

FEATURE

## **New business models in health care: Building platform-enabled ecosystems**

Health tech innovators are investing in the Future of Health through platform businesses

Simon Gisby, Peter Micca, Boris Kheyn-Kheyfets, Christine Chang, and Madhushree Wagh

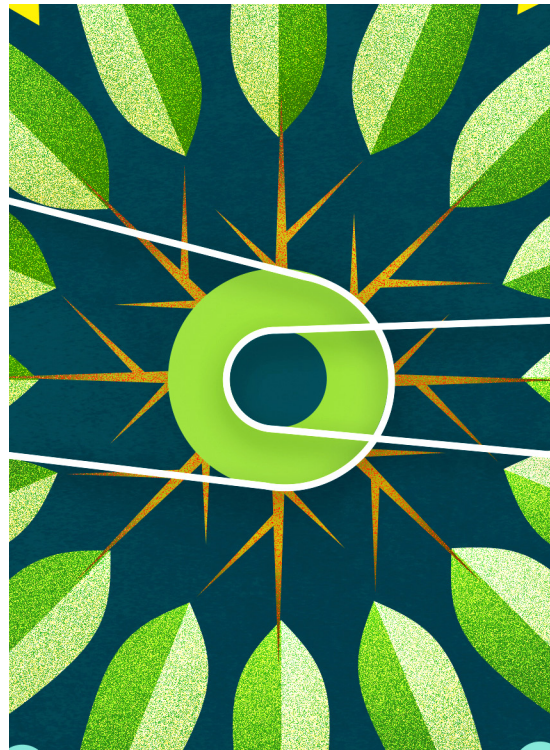
Digital platforms can bring together ecosystem participants to build new business models that cocreate goods and services, enable wider customer reach, access to new capabilities, and increase revenue.

## Executive summary

COVID-19, value-based care, data liquidity, consumer expectations, digital transformation, virtual health—these are some of the factors transforming health care and life sciences organizations and driving investments in health tech. In the [Future of Health™](#), health plans, health systems, and life sciences companies will likely face new demands, with increased competition from nontraditional players, an educated consumer, increasing price transparency, and data exchange focused on standardizing clinical pathways and supporting the migration from care to health to wellness. These forces are complex—with exponential increases in demands on capital and talent—and too large to be solved by any one organization. Many health tech innovators are realizing that new business models should be created to thrive in the future. One such model can be through platform-enabled ecosystems.

Traditional “pipeline” businesses compete on cost, quality, and market breadth, and try to capture part of the value chain by focusing on economies of scale, unique intellectual property, specialized resources, geographic presence, and brand.<sup>1</sup> They have traditionally used mergers and acquisitions (M&A) to grow and diversify. But alternatives such as platform-enabled ecosystems can help organizations improve and expand their services as they tap into the expertise of other organizations.

Platform businesses can bring together ecosystem participants on a digital network to cocreate goods and services, providing opportunities for wider customer reach, access to new capabilities, and increased revenue. For example, Uber’s



platform-enabled ecosystem provides a seamless experience for customers to book rides on demand, attracting thousands of vehicle owners as partners. Airbnb’s technology platform allows hosts with extra rooms/homes to connect with guests. In health care, telemedicine platforms allow providers to see patients anywhere and at a time that works for them.

Platform-enabled ecosystems are beginning to gain more traction in health care and life sciences organizations. Health tech investor trends data shows that interest in new business models are one of the three most impactful changes in 2021, a record-breaking year for health tech investments.<sup>2</sup> In interviews with a diverse set of leaders from health care organizations, health tech innovators (startups), and investors, we explored key

components of a successful, sustainable platform-enabled ecosystem:

- Accessibility of underutilized assets
- Delegation to ecosystem
- Modularized components
- Focus on consumer experience
- Positive network effects

Using insights from these interviews, this paper aims to help organizations think through what role they should play in ecosystems moving forward.

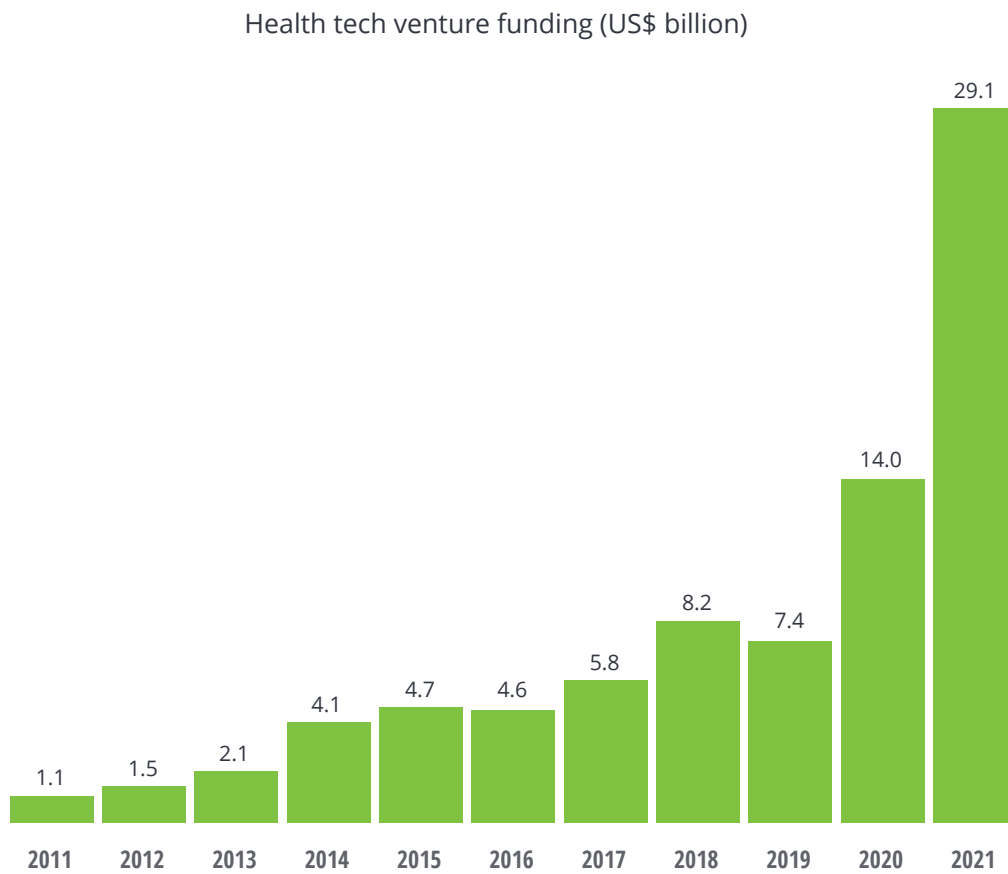
## Introduction

Health tech funding continued to break records during 2021. Total funding in 2021 amounted to US\$29.1 billion across 729 deals, with an average deal size of US\$39.9 million (figure 1).<sup>3</sup> The market is expected to continue growing in the next few years and, as one interviewed investor stated, “It’s one of the most exciting times to be investing in health tech.” Top areas of investment through 2021 include R&D catalyst (US\$5.8 billion), followed by on-demand health care (US\$4.5 billion) and treatment of disease (US\$4.5 billion).<sup>4</sup>

FIGURE 1

### Health tech investments continue to grow at an unprecedented pace

■ Overall funding



Source: Deloitte analysis of Rock Health Digital Health Funding Database.

But the health funding database Rock Health noted that changes in business models, increased focus on direct-to-consumer and even business-to-consumer-to-business, as well as infrastructure and talent pools, may have the biggest impact on the sector moving forward.<sup>5</sup> Venture capitalists, private equity, health care organizations, and other investors have already begun investing in startups that call themselves platforms. For example, veda, an AI-powered data-processing platform that uses smart automation to streamline health care administrative tasks, raised US\$45 million series B funding led by Oak HC/FT.<sup>6</sup> Digital health company b.well raised US\$32 million in its series B fundraising round to drive its next development phase, led by HLM Venture Partners.<sup>7</sup> b.well gathers patient data across providers, insurers, pharmacies, and a patient's own apps and devices, and enables consumers to navigate through their own care journey. Disease-specific platforms are also generating interest; Khosla Ventures has invested in both Alzheimer's disease (Neurotrack's series C funding) as well as cell therapy (Cellino seed investment and series A funding). IVF (TMRW Life Sciences equity round, led by Transformation Capital) and autoimmune diseases (Drugviu seed funding from Avestria Ventures, Cleveland Avenue, and ImpactAssets, among others) are other areas of interest.<sup>8</sup> Transcarent, which was evaluated at US\$1.62 billion in January 2022, making it the latest digital health unicorn,<sup>9</sup> is a "comprehensive, consumer-directed health and care platform for employees of self-insured employers and their families."<sup>10</sup> Investors see potential in this space as platforms such as Transcarent can "address the challenge [of health care] in a new and different way that is focused first and foremost, on the consumer."<sup>11</sup>

Of the nine health care startups that went public in 2021, four describe themselves as platforms.<sup>12</sup> But not all startups that call themselves a platform will

be successful. The markets will distinguish between those that are true platforms and those that are not, and value them accordingly.

## What are platform businesses?

Many health care organizations have traditionally relied on M&A to grow or diversify, either as an opportunity (e.g., increase market share), or to mitigate threats (e.g., changing reimbursement models). However, M&A may not always be the best option due to constraints with capital, talent, and organizational structure. Technology advances in the past few years have enabled health care organizations to achieve similar ends (growth and diversification) through a newer avenue—[platform-enabled ecosystems](#)—paving the way for transforming traditional business models.

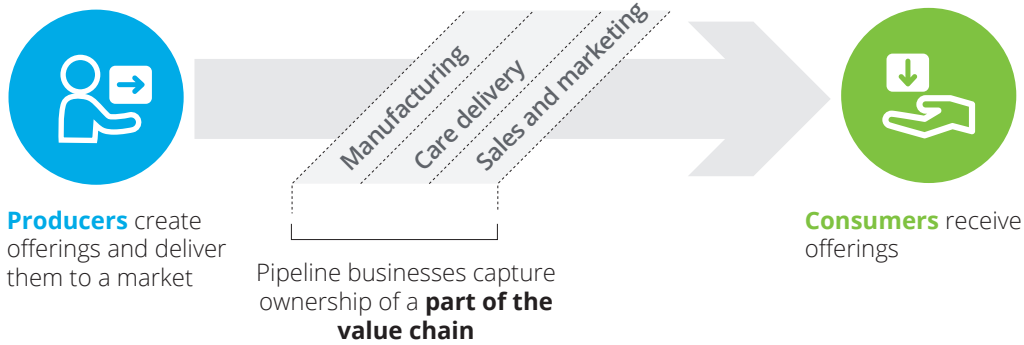
Ecosystem conveners create a platform that aggregates goods and services provided by ecosystem partners. In industries such as retail, entertainment, and hospitality, such business models have rewired value chains by providing a better, digitalized customer experience while making suppliers more accessible—in turn, attracting more and more participants onto the platform (figure 2).

How well are health care organizations adopting and leveraging this new business model to improve quality of care, reduce costs, and personalize the health care consumer experience? To understand this, the Deloitte Center for Health Solutions analyzed health tech investment trends and conducted 10 interviews with a diverse set of leaders from health care organizations, health tech innovators (startups), and investors. Areas of discussion included understanding existing initiatives focused on building platforms to convene ecosystems, early value generated, and learnings from these endeavors.

FIGURE 2

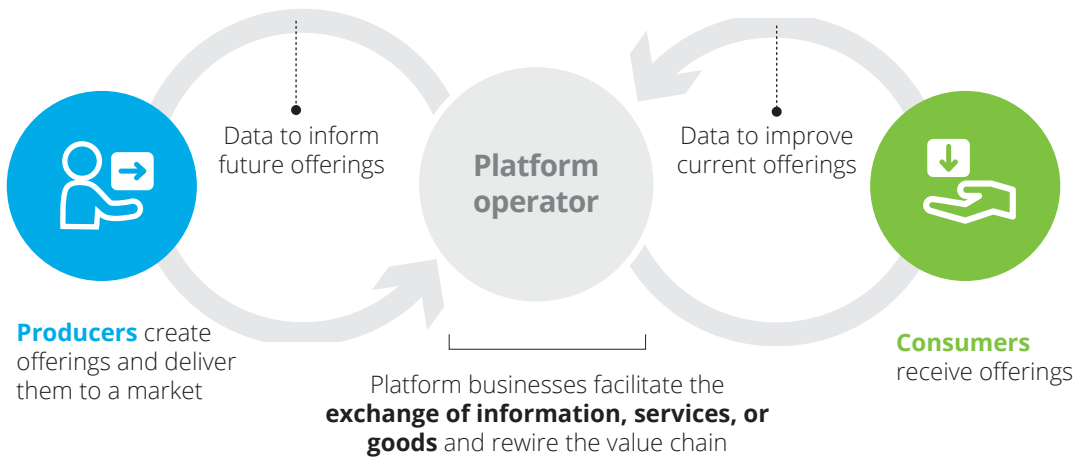
## Legacy pipeline versus platform businesses

### Pipeline businesses



- Companies operating traditional pipeline businesses **integrate into suppliers** and compete on cost, quality, and breadth of market.
- To maintain their advantage, these companies depend on **economies of scale, intellectual property, scarce resources, and brand power**.

### Platform businesses



- Platform businesses **compete on network effects**.
- To remain competitive, platform ecosystems must attract users with a superior **experience and differentiated offerings** (e.g., analytical rigor).
- To grow, **platforms incentivize partners to join and fill capability gaps, instead of pursuing M&A**.

Source: Geoffrey G. Parker, Marshall W. Van Alstyne, and Sangeet Paul Choudary, *Platform Revolution: How Networked Markets are Transforming the Economy and How to Make Them Work for You* (New York, W. W. Norton, 2016).

## Interview findings

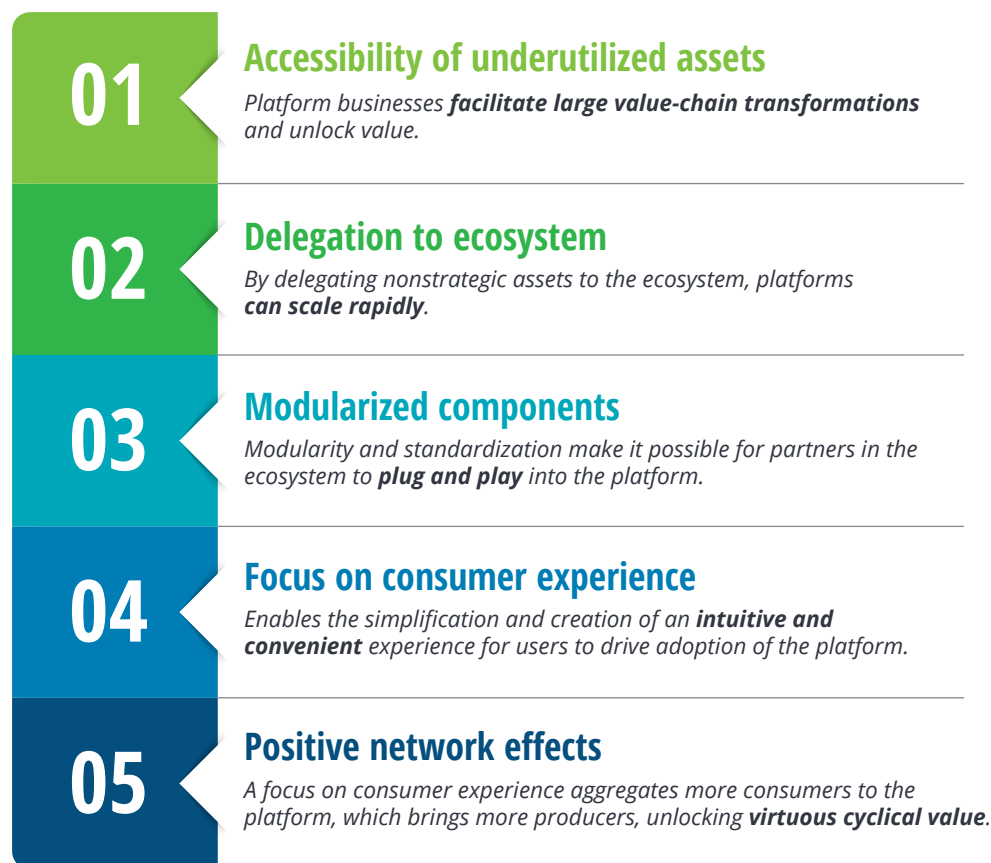
The concept of platform-enabled ecosystems in health care drew a spectrum of reactions from interviewees. Some were skeptical about ecosystems as a future business model and the concept of platforming health care or even subsegments of it. Instead, they preferred to focus on building technology solutions to address a particular pain point in the care journey or on creating an edge pipeline business as an alternative revenue stream. Others were interested in building

an ecosystem but were still trying to figure out how to do it. One interviewee, for instance, discussed building localized ecosystems focused on community health, but faced two challenges—building the technology backbone and convincing clinical and administrative leadership. However, many of the interviewees were bullish on the concept.

Five principles that can enable an effective, sustainable platform-based ecosystem are described below (figure 3).

FIGURE 3

### Platform principles in action



Source: Ben Thompson, "Stratchery," accessed February 1, 2022.

## ACCESSIBILITY OF UNDERUTILIZED ASSETS

It is no secret that health care, as an industry, sits on valuable but underutilized assets—be it clinical expertise and provider availability or data, such as fragmented and disconnected clinical and claims data, or factors that influence drivers of health (also known as social determinants of health). Interviewees emphasized how building platform-enabled ecosystems enabled their organizations to access and unlock the value of these underutilized assets. Telemedicine platforms, for example, leveraged untapped provider availability, allowing clinicians to see patients anywhere at any time, and in a safer environment during the pandemic. Real-world evidence companies have identified underutilized assets in data and created a marketplace for data suppliers and buyers to convene.

## DELEGATION TO THE ECOSYSTEM

Leading organizations that are building platform-enabled ecosystems acknowledge several advantages of bringing together participants through this business model. For example, as accountable care organizations continue to grow, the root causes of health such as drivers of health are impacting the risk hospitals take on. While hospitals cannot provide housing, groceries, job training, etc., they can partner with community-based organizations and leverage technology to make it easier for patients to connect with these organizations. Health plans can delegate disease management to virtual-first providers, negating the need for the health plan to build such solutions from the ground up, quickly scaling their use for better outcomes. Organizations are preferring to partner with suppliers using networked platforms than owning the suppliers to advance their ambitions.



## MODULARIZED COMPONENTS

Some platform businesses are building interoperable, modular (standardized) platforms that enable additional capabilities or point solutions that simplify and streamline the user experience. Some are built in-house while others are developed by partners. Many interviewees stated that building modular platforms can remove redundancies (e.g., building another diabetes management app). Interviewees also discussed enabling partners or third parties to “plug and play” and use the platform to augment existing offerings and solutions. For example, HealthVerity’s identity, privacy, governance, and exchange platform allows partners to combine disparate datasets in a secure environment and match records with greater accuracy.<sup>13</sup> The platform was built to incorporate different datasets and standardize complex activities, with the added network effect of building out its user base with both data suppliers and data buyers.

## FOCUS ON CONSUMER EXPERIENCE

Interviewees unanimously pointed to improved and simplified consumer experience as one of

the core outcomes of platform-based ecosystems. As one interviewee said, “At the end of the day, consumer convenience is what you are aiming for.” Many interviewees noted that platforms can not only create a digital front for care delivery, but also optimize the omnichannel care experience for patients. This builds on our [recent study](#), in which nine out of 10 surveyed health system digital executives considered digital capabilities to be a path to fundamentally transform their relationship with consumers. In the same study, health system interviewees and panelists discussed designing processes and experiences from a consumer’s perspective to build consumer trust and loyalty.<sup>14</sup> Consumer trust is necessary to guide consumers to new ecosystem partners. An engaging, digital experiences can influence consumer behavior, increase loyalty, sustain engagement, and, therefore, rewire the value chain. Uber, for example, with its easy-to-use interface, could enter new markets, including food delivery services and health care transportation.

### ATRIUM HEALTH’S HOSPITAL AT HOME

In 2020, spurred by the COVID-19 pandemic, Atrium Health created a Hospital-at-Home (AH-HaH) initiative.<sup>15</sup> Fifty-one thousand patients were seen through AH-HaH during its first 10 months. This **patient-centered** care delivery model provides daily telemonitoring by a nurse for COVID-19 patients and escalates care as needed. For higher-acuity patients, it provides hospital-level care in the home by deploying a hybrid of virtual and in-person services. AH-HaH also offers patient access to 24/7 virtual physician call coverage. This enables providers to increase the use of an **underutilized asset**—access to complex care—and treat higher acuity conditions safely in a patient’s home (a new site of care and another **underutilized asset**) rather than in a traditional hospital setting. AH-HaH provides patients with Bluetooth enabled devices that connect to a smartphone app that **integrates** with the hospital’s EHR. Another health system has partnered with AH-HaH to use this program in their facilities. And the virtual hospital plans to expand its services to other diagnoses, the first being congestive heart failure.



## NETWORK EFFECTS

Platform businesses differ from pipeline businesses in that they compete on virtuous network effects. To grow, platforms incentivize ecosystem partners to join and fill gaps. Many well-known consumer technology companies generate demand side strong network effects: The more users they serve, the more value (e.g., offerings become better or/and cheaper) they deliver. Then, with more data on user behavior, businesses can improve their offerings. A better product/service in turn attracts more consumers and partners. Further, producers can interact with other producers on the platform. For example, on a platform for care management, virtual-first diabetes companies can refer to virtual-first behavioral health companies.

While monetizing an ecosystem, one of the most crucial decisions is whom to charge, since the different roles played by various platform users mean that charging them differently can have widely varied network effects. Interviewees cautioned that monetization should be a carefully calibrated exercise. Minor miscalculations can impact the value of network effects exponentially and hamper the ecosystem's success.

As each of our case studies shows, as more providers from different specialties and backgrounds join the platform, patients have a wider choice. Patient feedback allows providers to further refine and/or personalize their offerings, creating network effects, which then improve the service and make it more likely that patients will come back.

## Considerations for platform-enabled ecosystems

Health care organizations looking to position themselves for the Future of Health™ and navigate current forces—such as COVID-19, value-based care, data liquidity, consumer expectations, digital

## INCLUDED HEALTH

Included Health<sup>16</sup> is an ecosystem that aims to change the health care experience for consumers who have traditionally been underserved, such as individuals who identify as LGBTQ+.

Included Health enables consumers from these underserved communities to connect virtually with providers from similar ethnicities and backgrounds. This helps forge long-term provider relationships, reduces disparities in care delivery, and builds patient trust in the health care system. Included Health also works with employers to offer employees more care options and make it easier for them to find the best and most affordable care. The platform leverages multiple solutions and offerings to steer utilization of an **underutilized asset** (LGBTQ+ affirming clinicians), amplify engagement, and enhance **consumer experience**. It analyzes its data to understand the solutions and services consumers need on their journey across the entire health care continuum and to improve care. Furthermore, Included Health providers can access patient data at any given point of the patient journey to provide personalized care.

transformation, and virtual health—should consider convening a platform and/or joining an ecosystem. Organizations should consider the following as they shape their thinking around how to use platforms and ecosystems:

1. **Identify areas where you can grow the value chain (e.g., improve outcomes, improve customer experience, and reduce costs) without M&A:** As health care organizations are expected to take on more, leaders should examine where partnering

in an ecosystem and leveraging a platform could be beneficial. Delegating to partners could be an alternative to expensive vertical integration and can be equally, if not more, successful.

- 2. Identify areas where you can turn threats into opportunities:** When faced with threats to the business, launching a platform can commoditize those threats. Many health systems, for example, are taking on more risk, and therefore looking for more ways to address the root causes of health. By forming an ecosystem with a network of community-based organizations, health systems are better able to address their patients' drivers of health.
- 3. Form ecosystem alliances:** Finding the right partners is an important part of creating an ecosystem. Each entity will bring its own skill-set and offerings and must align with the goals and purpose of the ecosystem. They will

also each need to decide their preferred roles in the ecosystem. Will they be a convener, creating and operating platforms and orchestrating interactions? Or would a participant role, providing goods and services on the platform, be a better fit?

Life sciences and health care organizations have traditionally relied on pipeline business models by competing on cost, quality, and market share. M&A has been the predominant method of growth. But as the scope of health care products and services expands, it is likely untenable for any one organization to own the full spectrum of care—from clinical care to the roots causes of health such as drivers of health, from well-being to long-term care. A platform business model can create comparable results with less capital costs, leveraging the sharing of information, services, or goods between ecosystem players, and competing on network effects and consumer experience.

## Endnotes

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