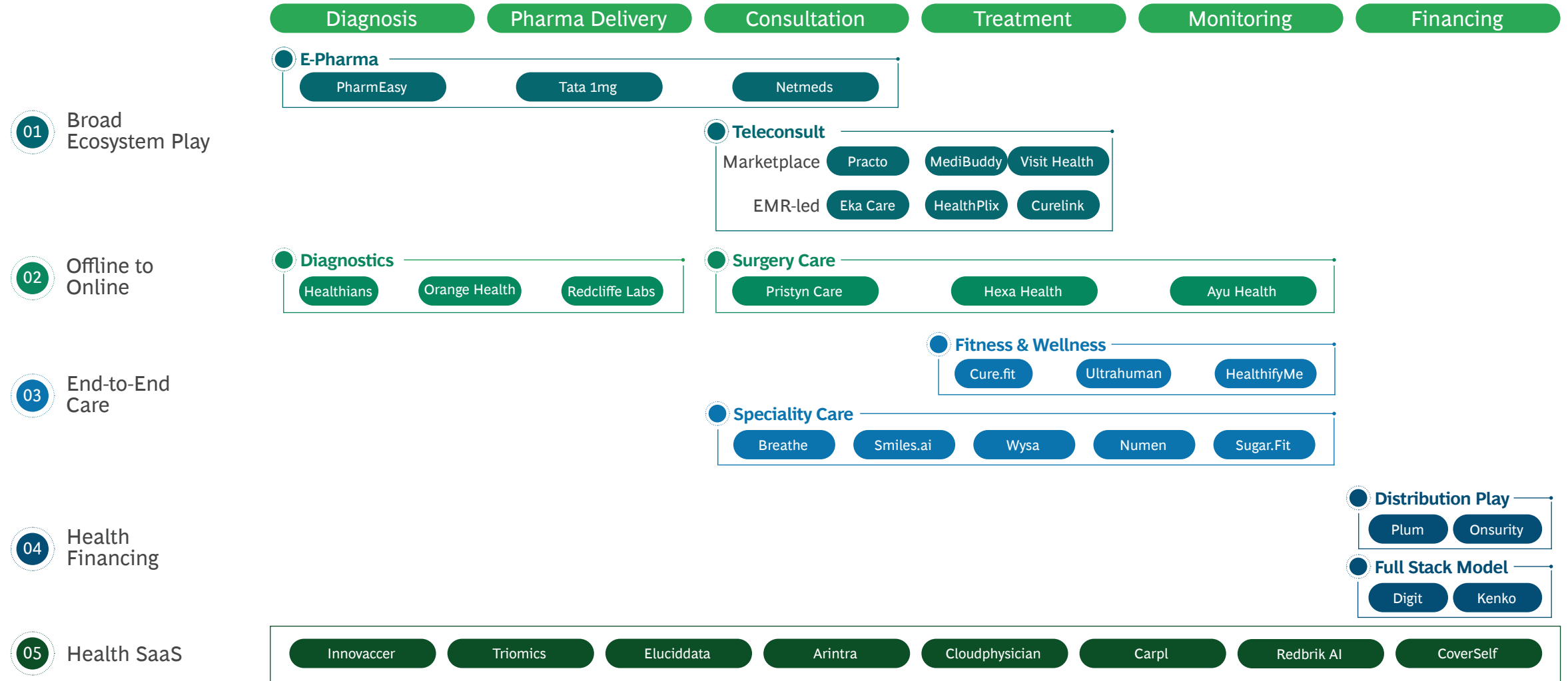


Driven by 6 Major Trends

- Rising Digital Consumerism:** ~46% smartphone users consuming digital solutions
- Increasing Power of Payer:** Up to ~10% digital distribution by traditional insurers
- New Ecosystems:** With digital natives & incumbents creating newer solutions
- Beyond the Pill:** Play by pharma companies via digital disease management
- Connected Devices:** 100Mn+ wearables shipped to India in 2022
- NDHM:** Significant push to operationalize digital backbone across India

Sources: Jefferies, RedSeer, UBS Equities, Expert Interviews, Annual Reports, BCG Analysis

Multiple player archetype emerging in the Indian healthtech market





Show Me the Money!



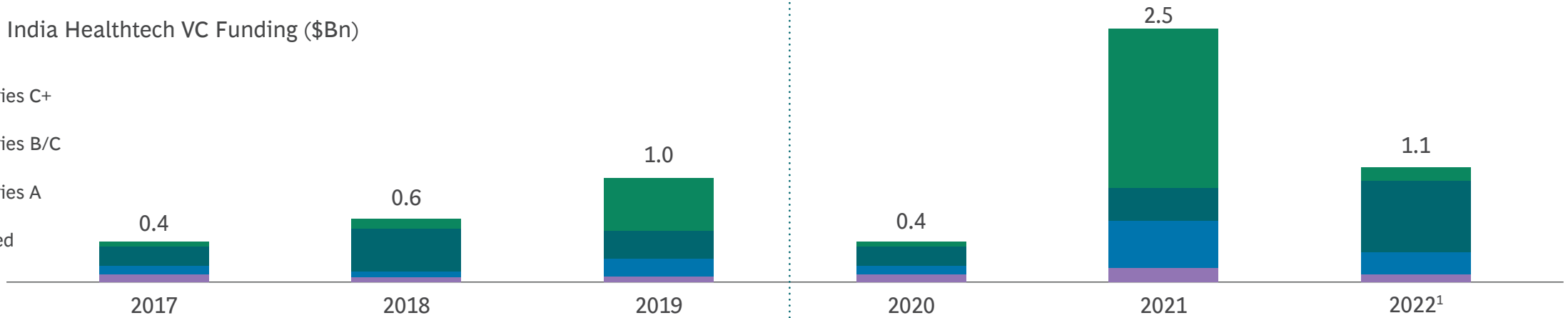
Funding environment remains robust even post the pandemic surge; \$1Bn+ flowing into healthtech in 2022

Phase 01

Phase 02

India Healthtech VC Funding (\$Bn)

- Series C+
- Series B/C
- Series A
- Seed










- Key Highlights**
- E-Pharma, teleconsultation, e-diagnostics and fitness attracted 80-85% of healthcare spend pool
 - Segments addressed pillars of the economy's healthcare needs and addressed large target segments
 - Tapped into base layer of supply (pharmacies, gyms etc.) while improving delivery experience for end users

- 1.0 models given a boost driven by adoption during pandemic
- Rise of specialty care models targeting high incident health issues such as diabetes/cardio/cancer etc.
- Aggregation plays catering to elective surgeries & diagnostics got boost post COVID
- Higher awareness post Covid-19 leading to rise of health insurance distribution models and full stack plays with OPD coverage

¹. 2022 till Dec-22
Source: Tracxn



New models emerging in healthtech ecosystem

Sub-Sector	Total Funding	Unicorns #	# Companies at Series C+ stage	Comments
 Pharma Delivery	\$1.5Bn+	1	2	<ul style="list-style-type: none"> Quick commerce models for pharma and rise of ONDC to further boost adoption
 Teleconsult	\$0.5Bn+	0	3	<ul style="list-style-type: none"> Rise in shopify models for doctors ABDM to catalyze digital medical records
 Fitness & Wellness	\$1Bn+	1	1	<ul style="list-style-type: none"> Rise in fitness consciousness; wearables seeing adoption
 Specialty Care	\$0.2Bn+	0	1	<ul style="list-style-type: none"> Specialty care models in chronic, critical care and elective surgeries seeing uptick
 Aggregation Play	\$0.25Bn+	1	0	<ul style="list-style-type: none"> Offer improved the care delivery experience for patients and enable demand aggregation for providers
 Healthcare Financing	\$0.1Bn+	0	0	<ul style="list-style-type: none"> Point-of-sale financing and OPD insurance emerging areas
 Healthcare SaaS	\$0.5Bn+	1	0	<ul style="list-style-type: none"> Rise in SaaS platforms automating workflows and data collection/storage for global providers, pharma, and payers

Source: Tracxn

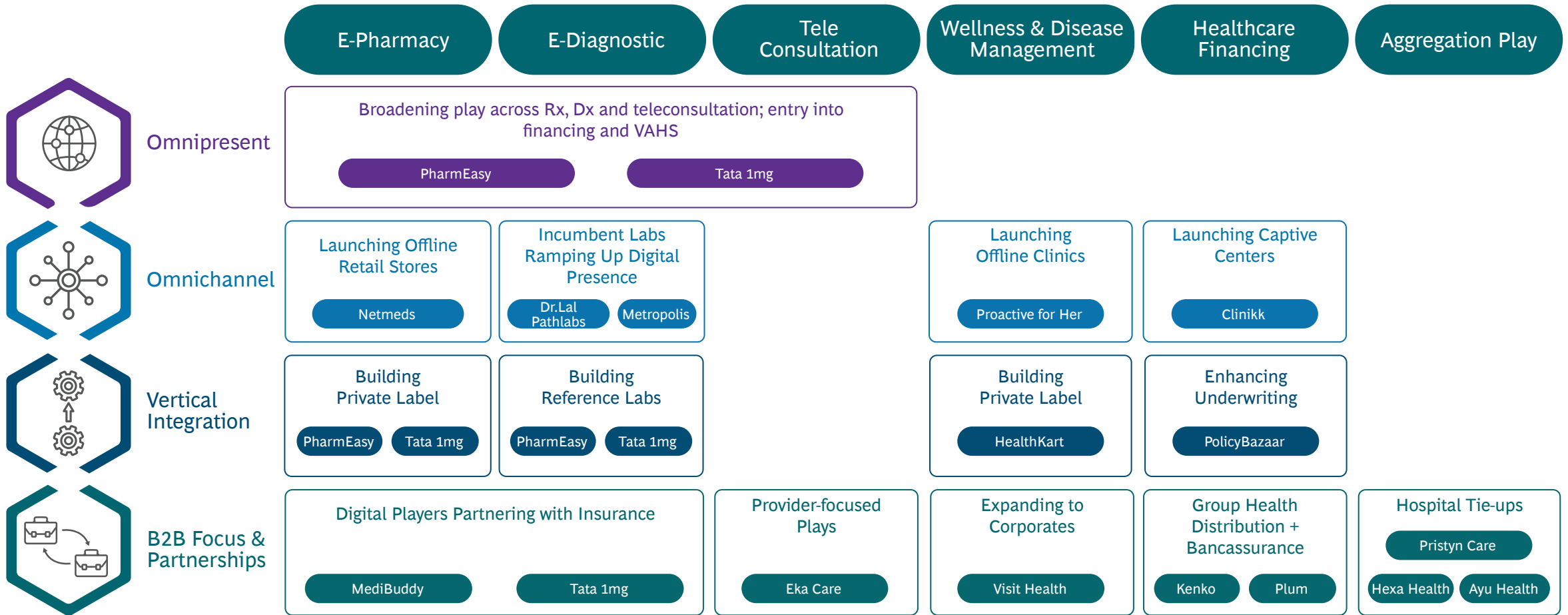
 Emerging Segment  Mature Segment



Omnichannel and Omnipresent



As the healthtech market matures, we are seeing horizontal expansion and vertical integration across the digital health ecosystem



Source: Management Information; Expert Interviews; BCG Analysis



Underpinning these moves are the unit economics of acquiring and servicing a customer

Metric	Unit	E-Pharmacy	E-Diagnostic ¹	Tele Consultation ²	Specialty Care	Surgery Aggregation
AOV	INR	1-1.4K	1.8-2K	0.3-0.5K	1-20K ³	70-80K
GM	%	25-30%	60-80%	10-30%	50-80%	20-30%
CAC	INR	1-1.4K	~2.5K	0.7-1.2K	1-7K	10-15K



Omnipresent
Improve LTV from existing user base



Omnichannel
Improve customer acquisition at a lower CAC



Vertical integration
Improve gross margins through private label



B2B Focus & Partnership
Expand customer pool at a lower CAC profile

“
We decided to start online-to-offline model where online would focus on attracting new customers and offline would service orders and build customer loyalty.
— Co-Founder, A Large Marketplace Company
”

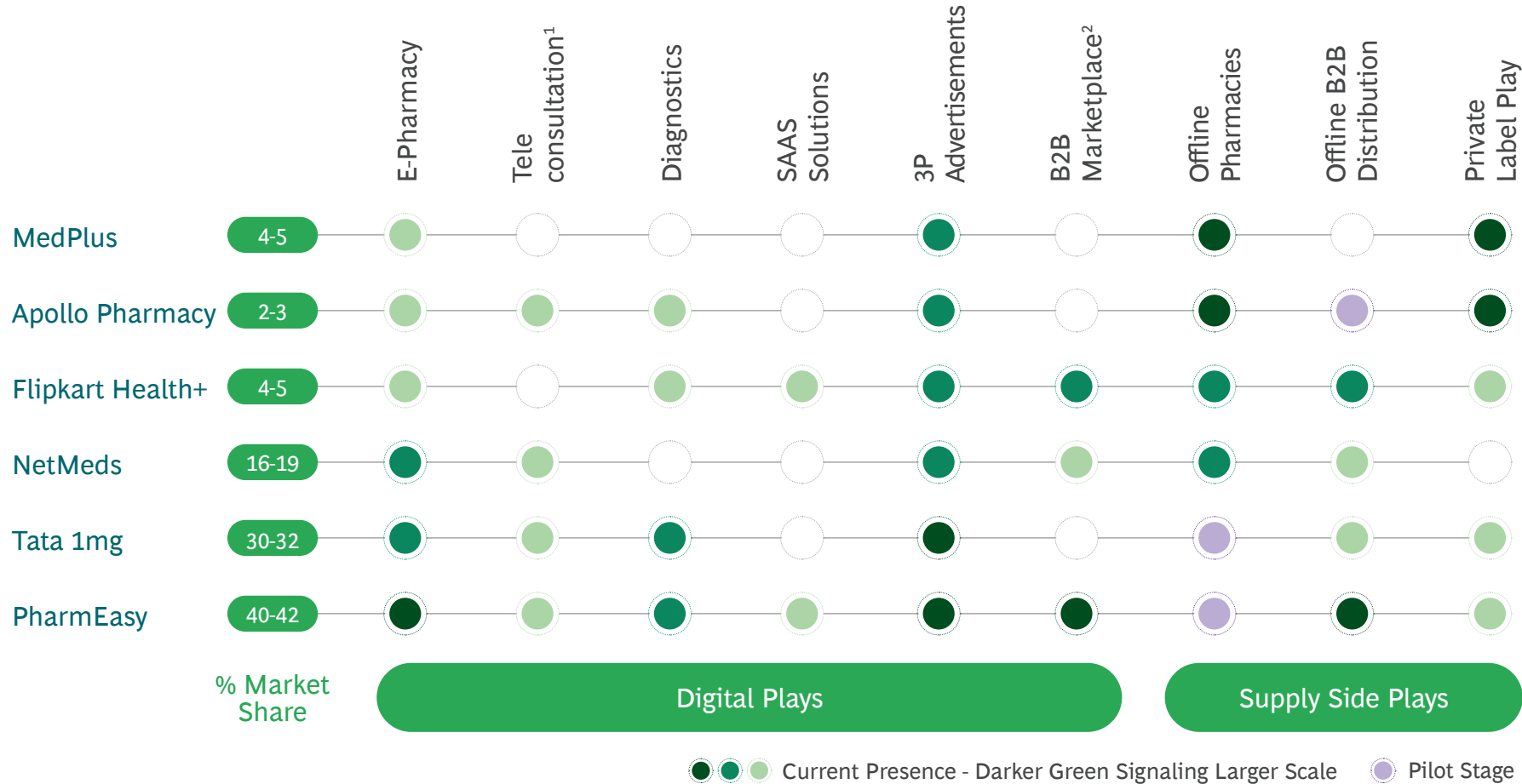
1. Blended economics for marketplace and captive model 2. Captive Models generally have Fixed Rate Consultation Fees Whereas Marketplace Models Generally Pass Consultation Fees to Patient and Charge a Commission

3. Higher AOV where wearables plays involved

Source: Management Information; Expert Interviews; B Capital Group Analysis; BCG Analysis



Increased horizontal expansion of E-Pharma into adjacencies such as diagnostics and vertical integration into B2B distribution and private label



“ In the USA, small verticals have very high value pools so niche businesses can be sustainable whereas in India, cost structures are too high to justify the ROI in individual value pools.

Owning multiple product and service ecosystems is critical to improve margin structures.

— Co-Founder, Leading E-Pharmacy Player ”

1. Does not include consultations for prescription validation 2. Includes Retailio 1P and 3P GMV
 Source: Target Data; Investor Presentations; Medplus DRHP; Expert Discussions; BCG Analysis

E-Pharmacies are adopting multi-channel approach to expand addressable market by servicing acute Rx customers

Store-in-store Model with Potential to Support Online Channel



Help improve TAT (3-4 hrs vs. 1-2 days via warehouses/darkstores)



Cater to greater number of acute customers



Fulfill larger number of online orders through availability of SKUs



Increase visibility via branding to address larger customer base



Progress of E-Pharmacy players



PharmEasy network of franchise pharmacies



Netmeds shop-in-shops within 1000+ RSPs



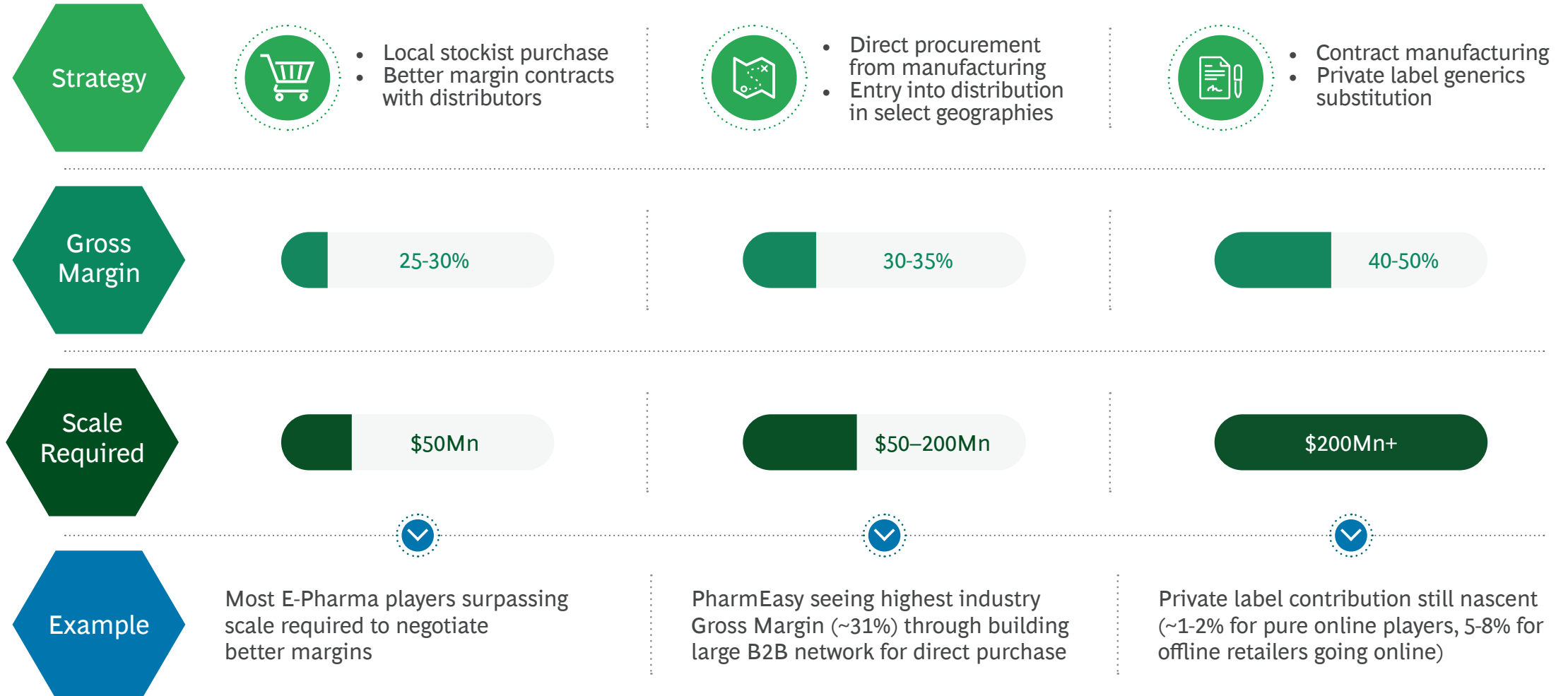
SastaSundar network of partner retailers (i.e. Health Buddies)

“ Online is still <5% of market so it is imperative to move offline to capture acute Rx demand, better service patients looking for immediate fulfillment and build strong customer loyalty. — Co-Founder, Leading E-Pharmacy Player ”

1. RSP = Reliance Smart Point
Source: Expert Interviews; Press Search



E-Pharmacies vertically integrating to drive higher contribution through direct procurement and private label

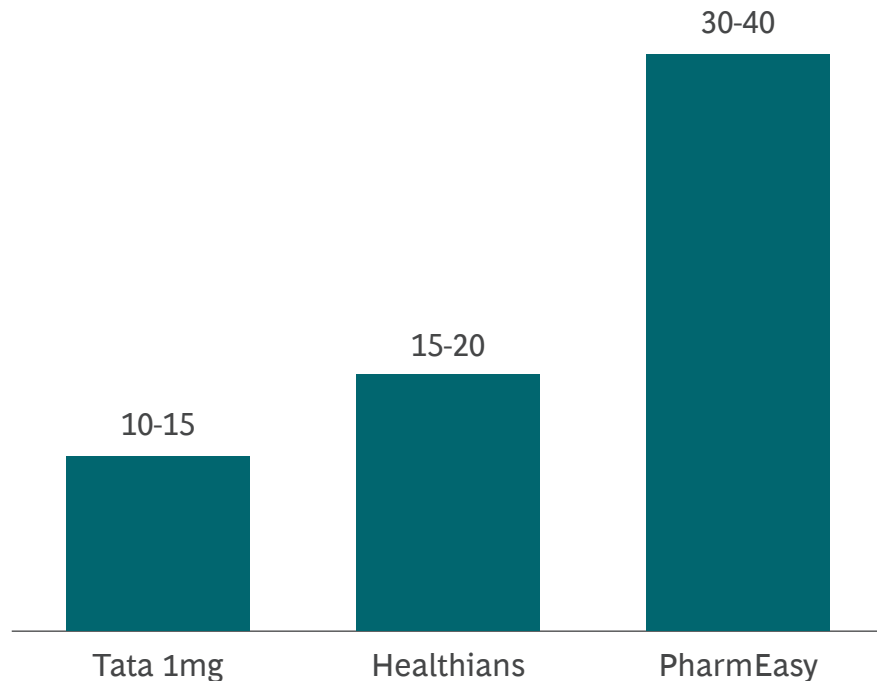




E-diagnostic players transitioning from marketplace model to captive labs to drive favorable economics

Significant expansion in diagnostic presence through own labs...

No. of owned labs (FY 22)



Source: Management Information; Expert Interviews; BCG Analysis

... driven by 15-20% higher CM realization with supply chain ownership and higher quality control

Metric	Unit	Marketplace Labs	Own Labs
AOV	INR	1.8-2K	1.8-2K
COGS	%	-	30%
Pass Through to 3P	%	40-50%	-
Discounts	%	30-35%	40-45%
Net Margin	%	10-20%	25-30%

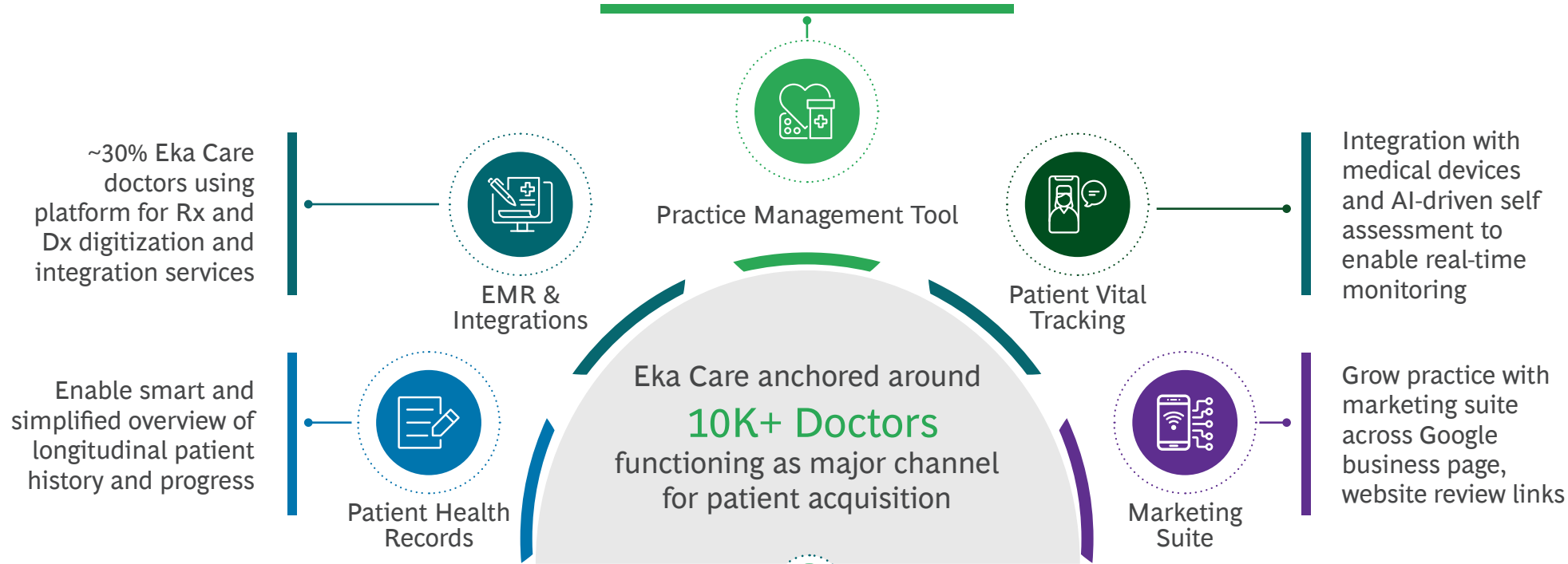
There is a huge variation in quality across marketplace labs. Building a company-owned lab infrastructure is imperative to control quality and improve patient experience.

— Co-Founder, Leading Diagnostic Player

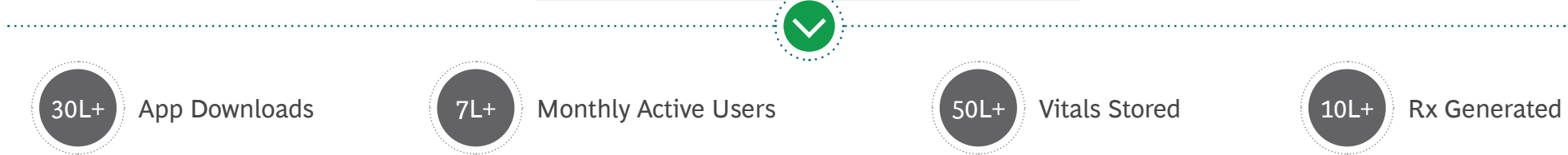


Newer teleconsultation players like Eka Care are adopting a B2B-focused GTM approach

~70% Eka Care doctors using platform for teleconsultation, billing, smart patient overview, offline support



“
 Need to go beyond only teleconsultation- have to digitize practice, give good patient experience and build deeper workflows
 — Co-Founder, Leading Teleconsultation Platform
 ”





Successful global teleconsultation platforms have moved across the care spectrum to offer comprehensive solutions

	Delivery Model	Platform Play with Online and Offline Assets			Platform Play with Pure Online Assets			
	Examples	Teladoc Health	KRY	Ping An Good Doctor	WeDoctor	Doctolib	Amazon Care	AliHealth
	Region							
	Preventing Care							
	<ul style="list-style-type: none"> Information provider Personal health management Community/social care 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Finding Care							
	<ul style="list-style-type: none"> Symptom checking Registration service Appointment booking 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Receiving Care							
	<ul style="list-style-type: none"> Telemedicine service Diagnostic services 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Continuing Care							
	<ul style="list-style-type: none"> At-home care delivery E-Pharmacy Disease mgmt. & monitor. 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Paying for Care							
	<ul style="list-style-type: none"> Insurance coverage Insurance products sales 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Enabling the Journey							
	<ul style="list-style-type: none"> IT software as a service Data analysis (decision support, PHM) EL Health Records (EHR) Health Information System (HIS) 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Service Covered Service Not Covered

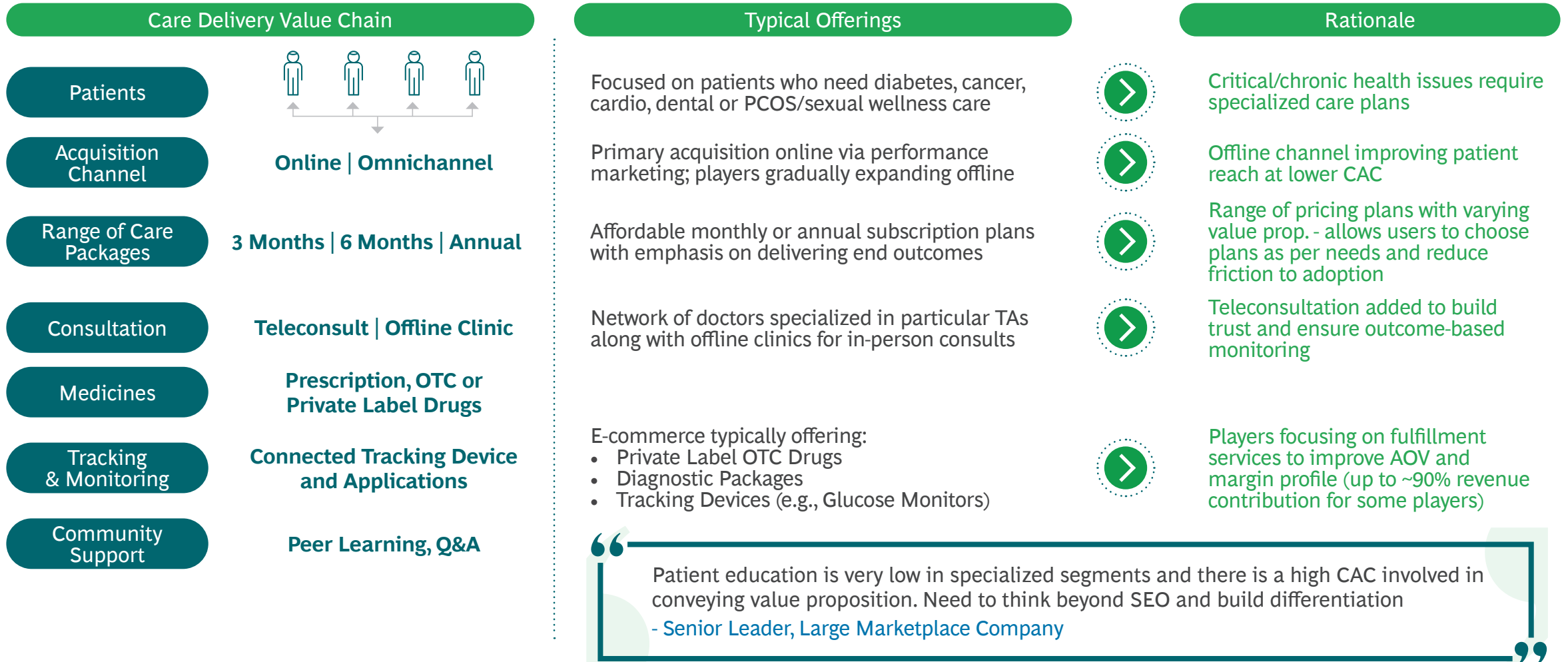


Platforms started from telehealth offering but evolved to offer comprehensive solutions across the patient journey



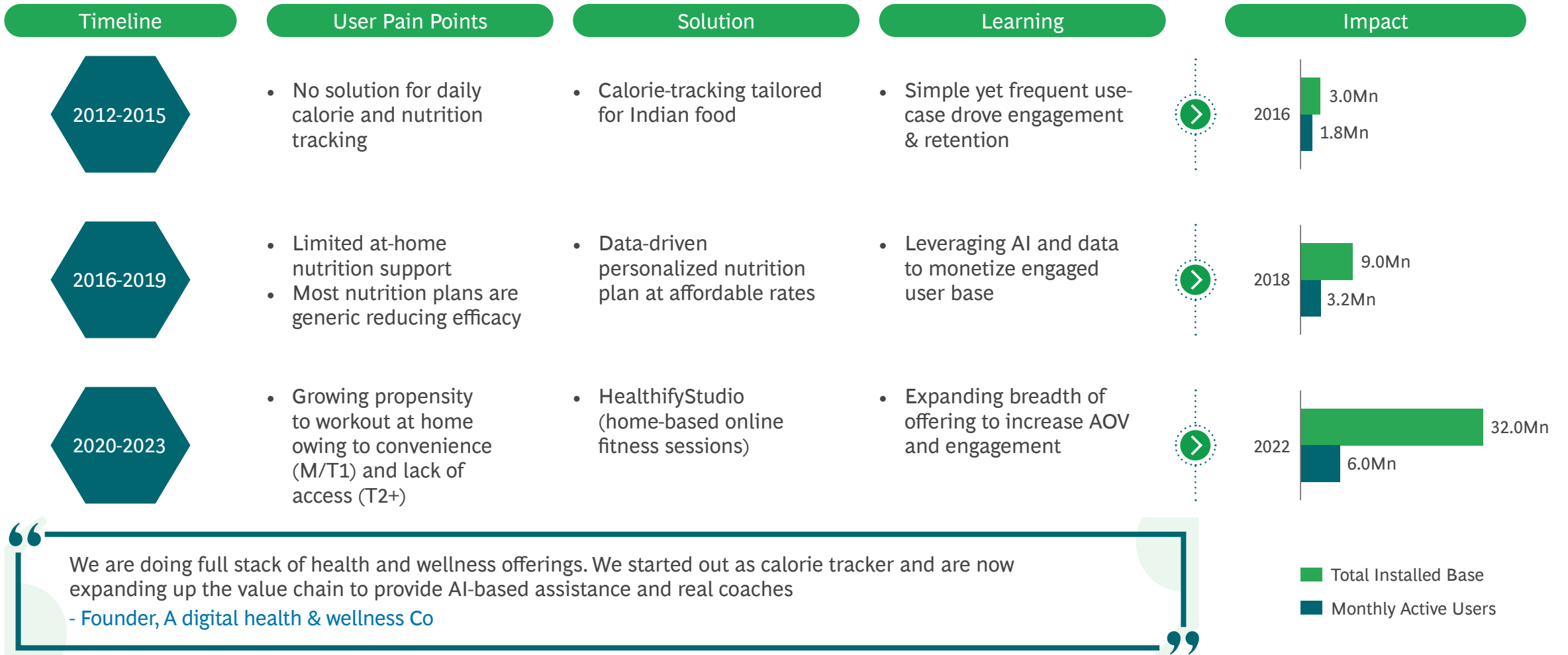
Specialty and Preventive Care

Specialty care models have emerged which enable continuous monitoring of patients' wellness





HealthifyMe has scaled into a holistic nutrition and fitness platform addressing multiple consumer pain points





BeatO moving up the value stream through combining health insurance with existing diabetes offerings

Collaboration Objectives

Diabetic patients in India typically find it hard to buy health insurance with adequate protection

Health insurers face challenges in underwriting and pricing for diabetic patients due to data limitations

BeatO targeted to address this problem through a curated data backed insurance product and help their 200k+ active diabetes community

The Diabetes Total Plan

BeatO partnered with Care Insurance, to offer insurance along with a comprehensive wellness offering

Value to customers

- INR 5 lakh cover
- INR 20k savings per annum – due to expense management
- Additional offerings such as BeatO connected glucometers, strips, health coach, unlimited doctor consults through marketplace

Overall Wellness of Customers with Rich Data for Sharper Offerings

3x

increase in average weekly monitoring frequency

7x

increase in engagement with Doctors and coaches

15%

reduction in overall blood glucose levels within 3 months



Historical health and prescription data for better claim and underwriting



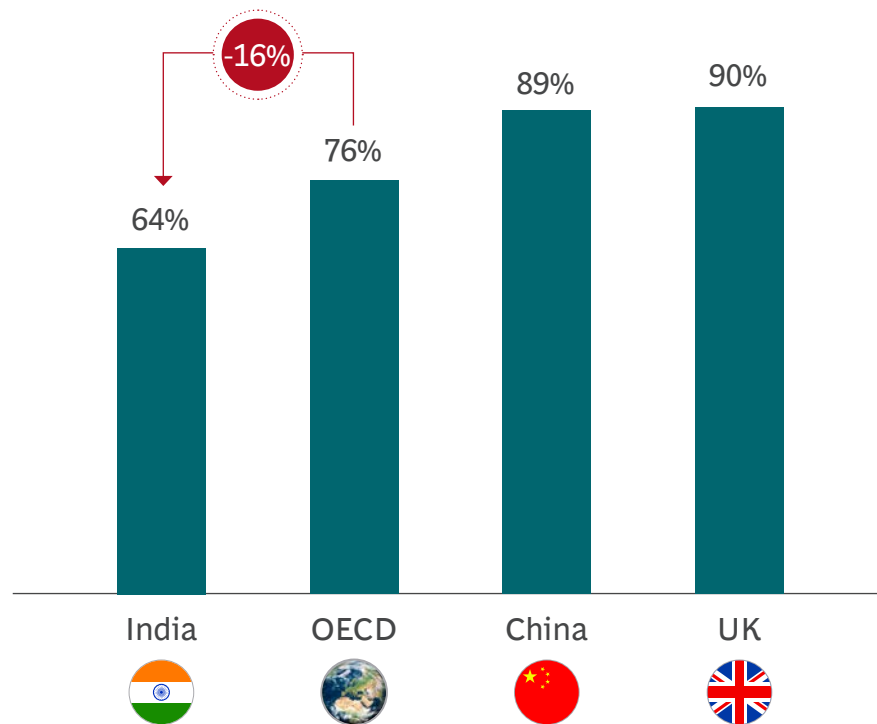
Asset-Light — But Not Light Touch



Indian hospitals are challenged with lower occupancy levels compared to global peers, leaving room for demand fulfillment via asset-light models

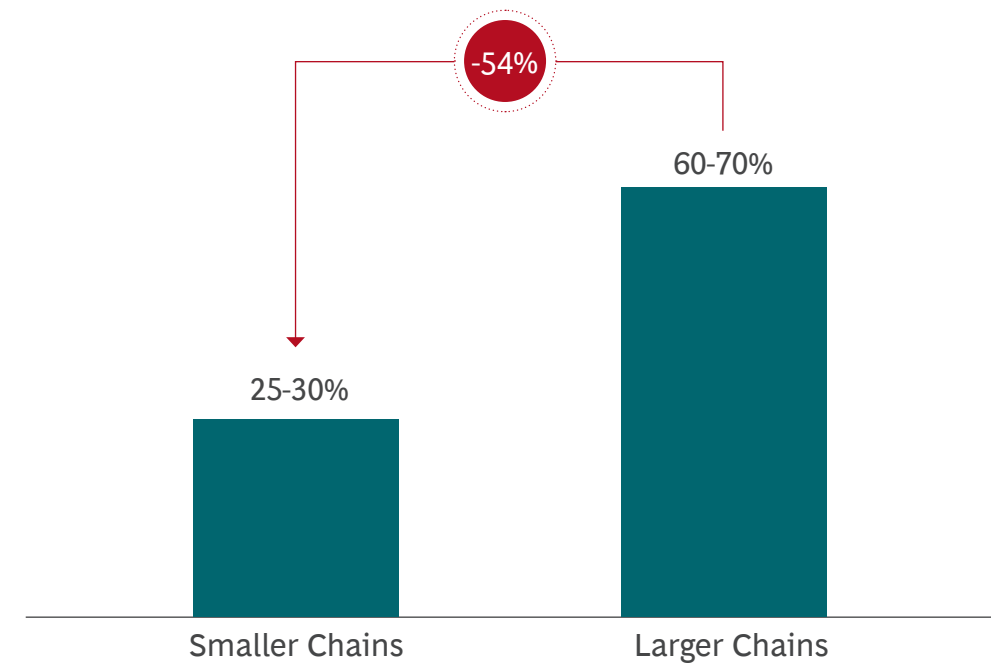


India has consistently struggled with maintaining hospital occupancy levels compared to peers



Smaller hospitals are facing even significantly lower occupancy compared to larger chains

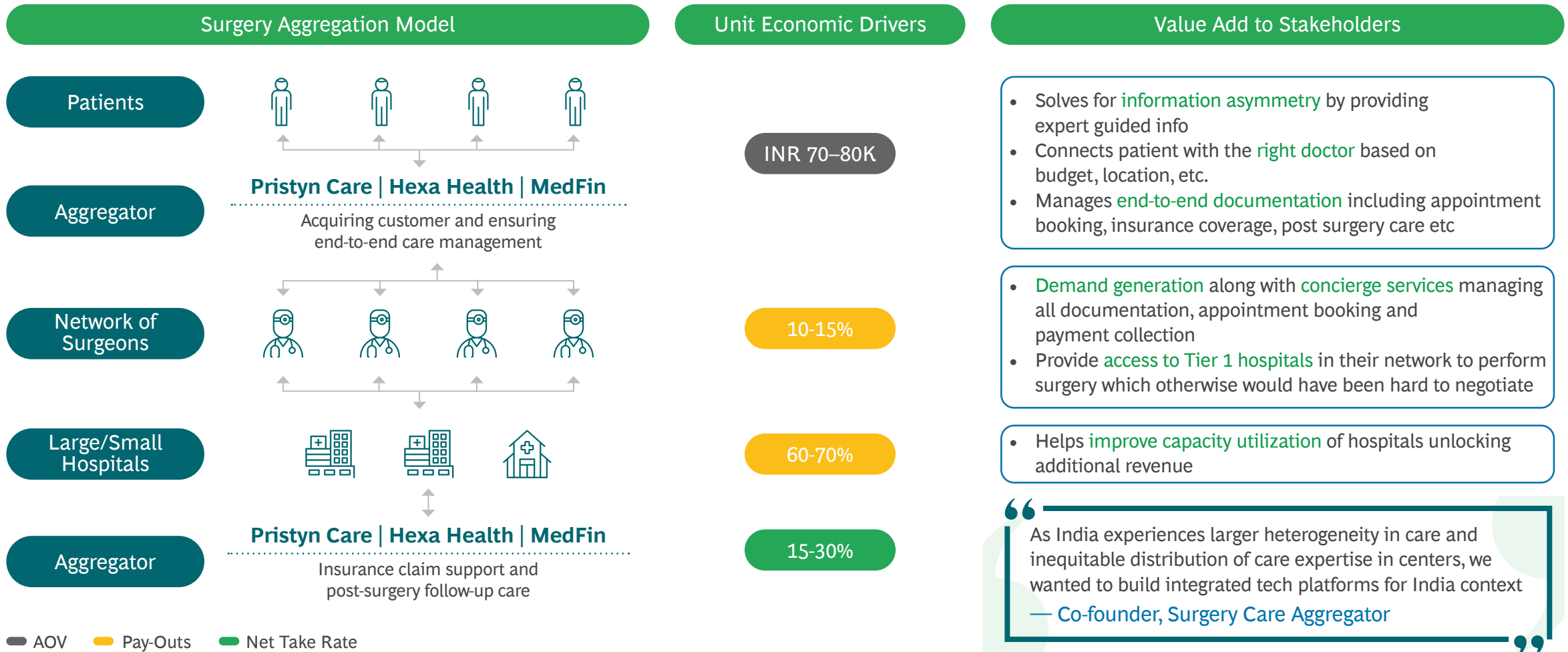
Percentage Utilization of Hospital Infrastructure in Top 60 Indian Cities (%)



Source: OECD; Financial Express



In-patient care players like Pristyn and Hexa are delivering significant value for multiple stakeholders in the healthcare ecosystem



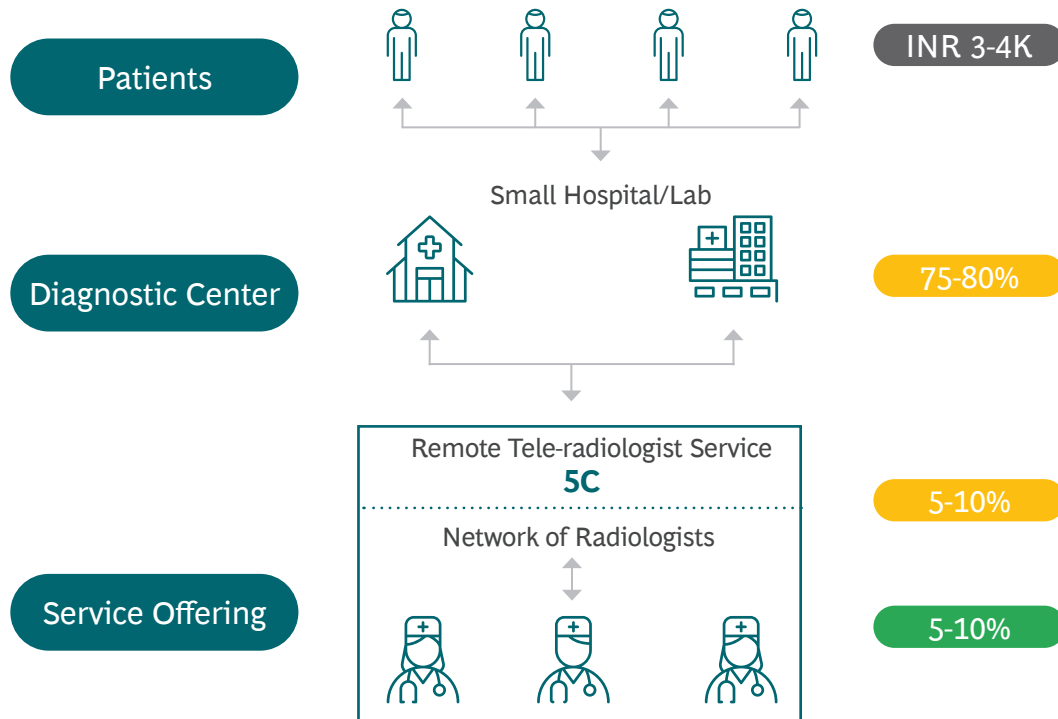
“ As India experiences larger heterogeneity in care and inequitable distribution of care expertise in centers, we wanted to build integrated tech platforms for India context — Co-founder, Surgery Care Aggregator ”

Tele-diagnostics players like 5C are expanding services across diagnostics value chain

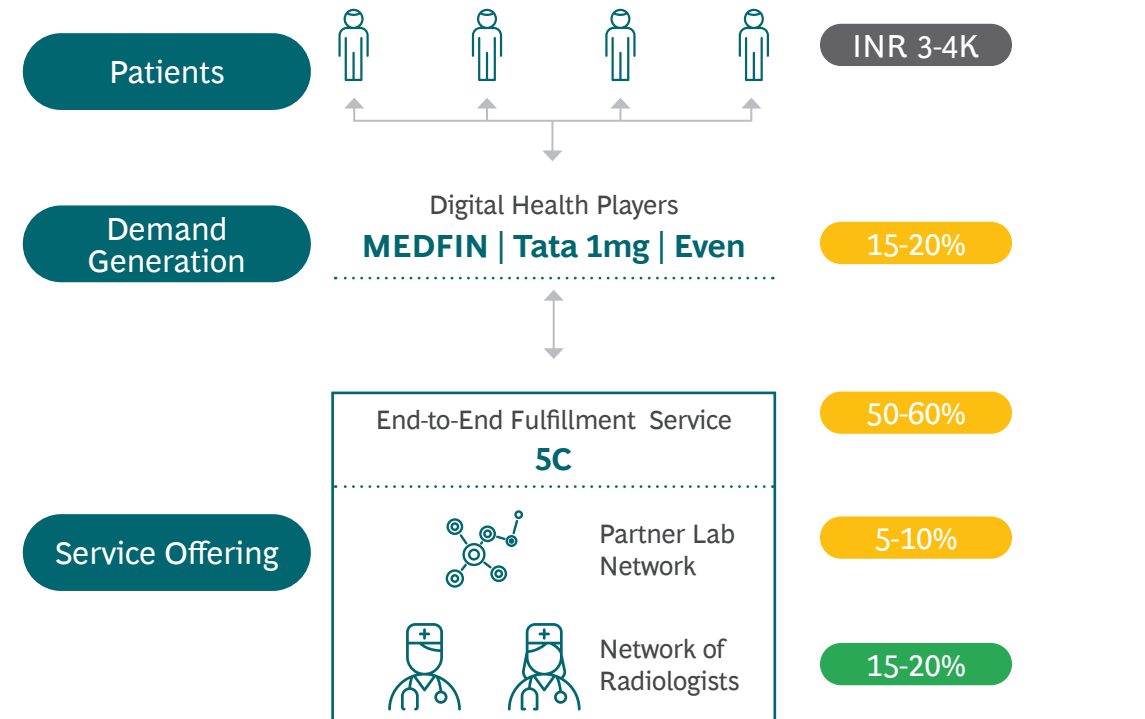
Business Model

Moving from individual tie ups with diagnostic centres and small labs to becoming a demand aggregator across multiple platforms to capture greater market share

 Started by providing pay-per-use remote tele-radiology services for offline centers



 Expanding services to digital demand aggregation and fulfillment model

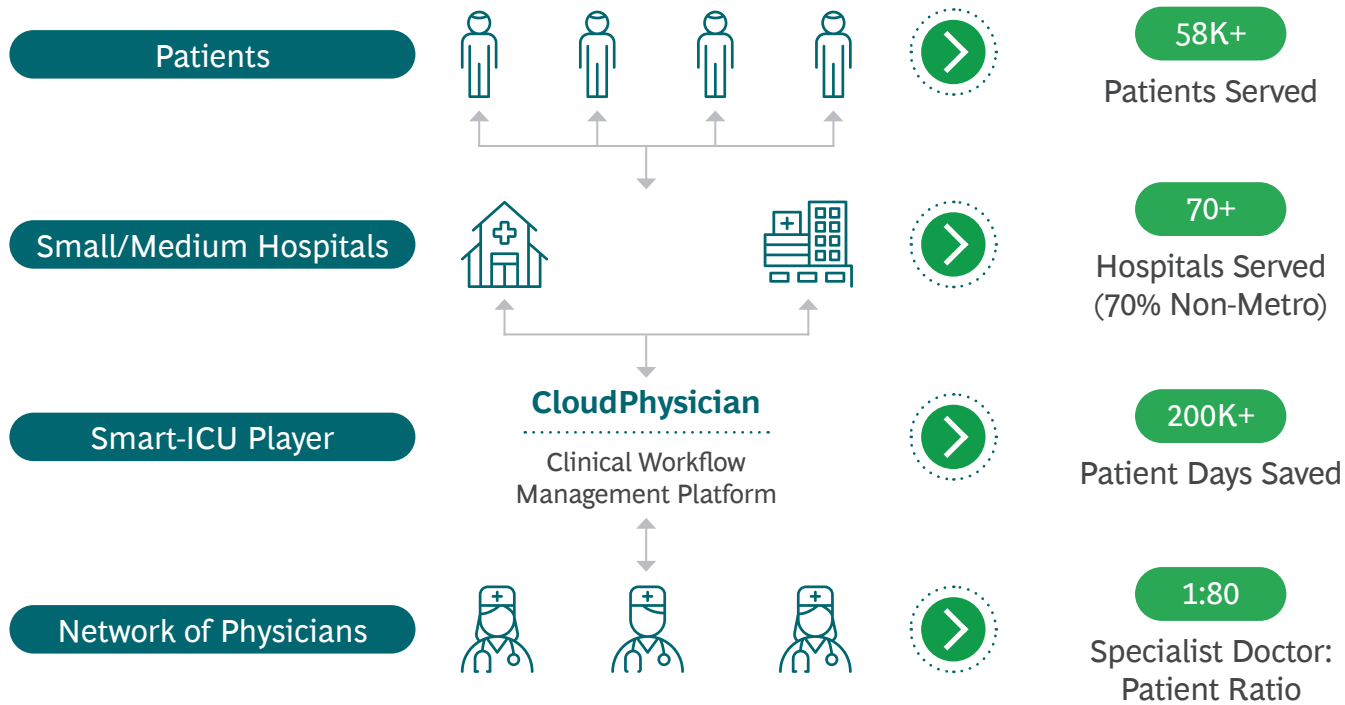


Source: Expert Interview; Lit Research; BCG Analysis

■ AOV ■ Pay-Outs ■ Net Take Rate

Smart-ICU players are enabling expanded access and improved quality of care for providers in Tier-2 regions

Smart-ICU players are targeting smaller hospitals with limited in-house critical care capabilities to realize significant on-ground traction



Business Model

Enable remote critical care delivery by connecting trained healthcare personnel to ICUs remotely.

Aggregate demand around small and medium sized hospitals in tier II and III cities through their platform

“ India experiences a large heterogeneity in care and unequitable distribution of care expertise across centers.

Smart-ICU solutions bridge this gap by using advanced technology to improve critical care access and streamline standard of care in real-time.

— Co-Founder,
Leading Smart-ICU Player

”

Source: Expert Interviews; Lit Research; BCG Analysis



From OOPS to SAHI

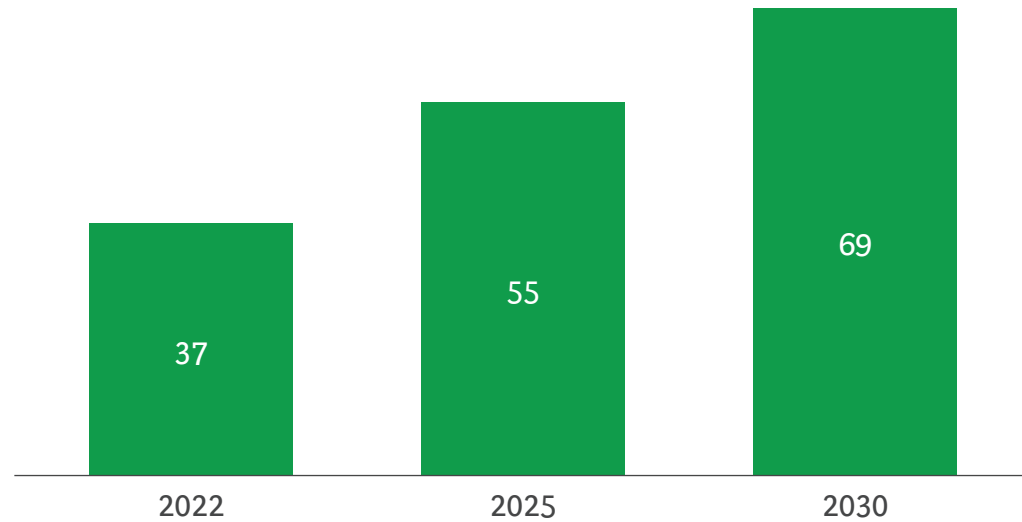


A quiet revolution in healthcare financing is taking place



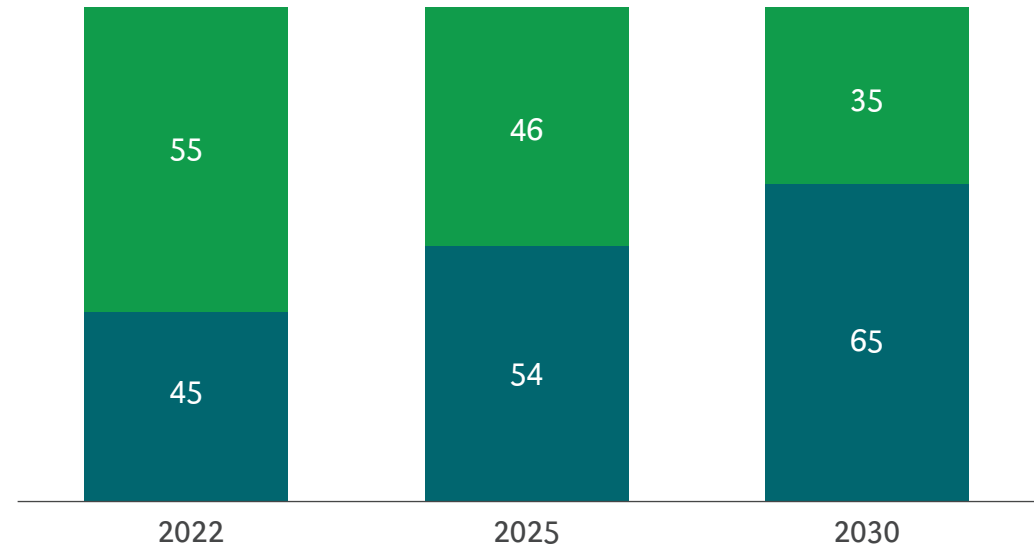
Insurance coverage to improve from 37% today to 69% by 2030...

% of lives covered by insurance in India



...with increasing shift in mix towards insured coverage vs. OOP spends

OOP as a % of current health expenditure



Driven by

- Improved access through Ayushman Bharat scheme
- Increased penetration through digital distribution
- Higher awareness for healthcare insurance

Legend: ■ OOP ■ Insured

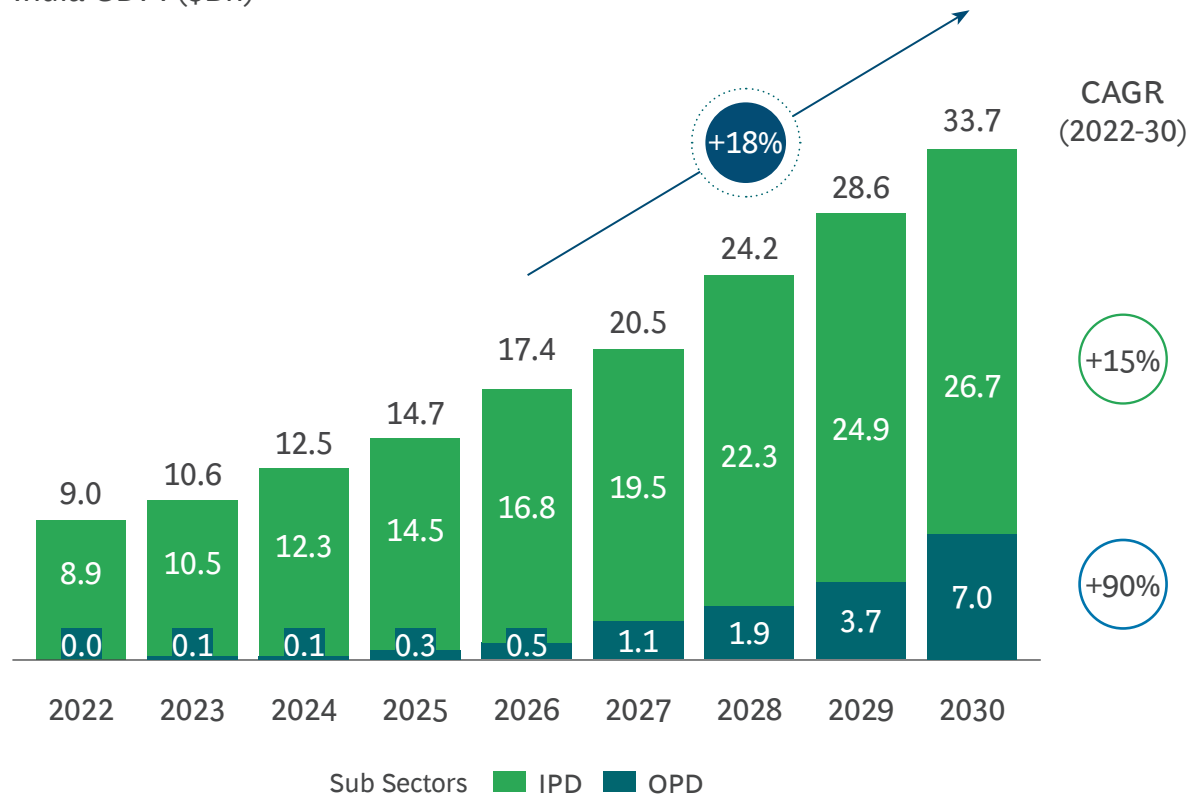
Source: IRDAI, Niti Aayog, BCG Analysis



Outpatient segment to grow faster than overall insurance

Outpatient Coverage Expected to Clock ~2x YoY Growth...

India GDPI (\$Bn)



...Driven by 4 Major Trends



Increased coverage of OPD benefits as digital companies make it easier for insurers to track data and determine legitimacy of claims



Employer-driven OPD/VAHS programs with corporates increasingly following suit of global firms to provide employee health benefits








Traditional insurers providing OPD riders (add-on) and digital attackers enabling easy access & distribution



Greater consumer spend on online OPD services with ease of access and focus on preventive care



Creation of digitally-administered OPD benefits picking up by both startups and traditional insurers

	OPD-Benefits-Focused Players	Traditional Insurers
 Key Players	Kenko, Clinikk, Visit Health	Star Health Insurance, ICICI Lombard, HDFC ERGO
 Core Offering	<ul style="list-style-type: none"> Started with OPD benefits as differentiator Introducing new features such as “no cap on room rent” and “additional sum insured” across all policies 	<ul style="list-style-type: none"> Traditionally focused on surgery and accidental coverage Adding standalone OPD benefits or bundled with IPD for the corporate segment
 Network & Benefits	<ul style="list-style-type: none"> Enhancing hospital coverage esp. in Tier 2+ Suite of digital healthtech services e.g., free teleconsult, expanding offline services 	<ul style="list-style-type: none"> Large hospital coverage across India Limited digital healthtech services covered; leveraging partnership with digital players
 Pricing	<ul style="list-style-type: none"> Affordable monthly/annual subscription plan Customized pricing with AI/ML model-based underwriting using health data points 	<ul style="list-style-type: none"> Annual plans with add-ons for any additional service
 User Experience	<ul style="list-style-type: none"> Digital & user-friendly onboarding & claim management process Easy to read policy and simple terms and conditions 	<ul style="list-style-type: none"> Transitioning from paper-based to digital system for onboarding & claims management

“ People have realized that conventional insurance remains under-utilized in the long run as it doesn't include OPD. Almost 70% of lifetime healthcare expenses incurred are on OPD costs and it is necessary to bridge this gap by providing complete financing as well as assistance.

— Co-Founder, OPD Benefits Player ”



The Empire Strikes Back



As startups scale on customers and omnichannel, incumbents are ramping up digital capabilities to capture growth and counter threat from digital natives



Building OPD services and D2C channels and VAHS products to compete with digital attackers

- Star Health Insurance
- HDFC Ergo
- ICICI Lombard



Ramping up offline-to-online presence and fulfillment services to improve value capture

- Apollo



Building digital patient support programs and platforms to improve patient adherence

- Lupin
- Abbott
- Cipla



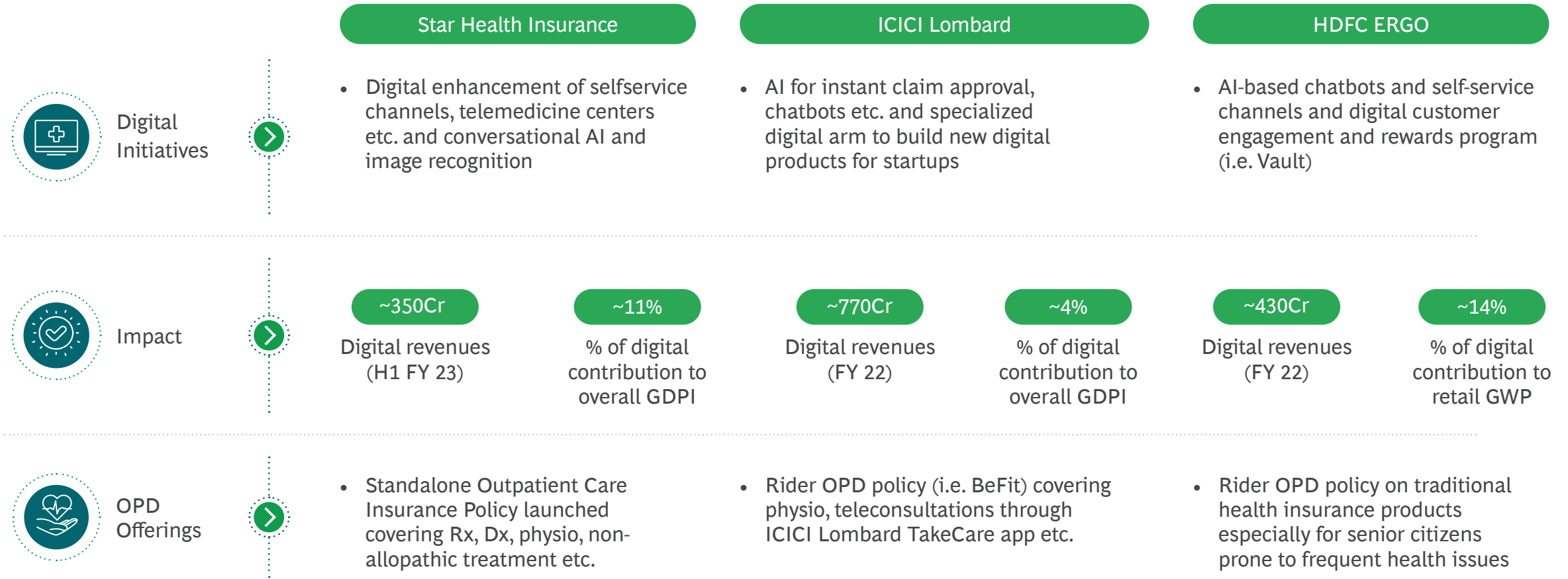
Setting up digital platforms to enable online bookings and improve customer experience

- Metropolis
- Dr. Lal Path Labs

“ Institutional play is becoming large with insurance taking center stage on digital capabilities and specialty pharma ramping up their D2C programs to meet patient demands.
— Co-Founder, Leading Digital Health Player ”

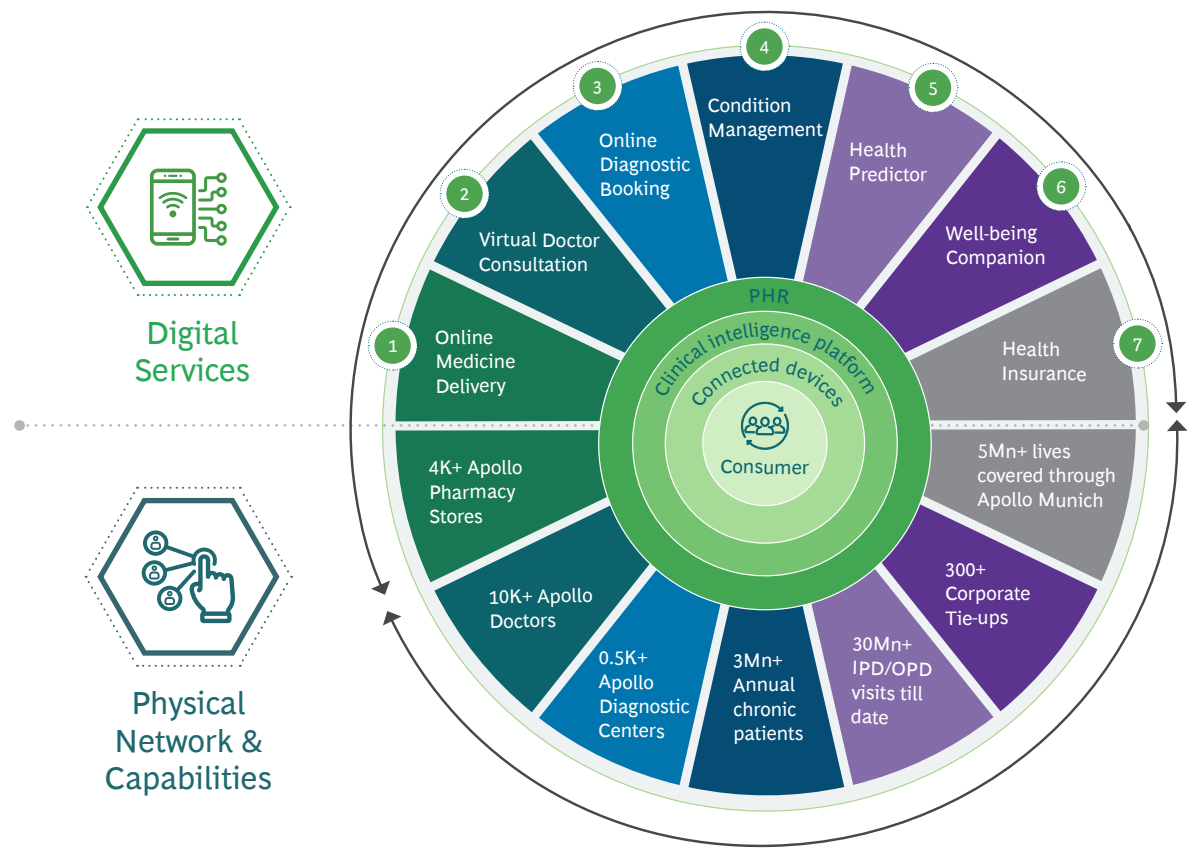


Traditional insurers are investing heavily in digital and building OPD services to improve consumer value proposition









Larger providers are significantly investing in tech and leveraging existing infrastructure to improve reach and value creation

Apollo's Distinctive Digital Ecosystem Enabled by its Formidable Physical Network and Capabilities



Impact Realized

- 
 Virtual Doctor Consultation
 5K+ Daily Consultations
 - 
 Online Medicine Delivery
 35K+ Daily Medicine Orders
 - 
 Online Diagnostic Booking
 1.5K+ Daily Sample Collections
 - 
 Patient Registrations
 23Mn+ Cumulative Registrations
 - 
 Active Users
 0.7Mn+ Daily Active Users
 - 
 Well-being Companion
 6.3K+ Providers Onboarded
- Future Launch...**
 Health Insurance, Condition Management, Well-being Companion



Leading domestic pharma players are instituting digital patient support programs to drive engagement and adherence

Lupin

Abbott

Cipla



Description

Lupin Digital Health Ltd.

- Wholly-owned subsidiary of Lupin Ltd. to provide holistic digital cardiac care

A:care platform

- Digital health service launched as part of its global A:care program

Breathefree

- Mobile app to manage lung health and improve patient education



Competitive Advantage

- Provides a digital therapeutics platform linking cardiologists, coaches, and care managers to patients and personalized risk management services for heart health

- Gamified health-related incentives, tailored guidance for patients and scientific information, virtual learning tools, patient progress review for doctors

- Improves patient adherence through a network of certified educators and medication reminder features and enhances patient experience through real-time query resolution via a live chat portal



Area of Focus

- Cardiology

- Thyroid, Diabetes, Osteoarthritis

- Respiratory



Large diagnostic players are moving towards omnichannel opportunity by setting up digital platforms to improve customer experience

Metropolis



Online test booking for sample home collection through mobile app including test suggestions based on inputs and online report downloads and ongoing health monitoring



~INR 100 Cr (15%) revenue contribution in FY22 targeting **33% digital contribution** in the next 3 years

Apollo



Online test booking for free sample home collection through mobile app including live chatbot support and easy access to all trend analyses and download of reports



1.5K+ daily sample collections through bookings on digital platform

DLPL



WhatsApp and app based test booking and customer chat support along with free home collection of sample and Apollo Life collaboration with Jiyo on digital wellness platform (health tracking, well-being tips) for corporates



~10-12% revenue contribution from digital bookings in FY21

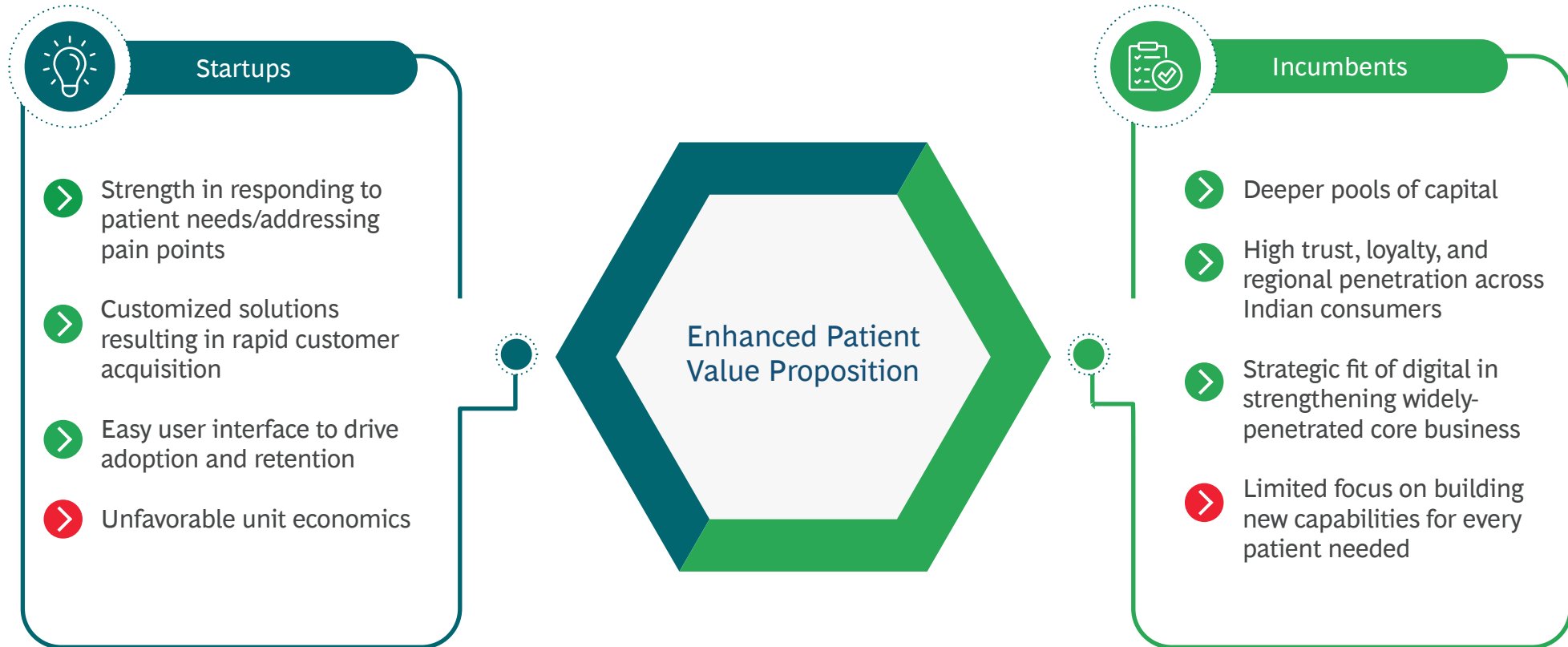
Source: Respective company websites, HBS, IIFL Securities report April 2021, Economic Times, Expert interviews



Ecosystem Partnerships — A Marriage of Convenience



As the healthtech ecosystem matures, startups and incumbents bring different strengths to create value for patient



Traditional insurance is driving creation of health ecosystems by partnering with healthtech players across the value chain



Use Cases

Staying Healthy

- Personalized health coaching engine
- Incentives to keep healthy – premium discounts, products
- Cloud for report storage

Developing Symptoms | Getting Sick

- AI-based timely diagnosis
- Doctor recommendations
- Medicine delivery
- Access to quick & convenient advice e.g. tele/video calling

Obtaining Treatment

- Make educated decisions: Access to range of hospitals, doctors
- Cashless payments
- Instant claim process/Straight through processing

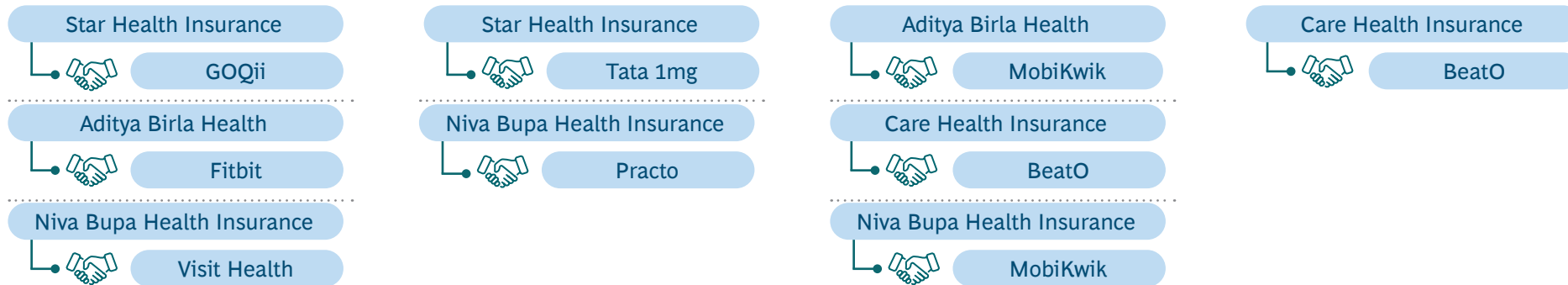
Recovering | Post Care

- Continuous monitoring
- On-demand medication and home nursing service

Insurer becomes control centre: Gatekeeps members access to solutions, collects data along the way, can use data for predictive analysis



Examples of Partnerships



“ Partner ecosystem is critical for driving growth while maintain cost structures. We have introduced new verticals through partnerships to tap into growth opportunities.
— Senior Leader, A Large Marketplace Company ”

Source: Press Search; BCG Analysis



Innovative Partnerships by large Indian Pharma players

Dr. Reddy's | ICICI Lombard

Abbott | GOQii |
HealthifyMe | Fitterfly

Cipla | GoApptiv



Description

- DRL's subsidiary Svaas is launching cashless digital outpatient ecosystem in partnership with ICICI Lombard

- Abbott has partnered with multiple DTx platforms for their continuous glucose monitoring (CGM) device Freestyle Libre

- Cipla acquired 22% stake in GoApptiv, a platform to engage channel partners digitally



Area of Focus

- Multi-service cashless outpatient services across specializations delivered via application

- Chronic therapy (diabetes)

- End-to-end brand marketing and channel engagement across 2-6 tier towns



Benefits

- Bringing together 4 key touchpoints in the outpatient journey-consultations, diagnostic services, pharmacies & insurance

- Improve patient outcomes by developing a connected healthcare ecosystem for holistic diabetes management

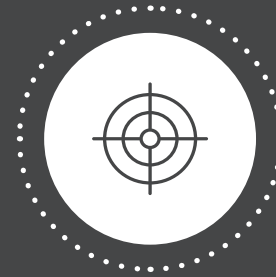
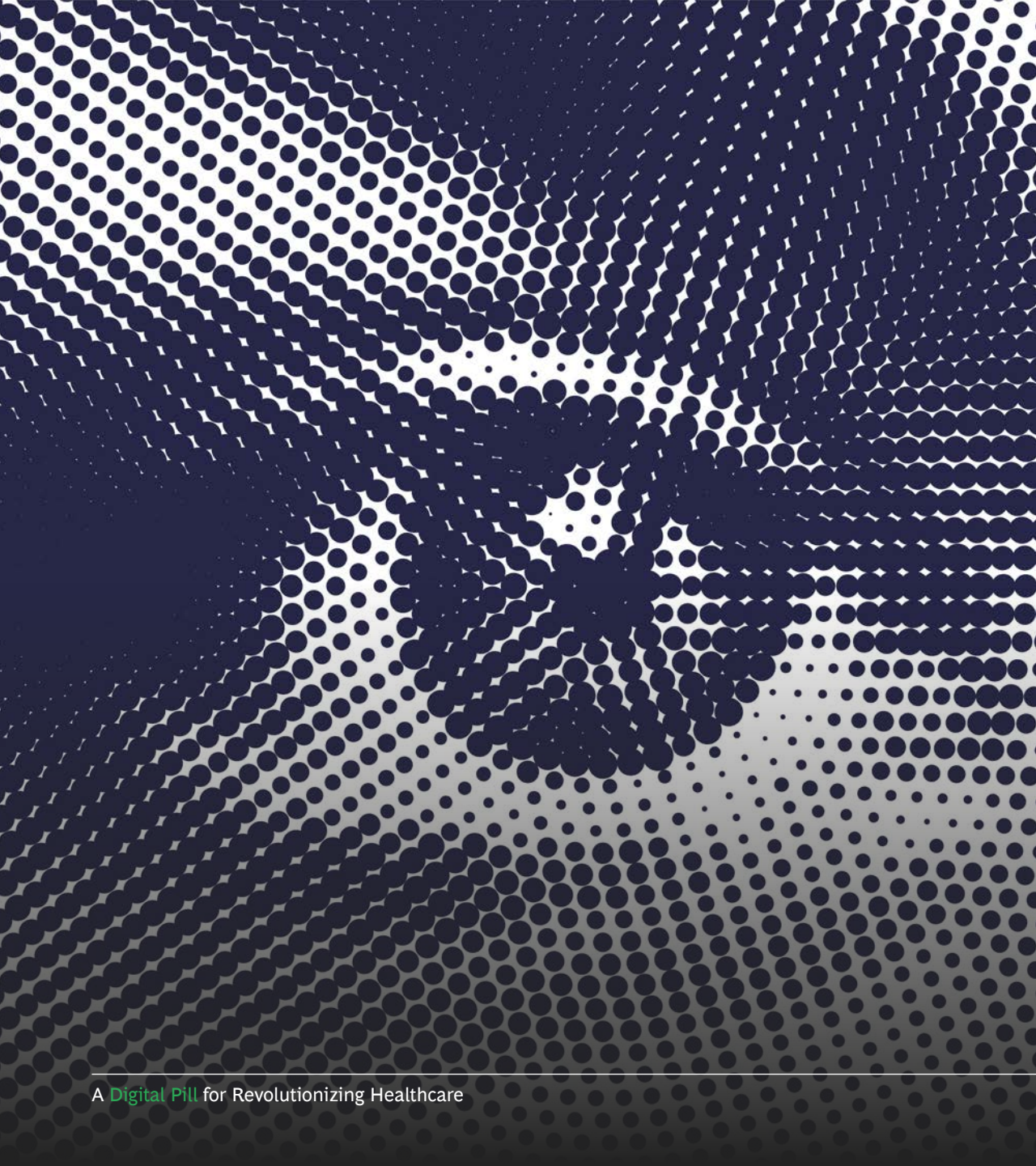
- Enabling wider patient reach with affordable and quality drugs



Global pharmas are partnering with disease management platforms to improve access and patient adherence

Pharma Co	Digital Platform	Disease Area	Description
Otsuka	Click Therapeutics	Major Depressive Disorder	<ul style="list-style-type: none">Platform is using evidence-based cognitive therapy principles and Click's patient-engagement platform to treat patients
Roche/Genentech	Flood Light Open	CNS (Multiple Sclerosis)	<ul style="list-style-type: none">Platform is allowing patients to monitor symptoms (based on ePRO) and offering cognitive activities to improve patient QoLOngoing registry study aims to enroll 10K MS patients
Sanofi	Onduo	Diabetes	<ul style="list-style-type: none">Smartphone-based clinic is connecting patients to endocrinologists in informing lifestyle and medication changesPatient data collection to track potential long-term complications of diabetes
Allergan	The Aesthetic Society	Breast & Other Implants	<ul style="list-style-type: none">Digital wallet containing patient implant record and procedure summaries. Enables real-time access of personal data and increases patient empowermentTwo-way doctor-patient communication tool provides safety alerts and pre & post-operative instructions to enable greater quality of care
Novo Nordisk	Noom	Obesity	<ul style="list-style-type: none">Weight management and education platform to improve lives of people living with obesity"Novo Nordisk patients using Saxenda gained significant value from the combined offering of SaxendaCare & Noom" – Camilla Sylvest, Novo EVP of Commercial Strategy

Source: Otsuka US Press Release; Gene.com; Onduo.com; The Aesthetic Society (Surgery.org); Biospace.com



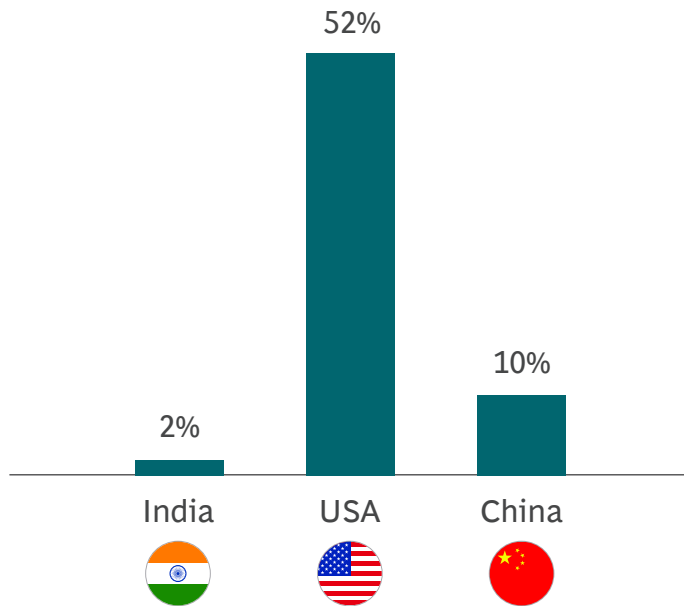
A Multipolar World — No Winner-Take-All



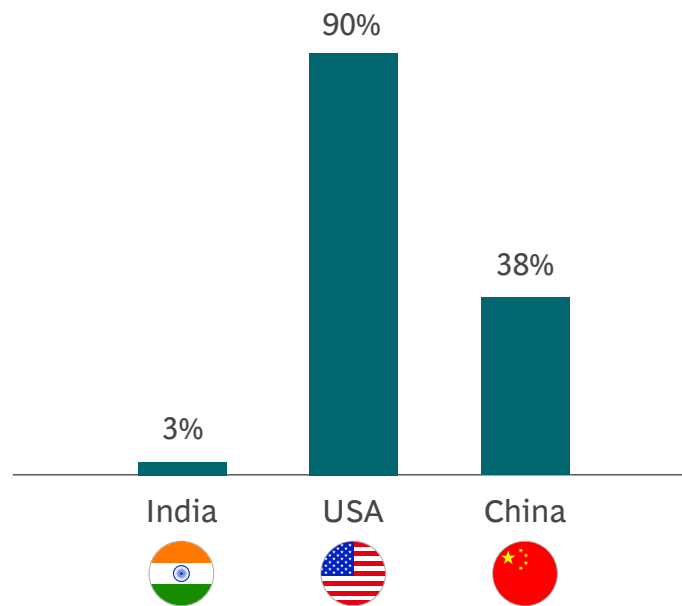
Indian healthcare market is highly fragmented compared to peer markets overseas



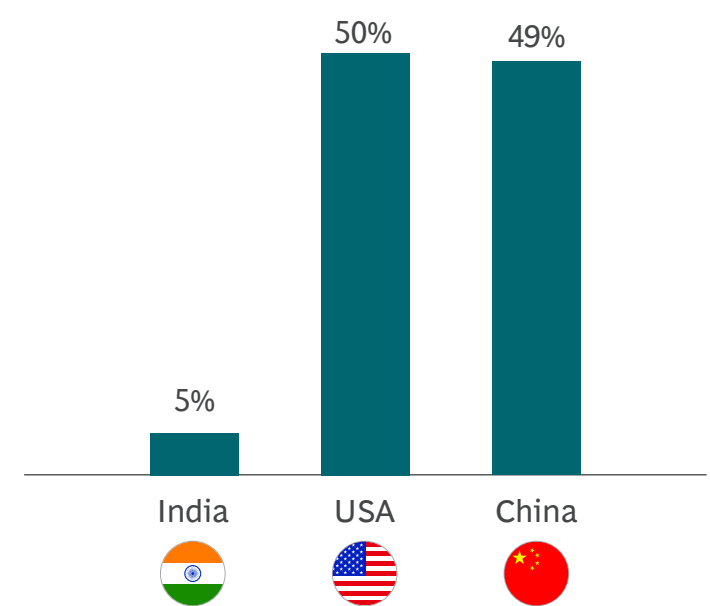
Market Share of Top 3 Pharmacies



Market Share of Top 3 Distributors



Market Share of Top 3 Laboratories

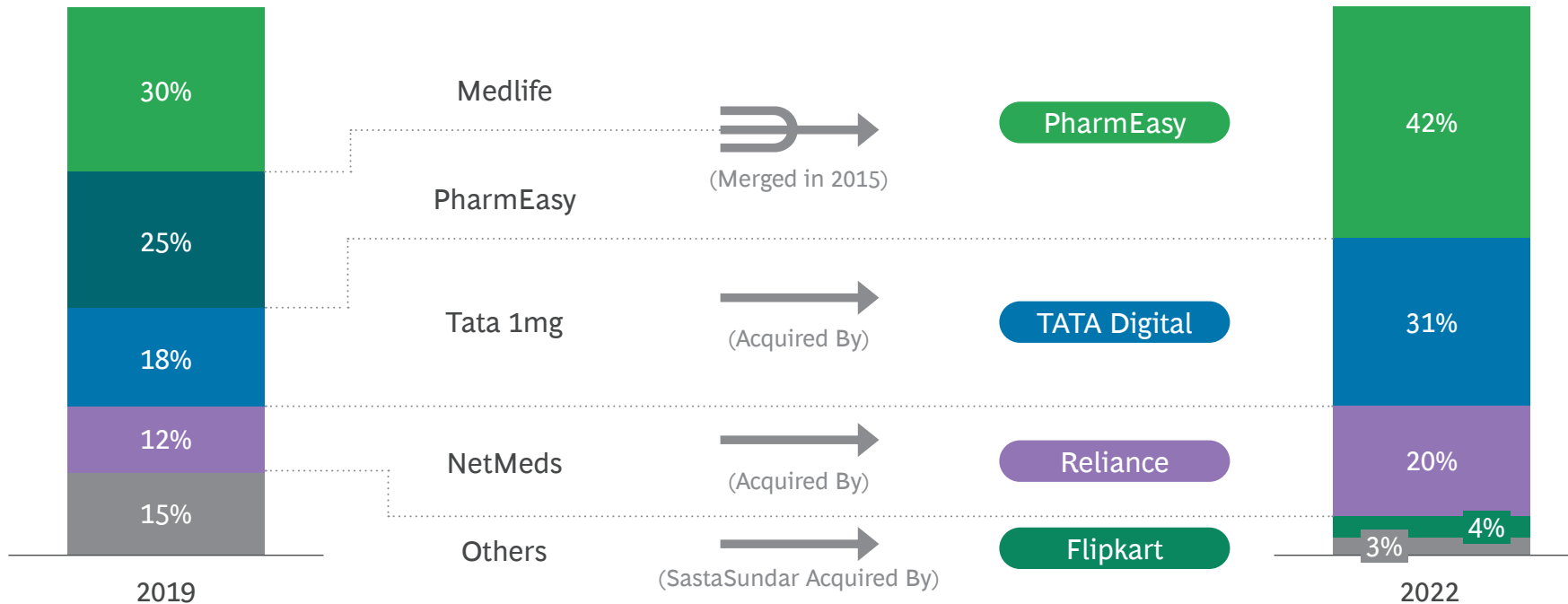


Source: EIU; WHO; World Bank; National Statistics Agencies; BCG Analysis

Consolidation has started but is being led by deep pocketed conglomerates which will lead to a multi-player world

Top 4 E-pharmacy players holding 85% market share pre-pandemic

Strong conglomerate capitalization driving consolidation towards 97% market share



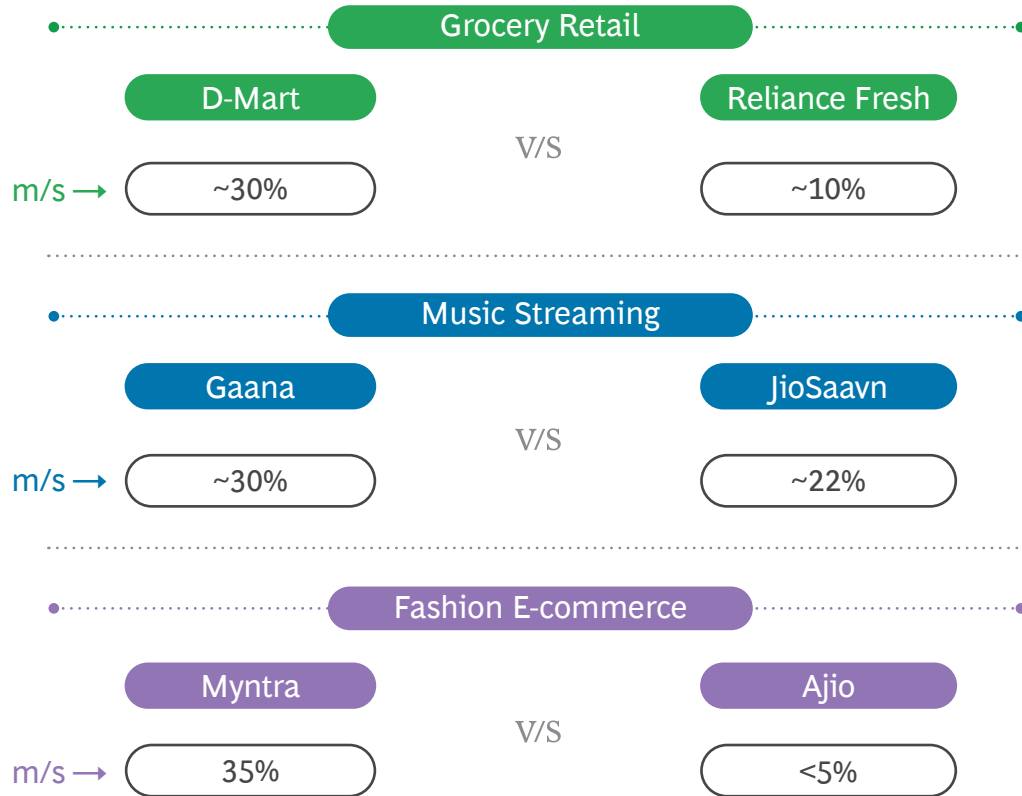
“E-pharmacy will be a multi-player game (5-6 at the least) due to need for localized networks and omnichannel. It will be hard for a single player to be omnipresent given fragmented nature of pharmacy and diagnostic laboratory market.”

— Co-Founder, Leading E-pharmacy Player

Sources: Analysis Mason Report; Lit Research; BCG Analysis

E-commerce learnings suggest as horizontal plays are being built, vertical players can still thrive

Despite the presence of horizontal e-commerce players, category specialists have emerged as winners



Sources: Jefferies; Expert Interviews; BCG Analysis

Healthtech is a well-suited market for deep play by vertical players



Supply-Side Drivers

- Storage and delivery of pharma products requires deep operational expertise – especially in temperature-controlled supply chains
- Reverse logistics operations in pharma are complex as products are to be returned to the manufacturer



Demand-Side Drivers

- Customers value affordability, quality assurance, ease of discovery, and high availability of specialty products – vertical e-commerce players are better positioned on these parameters
- The customer journey for e-pharma is unique, check-out procedure involves prescription validation and is a complex process



Globally, we've seen vertical players dominate digital health despite the success of horizontal players in other e-commerce categories

Goods	China	USA	Brazil	UK	Germany	India (current)	India (expected)
Consumer Electronics	↔	⊕	↔	⊕	⊕	↔	↔
Consumer Durables	↔	↔	↔	↔	↔	↔	↔
Books	↔	↔	⊕	↔	↔	↔	↔
Personal and Home Care	↔	↔	↔	↔	↔	↔	↔
Grocery	⊕	⊕	↔	⊕	↓	↓	↓
Apparel and Footwear	⊕	⊕	↓	⊕	⊕	⊕	⊕
Digital Health Products	↔	⊕	↓	↓	↓	↓	↓
	Ping An Good Doctor	CVS Health	Dr.Consulta	KRY	Doctolib	PharmEasy	

Sources: BCG Analysis

↔ Dominant Horizontal Play ↓ Dominant Vertical Play ⊕ Mixed Play

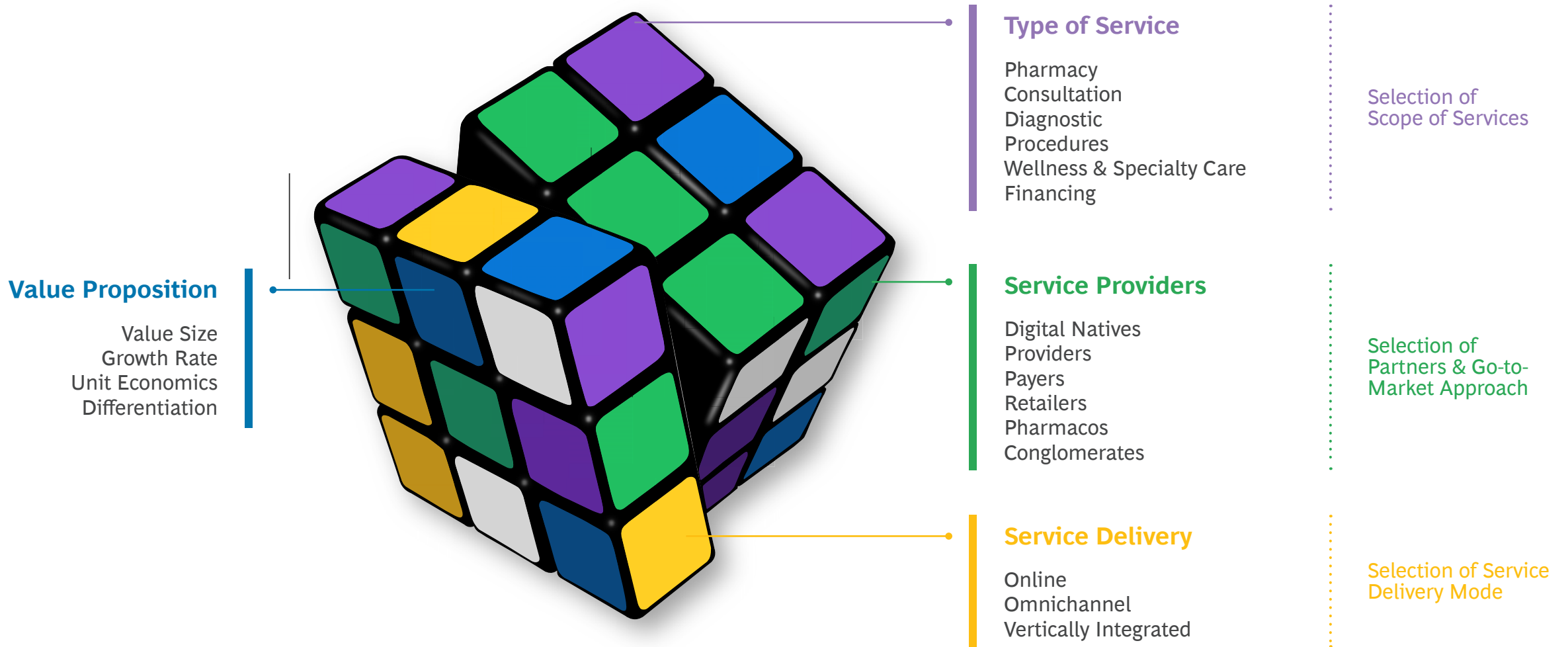


03

Solving the Rubik's Cube

Winning in the digital healthcare opportunity

Solving the Rubik's Cube: Winning in the digital health opportunity





Key Imperatives for Startups

01

Clearly **identify value pools** to target as healthcare spend pools increasingly diversify beyond consumer **out-of-pocket to insurance** and spend mix changes from **inpatient to outpatient**

02

Sharply define your **'right to win'** beyond customer acquisition and experience. Define **scope of services** (horizontal vs. focused) and **mode of delivery** (online vs. omnichannel) based on **customer needs and organizational capabilities**

03

Identify tipping points and step changers in **unit economics** in a clear-eyed manner to drive business model construct and go-to-market approach

04

Reimagine go-to-market by exploring partnerships and ecosystems to augment service delivery capabilities keeping patient centricity, core capabilities, and service build and delivery costs into consideration

05

'Move Fast and Break Things' approach **may not** necessarily be applicable as healthcare is a **multi-stakeholder system**; Factor in business model how different stakeholders influence the patient journey and sources of funds



Key Imperatives for Incumbents

01

Integrate digital into DNA as consumer trends and digital adoption are **changing irreversibly** and digital adoption so far has been led by natives; as natives develop **omnichannel capabilities**, incumbents need to develop and execute on a **comprehensive digital strategy**

02

Recognize that **winning in digital requires different** strategic, organizational, and operational capabilities and approach from winning in physical; develop **digital capabilities** and **approach** with a ground up 'start-up' mindset

03

Clearly **define role of digital in overall strategy** as

1. Standalone digital services are targeting **new customers**
2. Increase **cross-sell** in existing customer base to boost core business
3. Enable a **process step change** in service delivery in existing service lines

04

Identify and monitor key flex points in unit economics as per the defined role of digital in overall strategy to drive sustainable adoption and growth of digital

05

Reimagine go-to-market by developing **partnerships and ecosystems** with digital natives to augment service delivery capabilities in core and emerging businesses



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Acknowledgements

This report is a joint initiative between the Boston Consulting Group (BCG) and the B Capital Group.

We thank all the participants for their valuable contributions through the 1-on-1 discussions we have had towards the enrichment of the report.

Marketing Process: India Marketing team

Design & Production: Jamshed Daruwalla, Rahul Surve, Saroj Singh, Pradeep Hire, Sujatha Moraes, Abbasali Asamdi, Saurabh Tikekar, Dillibabu Muthu, and Saanchi Chatwal.





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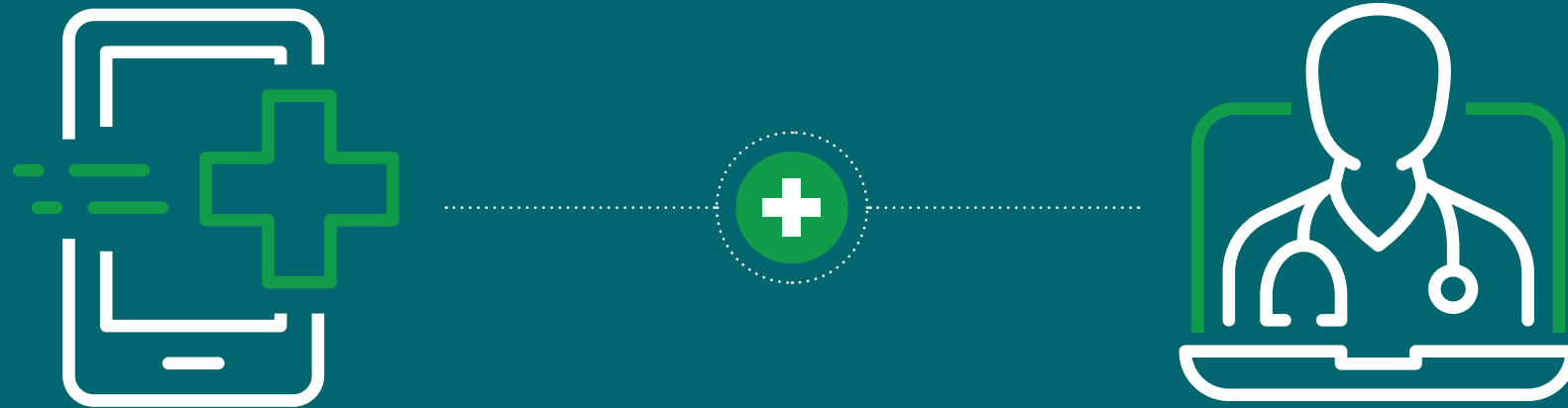
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