

# Health & Wellness Tech

Q1 2020

## Report preview

The full report is available through the PitchBook Platform





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The previous reports covering the healthtech and wellness tech sectors individually will be discontinued. Going forward, we will combine coverage of those industries and segment them by retail and enterprise focus. This is the first Health & Wellness Tech: Retail report, which will be updated on a quarterly basis to reflect changes in venture capital deal activity and other market-related updates deemed valuable by the research analyst.



# Executive summary

Increasing recognition that traditional provider-based medicine is not keeping up with the evolving needs of the population is giving rise to a new era of consumer-focused healthcare products and services designed to improve personal health & wellness at a lower cost than traditional alternatives. These emerging products largely rely on digital technologies that enable convenient at-home or mobile use, the ability to integrate with other services, and large-scale data collection and analysis to help drive personalized offerings.

Startups in this sector are working to develop solutions that can help reduce ongoing epidemics related to chronic diseases, reign in healthcare costs and improve overall wellbeing. While this burgeoning industry includes new ways to obtain traditional care (e.g. telehealth), it also includes a range of alternative health & wellness tech products such as digital therapies and behavioral tools; fitness-related products, including exercise equipment, health-monitoring tools and nutrition-related services; and emerging tools related to genomic science.

In the wake of the coronavirus pandemic, we expect governments and organizations will prioritize technologies that can help mitigate the health impacts of future pandemics. This is likely to accelerate investment into technologies in the realm of telehealth.

In general, VC activity within the health & wellness tech space has spiked significantly as consumers, employers and policymakers adopt related initiatives. Today, the venture ecosystem is a vital incubator for this space. In the first quarter of 2020, VC funding for retail-oriented companies in the health & wellness tech industry totaled \$1.9 billion across 135 deals.

In this report, we focused in particular on the retail side of this industry, segmenting it into the following five categories: virtual health, mobile & digital health, biometric wearables & devices, dietary supplements and personalized medicine & omics. In coming quarters, we will also explore enterprise health & wellness tech.



# Industry drivers

**COVID-19 pandemic crisis:** We believe a robust pandemic preparedness and response infrastructure is likely to consist of several technology-based capabilities focused on predicting, identifying, tracking, containing and treating outbreaks. This will benefit companies developing solutions in disease testing and telemedicine. It is unlikely these responses will all emerge as a singular effort but will consist of several overlapping systems funded by various stakeholders, including governments, non-governmental organizations (NGOs), health systems and businesses. We expect startups focused on these opportunities could benefit from current and future investment into pandemic infrastructure. Furthermore, stay-at-home orders have eliminated people's ability to attend "non-essential" doctor appointments in person and demanded all fitness centers close their doors indefinitely. This pushes consumers to adapt their usual health & wellness routines, increasing the use of mobile wellness applications, remote monitoring devices and at-home fitness devices.

**Doctors focusing more on preventative care and healthy lifestyles:** Healthcare professionals have come to view healthy lifestyles as a key preventative measure to improve health outcomes. This includes a focus on diet, sleep and regular exercise. Medical caretakers have highlighted the benefits of these practices, which include reducing high-cost curative solutions. In addition, they've indicated that healthy lifestyles can potentially yield several non-financial benefits, such as heightened productivity, improved morale and enhanced interpersonal relationships.

**Increased consumer health awareness and healthy eating index:** Consumers are seeking ways to boost daily activity levels, driving demand for wellness-related products and services. The global health and fitness industry lured in \$94 billion in revenue in 2019.<sup>1</sup>

**Consumer wellness startups partnering with corporations:** We expect workplace benefits platforms to partner with wellness startups to improve employee benefits. For example, HR software platform **Zenefits** announced a partnership with well-being platform Thrive Global in October 2018 to offer its wellness-tracking app on **Zenefits'** platform. In August 2019, payroll and HR provider **Justworks** teamed up with **ClassPass** to offer exclusive rates to its global network of over 10,000 fitness studios.

**Growing elderly population and increased life expectancy:** The geriatric population has expanded as baby boomers have aged and life expectancy has extended. This has driven the demand for wellness solutions among the elderly, who are looking to stay healthier as they age. Younger consumers are also pursuing these solutions, hoping to delay the impacts of aging.

**Digital economy opens door to telehealth, personalized solutions and fitness applications:** Smartphone apps are an effective tool for delivering personalized physical activity interventions while enabling providers to reach a large audience. According to one estimate, the global fitness app market was valued at approximately \$3.2 billion in 2019 and is anticipated to grow close to 26% annually over the next several years.<sup>2</sup> Digital solutions enable personalization, allowing consumers to curate fitness plans and adopt healthy behavior modifications with services including individualized meal plans, exercise monitoring devices and shopper-tailored grocery lists. Furthermore, the mass adoption of mobile devices expands the userbase for telehealth providers that offer apps enabling real-time health monitoring.

1: The 2019 IHRSA Global Report, IHRSA, 2019

2: Fitness App Market Share, Size, Trends, & Industry Analysis Report: Segment Forecast, 2020-2026, Polaris Market Research, February 2020





## INDUSTRY DRIVERS

**Population increase coupled with lack of medical providers:** By 2032, the AAMC predicts a primary care physician shortage of 21,100 to 55,200 and a non-primary care specialty physician shortage between 24,800 and 65,800 in the US.<sup>3</sup> Hospitals have begun launching virtual care centers to help meet rising demand for wellness solutions, which can further decrease the need for in-person visits.

**Growth of social media:** Active lifestyles and working out have become ubiquitous on social media, with consumers relying on photo- and video-sharing platforms as go-to sources for fitness inspiration and motivation. Social challenges on platforms such as Facebook can increase participation, as users share their activities and vie for influencer status. For example, a quick search of the popular “#fitspo” hashtag on Instagram brings up tens of millions of posts related to fit and active lifestyles. New technology such as Snapchat glasses, improved cameras and video-editing tools make it easier to post quality content and drive more activity and engagement across social platforms.

**Consumer and provider demand for healthcare flexibility:** Consumers and physicians are seeking more convenient and accessible models of care. Mobile applications, telehealth and biometric devices allow for greater workout flexibility and enable individuals to create personalized health plans, discuss medical conditions and share monitored data with physicians remotely.

**Expanding cost of traditional healthcare:** National health spending is projected to grow at an average annual rate of 5.4% for 2019-2028, reaching \$6.2 trillion by 2028.<sup>4</sup> Several factors have contributed to the swelling costs of traditional healthcare, including the prevalence of chronic diseases, rising obesity rates, increased sleeping disorder rates and

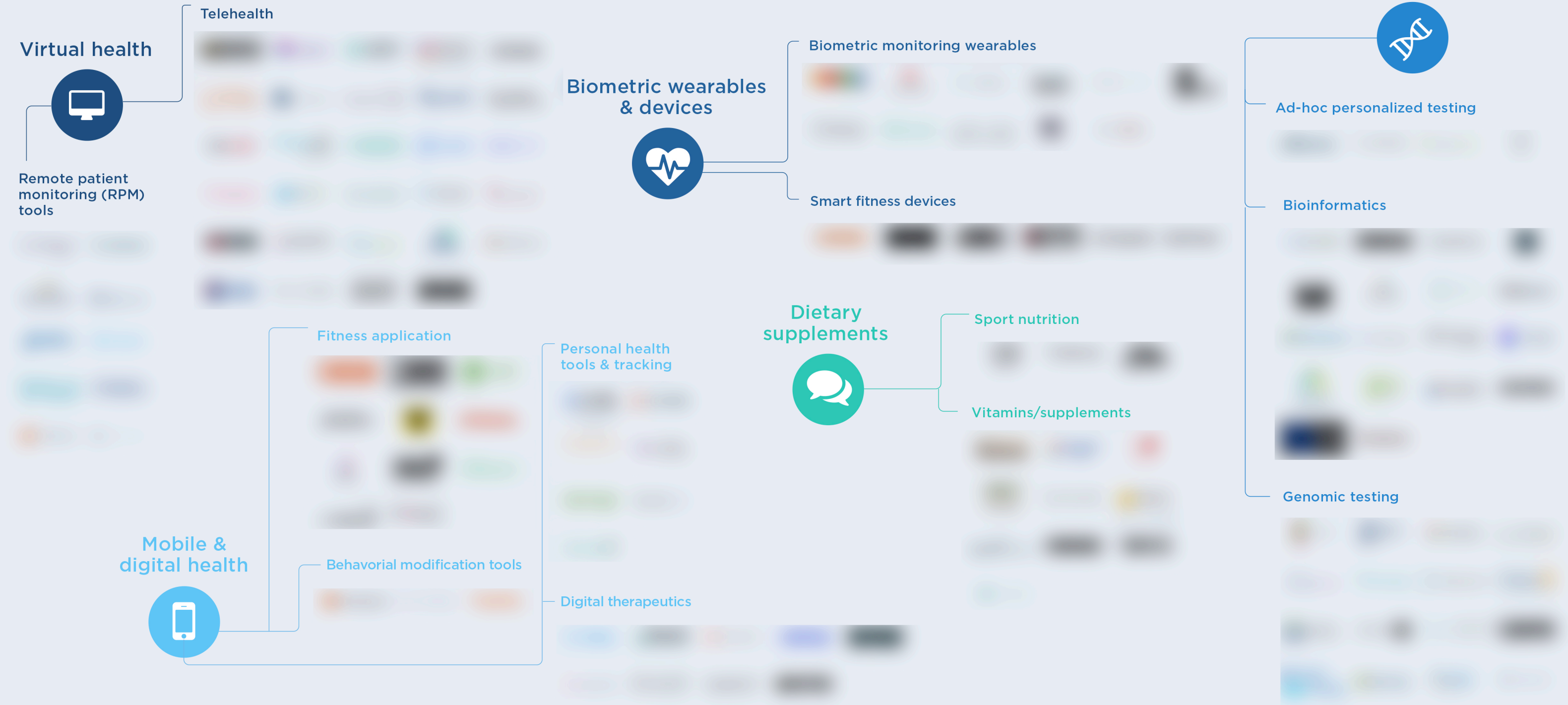
the expanding geriatric population. These costs are especially burdensome in emerging countries where out-of-pocket spending on healthcare to combat communicable and non-communicable diseases is higher. In the US as well, company-sponsored private health insurance has allowed for a significant escalation in cost of care. This puts pressure on consumers, providers and insurers to find ways to reduce the growing cost burden, such as promoting lower-cost alternatives.

**Advancements in AI and Big Data:** Providers of health & wellness services are using new technologies such as AI to gain new insights and opportunities. These include accelerating diagnostic capabilities, automating processes and providing AI-based treatments.

<sup>3</sup>: The Complexities of Physician Supply and Demand: Projections from 2017 to 2032, Association of American Medical Colleges, April 2019  
<sup>4</sup>: National Health Expenditure Data, Centers for Medicare & Medicaid Services



# Health & wellness tech market map



Companies included are VC-backed, segmented by primary use case and sorted by total capital raised.



# VIRTUAL HEALTH

## Overview

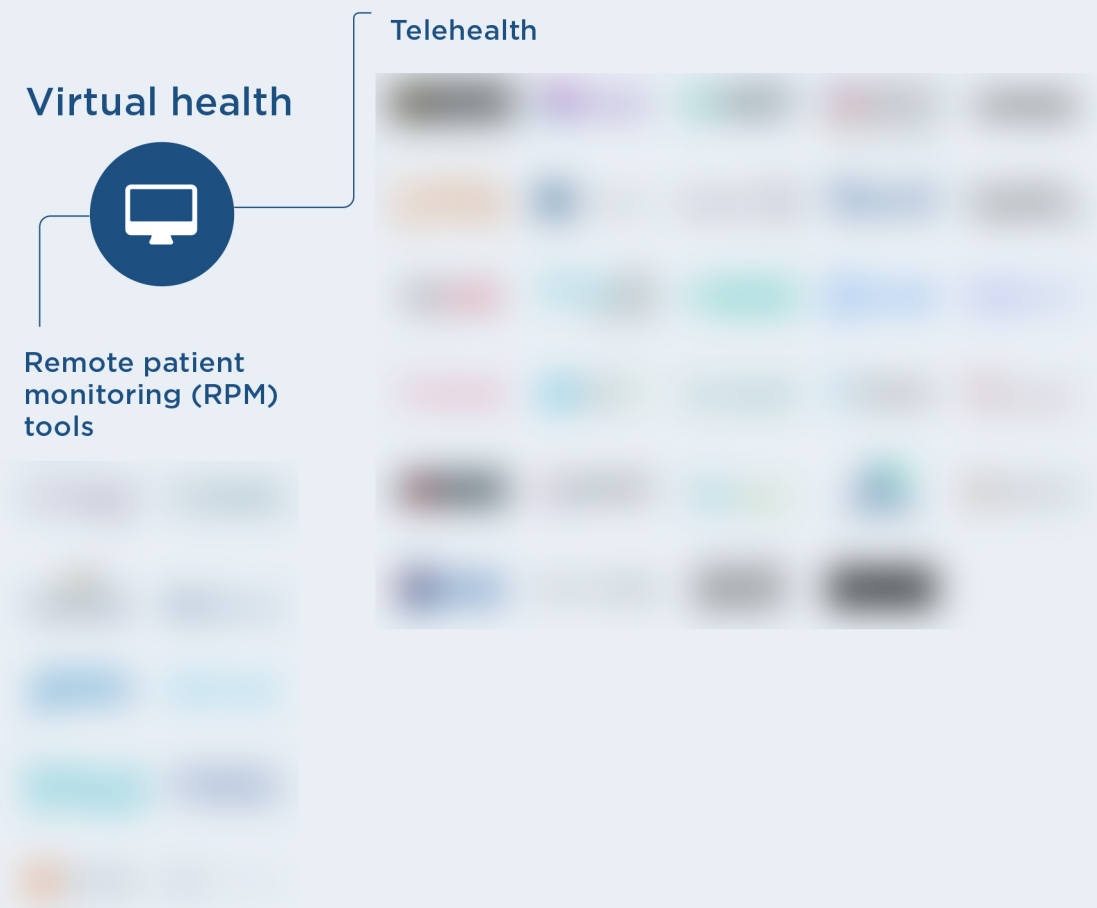
The virtual health (or telehealth) category includes companies involved in the distribution of health services via telecommunication platforms accessed through the web or mobile applications. Telehealth products and services provide remote communication between patients and providers. They also transmit and collect medical imaging information and data. The current segments within this category include:

**Remote patient monitoring (RPM) products:** RPM tools utilize at-home diagnostic technology to electronically collect and transmit information between patients and physicians. This technology can be deployed in healthcare settings and at home via mobile devices, carts, robots and other digital tools.

**Telehealth services:** Telehealth connects patients and healthcare providers via computers, mobile devices and audio-visual systems so treatment can be provided remotely. This category also contains AI-powered chatbots that can provide medical advice and cognitive therapy. Telehealth service providers can be segmented into two different buckets:

- **Direct-to-consumer (D2C) telehealth companies:** These companies contract with employers, insurers or patients directly to provide an on-demand telehealth service—typically urgent care or primary care. Players in this area hire or contract their own physicians to provide consultation and/or create AI-powered chat-bots that can service the patient.
- **Telehealth service platforms:** These companies provide IT infrastructure to healthcare providers who wish to develop and provide their own telehealth services.

Telehealth has the potential to provide benefits across the ecosystem, not just for the end consumer. For example, hospitals deploying telehealth services reduce costs for consumers and insurers, increase convenience to users and improve capacity constraints. We outline these benefits in Figure 3 on the following page.





## VIRTUAL HEALTH

### Business model

Telehealth companies sell to healthcare providers through D2C, B2B or B2B2C models, offering either software or hardware (e.g. video devices for hospital exam rooms and RPM devices).

Revenue is generated via unit sales, SaaS subscriptions and digital visits. B2B and B2B2C

Telehealth service platforms sell strictly to healthcare providers who offer telehealth services to patients, these patient are often unaware of what telehealth platform is being utilized as they are on the back end and may be white labeled. D2C providers attract consumers to their platform and connect them with their own- or third-party medical providers.

**B2B:** On a B2B basis, providers sell their platforms and services to hospitals, employers and/or insurers through a SaaS business model. Prices vary based on physician and employee usage as well as session volumes and additional features. RPM devices are typically sold directly to the hospital for patient distribution, which may or may not be covered by insurance.

**D2C:** D2C telehealth providers target individuals directly. In the US, D2C providers partner with insurers and employers to ensure coverage; however, in countries with universal healthcare, they receive funding from the government and may bypass that step. Consumer prices vary based on insurance levels and whether employers offer telehealth benefits. Telehealth services that use only chatbots, text messaging and/or online risk assessments typically have standard prices and do not partner with insurers, though they may partner with employers. For example, 98point6, which diagnoses patients through text messaging, charges individuals a \$120 annual fee and \$1 for each visit. Employee-sponsored plans cover the annual fee, but users still may have to pay the visitation fee. Primary customer acquisition channels include physician referral and direct marketing.





## VIRTUAL HEALTH

### Market size

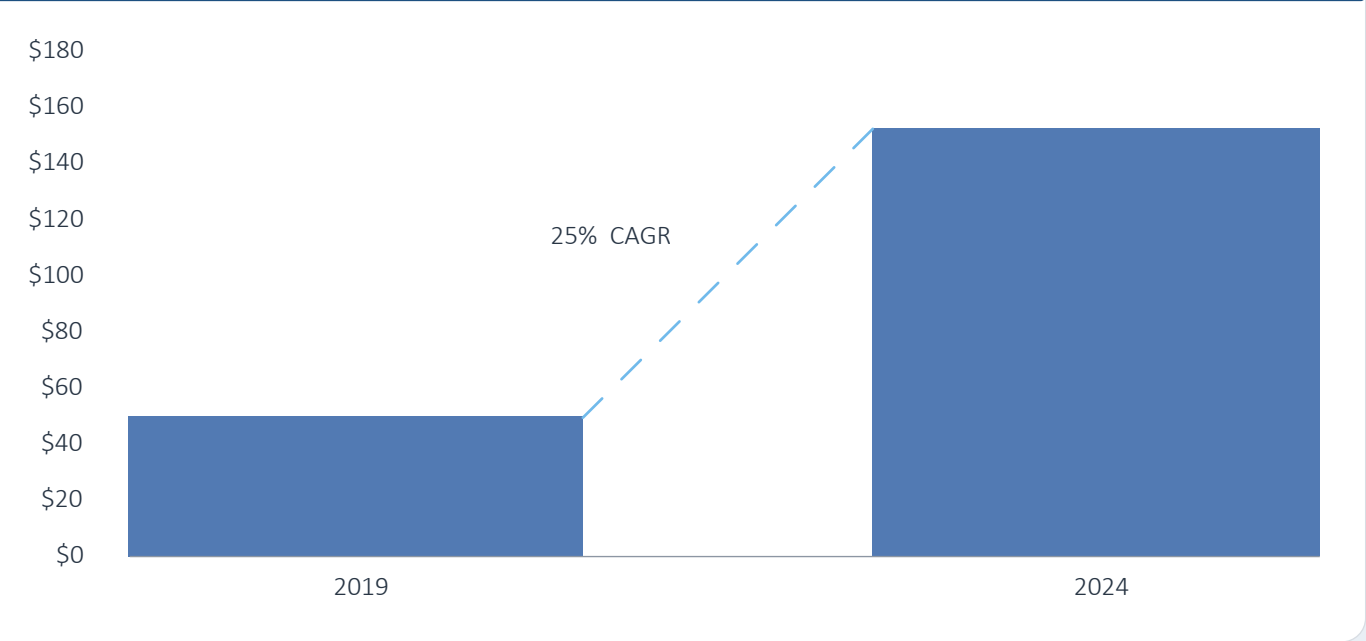
Before the COVID-19 pandemic swept through the world, the global virtual health market was projected to grow at a CAGR of 23.4% to \$266.8 billion in 2026 from \$49.8 billion in 2018.<sup>5</sup> Most of this growth is driven by telehealth platforms and services as opposed to remote patient monitoring devices. While we expect the COVID-19 pandemic will serve as a strong catalyst for near-term growth, we believe the total size of the market in the long term will remain relatively unchanged from pre-pandemic forecasts. In the US, the telehealth services industry, driven by advancements in medical technology and telecommunications, is in the growth stage of its life cycle. It is expected to grow at an annualized rate of 9.2% to \$3.7 billion in 2024 from 2.4 billion in 2019.<sup>6</sup> The global remote patient monitoring devices and equipment market is expected to grow to \$3.7 billion in 2024, growing at a CAGR of 15.8%.<sup>7</sup>

### Industry drivers

**Technological innovation:** Advances in technology have led to significant innovation in remote patient and self-monitoring devices, including at-home diagnostics that measure heart and respiratory rates, insulin levels and skin PH levels; mobile communications and high-speed networks that enable real-time communication between patients and providers; and online triage bots that can assist with routing patients to the appropriate clinical teams.

5: Telehealth: Global Market Analysis, Insights, and Forecast, 2019-2026, Fortune Business Insights, July 2019  
6: Telehealth Services in the US, IBISWorld, Jack Curran, October 2019  
7: “World Remote Patient Monitoring Devices & Equipment Markets: Analyses & Projections (2015-2030)—ResearchAndMarkets.com,” Businesswire, November 12, 2019

Figure 4. VIRTUAL HEALTH MARKET SIZE (\$B)



Source: PitchBook estimates | Geography: Global

### COMMON INDUSTRY KPIS

- Lifetime value (LTV)
- Customer acquisition costs (CAC)
- CAC/LTV ratio
- Gross profit margin
- Customer churn & revenue churn (software)
- Monthly recurring revenue (software)
- Per-unit manufacture cost (hardware)
- Cost of goods (COG)/unit sales (hardware)



# MOBILE & DIGITAL HEALTH

## Overview

Mobile & digital health startups are developing tools and apps that can help consumers monitor and improve personal health. In some cases, these tools may be recommended by health providers in conjunction with traditional care. Categories include:

**Personal health tools & tracking:** Consumer applications for monitoring and managing health concerns such as menstruation cycles, nutrition and sleep.

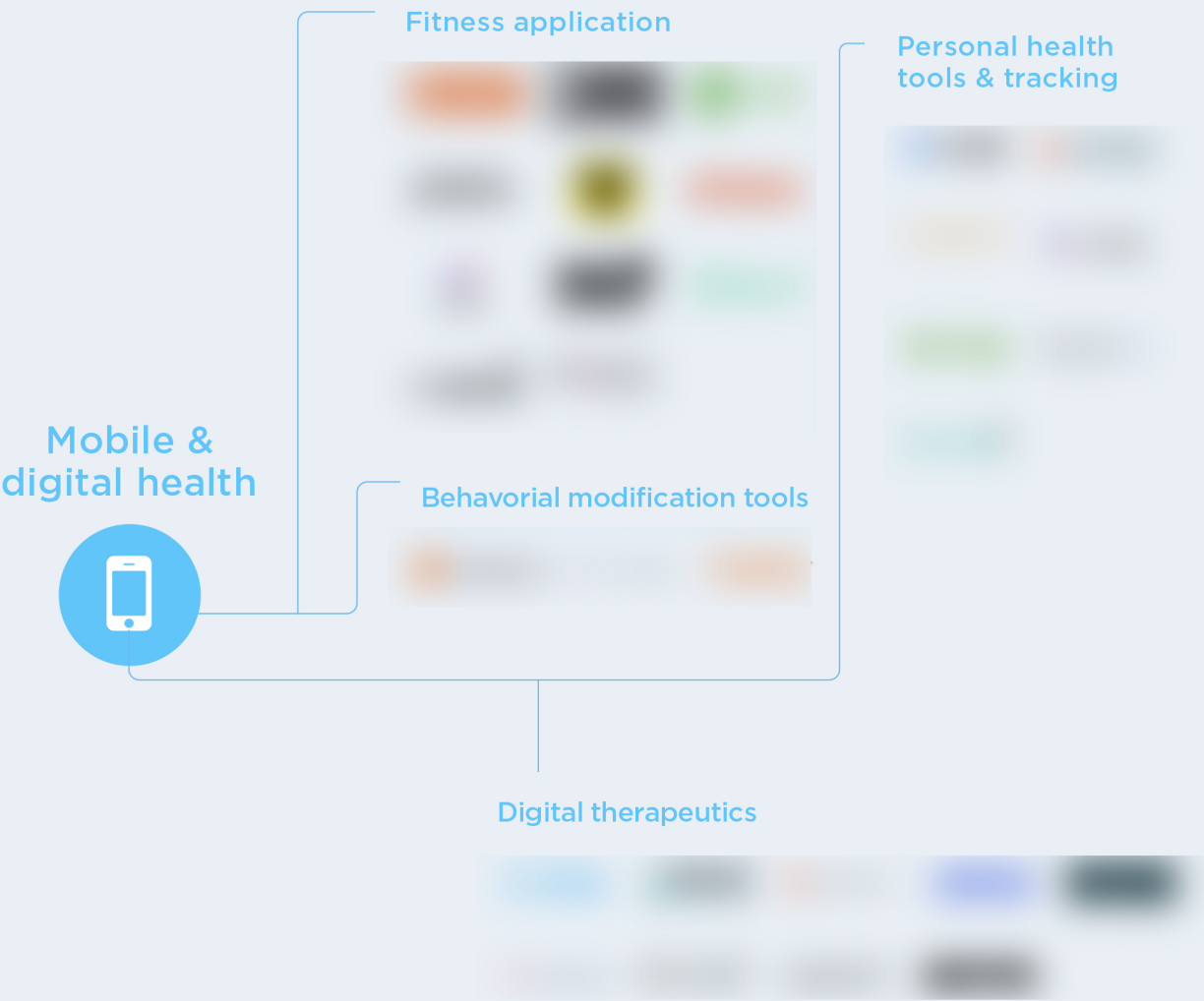
**Fitness applications:** Applications that enable users to work out anywhere by providing on-demand audio and/or video classes. This segment also includes “on-demand gyms” that allow consumers to access a network of gyms and pay per minute, as opposed to monthly memberships.

**Behavior modification tools:** Applications aimed at helping users improve critical brain functions, such as memory, attention, communication and ability to learn. This group also includes applications intended to help reduce stress through practices such as meditation, as well as encourage healthy behaviors.

**Digital therapeutics:** Software solutions designed to treat medical conditions that are used proactively by consumers or prescribed by doctors. For example, Akili Interactive’s AKL-T01 is used in place of or in tandem with traditional pharmaceutical therapies for ADHD.

## Business model

Mobile & digital health products are generally sold direct to consumer and may be accessible through desktops and/or mobile applications. These companies generate revenue through subscriptions (freemium and premium), ads and selling user data. Some products are covered under insurance plans or paid for by employers as a workplace wellness benefit.





## MOBILE & DIGITAL HEALTH

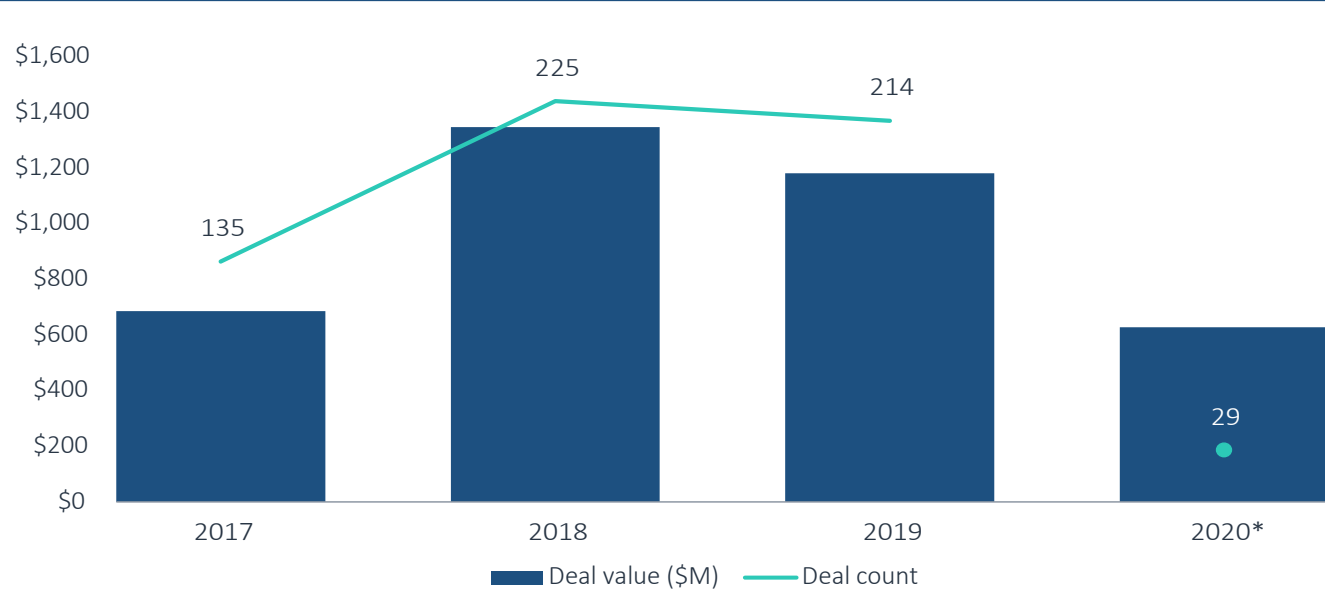
### VC activity

Companies tracked in this segment raised \$554 million across 29 VC deals in the first quarter of 2020, up from \$401 million YoY but producing far fewer deals than every quarter in 2019.

In Q1 2020, we saw four deals raise over \$90 million dollars each. In 2019, only two companies secured deals over \$90 million: **CureFit** and **Zhangshang Tangyi (ZyHealth)**. **CureFit** raised a \$120 million Series D, and **ZyHealth** raised a \$100 million Series C. In Q1 2020, **ZyHealth** pulled in an additional \$143 million for the largest deal of the quarter, and **CureFit** raised \$40 million in D2 funding. **ZyHealth** offers a diabetes management application that enables diabetics to track their blood glucose and diet. Most recently, the company created an app for doctors that allows them to communicate with patients and track their health. As a result, the app may also be considered an RPM device. **CureFit** provides a fitness-based online platform intended to address preventive healthcare techniques.

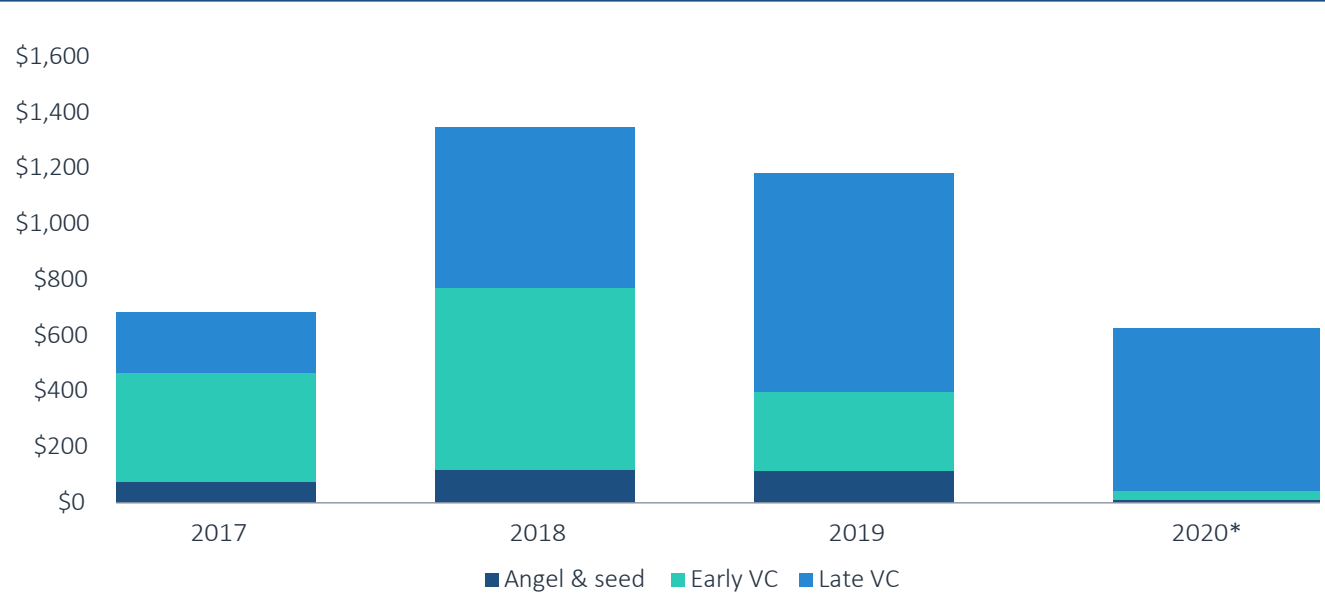
The second largest deal of Q1 2020 belonged to **Virta Health**, which raised a \$93 million Series C. The company operates an online diabetes reversal clinic intended to reverse Type 2 diabetes without medication or surgery. Its clinic offers health coaching, an online community, education resources and nutrition tracking to help patients restore metabolic health.

Figure 15. MOBILE & DIGITAL HEALTH VC DEAL ACTIVITY



Source: PitchBook | Geography: Global  
\*As of March 31, 2020

Figure 16. MOBILE & DIGITAL HEALTH VC DEALS (\$M) BY STAGE



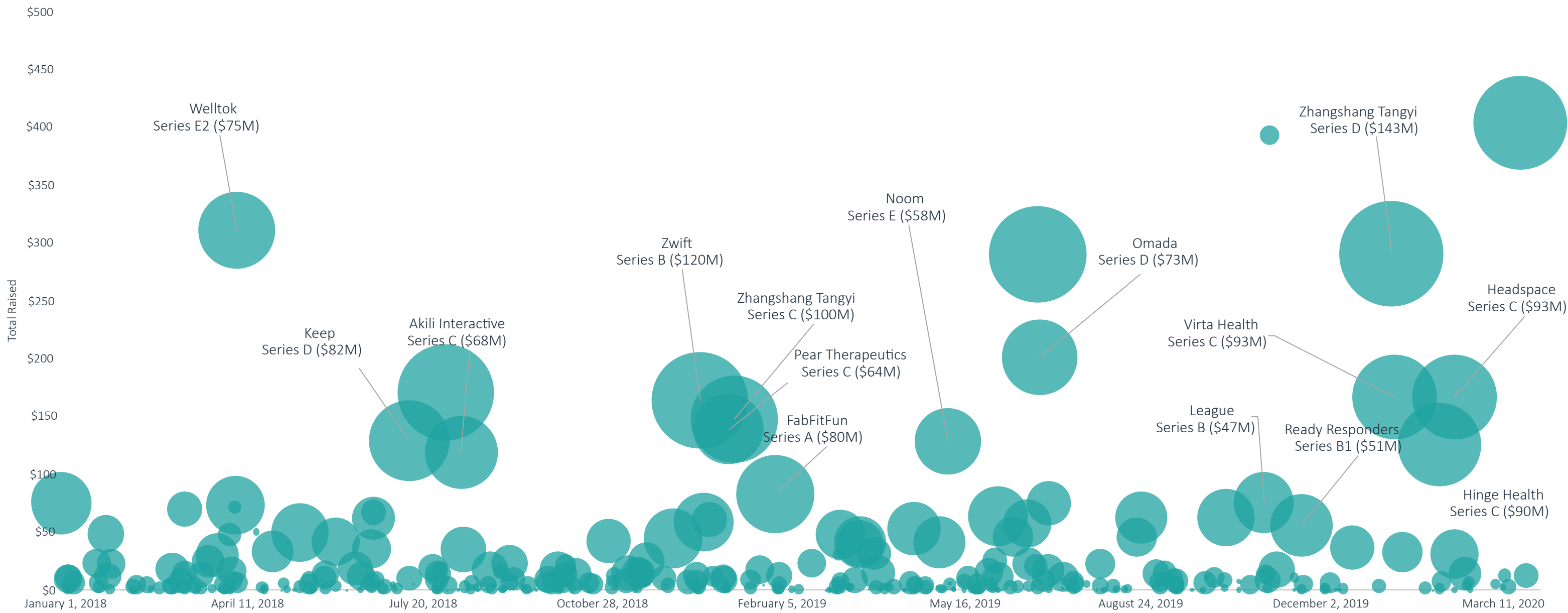
Source: PitchBook | Geography: Global  
\*As of March 31, 2020





MOBILE & DIGITAL HEALTH

Figure 17.  
Current mobile & digital health VC landscape (\$M)



Source: PitchBook  
Note: The left axis indicates total VC raised as of deal date. Bubbles indicate amount raised.



# BIOMETRIC WEARABLES & DEVICES

## Overview

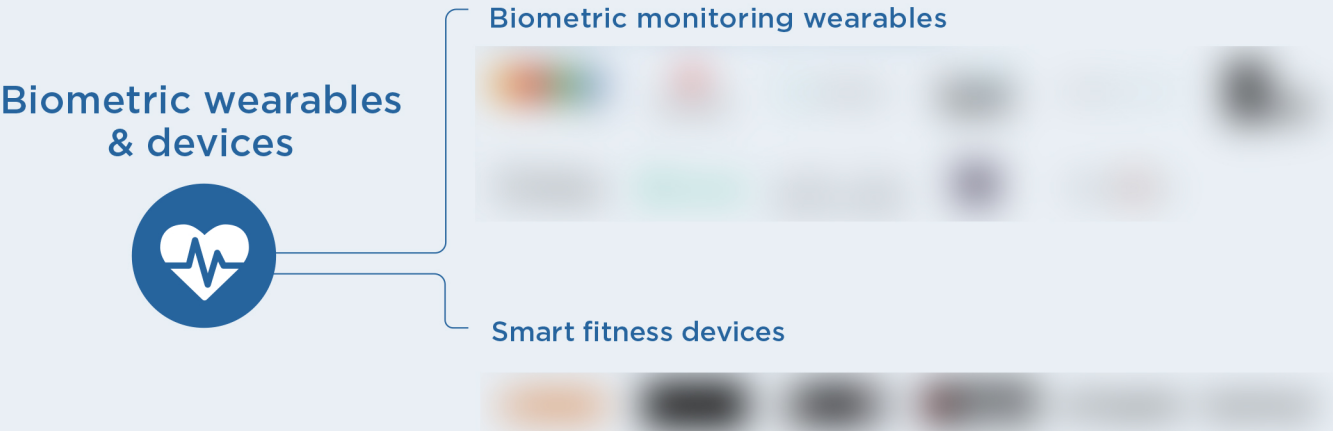
Startups in this space integrate biometric technology into both wearable and non-wearable devices that can monitor and/or improve user health. The current segments within this category include:

**Biometric monitoring wearables:** Hardware worn by users that continuously monitors a multitude of data points (e.g. biometric indicators, physical activity, location) or performs a specific function (e.g. improve circulation). Wearables gained mainstream popularity in the mid-2000s with the launch of **Fitbit** and other fitness trackers. Since then, wearable technology has evolved to measure more sophisticated health & wellness indicators such as heart rate, fertility, blood sugar and more.

**Smart fitness devices:** Adaptive exercise equipment designed to enable a customized workout by dynamically adjusting to the user and/or providing tracking information.

## Business model

Biometric wearables & devices startups primarily sell products and services to healthcare providers and payers (through a B2B2C model) or D2C. Both hardware and software could be sold through a one-time purchase or through a SaaS subscription model.





# DIETARY SUPPLEMENTS

## Overview

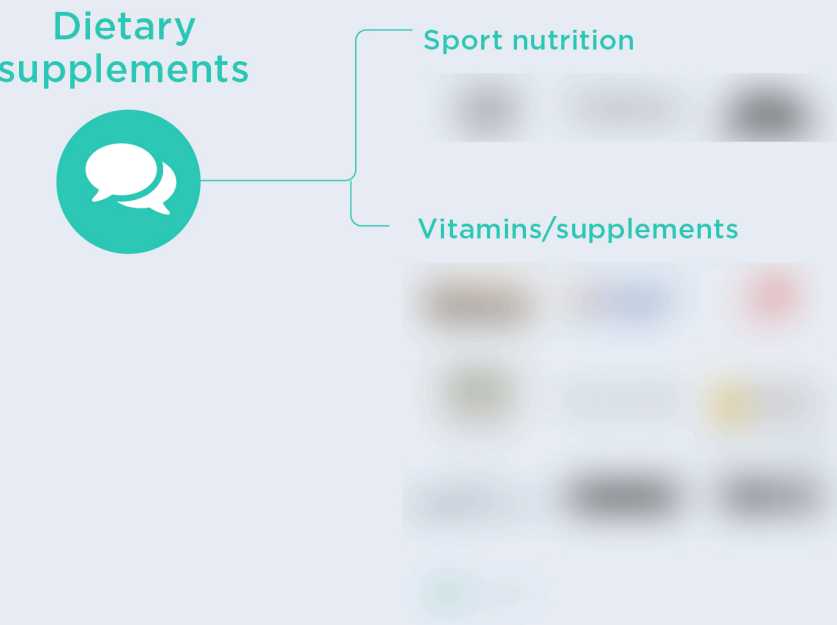
Consumer health products are intended to support the immune system and enable individuals to enhance fitness performance, improve cognitive functions and maintain or achieve a healthy weight. Products in this space include multivitamins, sports nutrition products, herbal supplements and other medicinal goods that can be purchased over the counter. In our analysis, we do not include the sale of natural and organic food products, granola bars, beauty and personal care products, which are often sold alongside dietary supplements.

**Vitamins & supplements:** In addition to vitamins, dietary supplements can contain minerals, herbs or other botanicals, amino acids, enzymes and many other ingredients. Dietary supplements come in a variety of forms, including tablets, capsules and gummies. This segment includes all providers of dietary supplements that do not focus primarily on athletes.

**Sports nutrition:** This segment includes nutritional products developed primarily for athletes and bodybuilders to improve their overall health, performance and muscle growth. Major categories in this segment include protein and weight gain powders, sport drinks and pre- and post-workout supplements to either lend energy before exercise or enhance recovery after. Sports nutrition products are offered in many forms such as powders, tablets, capsules, soft gels and liquids.

## Business model

Startups in this space either manufacture unfinished products that are used to increase the nutritional value of other foods or produce finished products which are then sold to third-party marketplaces or D2C. Revenues are acquired through subscription-based memberships and direct one-time sales.





## DIETARY SUPPLEMENTS

Figure 35.  
Dietary supplements market size (\$B) by region

COMPANY/ TREATMENT	SUPPLEMENT MARKET 2018	2018-2023 CAGR (%)	2024
US & Canada	\$46	5%	\$61
China	\$25	9%	\$42
Europe	\$22	6%	\$31
Japan	\$12	2%	\$13
Latin America	\$7	8%	\$11
Other APAC	\$23	7%	\$34
Middle East & Africa	\$2	11%	\$4
Total	\$137	6%	\$196

Source: GNC's Jefferies Fitness and Wellness Summit presentation  
\*As of September 12, 2019

## Industry drivers

**Rising interest in nutrition as a means to improve health:** Increases in chronic illnesses coupled with rising healthcare expenses, particularly pharmaceutical drug prices, is stimulating demand for dietary supplements to help prevent or alleviate common health complications. According to a 2019 poll sponsored by the Council for Responsible Nutrition, 71% of dietary supplement users exercise regularly, 86% try to eat a balanced diet and 80% visit the doctors regularly.<sup>27</sup>

**Technology-driven supplement research:** Vitamins and supplement manufacturers rely on technology to discover new ways to extract nutrients from natural ingredients and create new synergistic combinations.

**Internet and ecommerce advent:** Digital commerce has created multiple sales channels for providers relative to traditional methods. These channels increase the opportunity for providers to develop targeted marketing and content campaigns along with personalized offerings that appeal directly to consumers as opposed to selling through traditional nutritionist or doctor channels.

**Growing sports participation:** As more people exercise and play sports, demand for sports nutritionals and meal replacements is expected to increase.

**Rapid pace of urbanization:** Urbanization fuels the demand for sports nutrition products globally. It is characterized by change in lifestyle, the growing pool of working women, and heightened consumption of ready-made and fast food. These factors result in increased consumption of junk foods that may lead to health disorders, such as obesity,

27: 2019 CRN Consumer Survey on Dietary Supplements, Council for Responsible Nutrition, 2019





# PERSONALIZED MEDICINE & TESTING

## Overview

Personalized medicine is an approach to patient care that allows doctors to select treatments that are most likely to help patients based on a genetic understanding of their disease. Startups in this segment provide personalized recommendations or treatments based on genomics, microbiomics or other biomarkers and vital indicators, using proprietary biological data analysis platforms to devise new diagnostic and medication methodologies. Product categories include:

- Genomic testing:** The collection and/or interpretation of DNA samples to determine health implications.
- Bioinformatics:** The analysis of biological information in order to devise new diagnostic and medication methodologies for patients. Companies in this space focus on analyzing genotypic and phenotypic data to determine the potential effectiveness of medications and prevent adverse drug reactions. Biotechnology companies focused on using genetic data to create new medicines, primarily for cancer, are also included in this category.
- Ad-hoc personalized testing:** Providing personalized health recommendation through testing and analyzing biomarkers, the microbiome and vital indicators (e.g. blood sugar levels). Microbiome samples can be collected from an individual’s gut, skin, blood or other places.

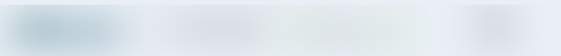
## Business model

Providers in this space seek to obtain the molecular data of customers or other individuals in order to derive health solutions. Some providers offer individual analysis for consumers, and others maintain data platforms intended to provide genomic data insights for therapeutic discovery and treatment. Revenue is derived through the sale of D2C analysis services and the

### Personalized medicine & testing



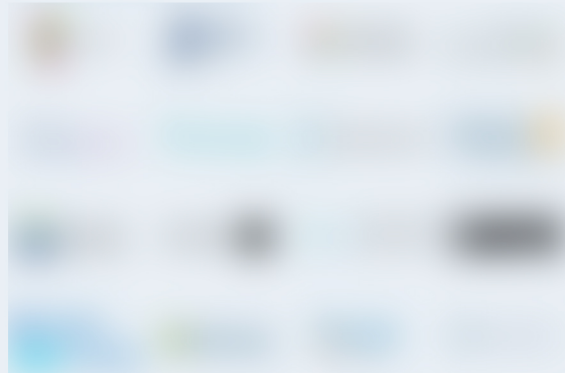
#### Ad-hoc personalized testing



#### Bioinformatics



#### Genomic testing





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Our Emerging Tech Research provides detailed analysis of nascent tech sectors so you can better navigate the changing markets you operate in—and pursue new opportunities with confidence.

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