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White Paper
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Digital health startups:
What we look for, why it matters,
and why now.

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Over the last 8 years, we at AXA Venture Partners have had the privilege of meeting with numerous transformative digital health companies. We have been fortunate enough to invest in and work with the following businesses:

Florence	GRAVIE	hint	INCEPTO	mindoula
OFFOR HEALTH	Troy MEDICARE	ValeraHealth	vida	wellth

Our experience has uncovered discernible trends and pivotal value drivers that have consistently propelled the success of numerous companies. Digital health is a broad space. Within digital health, there are companies that focus on the delivery of healthcare services, and companies that offer products and tools that contribute to the technological infrastructure of healthcare. Furthermore, there are other vital segments of the healthcare world enabled by technology such as med tech and biotech. For the scope of this discussion, we will concentrate on the digital health businesses that provide direct healthcare services through various delivery methods. At the core of these businesses is the belief that technology and the modernization of healthcare practices significantly improves the health and well-being of countless individuals globally.

In digital health, technology-enabled care should **optimize costs and expand access for patients, while improving the quality of care and outcomes.** While unique ideas and modern business models have routinely contributed to exciting new entrants, it is the consistent delivery of effective care that makes a digital health company sustainably succeed. In addition to delivering outcomes and lowering cost of care, some other drivers of startup success are strong margin profile and unit economics but that is outside of the primary scope of this article. Healthcare as an industry is complex, however companies experience many of the similar highly visible trends observed in other industries. For example, over the last few years, FinTech has undergone a shift to emphasize democratization in a move away from traditional financial services players. Initially, Neobanks and BaaS (banking-as-a-service) providers were the clear beneficiaries in this movement, but over time some entrants have faltered given they prioritized customer acquisition over the consistent development and delivery of value-additive, profitable financial products. In healthcare, we have seen analogous tendencies. With the unbundling of various products, services, and specialties, numerous companies are finding creative ways to offer healthcare services to those in need, yet it's ultimately the caliber of care and resultant outcomes that foster long-term accomplishments for start-ups.

Cost Considerations

When start-ups look to bring healthcare offerings to market, an initial determinant of success is ensuring the viability of costs. In the United States, cost can be an extremely limiting factor to the care options for a patient. This circumstance can be detrimental to a patient's chances of improving their condition as attaining exceptional healthcare results hinges on a patient's ability to receive the most fitting care. With reportedly 60% of United States adults living paycheck to paycheck,[1] patients often find themselves unable to access care that is aligned with their specific needs (or worse, will not even seek care at all). Remarkably, KFF polling reported that roughly 4 in 10 American adults[2] delayed or put off seeking medical care due to cost.

While some digital health startups accept insurance, most early-stage players begin by charging out of pocket given the regulations and complexities around achieving insurance coverage. Furthermore, many Americans are already required to pay out of pocket for medical services given the reliance of health insurance on employment and the inconsistency of coverage plans. With that in mind, one-way new entrants have been able to improve the alignment of care with specific needs is to offer competitive products and services at a lower cost. The following features and strategies are how they do so.

Reducing Overhead

By automating workflows and improving internal processes, companies can reduce hours of administrative overhead saving immense costs. Additionally, Health Systems typically face extreme real estate related costs due to the reliance on managing physical locations. With these cost savings, companies can offer powerful healthcare products at highly competitive prices with comparable or even improved margins.

Supplementing Human-Led Sessions with Technology-Based Offerings

Through technology-based offerings such as mobile applications, self-assessment tools, remote wearing devices, and AI-led sessions, patients no longer require a human-led product or service in order to receive the benefits of a healthcare solution.

Automating the Comparison of Solutions

By aggregating treatment alternatives, patients have the ability to compare pricing and efficacies in order to get the most beneficial solution. Technology such as machine learning models and predictive analytics can help ensure specific symptoms and conditions are met by appropriate treatment at the best price.

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[1] Lending Club, "60% of Americans Now Living Paycheck to Paycheck, Down from 64% a Month Ago", February 2023.
[2] Peterson-KFF Health System Tracker, "How does cost affect access to healthcare?", January 2023.

Selling Directly to Employers as Benefits

Corporations globally are emphasizing employee wellbeing through acquiring digital health solutions. By procuring effective healthcare offerings, corporations can improve production and employee satisfaction to drive output and retention.

VBC over FFS

Traditional Fee For Service (FFS) healthcare models emphasize volume and lack in aligning cost with results. By connecting the cost of service directly with improving patient outcomes, value-based healthcare lowers the overall treatment cost for patients. It incentivizes doctors to be more thoughtful about what they prescribe and how they approach each patient interaction.

To conclude, while insurance plays a significant role in covering healthcare expenses, millions of Americans are required to pay out of pocket leading to severe challenges. By leveraging technology, selling through employers, and focusing on value-based care, digital health startups can lower the cost of healthcare offerings, without sacrificing the quality of care delivered.

How Technology Expands Access and Improves Outcomes

On top of gaining access to the most appropriate medical care, technology is core in bettering the quality of care provided by digital health startups leading to improved results at scale. What expands the opportunities for the infusion of technology is that both patients and doctors experience aspects of care that lack efficiency, accuracy, personalization, and speed. Starting with patients, we have seen the following developments as examples of technological intervention:

Telehealth and Other Digital Communication Tools

The ability to have direct contact with medical professionals whether through video or chat ensures patients receive care no matter where they are and what their condition is. By eliminating transportation barriers and working with doctors from home, individuals can be spared the time and cost of commuting which often inhibits individuals from seeking care. In the end, enabling direct contact with care professionals in a more accessible manner increases the frequency of contact patients have with doctors ensuring medical improvements are taking place.

Remote Patent Monitoring

Fitness wearables, mobile applications, and other connected devices are increasingly allowing doctors to directly track a patient's health status remotely. Some key data points and conditions that can be dynamically tracked include blood pressure, glucose levels, activity, mental/emotional sentiment, and many other key indicators of a patient's responsiveness to treatment and adherence to care plans. Early detection of irregularities and non-responsiveness to treatment can be vital for patients.

Community and Social Aspects of Care

We have seen a rise in digital social platforms that allow patients to connect with others who are currently or have previously experienced similar health experiences. Whether offered through online forums, platform-native messaging, social media groups, or other virtual communities, patients can engage with others and gain immense support that boosts motivation and improves mental health throughout difficult conditions.

Information

In today's age, information is always available at our fingertips. Professionally published content can be key to helping patients understand their conditions and treatment options. By providing patients with quality content and information, they are empowered to make more informed decisions about their care, often leading to better results.

While digital health companies can often include a select few technologically driven aspects of care, effective incorporation of these tools substantially elevates the care standard, resulting in superior outcomes. For healthcare providers, though, much has changed following the COVID-19 pandemic. There is an extreme shortage of medical health professionals, leading to burnout and limited bandwidth. Additionally, this supply-demand imbalance continues to compound as the demand for healthcare spend outpaces inflation annually, as observed between 2010 and 2020, where the average annual growth rate of healthcare spending in the U.S. was around 4.1% (compared to inflation of 1.73%[3]). By improving the technology provided to healthcare professionals, doctors can experience significantly expanded capacity, maximizing care delivery, and optimizing patient care. Some examples of technologies we have seen help doctors and care providers globally include the following:

Note-Taking and Automated Intake Software

Documentation has plagued the healthcare industry since its inception. Many health systems still rely on manual and time-consuming processes to store and track mission-critical data. Automated note-taking and dynamic intake technology can eliminate hours of labor and reduce costs while also leading to higher quality information tracking. Therefore, practitioners can redirect time and money spent on managing information to providing better care.

Billing Software

Billing remains a strenuous process across healthcare as the industry is highly regulated leading to a reliance on complete data and detailed requirements for payment processes. Through incorporating modern RCM (Revenue Cycle Management) systems, practitioners reduce the risks associated with manual data entry, helping limit coding and billing errors before claims are submitted, leading to fewer claim denials and rejections. Streamlined billing and expansion of payment types limit the need for time and money being allocated to reconciliation processes and speeds up cash collection.

Scheduling Optimization

High-powered, automated scheduling allows doctors to see the most patients possible driving increased revenue and efficiency. This also includes route optimization for home services and multi-location capabilities which are commonly core to the practice of experienced providers.

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[3] Bureau of Labor Statistics, "$20 in 2010 → 2020 | Inflation Calculator.", 2023.

<u>Electronic Health Records (EHR)</u>

EHRs that store patient information in a secure fashion have made it easier for healthcare providers to access patient information, coordinate care between different providers, and share information with patients. In healthcare, there is heightened emphasis on data privacy as hackers and bad actors continue to strengthen. Aside from data protection, general data interoperability continues to plague clinicians. Today, state-of-the-art EHR platforms can standardize data formats, offer integrations with other systems, and automate time-consuming workflows and tedious legacy functions.[4]

<u>AI for Assistance</u>

While it is still early days, we have seen artificial intelligence augment many health practices given the ability to process data and information faster than ever. Whether by synthesizing dozens of the latest studies, simulating testing and research, scanning X-rays, MRIs and CT scans, or simply assisting in diagnoses, there are limitless use cases where AI can improve medical practices globally. To further this point, a study by Johns Hopkins showed that in 2018, medical mistakes were deemed the third leading cause of death behind heart disease and cancer.[5]

Whether it is a front, middle, or back-office functions, by using technology to improve the processes doctors rely on, more doctors can see more patients, while offering superior care. Moreover, while there has already been strong improvements across healthcare functions led by technology, we believe this trend should not just continue, but also accelerate as more and more exciting new players look to enter the field.

Why We Are Excited Today

Why are we so optimistic about investing in digital health startups you might ask? It is no secret that the places we rely on for treatment have failed to keep up with modern expectations. Medical outcomes and life expectancy in the U.S. are moving in the wrong direction. While America spends the most on healthcare administrative costs of any developed country, its health outcomes consistently lag behind, and are even below average in most cases.[6] Additionally, while healthcare organizations have distinctly recognized the importance of technology in their offerings, they still have a long way to go in implementation. In a recent study done by Deloitte, while 9 in 10 healthcare leaders surveyed said they firmly believe that digital technologies are enabling the shift from treatment-based care to consistent preventative care, over 80% said they're only halfway or less to becoming considered digitally enabled, always-on care, and over 50% said they're over 3 years away from this state![7] Therefore we believe that there has never been a better time to invest in the next generation of digital health companies that are building products and services that will sustainably deliver the highest quality of care, for the highest number of patients.

[4] Wakefield, "INTERNET OF HEALTHCARE REPORT, FINDINGS SUMMARY Q4 2021", 2021.
[5] CNBC, "The third-leading cause of death in US most doctors don't want you to know about", February 2022.
[6] Peter G. Peterson Foundation, "HOW DOES THE US HEALTHCARE SYSTEM COMPARE TO OTHER COUNTRIES?", July 2023.
[7] Deloitte, "Integrating digital health tools to help improve the whole consumer experience", April 2023.