



Venture Capital Trends in Digital Health

SPECIAL REPORT

April 2022

Record Breaking Healthcare M&A Activity in 2021

Healthcare is ripe for dispersion

New entrants make waves among traditional healthcare players



In collaboration with



Overview of Digital Health

INTRODUCTION

The year 2021 has been historic for digital health venture funding, with all of digital health's previous annual funding records topped mid-year already. Besides the fundraising dynamic itself, investor appetite was also influenced by major changes to the business models, infrastructure and talent pools that will have long-lasting effects on the respective companies themselves as well as the sector as such.

The global healthcare market is growing at an unprecedented pace. Much of this growth is attributed to an increase in the elderly population as well as an increase in life expectancy. Plus, as demand in healthcare soars, the world is facing a cost crisis. This demand surplus, inelastic pricing, and general complacency is causing an unsustainable growth rate in healthcare spending — revealing that disruption is inevitable.

Telemedicine



Analytics and Data



Population Health Management



Wearables and Bio-Sensing



Digital Medical Devices



Genomics and Sequencing



Introduction to Dispersion

COMPANIES ARE MOVING TOWARDS THE CONSUMER

50 years of continuously advancing globalization have left its marks on the world economy, digitalization is now a key driver for shaping company product offering and development. With big corporates that are in the process of digitalizing their businesses and advancing their business to consumer product offering the foundation for dispersion has arrived in the healthcare sector.



DISPERSION

Ability to distribute products and services, removing unnecessary friction and cost – Scott Galloway



Deliver with 10x Improvement in Speed or Cost

NPS AS A SATISFACTION BENCHMARK DIRECTING TOWARDS DISPERSIBLE INDUSTRIES

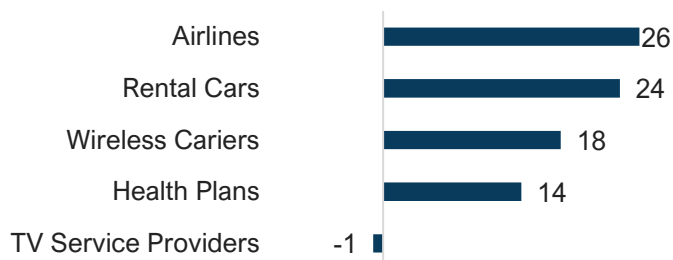
The counter development of the streaming service provider Netflix and home movie rental company Blockbuster is one of the most prominent examples of the dispersion that is reshaping the economy.

A low Net Promoter Score (NPS), a measure of customer satisfaction, indicates that a market is ready for dispersion and for a significant new player to emerge. In 2015, the Net Promoter Score for TV service providers was minus one, demonstrating that the consumer was dissatisfied with the current model and was ready to adopt new solutions.

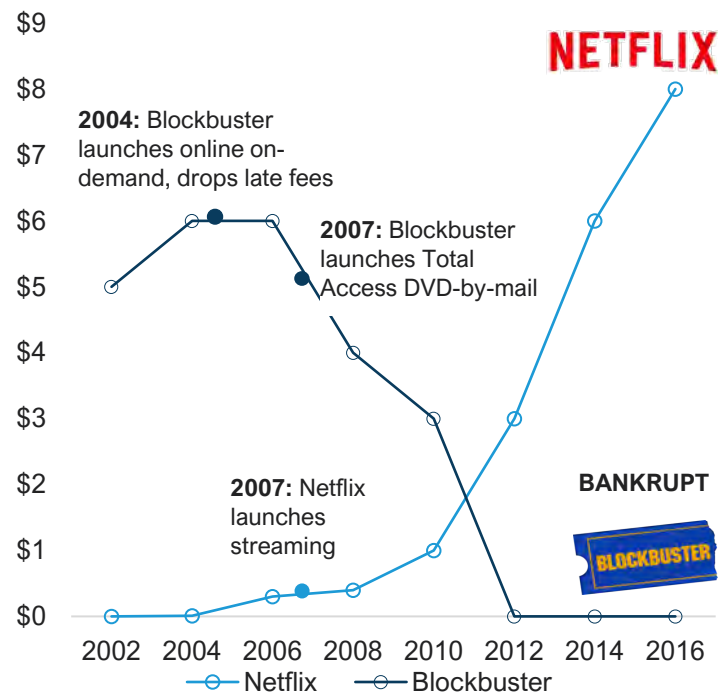
Netflix capitalized on that momentum with a business model that is not depended on physical store locations and enables consumers to online stream its product offering from around the globe.

In 2004, Blockbuster had a market cap of \$6 billion, and now, there's a \$150 billion market cap of Netflix. This is dispersion — Netflix removed friction and cost for the end consumer, offering services to a wide range of people in the world.

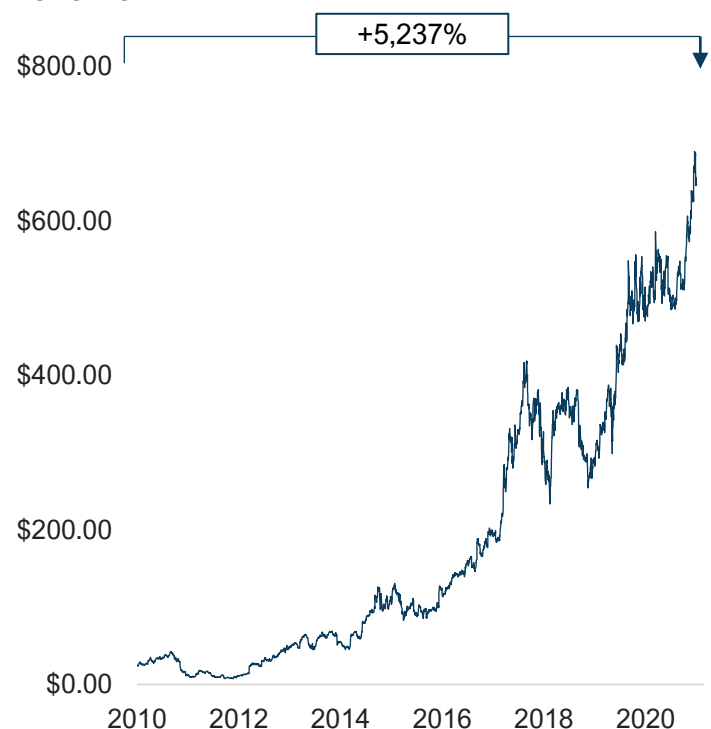
Average Net Promoter Score Per Industry, 2015



Netflix and Blockbuster revenue over time (\$ in billions)



Netflix, Inc. – Dividend Adjusted Share Pricing 2010-2021



Source: Temkin Group 03 2015 Consumer Benchmark Survey, Viima Disruptive Innovation – What it is and How Does it Work?

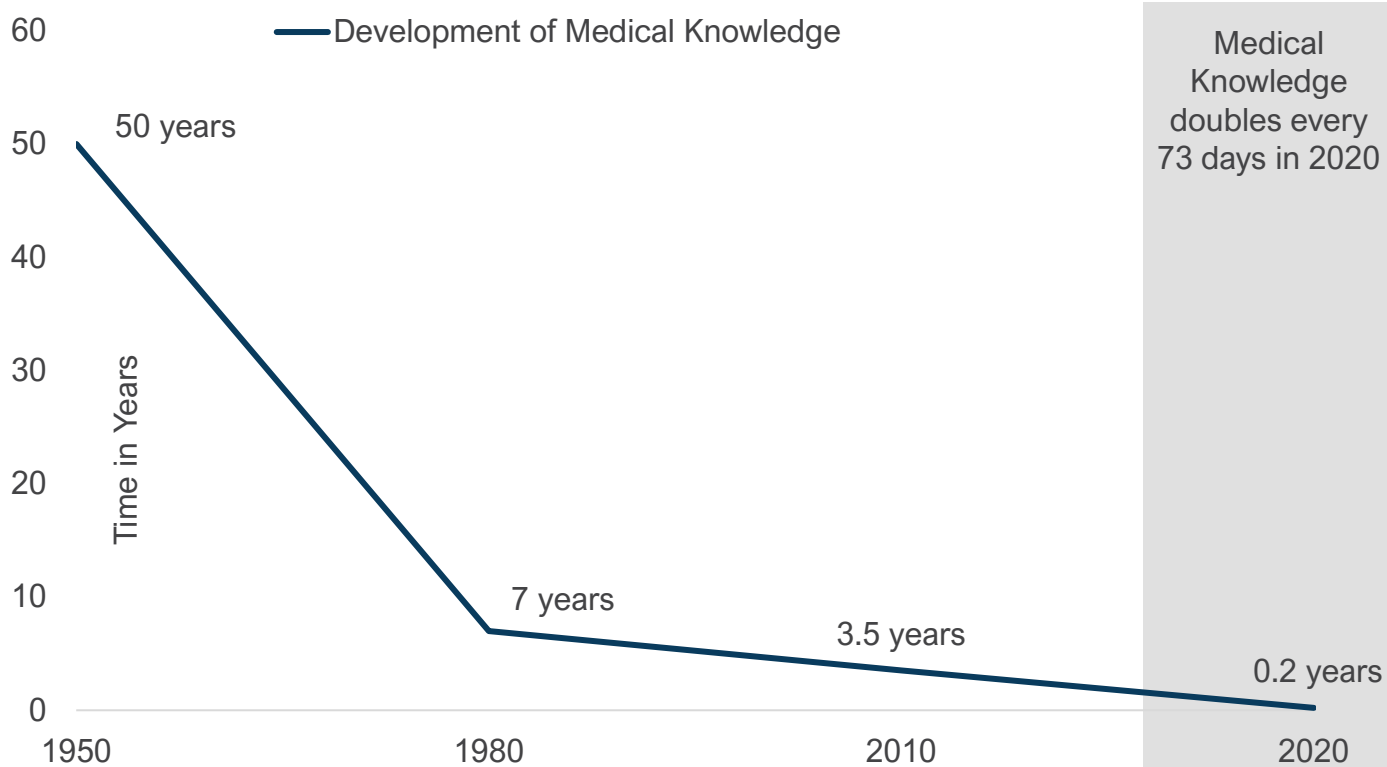
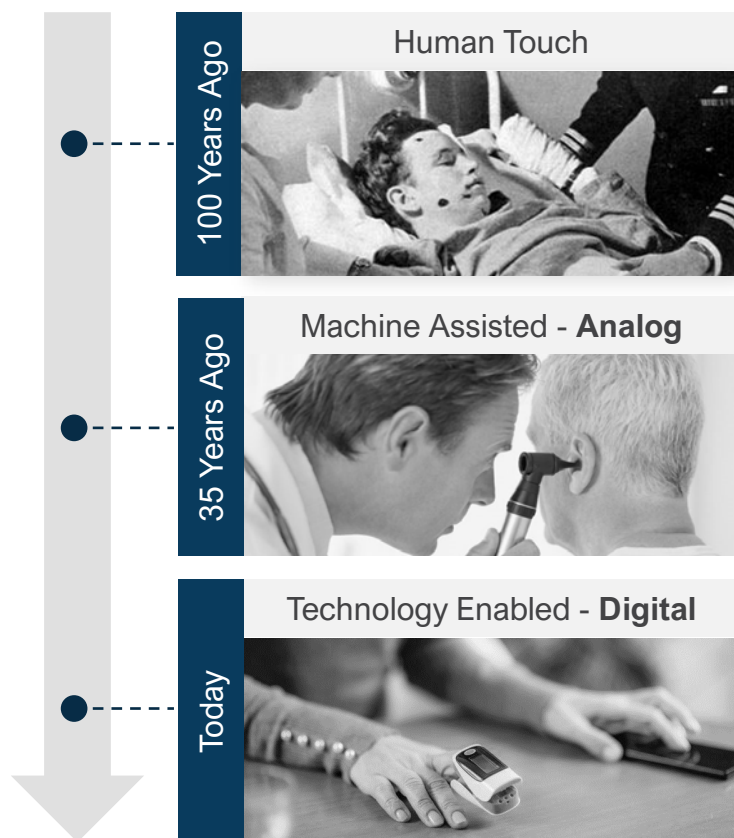
Healthcare Moves Towards the Consumer

DEVELOPMENT OF HEALTHCARE OVER TIME

The healthcare sector undergoes a trend that is moving towards the consumer:

One hundred years ago, doctors helped patients directly, through human touch. Thirty-five years ago, machine-assisted, analog tools were used for improved diagnosis and treatment. And now, we're investing into digital devices and technology that can help the consumer diagnose themselves at home, independently from the doctor.

Remote medical diagnosis is further backboned by the tremendous acceleration in medical research findings that minimized the amount of time to double medical knowledge from 50 years in 1950 to only a quarter of a year in 2020.

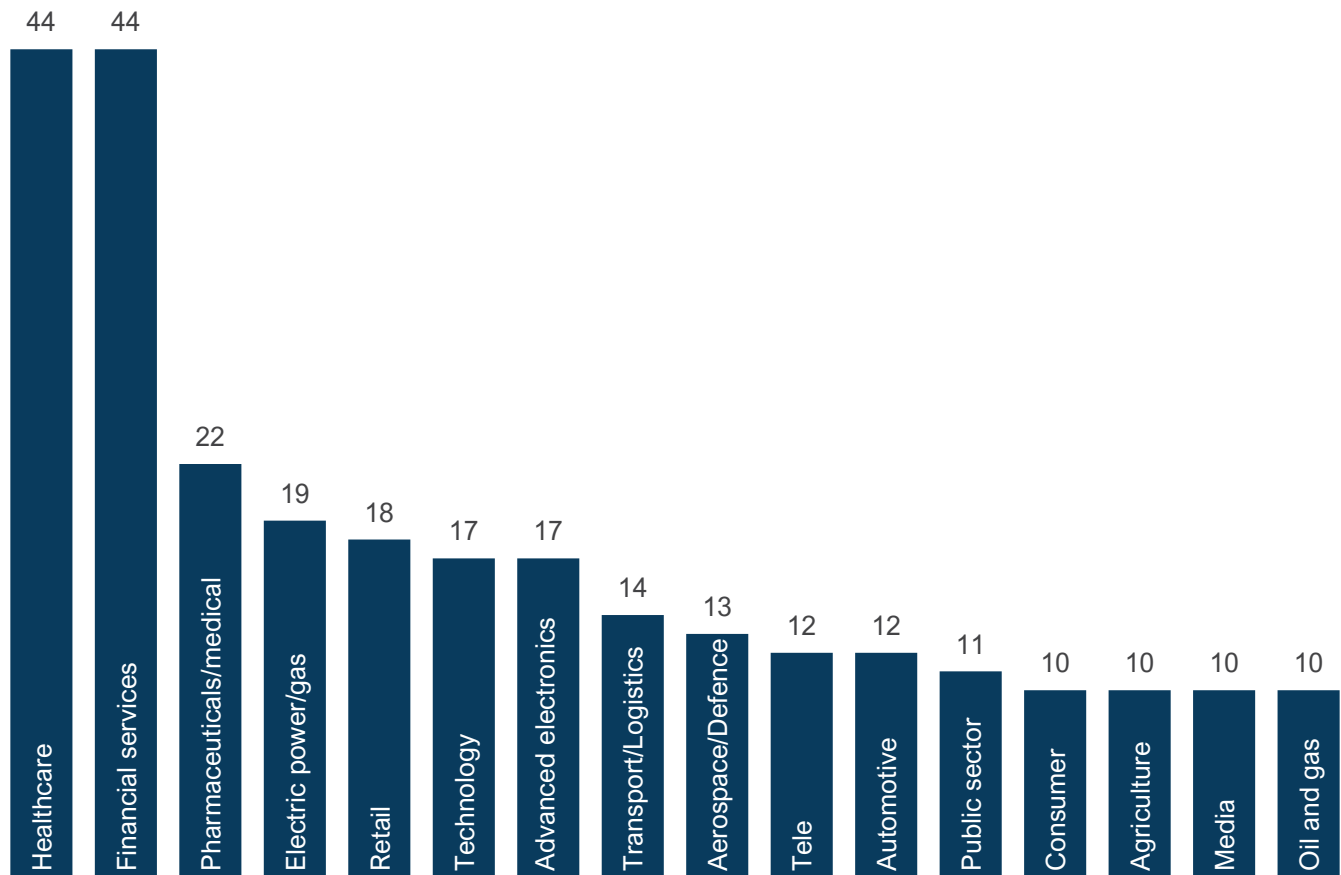


Sources: KP Internet Trends 2017: History of Nephrology, Welch Allyn, Medisave, Kinsa, NCBI, "Challenges and opportunities facing medical education", Peter Densen, MD, 2011

Increasing Appetite for Data Sharing

Rating of Businesses Considered Most Trustworthy

(Respondents choosing a particular industry as most trusted in protecting of privacy and data, % (n=1000))

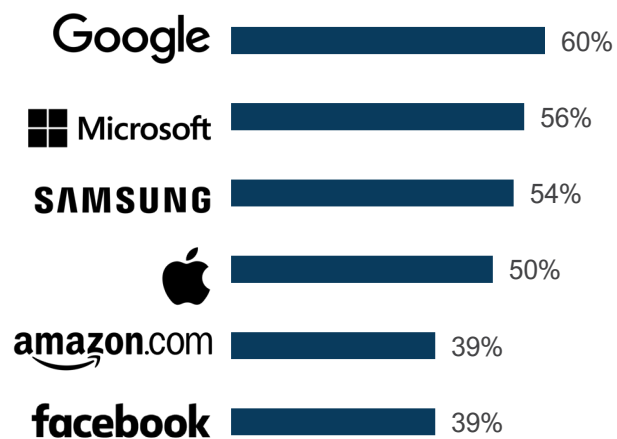


CONSUMERS EXCHANGE PERSONAL DATA FOR A TAILORED SERVICE

Going along with that trend, consumers are ready to share data with the tech companies that offer these digital devices.

Consumers understand that service gets personalized to them if they share their data, and they are willing to entrust big tech with their health data in exchange for personalized services or products.

With which tech company would respondents share their health data



Sources: McKinsey Survey of North American Consumers on Data Privacy and Protection, 2019, KPCB Internet Trends 2017, Rock Health 2016 Consumer Survey

Healthcare Amongst Lowest NPS Scores

LOW NPS SCORE LAYS FOUNDATION FOR NEW PRODUCT AND SERVICES

Customers are increasingly used to seamless digital user experiences in their daily lives and expect the same from traditional industries including healthcare. Users are willing to adopt new solutions within the healthcare sector that provide them with convenience, transparency and personalization. Equipped with relevant product experience, consumer companies see strategic opportunity for industry entrance into new markets.

Key Drivers for Customer Orientation

Convenience

- **Strong growth** in **demand** for simple and **user-friendly** apps
- **Accessible** services without time and location constraints

Price

- Creation of new **technology driven** business models with high scalability
- Ability for businesses to price services **competitively low**

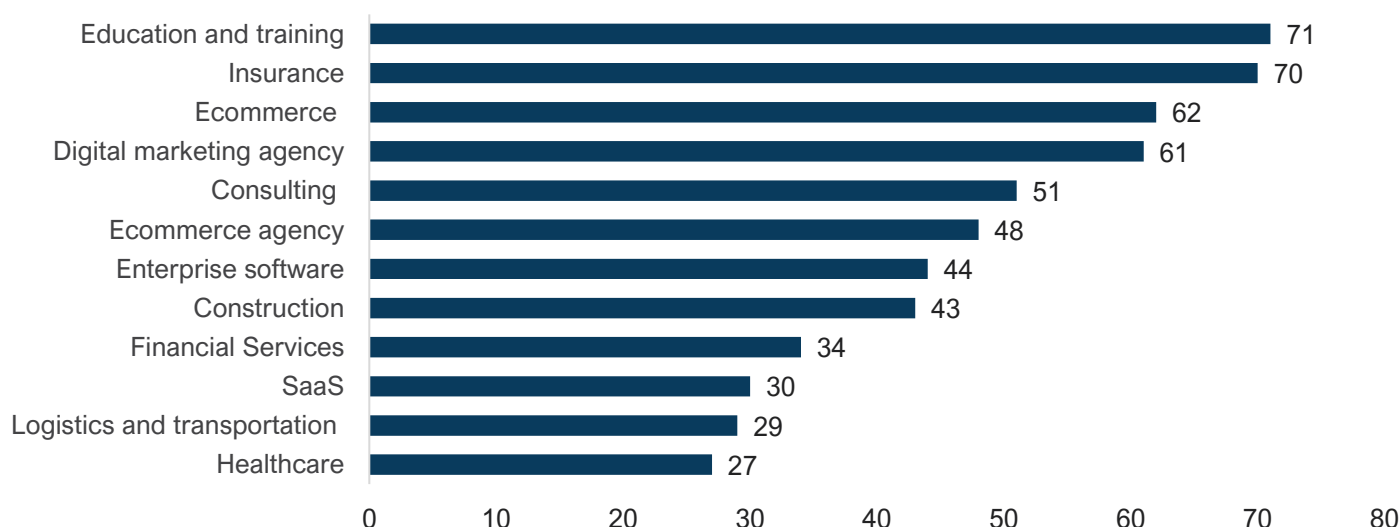
Transparency

- Increased transparency and trust through **social networks** or **platforms**
- Transfer of **health data ownership** to customers

Personalization

- Individualization of digital services via **tailor-made offerings**
- **Quick accessibility** for users to their most demanded services

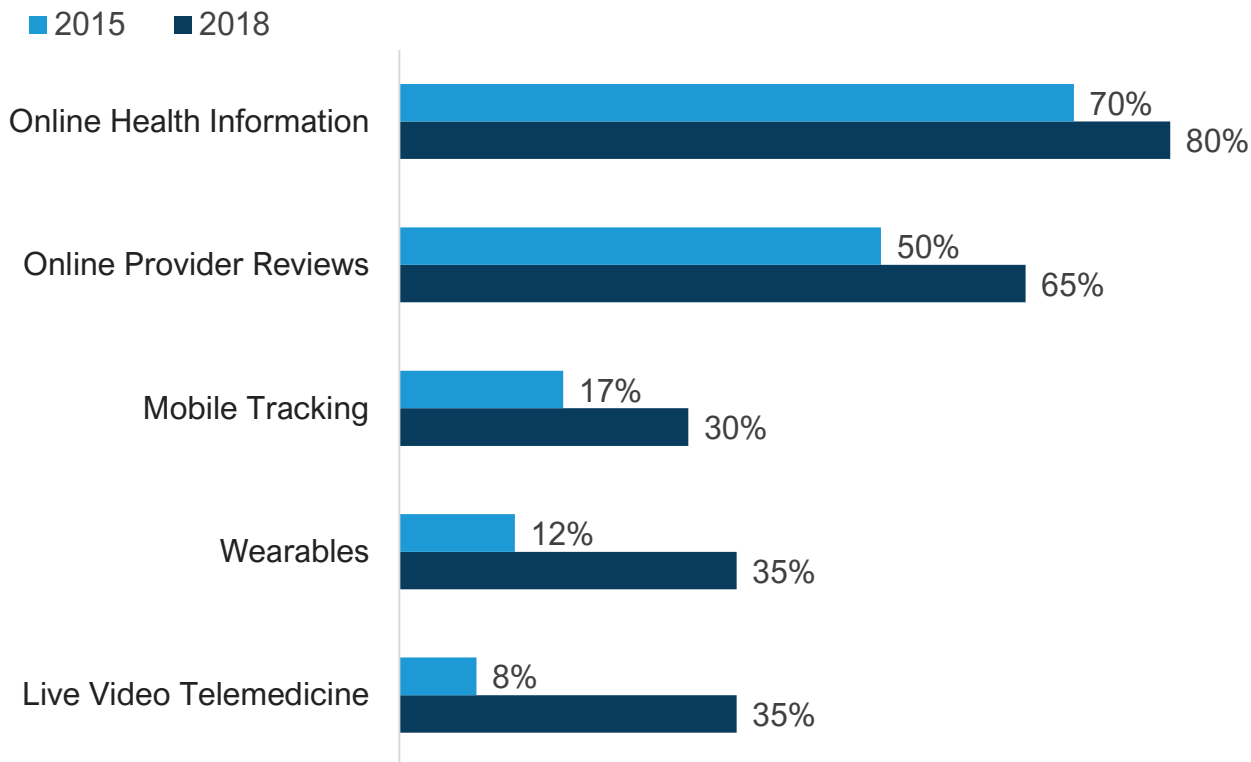
Net Promoter Score



Source: Statista

Pandemic as a Catalyst

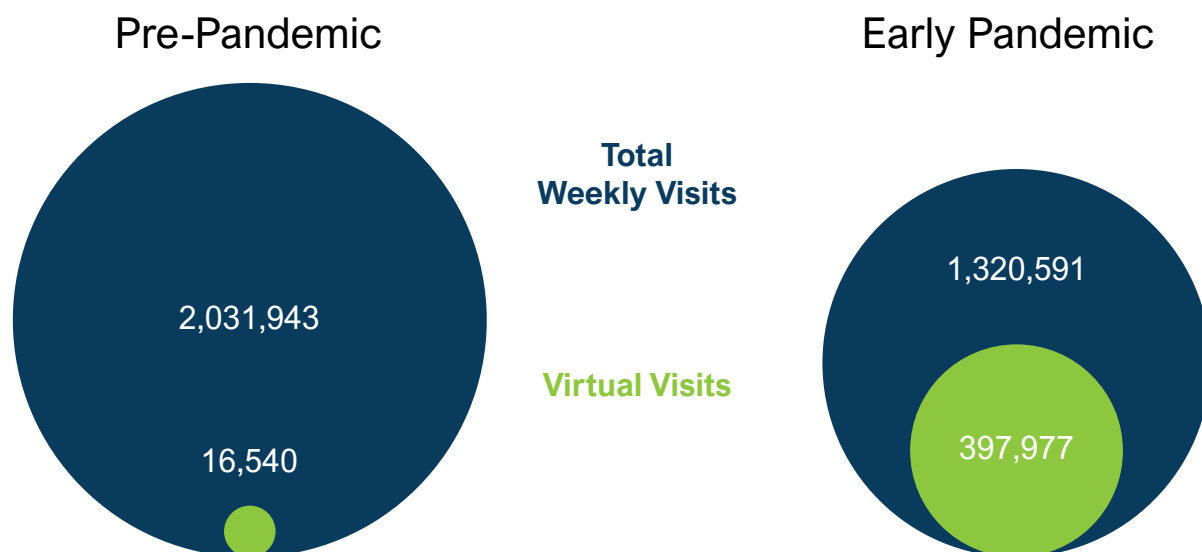
Consumer Adaptation of Digital Health Tools, USA



TELEHEALTH BOOM

Average Weekly Volume of Total Outpatient Visits and Virtual Visits in the US

(Pre-Pandemic: Jan. 1, 2020 – Mar. 17, 2020; Early Pandemic: Mar. 18, 2020 – June 16, 2020)

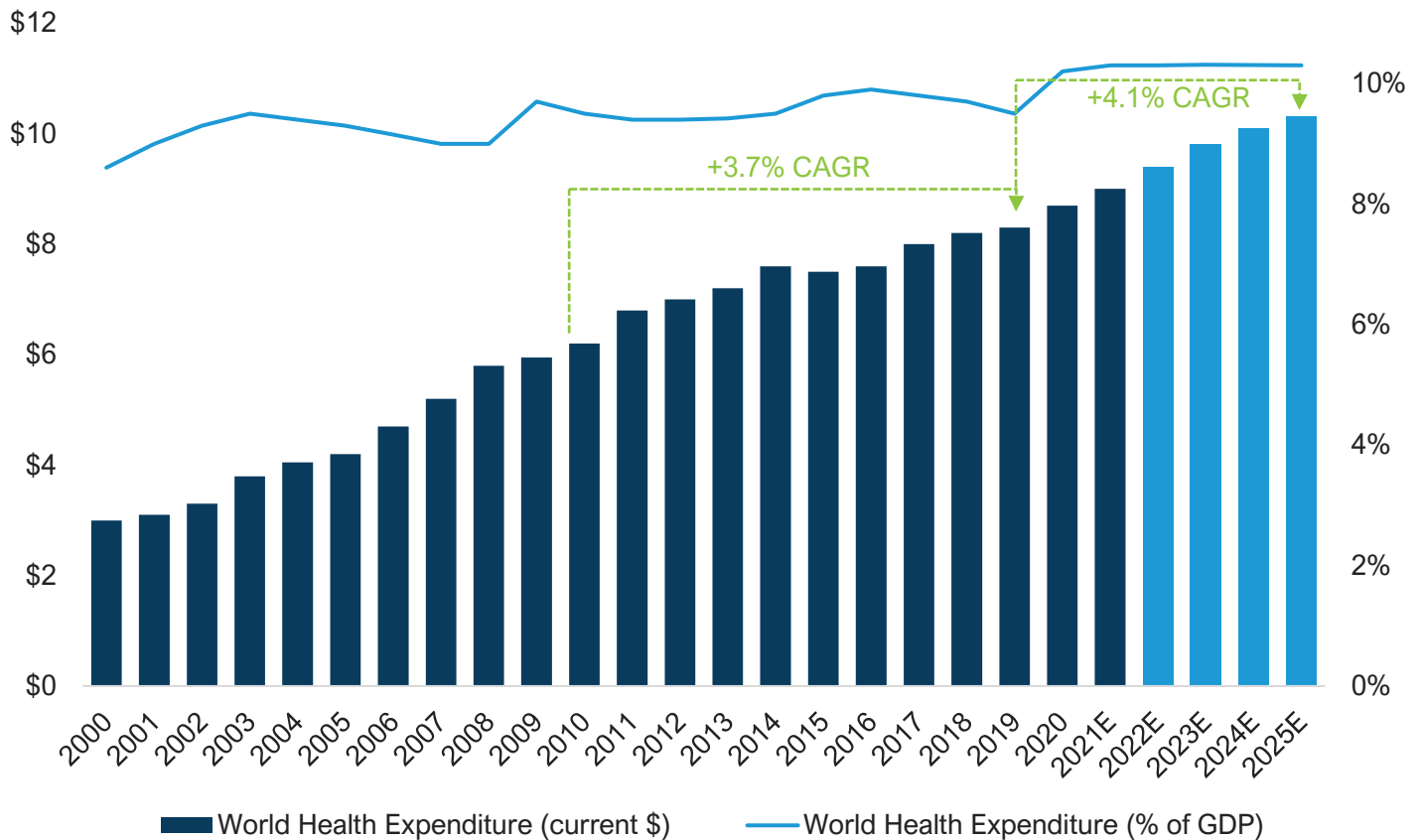


Sources: Rock Health Digital Health Consumer Adoption Survey

The Global Healthcare Market

Global Healthcare Expenditure

(\$ in trillions)



RAPIDLY GROWING \$8.3T MARKET SLOW TO EMBRACE DIGITAL TECHNOLOGY

Global healthcare, now the fourth largest component of world GDP, hit \$8.3 trillion USD of spend in 2020 – growing in real terms by 3.7% per annum since 2000.

Notable demand drivers include:

- **Aging:** 100% increase in world's over 60 population by 2050;
- **Life Expectancy:** 75+ years life expectancy by 2025;
- **Demographics:** 80% of the elderly will be living in developed markets by 2050;
- **NCDs (Non-Communicable Diseases):** 71% of all global deaths are due to non-communicable diseases

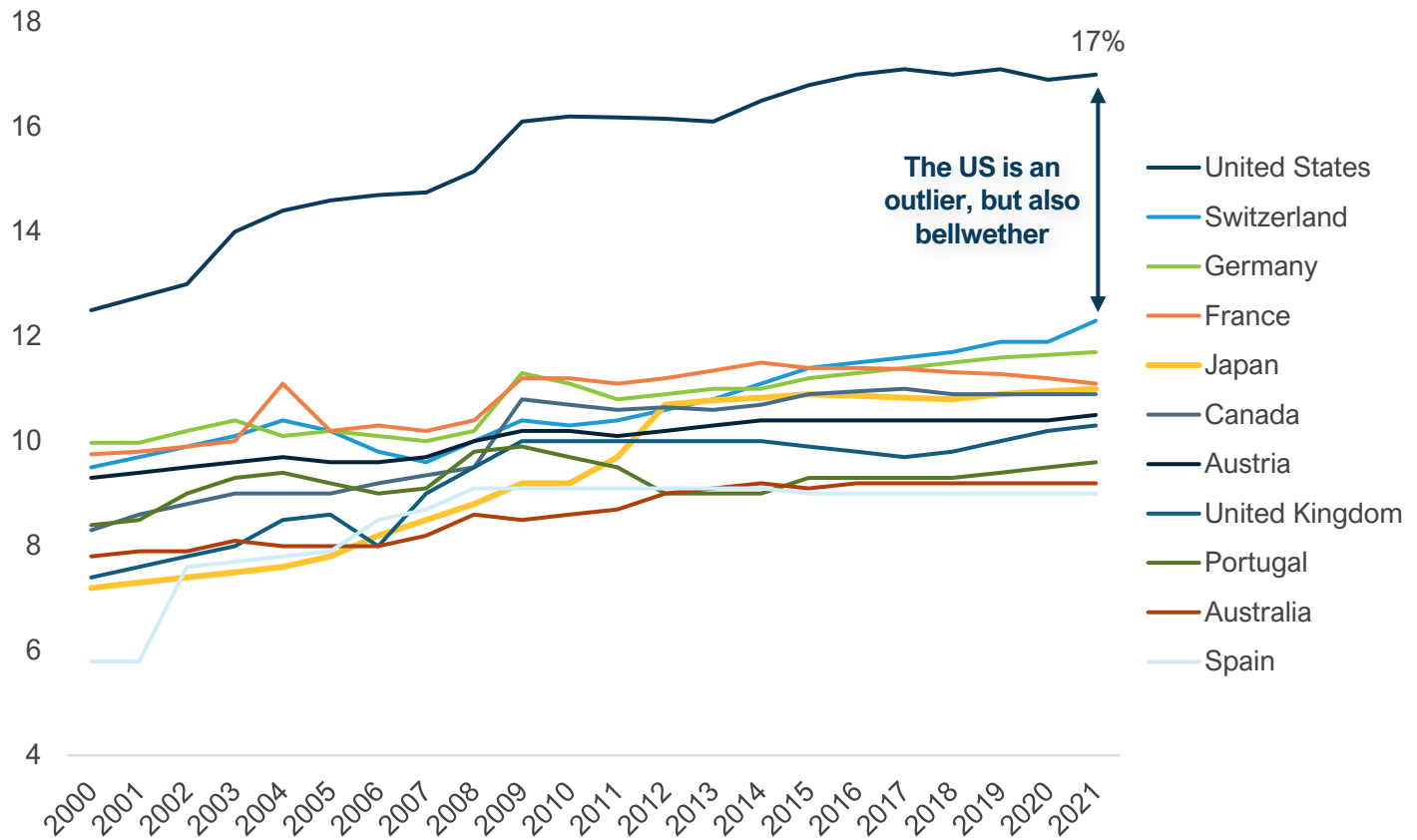
We expect growth to accelerate to 4.1% over the next five years, driven by cost-push and demand-pull forces.

Sources: World Bank Data, OECD Data, CapitalX The Rise of Digital Health 2021

Affordability: The Rising Cost of Care

Healthcare Spend Rising Globally

(as % of GDP)



AS HEALTHCARE DEMAND SOARS, THE WORLD FACES UNSUSTAINABLE COST CRISIS

A growing demand surplus, inelastic pricing, and general complacency have caused global nominal healthcare costs to rise at a CAGR of 5.8% since 2000 – outstripping both global inflation and economic growth.

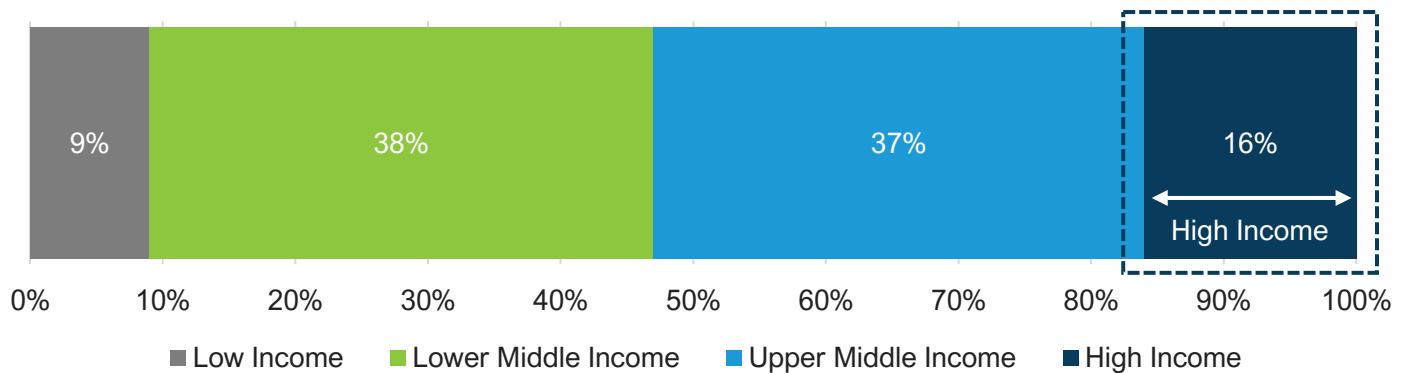
Global health care expenditure has tracked ahead of real GDP for several decades, with expenditure rising from 8.7% to 9.7% of world GDP between 2000-2020.

Mathematically, economically and politically, this imbalance is unsustainable – disruption is inevitable.

The U.S. stands out as the least efficient and most expensive developed market health system globally, boasting the lowest life expectancy amongst its developed market peers, despite spending by far the largest proportion of their GDP towards healthcare ~17%.

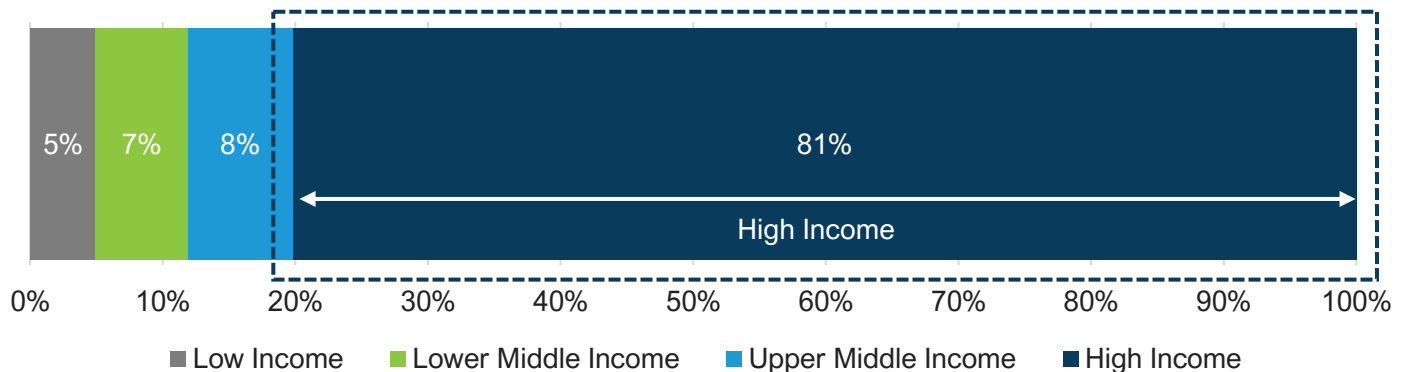
Inequitable Access to Care

Global Population - 2017



Global Health Expenditure

(\$8T USD)



THE TRADITIONAL HEALTHCARE MODEL IS DESIGNED FOR THE WEALTHIEST 16%

“Our current approach to healthcare, lacks the operational efficiency and leverage required to provide global, universal access to healthcare”

-World Healthcare Assembly 2019 (WHA)

- **1/100** individuals are pushed into extreme poverty after paying for healthcare
- **50%** of the global population does not have access to essential health services
- **81%** of global healthcare spend is derived from only 16% of the world's population (high-income markets)

To provide more equitable access to medical care, we need to evolve past the traditional, high-income, high-capex health model.

New Entrants Versus Existing Players

THE AMAZON EFFECT: PILLPACK (2018)

Investors have been expecting Amazon to make a move into the pharmacy space since at least 2018, when the Seattle-based firm acquired online pharmacy PillPack for more than \$750 million.

In November 2020, Amazon announced the launch of its own digital pharmacy alongside prescription discounts of up to 80% for its Prime members.

Shares of the nation's three largest pharmacy chains—Walgreens, CVS Health and Rite Aid—were tanking 9%, 8% and 16% (more than \$10 billion in diminished market value between Walgreens and CVS alone).

Amazon gained \$20 billion in market capitalization.

Alphabet

amazon



NOKIA

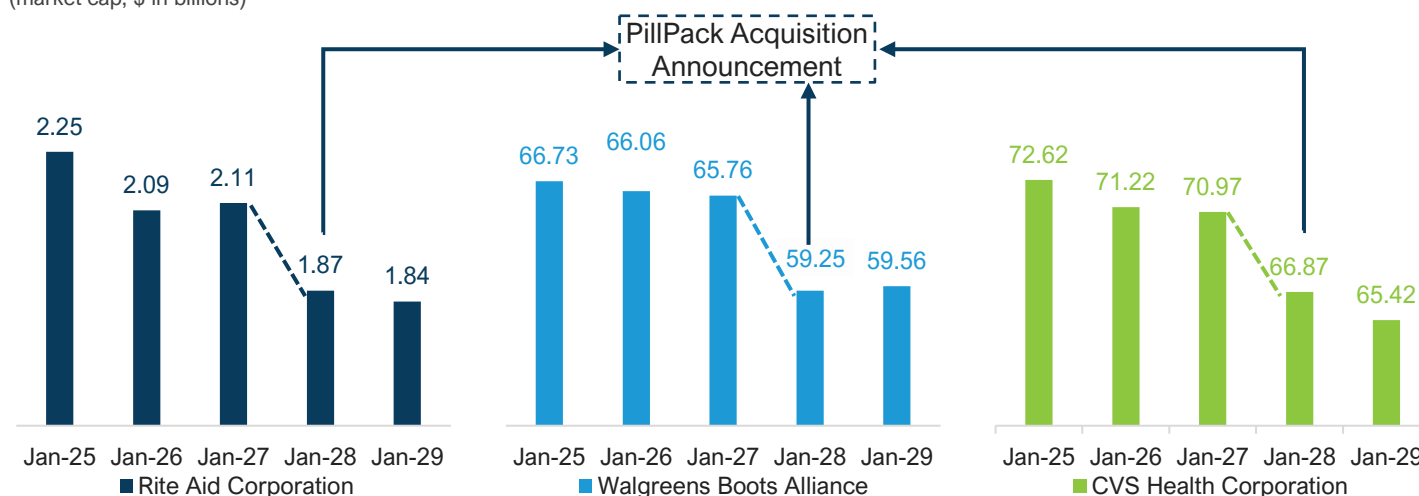
PHILIPS

SAMSUNG

UBER

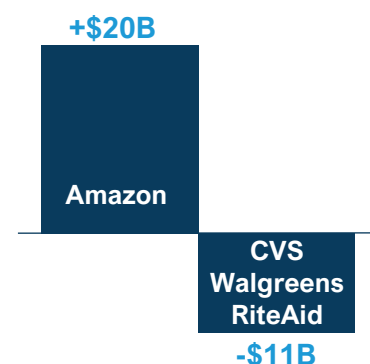
Effect of Amazon's acquisition of PillPack on pharmacy companies

(market cap, \$ in billions)



BIG TECH BREACHING INTO DIGITAL HEALTHCARE

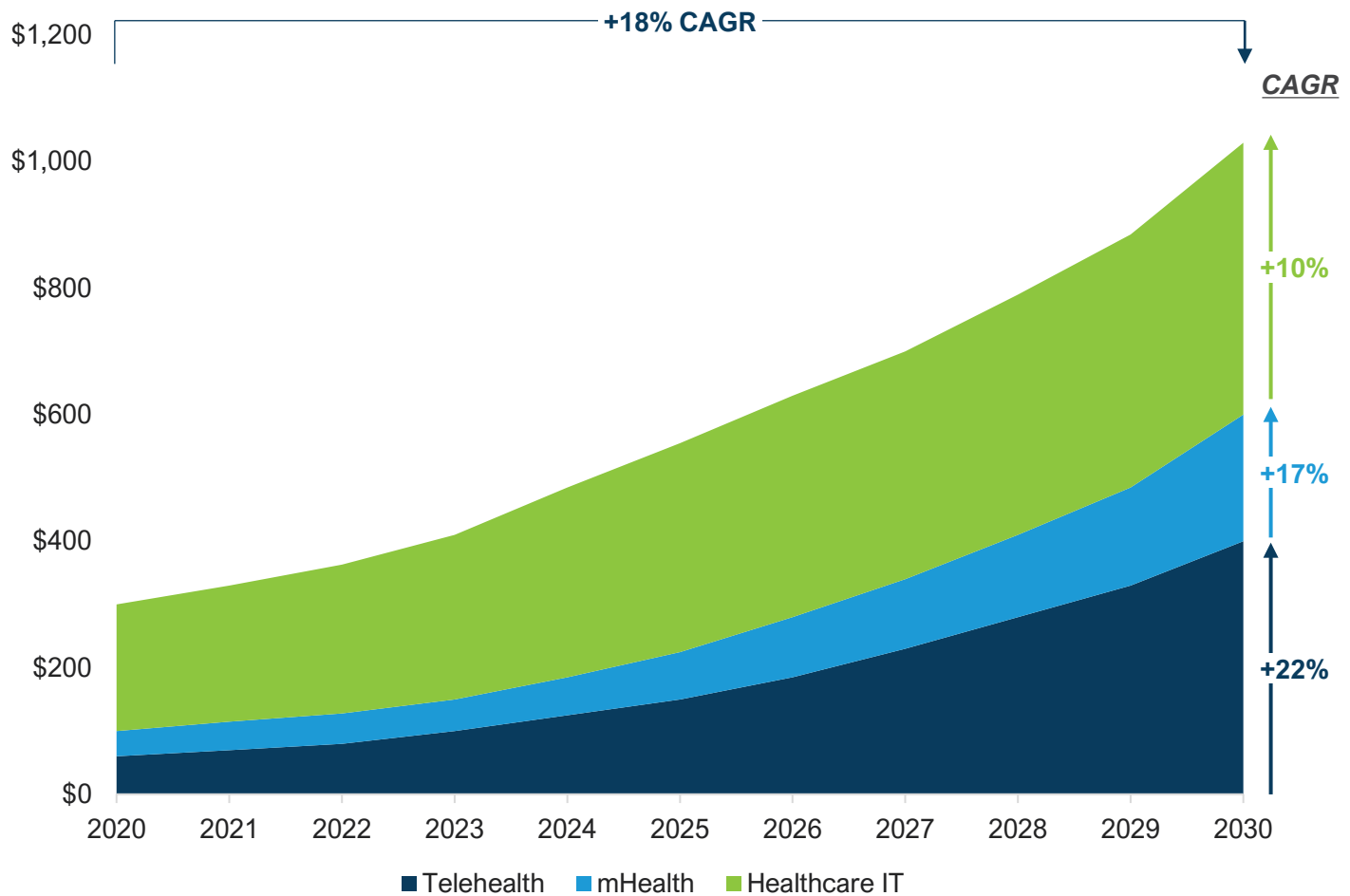
Like shown by Amazon's acquisition of PillPack, new entrants into the healthcare market are offering a foretaste of what disruption might look like. Tech companies see the opportunity here — they understand the consumer and that they can grab market share when they enter the healthcare market. There was an increase in M&A transactions in the digital health space in 2020 over the previous years, and now during the pandemic, there are more acquisitions of digital health companies.



Sources: AlphaStreet, "The Ripple effect of Amazon popping up PillPack"

Sizing the Market Opportunity

Forecasted Market Value by Segment by 2030 and Implied CAGR Growth Rates



DIGITAL HEALTH IS PROJECTED TO EVOLVE INTO A TRILLION-DOLLAR GLOBAL MARKET BY 2030

We anticipate strong growth across most of the digital health subsectors over the decade:

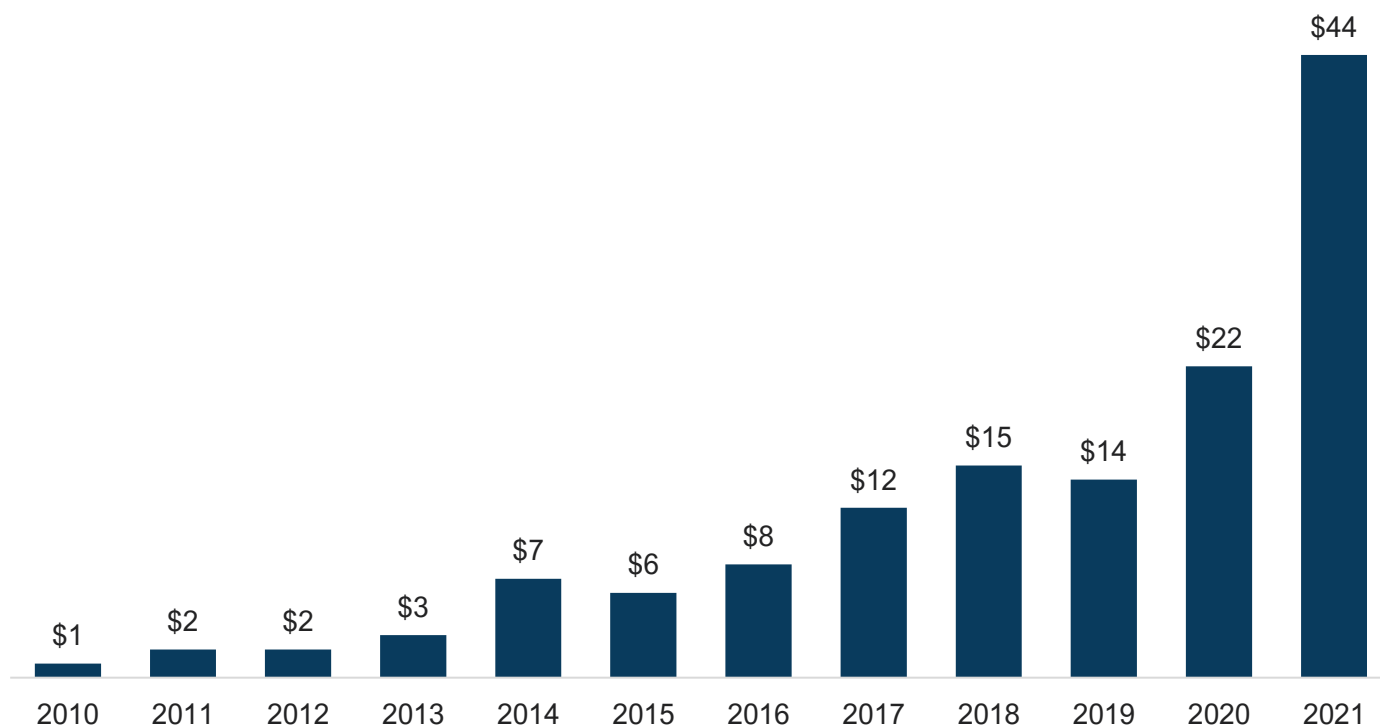
- Telehealth is the fastest growing market at 22% per annum – reaching \$400bn in value by 2030 as more remote care problems and services are established and funded.
- mHealth is set to grow at 17% per annum to \$220bn by 2030 as provider buy-in, interoperability, reimbursement and smartphone usage increase.
- Healthcare IT is set to grow at 10% per annum to \$430bn by 2030 as data collection, structuring, applicability, and EHR adaption increase.

Source: CapitalX The Rise of Digital Health 2021

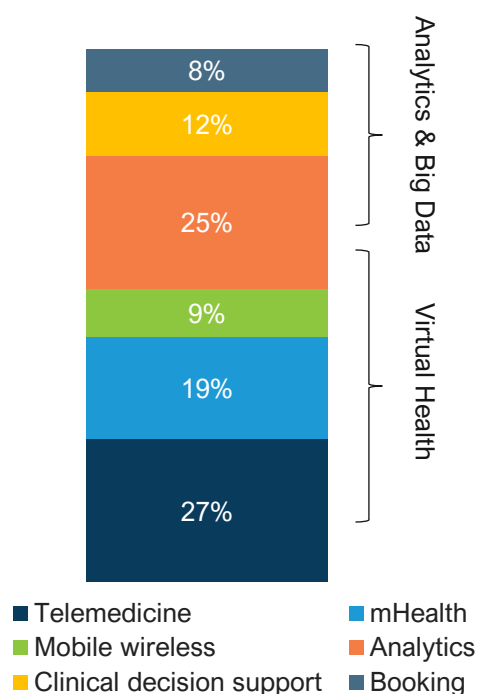
Global Health Innovation Funding

Global Digital Health Funding

(\$ in billions)



By Technology (2019)



DIGITAL HEALTH ATTRACTED ~7% OF GLOBAL VENTURE FUNDING IN 2020

Global digital health funding hit a record high of \$21.6bn in 2020 – propelled by a technology boom during the Covid-19 pandemic

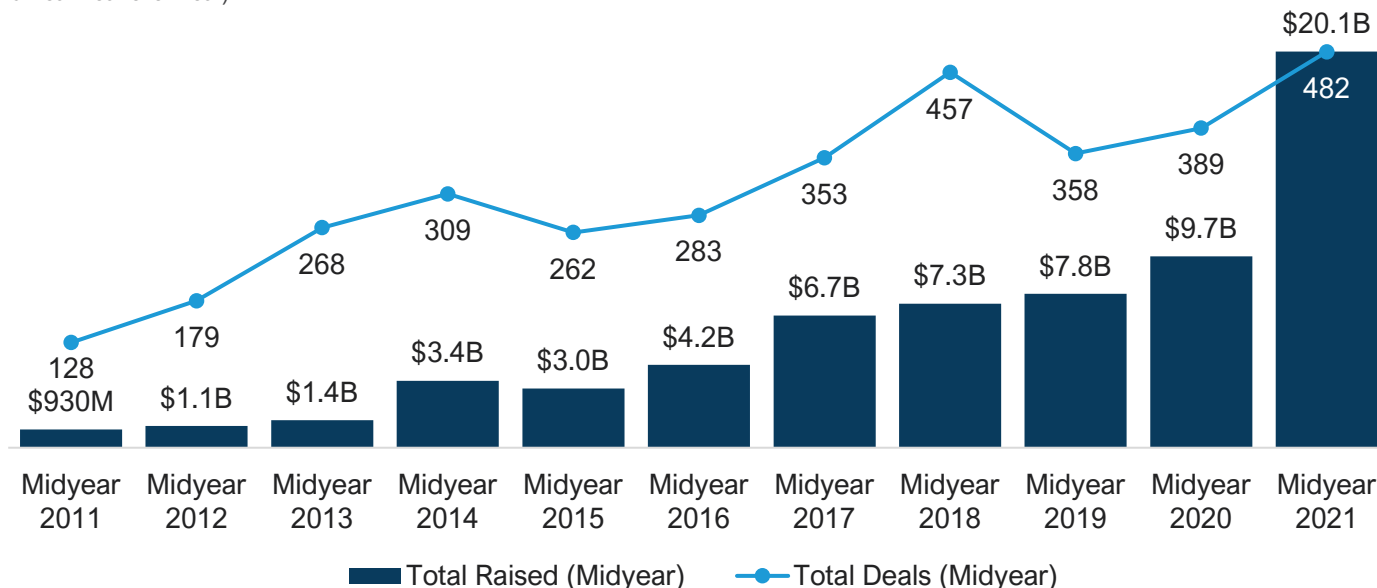
- In 2020, 55% of funding was directed towards virtual health technologies, whilst analytics and big data attracted 37%.
- 50% jump in average deal size to \$30m during 2020
- Between 2010-2020 digital health deal volumes grew 40% per annum
- 41% of deals are considered “mega” at >\$100m

Sources: CapitalX The Rise of Digital Health 2021, Statista, Rock Health

Global Health Innovation Funding (cont.)

Global Digital Health Funding

(Mid-Year Year over Year)

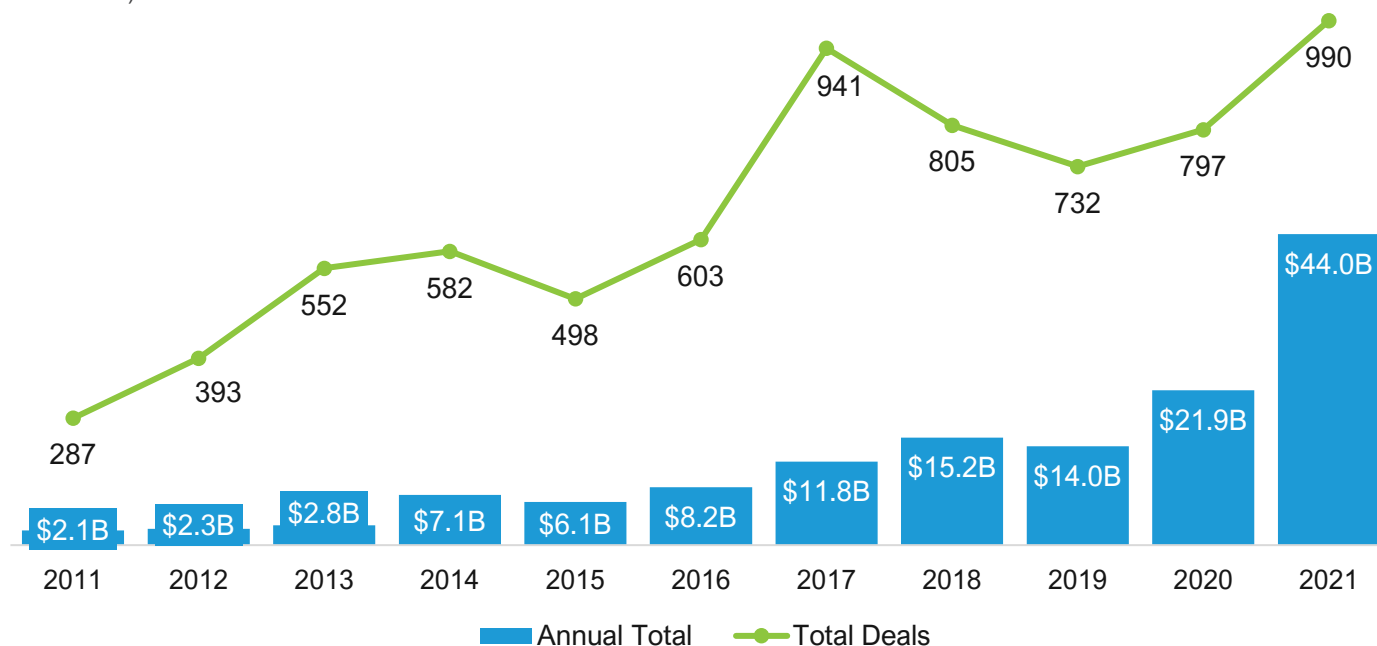


MID-YEAR YOY

In the first six months of 2021, we tracked a little over \$20B in funds raised. While money has flooded the health innovation market in 2021, the number of deals has risen more gradually. That's because we're seeing more and more blockbuster mega deals.

Global Digital Health Funding

(Year over Year)



Source: StartUp Health Insights Report 2021

Global Health Innovation Funding (cont.)

GLOBAL DIGITAL HEALTH INVESTMENTS SHOWS SLOW BUT STEADY GROWTH

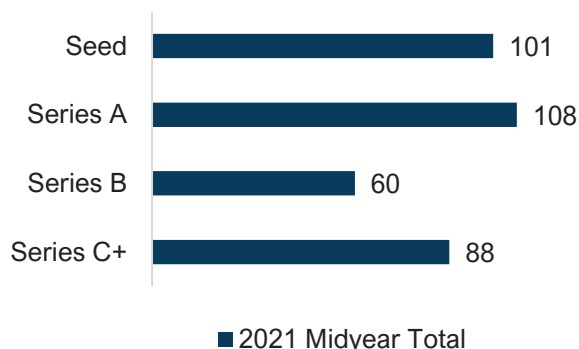
There was \$22 billion in venture capital funding for digital health in 2021. Seed and Series A investors are very enthusiastic, though Series B investing remains slower. This is because healthcare moves slowly but steadily, and venture capitalists are hesitant when they see go-to-market timelines. One of the major challenges in Europe is executing a quick go-to-market. However, once that go-to-market is achieved within a digital health company, a lot of money pours in, paving the way for upcoming, large-scale disruption.

Largest Deals of the Past 15 Months

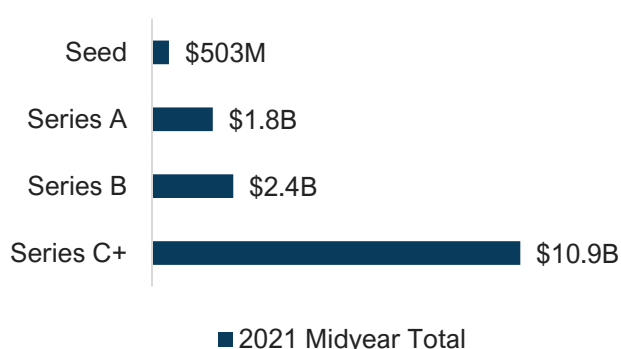
(\$ in millions)



Number of Deals by Stage



Total Funding by Deal Stage



Source: StartUp Health Insights Report 2021

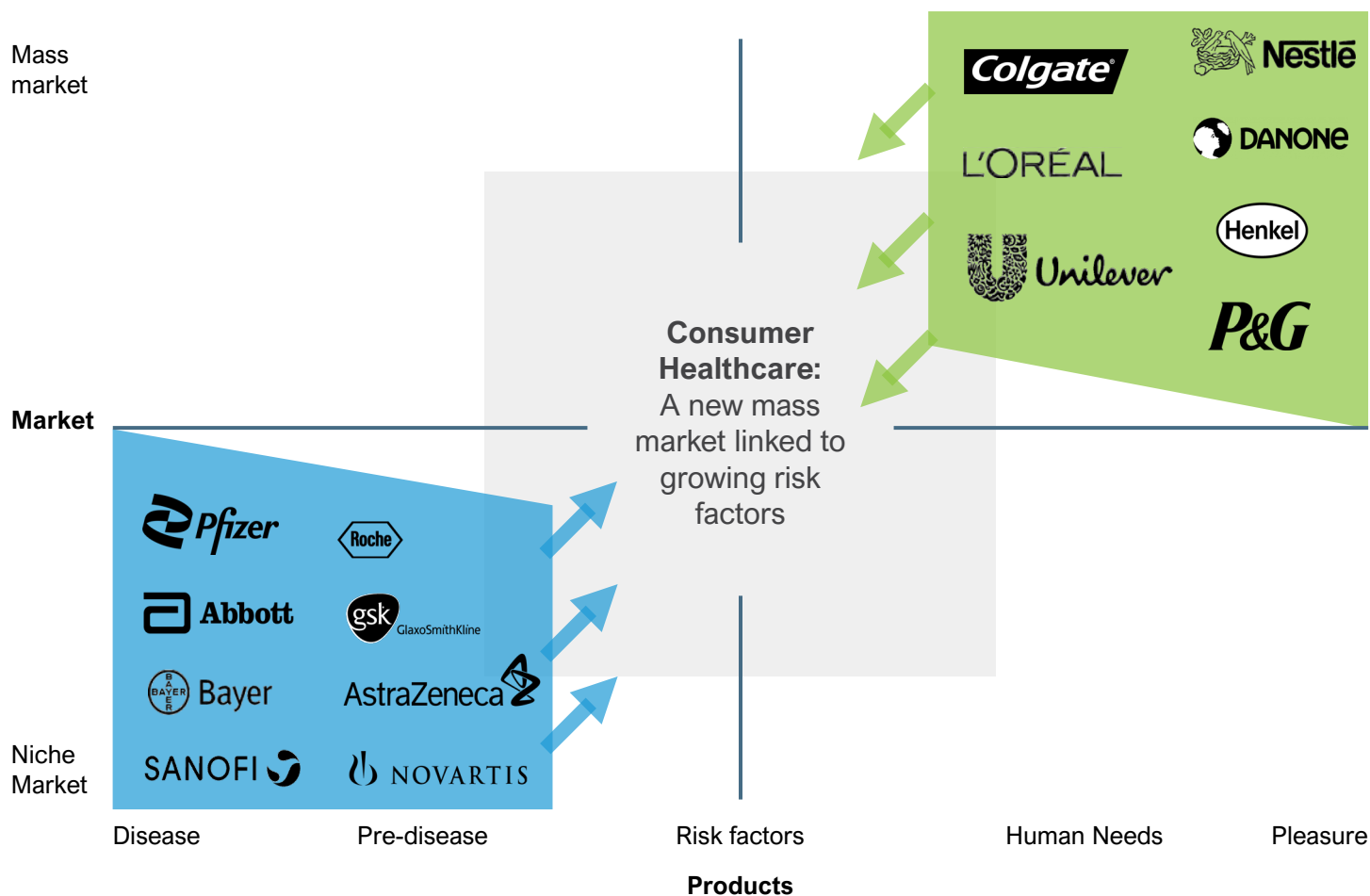
M&A Activity Outlook

TRADITIONAL OFFLINE BUSINESSES ARE ADAPTING TO THE INCREASING CONSUMER HEALTHCARE DEMAND

Companies operating in the mass market as well as niche market players are making significant acquisitions into healthcare businesses, and the industry looks poised for these and new entrants to make waves among the traditional players. That is because organizations want to step up their digital infrastructure and make their organization more future-proof.

There will be more incumbents, traditional healthcare players, be it pharma, MedTech, or providers, vertically implementing digital solutions or expanding their digital offerings – with b2c, b2b and b2c2b. Every healthcare company will have to become a digital health company as healthcare itself will become increasingly digital which otherwise opens up room for disruption by start-ups and innovators.

Consumer Healthcare – a new large mass market will develop midway ...



Sources: StartUp Health Insights Report, CapitalX The Rise of Digital Health 2021

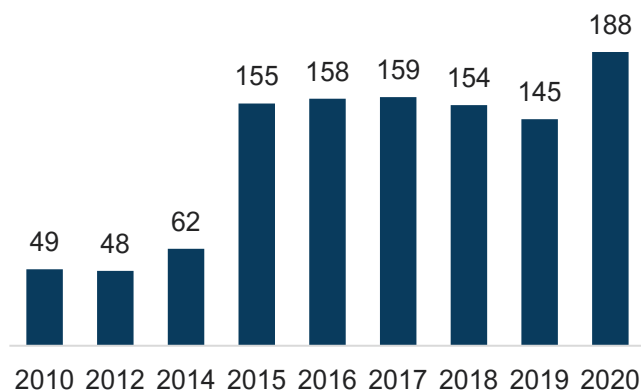
M&A Activity

Healthtech M&A Snapshot

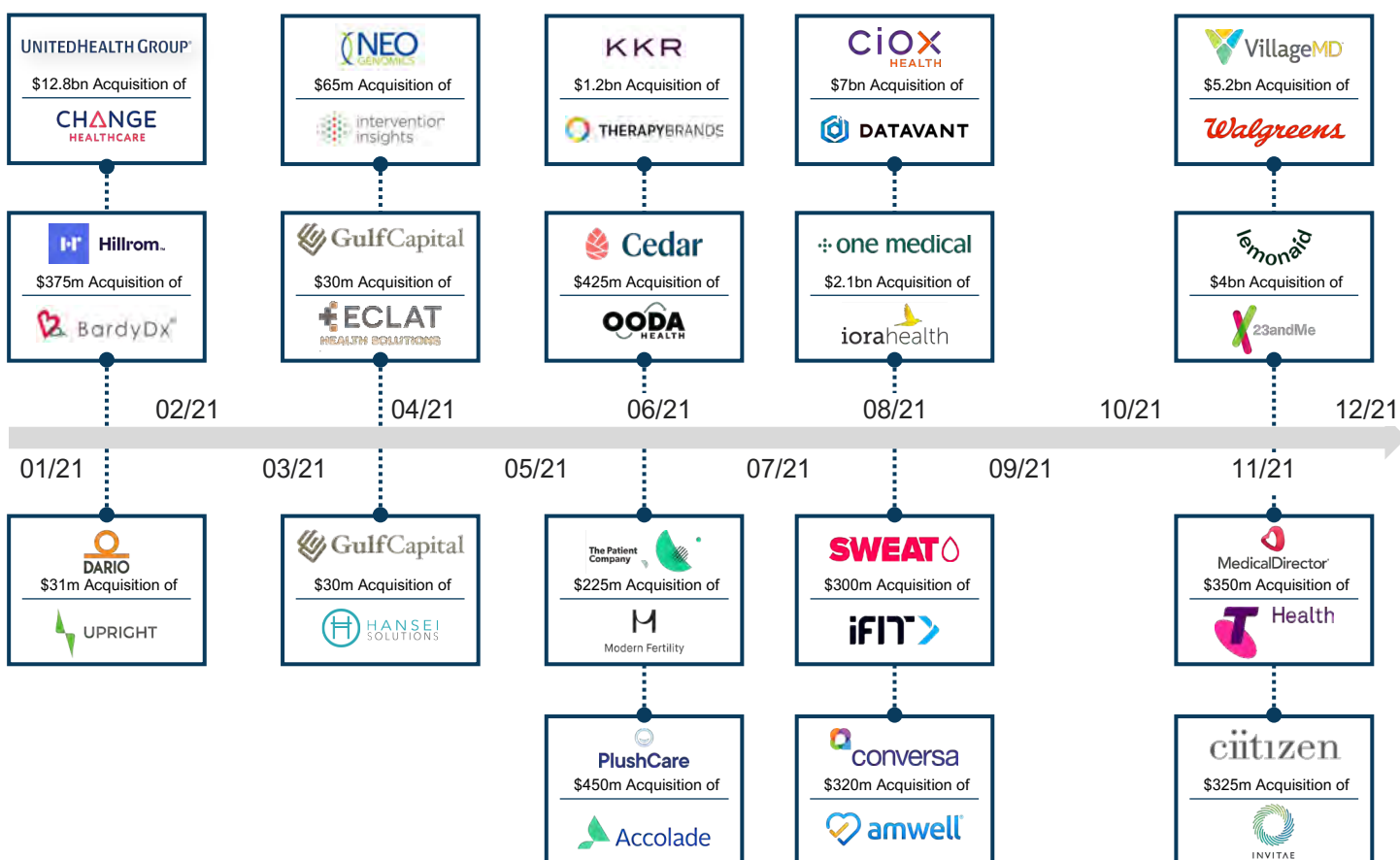
(Since 2017)

M&A Activity	\$64bn
Deal Count	646
Mean Transaction size	\$306m
Mean EV/EBITDA	17x
Mean EV/Sales	3x
Mean Listed Multiples	
EV/EBITDA	-
EV/Sales	-

M&A – Number of Deals



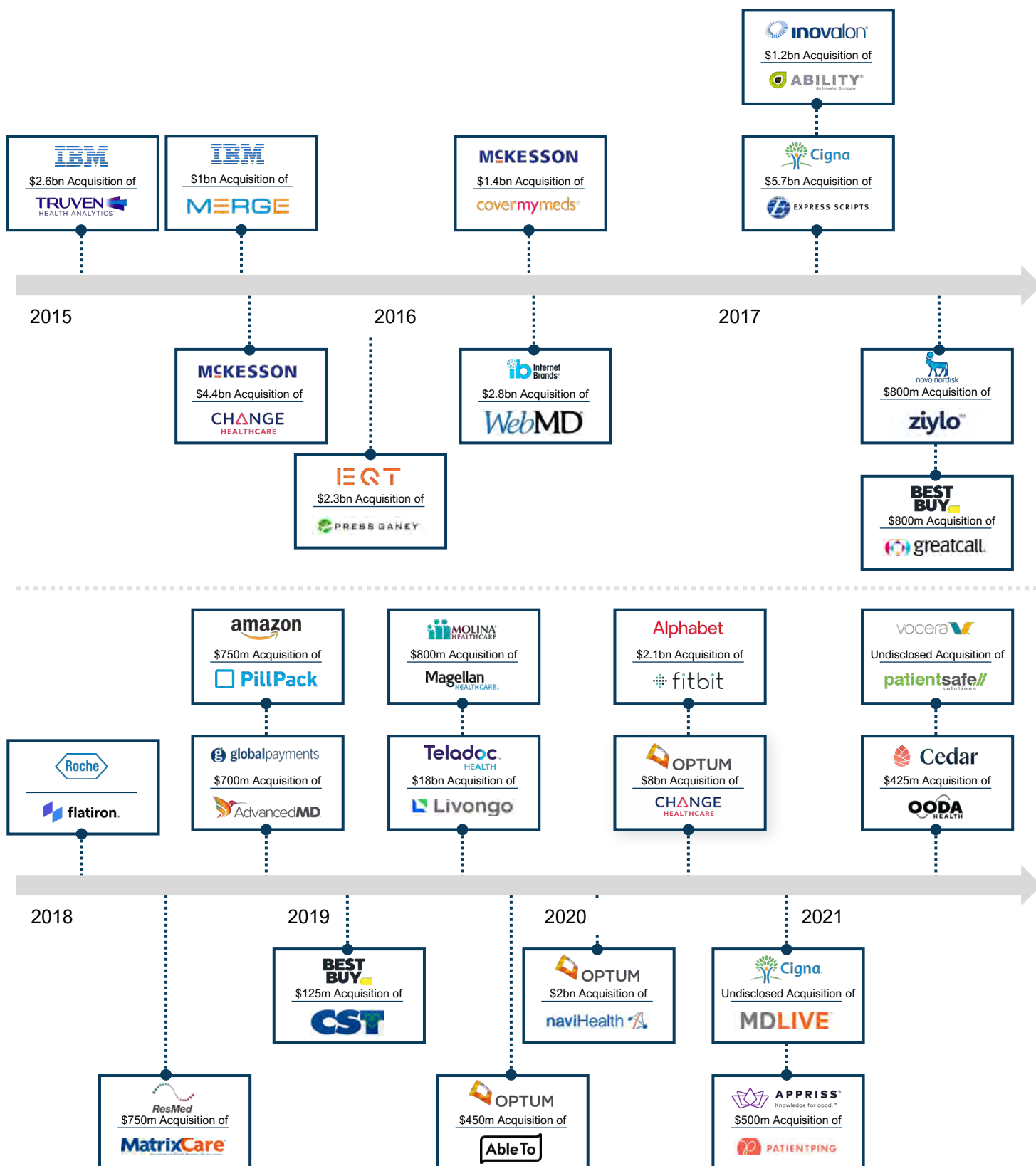
Recent Notable M&A Transactions in 2021



Sources: StartUp Health Insights Report, CapitalX The Rise of Digital Health 2021

M&A Activity (cont.)

M&A Transactions Timeline



Sources: StartUp Health Insights

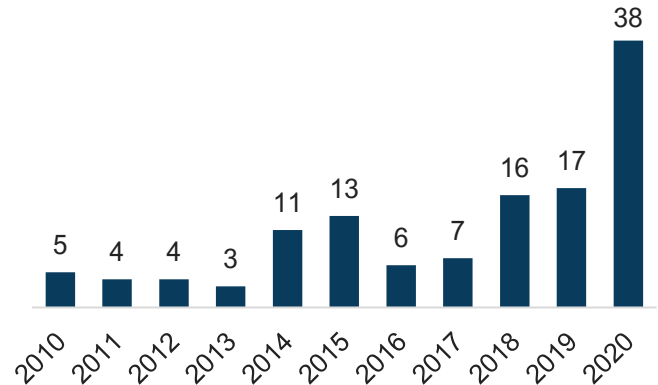
Initial Public Offerings

Healthtech IPO Snapshot

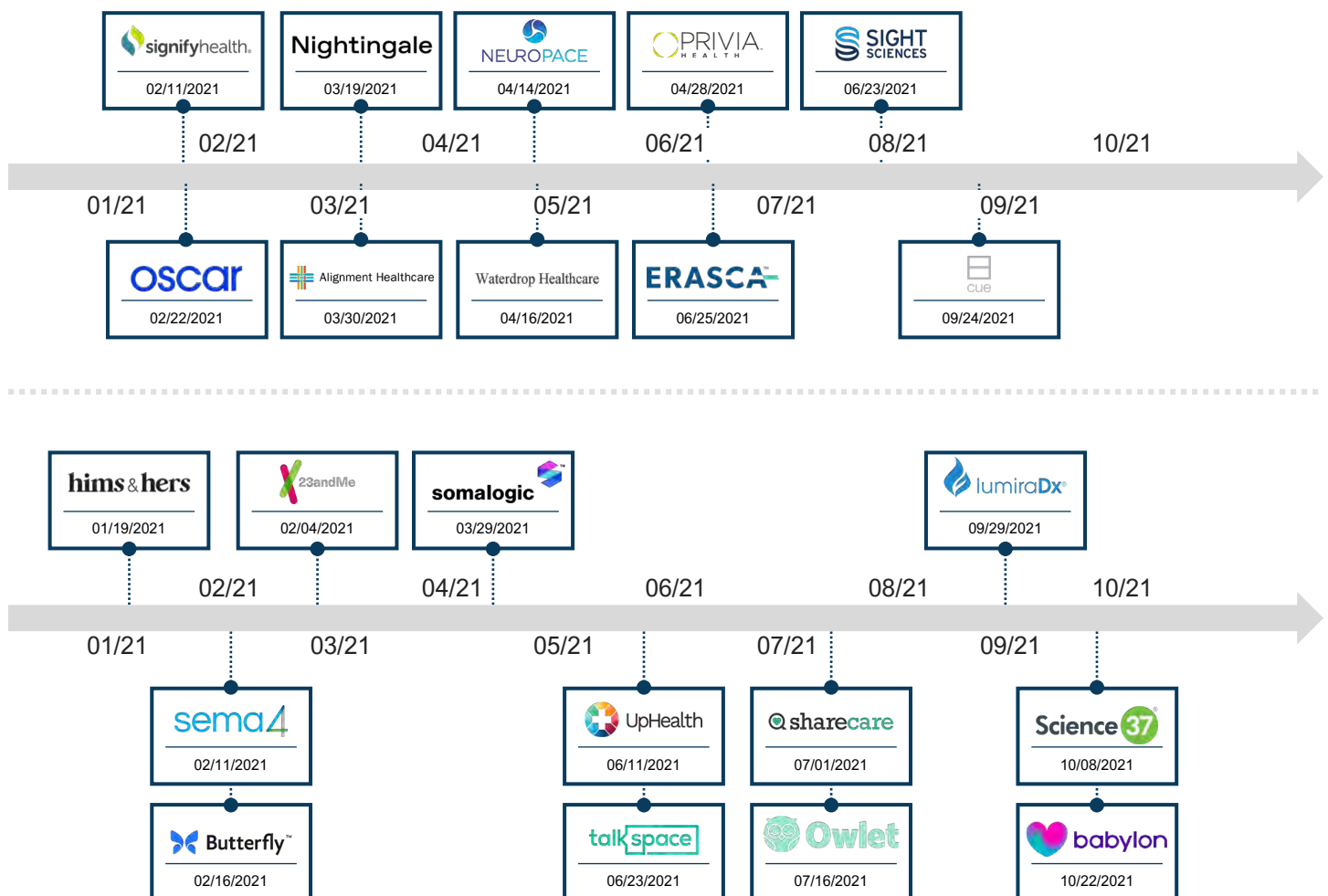
(Since 2017)

Number of Transactions	78
Mean Transaction Value	\$146m
Mean 1 Year Return from IPO	18x
Average IRR Since Listing	34%
Big Cap	40%
Mid Cap	33%
Small Cap	29%

IPO – Number of Deals



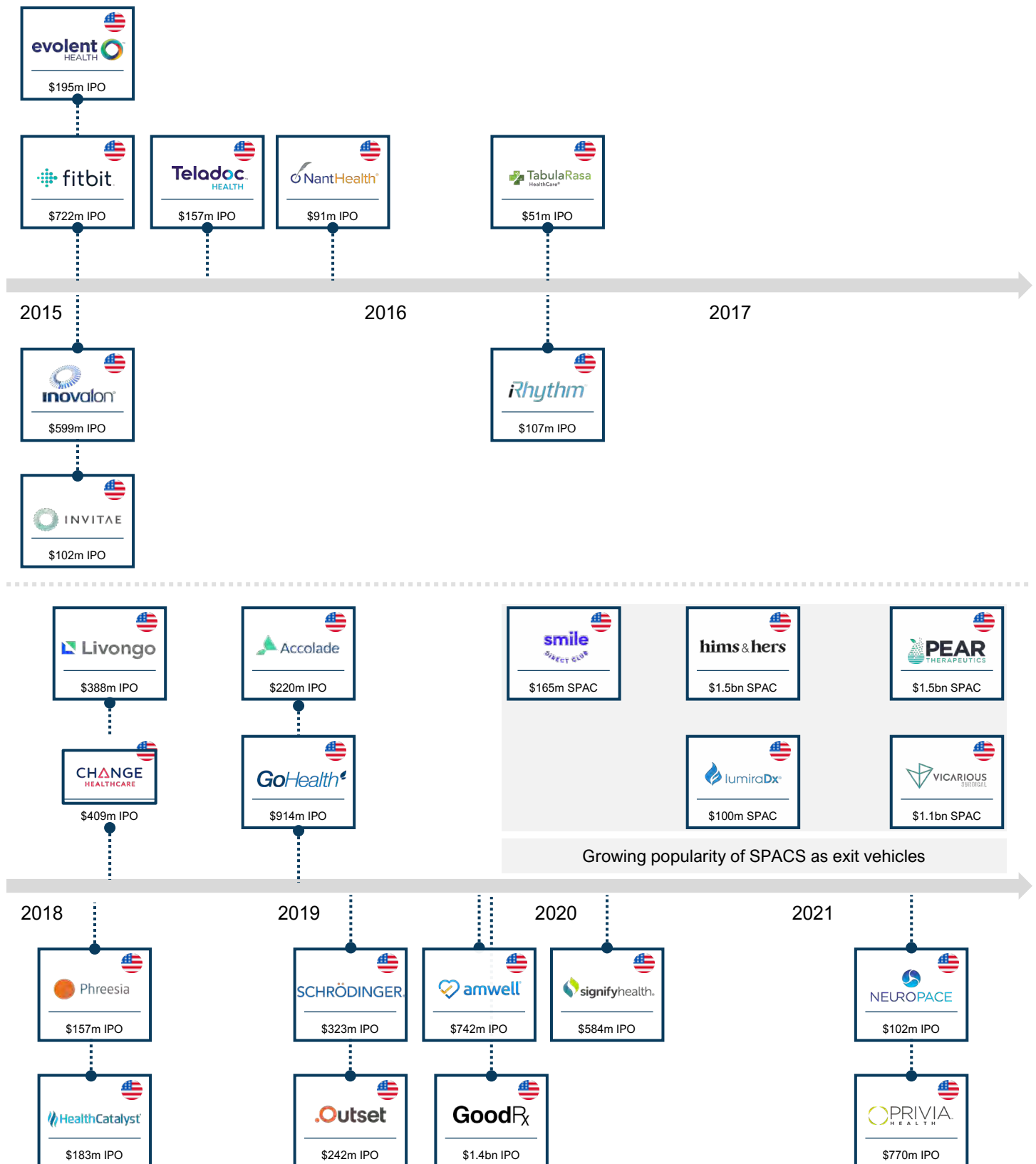
Recent Notable M&A Transactions in 2021



Sources: StartUp Health Insights, CapitalX The Rise of Digital Health 2021

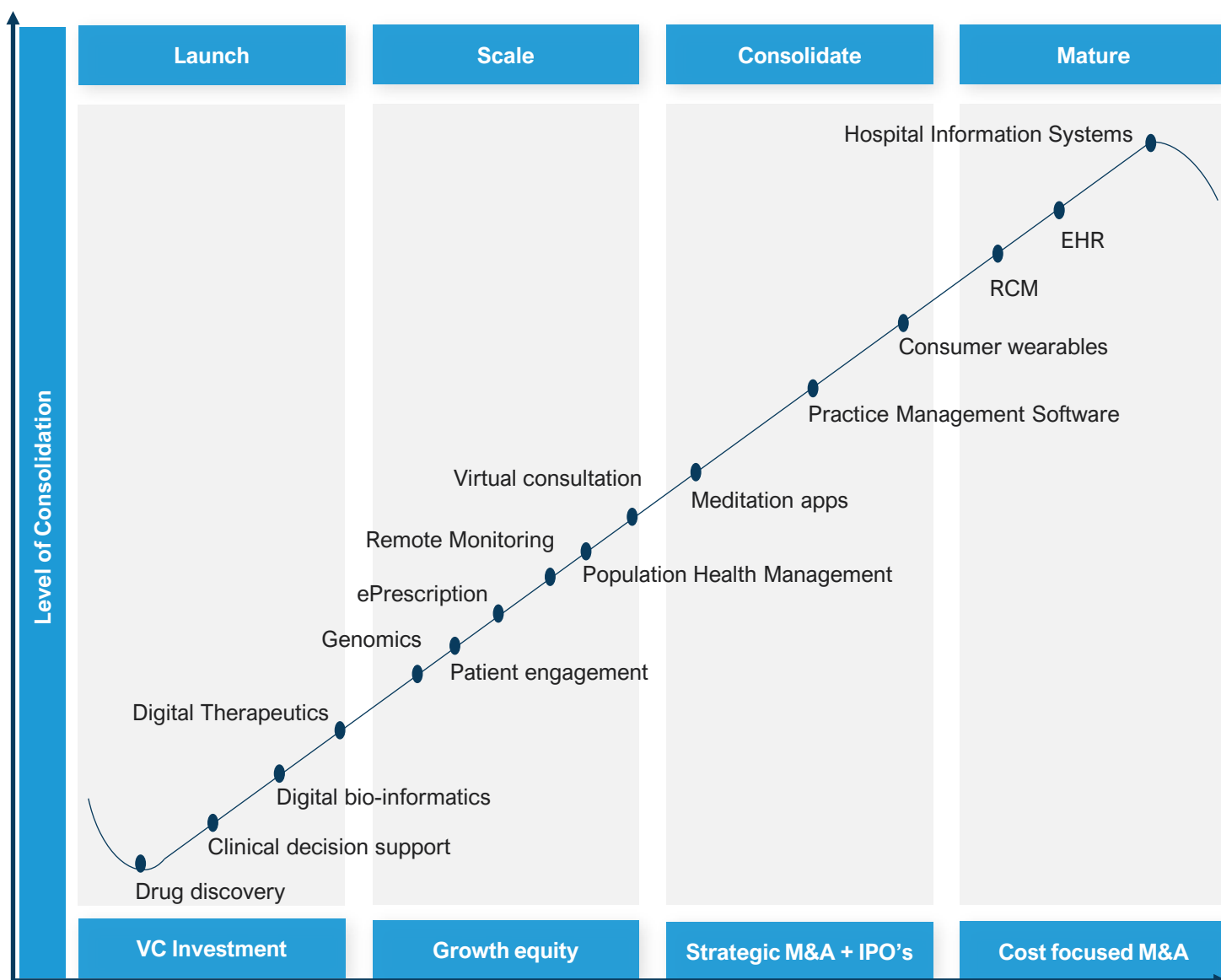
Initial Public Offerings (cont.)

IPO Transactions Timeline



Sources: CapitalX The Rise of Digital Health 2021

Digital Health Consolidate S-Curve



SOLID PIPELINE ACROSS THE FULL MATURITY SPECTRUM

Strong venture capital support has built a solid pipeline of digital health technologies, across the full maturity spectrum.

This should support investment banking deal flow for at least the next five years.

Stout Investment Banking Team

ABOUT

For more than 30 years, Stout has exclusively focused on serving the unique M&A transaction advisory needs of middle-market clients. Our firm is a trusted advisor to leading organizations due to our deep industry knowledge, senior-level attention, process expertise, and relentless focus on delivering unparalleled results.

The Stout Healthcare & Technology teams have deep sector expertise, key strategic industry relationships, and years of experience.

FOCUS AREAS

Healthcare

- Behavioral health companies
- Assisted living and long-term care facilities
- Healthcare distributors
- Home healthcare providers
- Managed healthcare
- Outpatient services (diagnostic imaging, ambulatory, and dialysis centers)
- Telemedicine

Life Sciences

- Medical device and medical technology companies
- Specialty pharmaceutical companies
- Molecular diagnostics and clinical labs
- Biotech companies
- Healthcare information technology

SELECT STOUT TRANSACTIONS

 Growth Financing BERTELSMANN FARALLON RW USD 120,000,000 FINANCIAL ADVISOR	 Trade Sale Dr.Reddy's Undisclosed SELL SIDE ADVISOR	 Secondary Investment Schroders USD 30,000,000 FINANCIAL ADVISOR
 Capital Raise leaps F4 SAMSUNG CATALYST FUND VITRUVIAN USD 90,000,000 FINANCIAL ADVISOR	 Capital Raise PING AN KREOS CAPITAL F4 MARIO GÜTZE EUR 35,000,000 FINANCIAL ADVISOR	 Minority Investment IMPACT EUR 6,000,000 FINANCIAL ADVISOR
 Secondary Investment CADENCE GROWTH CAPITAL Undisclosed FINANCIAL ADVISOR	 Minority Investment F4 Undisclosed FINANCIAL ADVISOR	 Capital Raise PING AN Finance - Technology EUR 32,000,000 FINANCIAL ADVISOR

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ABOUT

Digital Health Ventures (DHV) is a sector-focused Venture Capital Fund based in Berlin. We are experienced early-stage investors with a track record that includes several strong European healthcare innovators, as well as five exits and one IPO.

Our mission is to build a sustainable Digital Health ecosystem. We actively support portfolio entrepreneurs and leverage our networks in tech and healthcare. Historic investments of our team include mySugr (acquired by Roche in 6/2017) and amwell (IPO in 2020)

SELECT DHV PORTFOLIO COMPANIES



SYTE – Strategy Institute for Digital Health

SYTE is a management consultancy and scientific institute building Digital Health Services for the largest Pharma, MedTech and Insurance companies globally.



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ABOUT STOUT INVESTMENT BANKING

Stout's Investment Banking group provides mergers and acquisitions (M&A) advisory, capital market financing, and other financial advisory services to portfolio companies of private equity firms, closely held or family-owned businesses, and divisions of large corporate parents. Learn more about our [Investment Banking services](#).

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