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Last year our lives as New Yorkers changed completely. As the city became the pandemic's epicenter, offices shut down, schools closed, and healthcare workers became our heroes as they valiantly helped patients battle COVID-19. In the spring and summer, we confronted the issue of systemic racism, which coincided with data showing that the pandemic had impacted Black and Brown communities at far greater numbers than others.

But 2020 was also filled with resiliency, compassion, and collaboration. Many companies in our healthcare ecosystem took action—doubling down, pivoting, accelerating—tackling the immediate challenges facing healthcare as well as their employees.

To better reflect these efforts, we've changed the name of the annual publication from Healthcare Venture Capital Report to Healthcare Innovation Report. Because it's not just about the funding, it's also about what the entrepreneurs do with that funding—how they're driving change, improving access, upgrading processes, and impacting lives. This year, more than ever, we needed action and our New York "squad" stepped up and delivered.

As you'll see throughout the report, the explosion of digital health in New York has been astounding. I remember attending the first-ever Health 2.0 conference in 2007 when digital health meant online support groups, wisdom of the crowd, and blogging. Fourteen years later, technology is embedded in everything we do. Much like digital ad agencies morphed into simply agencies, digital health will become, simply, health. Technology powers everything—it's what we do with the tech that matters. It's exhilarating to see the range of ideas and people excited about changing healthcare for the better.

Thank you to our 50+ contributors for their incredible insights. Congratulations to the 100 innovators selected for the 2021 NYC Digital Health 100.

A special shout out to Pfizer for producing a vaccine in record time and making us New York proud.

By the time we publish next year's report, I hope we will have seen each other again in person at one of NYCHBL's legendary events.

Burry Ellerin

BUNNY ELLERIN Co-Founder & CEO, NYC Health Business Leaders

Many Thanks to Our Contributors

This is our largest group of contributors to date – over 50 entrepreneurs, investors, clinicians, and thought leaders. Thank you for taking the time to share your insights, perspectives, and wisdom with us.



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5 TOP TAKE-AWAYS FROM 2020

The funding never stopped.

When the pandemic hit, many of us thought it would have a negative impact on funding—instead there was a 40% bump in funding over 2019—increasing from \$2.B to \$3.6B! Digital health was the biggest recipient garnering 69% of the dollars. The rounds got substantially larger: in 2019, only one company (Oscar) raised over \$100M; in 2020, Oscar was joined by four more: Cityblock Health, Ro, Cedar and Medly. Another interesting finding: seven of the **Top 25 companies** raised at least two rounds during the year.

Virtual care took center stage.

Investors poured \$1.3B (about 35% of total funding) into virtual care, a reflection of its starring role during the pandemic. Telehealth has been around for decades, but in 2020, millions of patients experienced a video visit for the first time and tens of thousands of once-resistant providers became converts. While it took a pandemic to prod both groups to test it out, regulatory changes to payments and licensing closed the deal. Learn more about what's ahead on the <u>regulatory</u> front on page 29.

Mental health came out of the shadows.

Mental health has been called the shadow pandemic of 2020 because the levels of depression, anxiety and stress skyrocketed during COVID. As a result, new approaches to mental health treatment have blossomed and become more widely adopted. New York is at the heart of this movement and is quickly becoming the center of digital mental health. Investors put \$200M (about 5% of total funding) into this vertical and we expect this area to expand. Learn more about the **mental health start-ups** driving this growth on page 26.

Health Equity grabbed our attention.

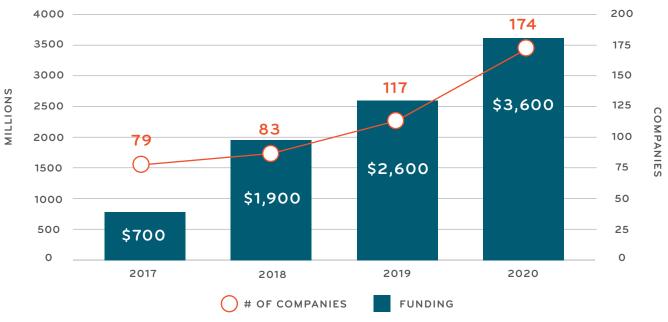
New York's Black and Brown communities were disproportionately affected by coronavirus, highlighting disparities in care. A number of New York companies are trying to address the imbalance, most notably Cityblock which took in \$214M in new funding. Discover more about the issues related to equity and potential solutions necessary to close the gaps on page 24.

Therapeutics & Diagnostics hit the front page.

PCR testing is the new normal, and mRNA technology has become a frequent topic of discussion (at least among this crowd). New York life science companies of *all* sizes played an active role in addressing COVID-19, most notably Pfizer, but smaller start-ups got in on the action, too. Take a closer look at a few of the players on page 30.

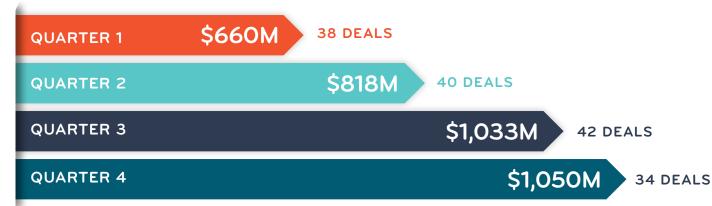
2020 BY THE NUMBERS

174 COMPANIES RAISED \$3.6B in funding in 2020 We've been tracking New York health and life sciences funding for four years—and the growth has been substantial. In 2020, investment reached an all-time high, and was a 40% increase over 2019.



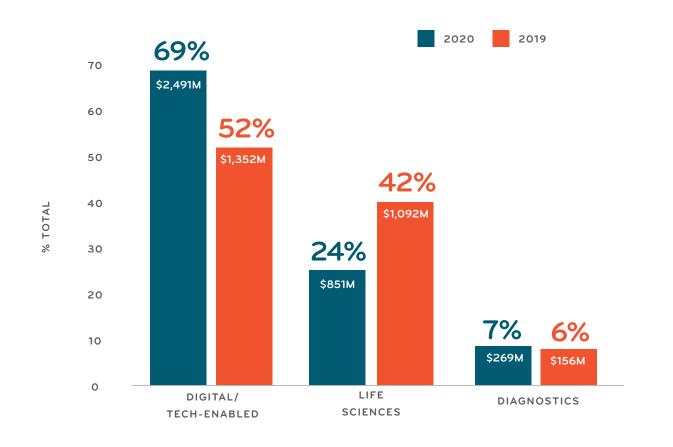
NYC HEALTHCARE INVESTMENT TRENDS

2020 FUNDING BY QUARTER

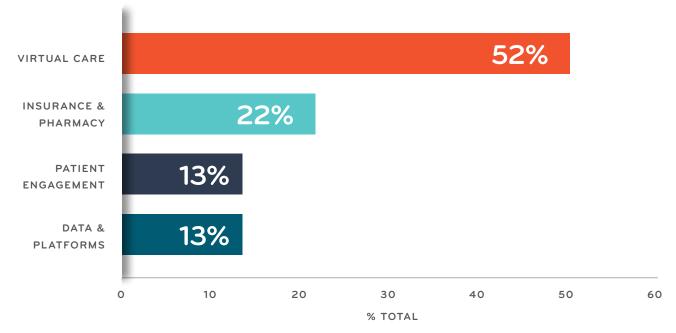


FUNDING

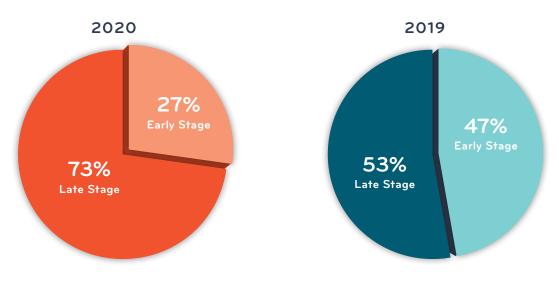
FUNDING BY SECTOR: 2020 VS. 2019



FUNDING BY DIGITAL SUB-SECTOR



FUNDING BY STAGE: 2020 VS. 2019



Early stage includes pre-seed, seed and Series A. Late stage includes Series B and beyond.

MERGERS & ACQUISITIONS

WE ENDED 2020 WITH A MAJORITY RECAPITALIZATION BY THOMA BRAVO and the simultaneous acquisition of HealthX. With the new capital, we'll be able to add many product enhancements and continue to build a world-class service organization. The HealthX acquisition allows us to bring Zipari's CX Platform and market-leading products to an additional 170 customers. It's been an incredible ride from a start-up six years ago to a valuation of over \$500 million today...and I feel like we're still just getting started on our mission to help health plans be more consumer-centric.

MARK NATHAN Founder & CEO, Zipari



Company	Acquired by	Amount (M)	
care/of	Bayer	\$225	
coherc health	AptarGroup	Undisclosed	
🧑 doctor.com	Press Ganey Associates	Undisclosed	
Prevail	Lilly	\$1,040	
Progenics	Lantheus Medical Imaging	\$419	
Stemline	The Menarini Group (Italy)	\$677	
ziparî	Thoma Bravo	\$500	
(Z) zipdrug	IngenioRx	Undisclosed	

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FUNDING IN 2020

Top 25

* 7 companies raised multiple rounds during 2020. The Funding number reflects total raised during the year.

No.	Company	Description	Funding (M)	Stage	Select Investors
1	oscar	Health insurance company using technology, design, and data to humanize health care.	\$365*	Late stage	Tiger Global Management, Dragoneer, Baillie Gifford, Coatue, Founders Fund, Khosla
2	СІТУВЬОСК	Personalized primary care, behavioral health care, and social services for underserved urban populations.	\$214*	Late stage	Catalyst, Thrive Capital, Sidewalk Labs, Town Hall Ventures, Maverick Ventures, Redpoint Ventures
3	ro	"The patient company" offering 3 digital health clinics: Roman (men), Rory (women), and Zero (smoking cessation).	\$200	Late stage	General Catalyst, FirstMark Capital, BoxGroup, 3L Capital, Tusk Venture Partners, SignalFire, Torch Capital
4	NEUROGENE	Biotech developing genetic medicines for those affected by rare, devastating neurological diseases.	\$115	Late stage	Cormorant Asset Management, EcoR1 Capital, Samsara BioCapital, Redmile Group
5	KALLYOPE	Biotech dedicated to unlocking the therapeutic potential of the gut-brain axis.	\$112	Late stage	Alexandria Venture Investments, Lux Capital, Polaris Partners, Casdin Capital, Two Sigma Ventures
6	neogene	Biotech developing next-generation, fully personalized engineered T cells therapies for broad spectrum of cancers.	\$110	Early stage	EcoR1 Capital, Jeito Capital, Syncona, Vida Ventures, TPG
7	🌢 Cedar	Patient payment and engagement platform for hospitals, health systems and medical groups.	\$102	Late stage	Andreessen Horowitz (a16z), Kaiser Permanente Ventures, Kinnevik, Thrive Capital, Lakestar, Founders Fund
8	FL <mark>@</mark> me Biosciences	Biotech addressing unmet needs in diseases linked to chronic inflammation including cancer, cardiovascular disease and arthritis.	\$100	Late stage	Rock Springs Capital, T. Rowe Price Associates, Cormorant Asset Management LP, Janus Henderson Investors
8	MMEDLY	Full-service, digital pharmacy offering free same-day prescription delivery.	\$100	Late stage	Volition Capital, Greycroft, Horsley Bridge, Lerer Hippeau
10	spring health	Comprehensive behavioral health solution for employers.	\$98 [*]	Early and Late stages	Tiger Global, Northzone, Operator Partners, GingerBread Capital, Equinox Ventures, Able Partners
10	ELEVATION	Precision medicine biotech developing drugs to inhibit specific alterations identified via genomic testing.	\$98*	Early and Late stages	venBio Partners, Cormorant Asset Management, Aisling Capital, Samsara Biocapital, Janus Henderson

FUNDING IN 2020: TOP 25

No.	Company	Description	Funding (M)	Stage	Select Investors
12	K	Digital care covering primary care, anxiety and depression.	\$90*	Late stage	Valor Equity Partners, Marcy Venture Partners, 14W, Mangrove Capital Partners, Lerer Hippeau, Primary Venture Partners
13	LetsGet Checked	Home lab testing and clinical services.	\$71	Late stage	Illumina Ventures, HLM Venture Partners, Deerfield Management, Transformation Capital, Optum Ventures
13	HI	On-demand, live insights to accelerate discovery and development of therapies.	\$71*	Early and Late stages	IVP, Menlo Ventures, Lux Capital, Transformation Capital, Lead Edge Capital
15	EMENDO BIOTHERAPEUTICS	Next generation CRISPR company.	\$61	Late stage	AnGes, OrbiMed, Takeda Ventures
16	CANDID	Teeth alignment technology.	\$54	Early stage	Greycroft Partners, Gaingels Syndicate, Bessemer Venture Partners, Redesign Health, Riverpark Ventures
17	@tyto care"	Mobile-health platform and device for self physical examination,and remote diagnosis.	\$50	Late stage	Qualcomm Ventures, West Fountain Global Fund, Insight Partners, Olive Tree Ventures
18	30	Virtual care and treatments for chronic conditions: Keeps (hair loss), Cove (migraine) and Evens (acid reflux).	\$47	Late stage	Polaris Partners, Gaingels Syndicate, J&J Innovation, Maveron, Northzone Ventures
19		On-demand healthcare and modern family benefits for women and families.	\$45	Late stage	Spring Mountain Capital, 14W, Sequoia Capital, Oak HC/FT, Female Founders Fund
20	tend	Dental clinic intended to improve dental visit and wellness experience.	\$37	Late stage	GV, Redpoint Ventures, Juxtapose, Zigg Capital, Tusk Venture Partners, Tiger Global Management
21	ziparî	Products for health insurance plans to improve consumer digital experience.	\$36.5*	Late stage	Vertical Venture Partners, Health Velocity Capital, HealthWorx, BCBS of NJ
22	ONE DROP	Mobile computing and data science to transform the lives of people with diabetes.	\$35	Late stage	Bayer,Brighter Capital, Innova Capital Partners, FJ Labs, RRE Ventures, BoxGroup
23	OCENTIVO	Digital health plan for self-funded employers.	\$34	Late stage	B Capital Group, Define Ventures, HarbourVest, Nassau Street Ventures, Bain Capital Ventures, F-Prime Capital Partners
24	pager	Virtual care companion that provides a personalized, connected care experience.	\$33	Late stage	Health Catalyst Capital, Horizon BCBS of NJ, Goodwater Capital, Three Fields Capital, Lux Capital
25	kindbody	Fertility, gynecology, and wellness services in modern, tech-enabled clinics.	\$32	Late stage	Perceptive Advisors, RRE, GV, Freemark Capital, Rock Springs Capital

5 EARLY-STAGE

Investors to Know

Visionaries see potential and take risks—they're the lifeblood of start-ups. Even during a difficult year, early-stage investors have continued to find, fund and incubate some of healthcare's most exciting companies. Meet five investors making an impact in New York's venture community.

GRAHAM BROWN Partner, Lerer Hippeau

NY healthcare investments: Heartbeat Health, K Health, Klara, Medly Pharmacy, Monument, Opentrons, Oscar, Thrive Global

LERER HIPPEAU

Where should healthcare entrepreneurs focus?

There are two big challenges for healthcare start-ups to tackle. First: How do you keep a healthy population from becoming sick? Second: How do you manage chronic care conditions more efficiently, knowing they generate 80-90% of total healthcare costs? There's plenty of room for innovation in both areas. Prevention is growing—AI will enable better early detection and diagnosis. Technology can make a major impact in the chronic population with telehealth, pharmacy, remote patient monitoring and efficiency of payments.

Give us an example from your portfolio.

Managing medications for your entire life is complex and involves addressing multiple conditions. Medly offers a fundamentally better pharmacy experience by using data more effectively and enabling more personalized plans. Plus they deliver, eliminating the need to visit a brick-and-mortar store. We think Medly is going to be one of the leaders in managing chronic conditions and specialty medicine.

What impact did COVID have on the space?

Digital penetration and telehealth have clearly accelerated across the board. That whole world has been pulled forward very rapidly, with an acceleration in adoption and TAM that has exploded. In the long run, though, regulation will also be a big factor in how these trends play out. What happens with reimbursements across the board going forward is very important, especially for telehealth. Cross-state licensing is another unknown. Some restrictions were loosened due to COVID, but we don't know if those will come back.

NIMI KATRAGADDA Partner, BoxGroup

NY healthcare investments: Alma, Blink Health, Clover, Garner Health, K Health, Level, Maven Clinic, Oscar, Ribbon Health, Ro, Tomorrow Health

BOX GROUP

Why early?

I think it's important to be comfortable with what early stage really means—more questions than answers, more vision than product, more ideas than data—and to me it's the most personally gratifying stage because investors and founders are able to build a really unique relationship (ideally a trusted friendship) by being there from the beginning. We love meeting founders early, even when it's just people and an idea. We've been very consistent in our strategy, which is laser-focused on the early stage.

Why healthcare?

Initially we were less focused as a fund on healthcare because it seemed specialized. Our deep friendships and relationships led us to our first healthcare investments: Flatiron Health and PillPack. Now about 25% of the fund's focus is healthcare, and much more as a percentage of mind share. As a generalist investor, I love the deeply mission oriented nature of healthcare companies and we're excited to continue invest in companies that help unlock better healthcare access for all.

Advice for founders pitching you?

Make it a conversation and articulate the pain point clearly. A concept that we like is "founder/market fit." Why are you uniquely positioned to tackle this problem? And why did you choose it? How do you see the market differently than others? Why are you going to spend the next 10 years focused on this? What's your unfair advantage? Those are some of the "how" and "why" questions that we find most compelling in a pitch.

ADRIANNA SAMANIEGO

Investor, Female Founders Fund

NY healthcare investments: Kensho, Maven Clinic, Oula, Real, Shine, Tempest, Thrive Global

FEMALE FOUNDERS FUND

What is your fund's philosophy?

We believe in female founders and have created a portfolio of 100% female founders. Today women account for less than 2% of venture financing, but we know there will be many billion-dollar companies built by women.

And why healthcare?

We're generalists but have a thematic approach: B2B, healthcare, fintech, and seed stage. We were early in seeing that women's health should not be described as a niche area. We invested in Maven Clinic and became aware of the critical need for specific solutions in women's health. After Maven Clinic, we were early investors in other category-defining health companies such as Shine (wellness), Real (mental health) and Oula (maternal health).

Tell us more about Oula.

Oula is a modern birthing clinic in Brooklyn using a collaborative approach. Eighty percent of births in the US are low-risk and don't need to be in a hospital. We are also paying attention to the growing disparities in Black and Latino communities. When you look at outcomes for Black women, the maternal mortality rate is high. Oula is looking at ways to use technologies to connect culturally savvy clinicians with underserved populations.

Investors to Know

BRENTON FARGNOLI, MD Partner, AlleyCorp

NY healthcare investments: Affect Therapeutics, Diana Health, Nomad Health, Pearl Health, Reside Health, Tempest, and Voya Health

ALLEYCORP

What should we know about AlleyCorp?

AlleyCorp founds and funds early-stage companies in New York. Founded by long-time entrepreneur, Kevin Ryan, AlleyCorp is unique in structure—we do not have LPs, we often launch companies as co-founders, we gravitate toward investing in first-time founders, and we focus on NYC. Some of the later stage New York companies AlleyCorp has originated include MongoDB, Gilt, BusinessInsider, Zola, and Nomad Health, and we continue to co-found new companies each year.

What investments did you make in 2020?

Although AlleyCorp is industry-agnostic, we placed a much greater emphasis on healthcare in 2020 than in years past. Within healthcare, we made 10 early-stage investments in 2020 in digital health broadly, with a specific focus around value-based care delivery, digital therapeutics, and data infrastructure. These investments ranged from \$1M-\$2M, the majority were in NYC, and a few were incubations which we started from scratch.

Why the laser focus on NYC?

A core part of AlleyCorp's mission since its founding over a decade ago has been to grow entrepreneurship in NYC. The diversity of talent, breadth of industry representation, and strength of creative thinking here is unrivaled. We've developed a robust ecosystem to support first-time founders and early-stage company growth in NYC and continue to be very excited about the future of innovation here.

Investors to Know

JORDAN NOF

Co-Founder & Managing Partner, Tusk Venture Partners

NY healthcare investments: Alma, Care/Of (acquired by Bayer), Ro, Tend

Tusk Venture Partners

What differentiates Tusk?

We sit at the nexus of technology, politics, and regulation. From our point of view, many of healthcare's problems stem from misaligned incentives resulting from antiquated regulations and reimbursement rates. So we focus on investing in companies that are operating in highly regulated markets or creating new business models where no regulatory frameworks exist today.

An example of a company breaking the mold?

Ro, because it's more than just a DTC product company—it's a vertically integrated new type of healthcare system. Though they started with conditions like E.D. (erectile dysfunction) and hair loss, they are quickly moving into managing chronic conditions like diabetes and thyroid issues. Ro is using telehealth and other technologies to manage patients more efficiently within a safer and more convenient environment.

What about health disparities?

Technology's largest benefit to the market often is transparency. Zip code by zip code you can see what COVID's infection rates have been. It's apparent that this has been a tale of two pandemics—the parts of the population that need our help the most are the least likely to get it. Those are the next problems that need to be solved, and we're ready to invest in meaningful solutions.



Why We **V**e **New York**

New York endured a great deal of loss during 2020. This included the death of Milton Glaser, the iconic designer, who created the instantly recognizable I Love New York logo. Here are just a few reasons why our community will continue to build, support, and invest in New York for years to come.

AS A COMPANY, WE COULDN'T BE MORE LONG ON NEW YORK. Our name stems from the first company my roommate and I operated out of our apartment, which was on the corner of 30th and Madison.

STEVEN GUTENTAG Co-Founder & CEO, Thirty Madison



NEW YORK IS STILL THE BEST CITY IN THE WORLD TO MOVE FOR YOUNG

PEOPLE—the talent across all industries is outstanding. It makes sense that technology and e-commerce have come together with healthcare to produce great companies. We have a range of NYC companies—Ezra, Ro, Klara, Parsley Health, Hubble—and will be long on this sector and location.

RICK HEITZMANN Partner, FirstMark Capital

I LOME NEW YORK



NYC IS THE LARGEST HEALTHCARE

MARKET in the US and has been the most active metro area for digital health investment in 2020. We have the investment dollars, infrastructure and diversity of talent to build the leading digital health ecosystem. We're excited about all the activity right in our backyard.

GRAHAM BROWN Partner, Lerer Hippeau



AS A FOREIGNER, I CHOSE TO BUILD MANTRA IN NYC for its pool of tech and healthcare talent, proximity to some of the largest healthcare players in the US, and access to capital.

ED GAUSSEN CEO, Mantra Health



NEW YORK CONTINUES TO BE AN EXCEPTIONAL PLACE for innovation—with the opening of significant amounts of new laboratory space as well as the emergence of new funds dedicated to the life sciences, we expect the entrepreneurial wave to continue in a significant fashion.

JENNIFER HAWKS BLAND CEO, NewYorkBIO



MDCALC BEGAN AS A SMALL PASSION

PROJECT and has grown into the most broadly used medical reference for practical evidence-based tools. New York's incredible healthcare community—and the relationships we've built—have allowed us to evolve in a way that wouldn't be possible in any other city.

JOSEPH HABBOUSHE, MD, MBA Co-Founder & CEO, MDCalc

Building Community

When we founded NYCHBL in 2009, our goal was to build a healthcare ecosystem in New York. A decade – and pandemic – later, that ecosystem has become a community that supports, partners and works together to drive success for its members. Collaboration is truly King...and Queen.

A COMMUNITY OF FEMALE FOUNDERS

is emerging in New York as well as a growing number of start-ups focusing on women's health. It's inspiring to see incumbent Kate Ryder of Maven Clinic so willing to connect with other female founders from Oula and Helania, who are also building women's health tech start-ups.

ADRIANNA SAMANIEGO Investor, Female Founders Fund



ONE OF THE CHALLENGES

START-UPS have is getting on the radar of larger companies. We launched <u>PulsePoint</u> <u>Data Lab</u> to make it easier for health data start-ups to build, launch, and scale. Our goal is to help these innovators with resources like platform access, commercial insights, business skills, legal counsel, and network connections. We're creating an environment to support these companies in achieving the better health outcomes that we all talk about.

SLOAN GAON CEO, PulsePoint STELLAR HEALTH BRINGS PAYORS AND PROVIDERS together to deliver value-based care. In 2020, we collaborated with both Elderplan and Rayn IPA to improve value-based delivery across NYC. Most recently, we partnered with Excelsior Integrated Medical Group in Lower Manhattan to further improve the delivery system and overall patient experience. New York has been a great market for us.

MICHAEL MENG CEO, Stellar Health



Building Community

WE UNDERSTAND HOW DIFFICULT

IT IS for digital health solutions to lock in a pilot. We've developed a tight process under <u>Vytalize Innovation Labs</u> that can deploy solutions within weeks. We take pride in the speed with which we're able to identify, partner, and execute on an elegant solution that advances valuebased care.

FARIS GHAWI CEO, Vytalize Health



ELEKTRA'S MISSION IS TO SMASH THE MENOPAUSE TABOO.

We work with mission-aligned partners to raise awareness. To celebrate World Menopause Month, we partnered with arfa's State of—a DTC menopause skincare brand —to take over <u>menopause.com</u>. The site was featured on the Today Show!

JANNINE VERSI Co-Founder & COO, Elektra Health



NEW YORK IS FULL OF INNOVATIVE, MISSION-DRIVEN

companies, and we are honored to partner with several. These include Ro, where we power the "find in-person care" search; Bennie, where we've integrated into their employee benefit navigation system; and Particle Health, where we make it easier for health systems and health plans to comply with incoming API regulations.

NATE MASLAK

Co-Founder & CEO, Ribbon Health



WE LAUNCHED THE MDCALC \$1M

AD GRANTS PROGRAM to recognize the extraordinary efforts of those supporting clinicians caring for COVID-19 patients. We selected four New York-based companies whose work aligns with our core mission to support providers and improve healthcare: Bluestream Health, Labfinder, Yosi Health, and Vesta Healthcare.

JOSEPH HABBOUSHE, MD, MBA Co-Founder & CEO, MDCalc



Powering Through COVID

Resiliency is the ability to not just survive, but to actually thrive in the face of adversity. During the COVID crisis, these leaders embodied that characteristic in the ways they responded and innovated, pivoting and expanding to meet the needs of their customers — and their own employees.



OUR BUSINESS WAS BUILT FOR THIS

MOMENT—we just thought this moment was going to happen 5 or 10 years from now. Millions of people who had never experienced telemedicine were introduced to it for the first time, creating extreme demand for online healthcare visits. We worked to make sure we had the infrastructure in place to scale while still delivering an exceptional, personalized experience.

STEVEN GUTENTAG Co-Founder & CEO, Thirty Madison



WE PRIORITIZED HEALTH AND SAFETY

FOR OUR TEAM—not just physical health, but mental health too. To stay connected, we kicked off a ton of events including morning meditation, daily planking, and trivia nights. The pandemic created a bit of a silver lining in that everybody was home and navigating this difficult moment together, even when apart. People showed up bringing their whole selves to work, not just their work selves. And that's how it should be.

MICHAEL CUNNION CEO, Remedy Health Media



WE LAUNCHED IN APRIL, at the peak of the first wave of COVID-19. We had to pivot our care delivery immediately, using a range of technologies such as mobile pre-visit registration and text messaging platforms to digitally screen our patients. We saw a dramatic spike in psychosocial needs such food insecurity, financial hardship, depression, and anxiety. We worked closely with our community partners to ensure that patients were connected to services and supports.

SUZETTE BROWN, MD, MPH

Founder & COO, Strong Children Wellness

OUR CORE BUSINESS IS genomics-asservice, but we know PCR testing well. When COVID struck, we responded quickly. We developed a clinical study to test an at-home saliva test for COVID-19, rapidly recruited patients and received FDA approval (Emergency Use Authorization) in June. It was a sprint but a great decision that opened up new ways to work with employers and individuals. The test was even featured on Dr. Oz.

ALEXANDER BISIGNANO Co-Founder & CEO, Phosphorus



Powering Through COVID

"

Quartet

TO HELP OUR STAFF STAY BOTH

physically and mentally healthy, we embedded one of our clinicians on the People team to focus specifically on our own employees. We made changes such as more flexible scheduling, additional vacation time, meetingfree days, and expanded mental health benefits and benefits for parents and guardians of young children.

ROBERT ACCORDINO, MD, MSC Chief Mental Health Officer,

I HAD ONLY BEEN CEO FOR TWO WEEKS

when the pandemic forced us to work from home in early March. My first priority was the health and safety of my employees, but as their new leader I also had to earn their trust. I sent every employee a handwritten card letting them know I was thinking about them and encouraging them to take care of their own mental health during this unprecedented time. Almost one year later, we saw employee engagement increase and virtually no attrition.

CARRIE SIUBUTT CEO, Simple Health



TELEMEDICINE PRESENTED AN

ENTIRELY NEW LANDSCAPE for the vast majority of physicians. We built our own video visit platform from the ground up and began onboarding and credentialing providers across all 50 states, and we did it for free to help the clinicians in a time of need.

MICHAEL BOTTA Co-Founder, Sesame



new health york business city leaders

NYC Digital Health 100



Deloitte.

DELOITTE IS PLEASED TO SPONSOR NYCHBL and would like to congratulate these leading 100 digital innovators. Learn more about Deloitte <u>here</u>.

NYC Digital Health 100 Selection Process: To qualify for inclusion, the company must (1) maintain headquarters or major office in New York region and (2) have raised at least a Series A round by 12/31/2020.

AbleTo	Imagen Technologies	Rightway Healthcare
Aetion	K Health	Risalto
AiCure	Kaden Health	Ro
Alma	Kaia Health	RubiconMD
andros	Kindbody	Rx.Health
BetterPT	Klara	Sesame
Blink Health	Koneksa Health	Shine
Capital Rx	LetsGetChecked	Simple Health
Capsule	Massive Bio	Smart Vision Labs
Cecilia Health	Maven Clinic	Somatix
Cedar	Mavencare	Spring Health
Centivo	MDCalc	Stellar Health
Cipher Health	Medly Pharmacy	SWORD Health
Cityblock Health	Monument	Talkspace
Clarify Health	Nava	Tempest
Click Therapeutics	Nomad Health	Thirty Madison
Cohero Health	Noom	Tia
Covera Health	One Drop	TrialSpark
Cureatr	On-Sight Medical	Truveris
DataCubed Health	Opentrons	TytoCare
Eden Health	Oscar Health	Unite Us
Eligible	Owkin	Valera Health
elovee	Pager	Vault Health
Extend Fertility	Paige	Verana Health
Ezra	Parachute Health	Vericred
Force Therapeutics	Parsley Health	Vesta Healthcare
Fruit Street Health	Particle Health	VirtualHealth
Galileo	Phosphorus	Vytalize Health
H1	Prognos	Wellsheet
Happify Health	PWNHealth	Wellth
Headway	Quartet	Wellthy
Healthify	Rapid SOS	Zipari
HealthReveal	ReferWell	
Heartbeat Health	Ribbon Health	

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What Are Your **Super Powers?**

Often in healthcare we see start-ups offering a solution in need of a problem. Then there are companies developing products, services and technologies that address real unmet needs. Meet a few New York start-ups striving to make healthcare more accessible, cost-effective and personalized. OUR MISSION AT EDEN HEALTH IS TO CREATE A WORLD where every person has a relationship with a trusted healthcare provider. We do this by delivering relationship-based virtual care, seamless patient navigation, comprehensive care coordination, and integration of virtual and in-person care.

MATT MCCAMBRIDGE Co-Founder & CEO, Eden Health



TIA IS ARCHITECTING A FUNDAMENTALLY NEW MODEL OF CARE for the most powerful customer in healthcare: women.

Our "Medical home" model is both *integrated*—we fuse gynecology, primary care, mental health, acupuncture into a one-stop-shop—and *integrative*, considering the diagnosis, treatment and prevention of the female patient through a lifestyle-centric, sex-specific lens.

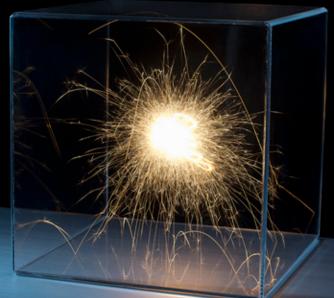
CAROLYN WITTE Co-Founder & CEO, Tia



CENTIVO IS A NEW TYPE OF DIGITAL HEALTH PLAN SOLUTION

custom designed for self-funded employers. They're looking for three key things: sustainable cost-savings, highquality care for their employees, and a plan that's easy to use. We're laserfocused on managing employer costs and offer absolute financial transparency in our fee structure.

ASHOK SUBRAMANIAN Co-Founder & CEO, Centivo



What Are Your Super Powers?

WE'RE HERE TO SERVE ALL

THOSE who seek to build a family. Kindbody provides end-to-end care, from prepartum to return to work, for all. We believe that fertility treatment should be affordable and accessible to all, not just the wealthy few.

GINA BARTASI Founder & CEO, Kindbody



PROVIDERS HAVE NEVER NEEDED

VALUE-BASED CARE MORE. What differentiates Vytalize is that we don't silo ourselves, we simply do what is needed to improve health outcomes and lower costs. Our solution combines payer, provider, and digital health, all-in-one because all of these pieces are needed.

FARIS GHAWI CEO, Vytalize Health

EVERYTHING WE DO IS BUILT FOR HUMAN FIRST. We use technology and world-leading experts to create experiences and solutions that are tailored to people addressing

and managing their health issues. Our platform rivals seeing a specialist in person and encourages patients to stay connected with the same physician to build an ongoing relationship.

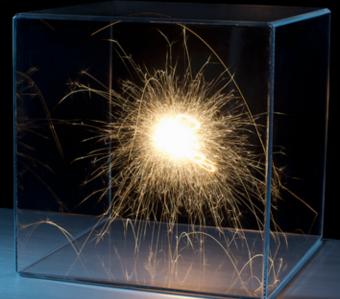
STEVEN GUTENTAG

Co-Founder & CEO, Thirty Madison



FULL-BODY MRIS HAVE EXISTED FOR A WHILE, but the cost ranged from \$10,000 to \$15,000. With Ezra, we brought it down to \$2,000 by using software and building AI to make the scans and interpretation faster. We've created a way to screen for cancer that's fast and accurate, but we are still working to make it more affordable. I dream of a future with a \$500 full-body scan.

EMI GAL Co-Founder & CEO, Ezra



Health Equity

The pandemic highlighted the vast health disparities and inequities that exist in the country, particularly for Black and Brown communities. The move to virtual care only exacerbated the problem, because not all people have equal access to broadband and mobile technologies. Healthcare and business leaders in New York are identifying and developing new ways to close these gaps.

Below is an edited portion of an <u>Open Letter</u> written by Gil Addo, CEO of RubiconMD in September 2020. He's also a member of <u>HT4M</u> (HealthTech4Medicaid) focused on bringing critical new technology to Medicaid enrollees.

Can Telehealth be Saved from Systemic Racism?

Alongside COVID-19, America has been slowly acknowledging the public health crisis of racial injustice. Even prior to COVID, structural racism had a devastating impact on healthcare, education, employment, housing, and infrastructure in Black and Brown communities. Health outcomes have lagged commensurately and dramatically. This is the house that COVID-19 entered. A house poorly equipped, staffed and supported for routine healthcare. Telehealth doesn't fix the larger problem. Layered on top of our existing inadequate system, telehealth exacerbates the problem. Only investment to combat the underlying system will allow telehealth to reach its true potential of enhanced access to care.

Communities of color and low-income households are frequently confronted by a digital divide with inadequate access to computers, high-bandwidth internet, and remote monitoring devices. While 64% of households with an annual income of \$100,000 or greater have access to a smartphone, desktop or laptop computer, broadband internet, and a tablet, only 18% of households making less than \$30,000 have the same access.

The solution must then be multipronged. First, there needs to be awareness, understanding and acceptance that systemic racism has massively contributed to the chronic underinvestment in the healthcare system of our communities of color. Second, national and local plans must be developed, tested and scaled to comprehensively address deficiencies and gaps. Finally, investment is necessary to address fundamental gaps in the digital divide and infrastructure to support our community and safety net health system.

Telehealth leaders cannot sit idly by waiting for broad infrastructure changes to come to fruition. As an industry, we must develop programs and services which affirmatively combat structural racism and ensure equitable access.



In hope,

Gil Addo

GIL ADDO

Health Equity

AS THE PANDEMIC HIT, MOUNT SINAI'S CARE MANAGEMENT TEAMS BEGAN

RECEIVING CALLS from the community alerting them to behavioral health issues such as increased suicidality and anxiety. With in-person visits canceled due to COVID, services were being provided virtually. It soon became clear that many of the families lacked broadband access, which prevented them from getting care.

We realized that education had solved that problem earlier in the spring by distributing Wi-Fi-enabled devices, which gave us the idea to piggyback on their infrastructure. We partnered with the Dream School, a public charter school in East Harlem that serves about 1,200 children K-12. We heard from Dream that asthma and behavioral health education were big priorities, so we hosted online forums with primary care doctors and specialists to not only provide education but allow opportunity for families to ask questions directly to the clinicians. We are working on additional projects with the Dream School to empower families to use technology for both medical and social care needs so that they gain confidence in managing their care and the challenges they face every day.

ROBERT FIELDS, MD

SVP and Chief Medical Officer of Population Health, Mount Sinai Health System



THOUGH WE NEEDED NO REMINDER, THIS PANDEMIC

CONTINUES to show us all that the people who will always suffer the most are communities of color, folks with disabilities, those who are LGBTQIA+, and people with limited economic means. There are 110 million people in the US living in lowerincome communities that desperately need better-integrated care. They need a revolution. And they need it now.

TOYIN AJAYI, MD

Co-Founder & Chief Health Officer, Cityblock Health

DURING COVID, SOME HEALTH PLANS TEMPORARILY BEGAN TO PAY for telehealth visits on par with in-person care, but they only reimbursed video visits, not care via telephone. Many patients we see do not have access to video-enabled devices and can't use Zoom or Google Hangouts. The notion of only reimbursing video speaks to the underlying socioeconomic issues of access and equity.

ROBERT ACCORDINO, MD, MSC Chief Mental Health Officer, Quartet DOCTOR

Mental Health

2020 was the year conversations about depression, anxiety and addiction went mainstream. People across every demographic experienced isolation, loneliness and depression, including children and teens. With one of the highest concentrations of therapists per capita in the country, New York has long been a center of mental health. Now it's rapidly becoming the epicenter of digital mental health, too. Clinicians and entrepreneurs are introducing new models that address age old problems of access, siloed care and lack of insurance reimbursement.

NEW YORK HAS A RICH AND STORIED TRADITION IN MENTAL HEALTH and psychiatry dating back to Freud's visit to NYC in 1909. It's no surprise that as health technology has grown in NYC, an emphasis on mental health start-ups has become evident. I've spoken with many founders whose own positive experiences with therapy prompted them to try to use technology to make mental health care more accessible for others.

RAVI N. SHAH, MD, MBA Founding Director, Columbia Mind Ventures

PEOPLE ARE GOING TO CONTINUE TO FEEL more comfortable talking about

mental health, so we expect to see an ongoing reduction in stigma over time. As the conversation around mental health continues to grow and take shape, we'll see more organizations looking for solutions that cover the full spectrum of mental health—not just one-size-fits-all solutions.

APRIL KOH Co-Founder & CEO, Spring Health

TIA HAS ALWAYS BELIEVED THAT MENTAL HEALTH IS "CORE" TO

WOMEN'S HEALTH and should be integrated into a primary care, medical home model vs. delivered in a silo—both due to the higher rates of anxiety and depression in women, as well as the many female-specific behavioral healthcare challenges like sexual trauma that all too many women experience.

CAROLYN WITTE Co-Founder & CEO, Tia



Mental Health

WE GREW OUT OF A NEED FOR

INTEGRATED CARE. Typically, care of the mind and body take place in different offices and different EMR systems. But we know that the best care for patients combines physical and mental health, and we're solving for that problem by creating care for the whole person, under one virtual roof.

ROBERT ACCORDINO, MD, MSC Chief Mental Health Officer, Quartet



OUR UNIQUE 'REVERSE' INTEGRATED CARE

MODEL is how SCW supports children and families with complex medical, behavioral, and social needs. By embedding primary care hubs into trusted communitybased organizations that offer cross-disciplinary teams of social service and mental health providers, we can deliver care that is holistic, coordinated, and community-engaged.

NICOLE BROWN, MD, MPH Founder & Chief Health Officer, Strong Children Wellness



OUR TRUE INNOVATION LIES IN OUR ABILITY TO DECREASE THE COST of

collaboration between on-campus care settings and our virtual network of providers. Our integrated telemental health programs improve clinical outcomes and reduce time to access care for universities of all sizes.

ED GAUSSEN CEO, Mantra Health



WE'RE UNIQUE IN OUR USE OF DATA AND ANALYTICS to identify at risk individuals and align each person's needs with a highly personalized program. We've long believed that it's important to find the right blend of human and digital care to meet the needs of a complex and heterogeneous group of mental health patients, who may require different interventions. Our longstanding focus on outcomes has enabled us to prove the impact on both physical and behavioral health and overall cost of care.

REENA PANDE, MD Chief Medical Officer, AbleTo



NEW YORK Mental Health Start-ups to Watch

With so many start-ups entering the space, it can be confusing to understand the different offerings. While this list is not exhaustive, it represents a good cross-section of the companies within the ecosystem.

Pioneer in delivering high-quality, outcomes-based mental health			
care to improve behavioral and physical health and lower medical costs.	Health Plans, Employers		\$73M
Matching platform for mental health providers and patients. Offers administrative and marketing support to providers.	Providers		\$14M
Digital therapeutic platform that empowers users to improve their mental and physical health.	Employers, Health Plans	A D S	\$46M
Building national network of therapists who accept insurance.	Health Plans, Providers		\$32M
Virtual Medication Assisted Treatment (vMAT™) platform provides online visits, group therapy, medication management.	Health Plans, Health Systems	SUD	\$19M
Telemental healthcare for students, integrating with universities' existing platform/system.	Universities, Health Plans, Consumers		\$4M
Platform (technology, content, space) that enables licensed psychiatrists to administer guided ketamine therapy.	Consumers		\$4M
Multiple locations throughout NY for same-day therapy and medication management.	Health Plans, Consumers		\$1.5M
Online platform providing affordable medical treatment (therapy, medication) and peer support for alcohol addiction.	Consumers	AUD	\$18M
Virtual and in-person therapy, coaching, support groups, and skills workshops.	Health Plans, Consumers		\$14.5M
Online treatment for opioid dependence, based on medication- assisted treatment (MAT).	Consumers	SUD	\$3.5M
Wellness supplements and sleep delivery solutions intended to improve long-term sleep health.	Consumers	0	\$9.5M
Platform that makes it easier for people to get the best mental health care for them.	Health Plans, Health Systems, Providers		\$155M
Focused on mental wellbeing. Monthly membership includes on-demand therapy pathways, tracking, events and roundtables.	Consumers	AS	\$6M
Mental health benefits platform for employers. Precision Mental Healthcare model matches employee with care and dedicated Care Navigator.	Employers		\$106M
Online therapy and psychiatric treatment through its network of licensed therapists and prescribers.	Consumers, Employers, Health Plans		\$410M
Personalized recovery plans for alcohol addiction. Provides education, support, and community via membership model.	Consumers	AUD	\$14M
Telemental health offering team-based care for coaching and therapy, medication management and psychiatry.	Employers, Health Systems, Health Plans		\$11.5M
	Matching platform for mental health providers and patients. Offers administrative and marketing support to providers. Digital therapeutic platform that empowers users to improve their mental and physical health. Building national network of therapists who accept insurance. Virtual Medication Assisted Treatment (vMAT™) platform provides online visits, group therapy, medication management. Telemental healthcare for students, integrating with universities' existing platform/system. Platform (technology, content, space) that enables licensed psychiatrists to administer guided ketamine therapy. Multiple locations throughout NY for same-day therapy and medication management. Online platform providing affordable medical treatment (therapy, medication) and peer support for alcohol addiction. Virtual and in-person therapy, coaching, support groups, and skills workshops. Online treatment for opioid dependence, based on medication-assisted treatment (MAT). Wellness supplements and sleep delivery solutions intended to improve long-term sleep health. Platform that makes it easier for people to get the best mental health care for them. Focused on mental wellbeing. Monthly membership includes on-demand therapy pathways, tracking, events and roundtables. Mental health benefits platform for employers. Precision Mental Healthcare model matches employee with care and dedicated Care Navigator. Online therapy and psychiatric treatment through its network of licensed therapists and prescribers.	costs.Costs.Matching platform for mental health providers and patients.ProvidersDigital therapeutic platform that empowers users to improve their mental and physical health.Employers, Health PlansBuilding national network of therapists who accept insurance.Health Plans, ProvidersVirtual Medication Assisted Treatment (MAT") platform provides online visits, group therapy, medication management.Health Plans, Health SystemsTelemental healthcare for students, integrating with universities' psychiatrists to administer guided ketamine therapy.ConsumersMultiple locations throughout NY for same-day therapy and medication management.Health Plans, ConsumersOnline platform providing affordable medical treatment (therapy, medication) and peer support for alcohol addiction.ConsumersOnline treatment for opioid dependence, based on medication- assisted treatment for opioid dependence, based on medication- improve long-term sleep health.ConsumersPlatform that makes it easier for people to get the best mental health Plans, ProvidersProvidersFocused on mental wellbeing. Monthly membership includes on-demand therapy pathway, tracking, events and roundtables.ConsumersConsumersConsumersConsumersPlatform that makes it patform for employers. Precision Mental health care for them.ConsumersConsumersConsumersConsumersFocused on mental wellbeing. Monthly membership includes on-demand therapy pathway, tracking, events and roundtables.Consumers, Employers, Health Plans, Employers, Health PlansPlatform that makes it easier for alcohol a	costs.Final Restrict StateOffers administrative and marketing support to providers.ProvidersProvidersImage: State St









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ALEXIS GILROY Partner, Jones Day



MAUREEN BENNETT Partner, Jones Day



What's in Store **For 2021**?

In 2020, swift regulatory changes helped make widespread adoption of telehealth and virtual care possible. We sat down with Alexis Gilroy and Maureen Bennett, two legal experts at Jones Day, to discuss the future regulatory landscape for these technologies in both care delivery and clinical trials. For ongoing regulatory insights and tracking, subscribe to <u>Vital Signs</u>, a quarterly publication tracking the latest must-know information.

$igodoldsymbol{\Theta}$ What are you expecting this year on telemedicine legal and regulatory change?

In the federal sphere, it is all about reimbursement. Although we have been operating during the public health emergency under very helpful waivers that significantly expanded telemedicine coverage to Medicare beneficiaries, post-emergency federal legislation will be necessary to remove decades-old statutory limitations that narrowed Medicare telehealth to patients at certain facilities in rural areas. Given recent policy activity and Congressional hearings, stakeholders believe some permanent legislative change on Medicare coverage is possible in 2021. As to states (those with the primary legal authority over health provider regulation and thus telemedicine), the annual legislative cycle kicked-off with a running start on various telemedicine related topics - from telehealth modality (e.g., video, audio-only, async) changes proposed by some states to a focus on Medicaid coverage of telehealth and cross-state licensure in others. So, buckle-up, we are in for lots of telehealth policy in 2021!

Are you seeing expanded applications for the use of telemedicine modalities beyond clinical care?

A Yes, indeed! In recent years, industry stakeholders have increasingly pursued a range of "decentralized", "remote" or "virtual" clinical trial protocols, which involve the leveraging of wearables and other remote data gathering and communication technologies, together with the deployment of home health personnel to perform certain at home trial procedures. These developments implicate both FDA and state regulation for US state trials, and there has been broad acknowledgment that further regulatory clarity is needed going forward. In that regard, the onset of COVID in 2020 did provide impetus for FDA to issue guidance on the conduct of trials remotely from traditional "brick and mortar" sites. FDA's guidance provided numerous recommendations for sponsors, investigators and IRBs to consider for adapting ongoing trials or when preparing for the launch of a new trial, during the COVID-19 public health emergency, with subject safety and data integrity being paramount considerations. Among many other issues, FDA addresses the potential use of telemedicine modalities for remote trial visits. Other international regulatory authorities, including the EMA and MHRA, also have issued guidance for the conduct of clinical trials during the COVID-19 pandemic.

Although certain COVID-19 related guidance may expire at the end of the public health emergency, some may be extended in one form or another. There is increasing enthusiasm for the flexibility and efficiencies associated with at home clinical trial procedures, where appropriate. For example, elderly or physically challenged subjects and their caregivers may appreciate the option to participate in clinical trials from home and communicating with the study doctor through videoconference. Telemedicine can also move forward other important objectives, including increasing the diversity of clinical trial participants to achieve greater equity in health outcomes.

Therapeutics & Diagnostics

New York once again proved its position as leader in therapeutics when Pfizer became the first company to emerge with a vaccine for COVID-19. But smaller NYC biotechs made equally important contributions. Some leveraged their experience and pivoted to provide immediate solutions such as face masks and at-home testing. Others stayed focused on their core businesses and found ways to adapt to the new remote reality. Prevail Therapeutics ended the year with a great exit: \$1B sale to Lilly. Several companies went public, some through traditional IPO like Schrodinger, Zentalis and Delcath Systems, others through a SPAC merger like Nuvation Bio and 180 Life Sciences.

BIOTECH COMPANIES LIKE OURS REQUIRE PHYSICAL LABS TO GENERATE REVENUE, but we learned that there were many ways to keep our employees productive during the lockdown. For instance, we began digging deeper into our datasets and research syntheses, by which we were able to improve our efficiency. We'll continue to do so post-COVID.

MISTI USHIO, PHD CEO, TARA Biosystems

o ST so Par

IN THE WAKE OF THE PANDEMIC,

NEW YORK opened its arms to partner with nimble companies that generated everything from masks to diagnostic tests and even therapeutics. This agile mindset will accelerate NY's attractiveness as a premier hub for incubating and launching biotech companies for years to come.

STACEY SELTZER Partner, Aisling Capital



WE LOOK SPECIFICALLY AT CONSTITUTIONAL GENETICS-WHAT MAKES UP YOUR DNA-

the genes you inherited from your parents. In most specialties, physicians typically do not order a genetic test until you're very sick due to lack of insurance coverage for preventive screening. While many conditions are avoidable, they're generally not discovered until there's been an event. Our goal is to change the care paradigm so that we screen everyone before there's a problem.

ALEXANDER BISIGNANO Co-Founder & CEO, Phosphorus

Therapeutics & Diagnostics

THE SUCCESS WITH DEVELOPMENT OF THE CORONAVIRUS VACCINES has

been simply remarkable. It's brought both a reputational boost, and a boost in overall investments, and it has made it easier for small companies like ours to raise the capital needed to continue innovating.

MATTHEW PRICE

Co-Founder & COO, Phosplatin Therapeutics



MANY SMALLER NY-BASED COMPANIES QUICKLY REDEPLOYED THEIR ASSETS

and operations to address immediate needs during the global pandemic. Shapeways in Long Island City began 3D printing face shields, a team from New Lab in Brooklyn developed a low-cost bridge ventilator and Opentrons was selected to run the Pandemic Response Lab, dedicated to processing COVID-19 tests, at the Alexandria Center.

MARIA GOTSCH

President & CEO, Partnership Fund for New York City

THE RESPONSE TO COVID ACROSS NEW YORK WAS AMAZING IN NEARLY EVERY

RESPECT. Among the big successes in diagnostics are New York companies like Mirimus and DETECT by Homodeus, both of which are operating at the forefront of test development; and Sema4 and the New York Genome Center, which are playing active roles in both the discovery of genomic variants and keeping the scientific community current on advancements in the field from across the globe.

JENNIFER HAWKS BLAND CEO, NewYorkBIO

Healthcare SPACs

Special purchase acquisition companies (SPACs) exploded in popularity across all industries in 2020, and healthcare was no exception. SPACs are an alternative to a traditional IPO in which a blank-check company (i.e. SPAC) merges with a private business to form a publicly-traded entity. New York investors were part of this trend: investment banks, hedge funds, private equity and venture capital firms all created SPACs during the year.

A significant transaction that helped catalyze the popularity of healthcare SPACs occurred in 2019, when New York-based Immunovant merged with Health Sciences Acquisition Corp. Since its IPO, Immunovant has been one of the top performers on the NASDAQ, delivering 4x returns to investors.

There are both advantages and drawbacks of SPACs relative to traditional IPOs. We spoke with three investors to learn more about when and how SPACs work for emerging healthcare companies.



JONAS GROSSMAN President, Chardan

Why have SPACs become so popular?

We've always been big believers in SPACs because you can use them as a tool to bring companies public earlier. SPACs allow you to marry due diligence without a crossover round before the IPO, leading to less dilution for private companies. In early 2020, I predicted there would be six biotech SPACs, and people thought I was crazy. Now as of year-end, there are 34 healthcare-focused SPACs seeking targets, 19 of those are biotech specific, four have announced transactions, and six have closed.

And healthcare SPACs?

Historically, SPACs were not focused on healthcare, aside from a handful of healthcare services. An easy-to-understand business is usually the best opportunity for SPACs—traditionally that's meant consumer goods and industrials. Now there's an appetite for growth stories, so biotech SPACs have taken off. In particular, the Health Sciences Acquisition Corp/ Immunovant (IMVT) deal woke people up—they started to realize the potential in biotech. Now, lots of SPACs are looking at digital health and healthcare IT as well, and I expect that to continue going forward.

What's one thing we should know about Chardan?

Chardan has established a reputation for "financing the frontier of healthcare" by focusing on industry disruption and innovation. Seventy percent of our focus is on disruptive biotech sectors like genetic medicines, cell therapy, and microbiome medicines. We also see potential in devices, diagnostics, digital health, and other burgeoning areas-we're always looking for growth companies with technology or an asset that have the potential to generate 5-10x investment returns, by creating and sharing in real value for society.



RAJIV SHUKLA Chairman & CEO, Alpha Healthcare Acquisition Corp.

What are the advantages of taking a company public via a SPAC?

SPACs are ideally suited for high-growth companies where it is important to be able to provide growth forecasts which is not permitted in regular IPOs. The SPAC process permits a target company to firm up financing before a public announcement. Whereas in an IPO, on account of having to file terms publicly before book building, targets are either over-conservative in valuing themselves or forced to publicly accept a diminution in terms or, worse, shelve the IPO after conducting a public process. One can put together incentive structures linked with future growth which is not possible in an IPO.

Which areas of healthcare are most attractive for SPACs?

Sectors where one is (a) experiencing substantial disruptive growth i.e. the investment thesis is future-oriented thus more time is needed for diligence (b) where there is appreciable public/private arbitrage (c) there are large private companies with limited IPO windows—in the past, device and diagnostic companies have fit the bill.

Q What is your experience with SPACs?

We closed a merger with DermTech (DMTK), a molecular cancer diagnostics company in 2019 which is trading at 11x the transaction price as of early February. We recently announced a \$1.1 billion merger with Humacyte, a universally implantable human tissue regenerative medicine company which has attracted significant support from marquee investors.



JOSH DEFONZO CEO, Lux Health Tech Acquisition Corp.

Why did you create Lux Health Tech Acquisition Corp?

We felt the SPAC was a really good way to disrupt healthcare and technology. Our thesis is that a funding gap exists across healthcare technology which impacts devices, digital health, lab equipment, diagnostics and telehealth. Biotech is less of a focus because many other SPACs are in that sector. In health tech, many start-ups become tuck-in acquisitions to the incumbent companies, leaving a lot of opportunity on the table. These start-ups develop their first application but don't have the capital to propel the business further. That's where we come in.



For the right company, SPACs provide critical benefits. Fundraising is treated more similar to a private raise than public company offering. The investors are all having conversations about the company's direction, which creates more alignment. We think the SPAC is a wonderful opportunity to provide curated go-public experiences.

"Our thesis is that a funding gap exists across healthcare technology which impacts devices, digital health, lab equipment, diagnostics and telehealth."

JOSH DEFONZO CEO, Lux Health Tech Acquisition Corp.



We really like companies with platform technologies. The ability to scale those existing platforms and develop or acquire content providers is compelling. We also like when a company's core technology can be extended into other areas.

A FEW RECENT EXAMPLES OF REVERSE MERGERS IN THE NEW YORK AREA:

Clover Health

Merged with Social Capital Hedosophia Holdings Corp in \$7.3B deal



Merged with Panacea Acquisition in \$1.3B deal



Merged with KBL Merger Corp in \$175M deal



Merged with Churchill Capital Corp III in \$11B deal

Where Will the Money **Flow Next?**

It's been said healthcare transformed more in five months during COVID than it has in the past 10 years. Now that the wheels are turning, and money is flowing, where will we see new investment? What trends are on the horizon? These leaders offer a look ahead.

THE MARKET WILL INCREASINGLY FAVOR TELEMEDICINE MODELS that offer

full-stack digital services, including different modalities of care, integrative and longitudinal care, those focused on specific verticals and life phases (like menopause!) and chronic conditions.

JANNINE VERSI

Co-Founder & COO, Elektra Health



THE SPEND ON MUSCULOSKELETAL (MSK) ALONE is approximately \$200 billion

in the US and most of that care is delivered in person. The nuance on how care is delivered in certain verticals (like MSK for example) will require platforms to be built for specific use cases. As a significant amount of care migrates from in person to virtual, there will be enormous potential to create expansive vertical-specific platforms.

RYAN DARNELL

Managing Partner, Max Ventures

IN 2021 WE EXPECT TO SEE THE PRACTICE OF MEDICINE EVOLVE more to

precision medicine, enabled by the widespread availability of molecular diagnostics. Key drivers include increased access to and declining cost of gene sequencing; new drug discoveries, and real-world data on biomarkers that help match patients to the best therapies.

CHARLES BOORADY Managing Partner,

Health Catalyst Capital



ONE OF THE MEGA-TRENDS WE'VE SEEN OVER THE PAST 5-7 YEARS is the rise of direct-to-consumer healthcare. Highdeductible plans are increasing, so people are paying more out of pocket. As a result, they are taking more control over their health, looking at what they're spending and why. COVID only accelerated this trend.

RICK HEITZMANN Partner, FirstMark Capital



Where Will the Money Flow Next?

THERE'S BEEN A SURGE IN DEMAND FOR MENTAL HEALTH

SUPPORT as a result of COVID-19 and the events of 2020. The continued growth and popularity of digital solutions will be a major trend, as more and more organizations and individuals look for solutions that are both effective and easy to access.

APRIL KOH

Co-Founder & CEO, Spring Health



FIVE YEARS FROM NOW I HOPE TO SEE ON-DEMAND,

PRECISION INSIGHTS as ubiquitous in healthcare as the Bloomberg Terminal is in banking. In 2021, we'll see more organizations switch off traditional, manual analytics reporting and move to highly automated platforms that deliver precise, micro-level insights at lightning-fast speed.

JEAN DROUIN, MD CEO, Clarify Health



WE'RE LOOKING INTO THE CONFLUENCE OF WOMEN'S HEALTH AND AGING. Menopause is a \$600 billion marketplace. A lot of women have been

silently suffering, and we're being thoughtful about the problems and solutions for our aging population.

ADRIANNA SAMANIEGO Investor, Female Founders Fund

On the **Frontlines**

In December, NYCHBL hosted <u>Healthcare Rocks!</u>, a virtual concert honoring the heroes of 2020. It was a magical night that included candid conversations with clinicians who were on the frontlines battling COVID-19. We've captured their reflections below and added several more. Their strength, compassion and hope will inspire you.

WHAT STOOD OUT THE MOST WAS

THE PANDEMIC of racism that came out of this pandemic. Disproportionately, Black and Brown people have died from the pandemic, not because of the virus itself, more because of systematic racism. I work in a very poor community—a level 1 trauma center in Brooklyn —and there are many institutional disparities. Until we have these painful conversations that racism is a public health issue, we're not going to move past this level of uncertainty.

ARABIA MOLLETTE, MD

Emergency Medicine Physician, Brookdale University Hospital



WHEN THE PANDEMIC HIT IN MARCH,

Mount Sinai was one of the first hospitals to jump into action, and many medical students joined in to help. We organized one of the largest medical school responses in the country in close partnership with our hospital system, helping with everything from coordinating PPE donations, triaging telehealth visits to staffing pharmacy sites and boosting our COVID-19 testing capabilities.

SHERMAN LEUNG

Medical Student, Icahn School of Medicine at Mount Sinai and Associate, AlleyCorp

AFTER 35 YEARS IN PRIVATE

PRACTICE, I arrived as a volunteer at Bellevue in April 2020. Being resolute in my desire to do everything for each patient, I mustered my energy to move the COVID-19 mountain. However, the virus was solid, alien, unforgiving, and so deadly. For each patient, I felt immeasurable sadness that I couldn't do more. I spent time with families hoping to be of comfort. It reminded me that empathy, humility, and kindness are vital in the care of each patient, especially when we do not have a cure.

ANNETTE OSHER, MD Cardiologist



SERVING AS A FRONTLINE HCW during the first wave of the pandemic was a surreal experience. I held patients' hands while increasing their oxygen, helped them FaceTime with their families when visitors weren't allowed in, and provided rehab to patients as they took their first steps after being on a ventilator for weeks. We were driven by pure adrenaline to save lives during the NYC surge.

SHIELD

SARAH URKE, PT Acute Care Physical Therapist, NewYork-Presbyterian

IN MARCH, I WAS DEPLOYED IMMEDIATELY to

Elmhurst, a city hospital, that operates on a shoestring budget and is always at maximum capacity. Having hundreds of COVID patients per day flooding into the ER completely overwhelmed their system. Elmhurst became the epicenter of the epicenter... While we saw a lot of suffering, we also witnessed some incredible human resilience. Everybody in the hospital pulled together with heroic effort, from the attendings in their sixties and seventies, to med students and nurses, right down to the cafeteria workers and janitors who didn't miss a beat.

BEN GOLD, MD

Cardiology Fellow, Mount Sinai Health System



SINCE THE PANDEMIC STARTED my role as a nurse has changed. We now wear an invisible cape. Many see us as heroes, but we are doing the work we are trained to dotaking care of people and saving lives. We saw the Navajo come together to help protect elders and those most vulnerable to COVID-19, as well as bring food, water, and supplies to those in need. The courage and resiliency of the workers on the frontlines when the pandemic hit were a beacon of hope for what was to come.

VIOLETA MICHEL, RN

Pediatric Nurse, Navajo Nation, Indian Health Service in Shiprock, NM (raised in Manhattan)



VOLUNTEERING AT THE BEGINNING OF THE PANDEMIC, WE WORKED SIDE BY SIDE IN THE ICU. We met health care providers from around the country who came to NYC to fight this disease we knew so little about. We pooled our common knowledge and learned medicine in real time. We grieved each other's losses and celebrated all the victories... including getting married in late 2020!

ROSHINI MALANEY, DO Cardiologist, Staten Island University Hospital,

Northwell Health

VIRAL PATEL, MD Founder and CEO, Radish Health

ONE OF THE FLOORS OF THE CHILDREN'S HOSPITAL was

converted for adults, to take care of coronavirus patients. Many of us hadn't taken care of adult patients in close to a decade, so we had to relearn adult medicine. It was certainly a trying time with more patient death than many of us have seen in our careers. But there was also so much humanity that came into it. You saved patients, comforted patients, and said goodbye to patients when you needed to. We had the best of outcomes and the worst of outcomes, and you had to deal with that as a physician.

RAY LORENZONI, MD

SHIELD

Fellow, Pediatric Cardiology, Children's Hospital at Montefiore

The Last Word

BY FAR THE BIGGEST LEARNING is that the success of any start-up lies within the quality of the team. An A+ team will build an A+ product; a B team will build a mediocre product.

EMI GAL

Co-Founder & CEO, Ezra



OVER \$250 BILLION OF ANNUAL HEALTH CARE DELIVERY is going to be shifted from in-person to online soon. The underlying APIs and technologies needed to accelerate digital adoption and support the new virtual healthcare ecosystem represent high-return opportunities for both entrepreneurs and investors.

RYAN DARNELL Managing Partner, Max Ventures



THE MOST IMPORTANT THING TO UNDERSTAND IN THE U.S. HEALTHCARE

SYSTEM is "Who pays?" and "Who are you providing value to?" Often those are different entities. If you conflate the two, it's difficult to be successful, so it's necessary to find approaches that begin to merge those two interests.

MATT MCCAMBRIDGE

Co-Founder & CEO, Eden Health



WE'VE ALWAYS HAD AN EMPHASIS ON CULTURE—our guiding principles are embedded throughout the company. We've been a sourcing and staffing machine from day one. In 2020, we had over 13,000 applicants and hired 119 people, less than 1%. My belief is that you never compromise on hiring.

MARK NATHAN Founder & CEO, Zipari



IN 2020 WE SAW OUR NOTORIOUSLY CONSERVATIVE INDUSTRY ADOPT TECHNOLOGY AND ANALYTICS with

unprecedented speed. In record time, providers switched to televisits, health plans remodeled their forecasts, and pharma companies developed vaccines. It makes me hopeful that we have reset the trajectory of innovation and adoption of technology and analytics in healthcare for good.

JEAN DROUIN, MD CEO, Clarify Health



WE ARE ON A MISSION TO DEMOCRATIZE WOMEN'S HEALTH.

Everything we do is driven by giving women access to care. There's so much talk about access, but not a lot of follow up. One of the key things I've told my team, "Let's stop talking about it and let's just start doing it.

CARRIE SIUBUTT CEO, Simple Health



TEAM AND METHODOLOGY

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ABOUT NYC HEALTH BUSINESS LEADERS

We are a professional community of 4,500+ entrepreneurs, executives, investors and clinicians who are leading, innovating and driving healthcare forward. Over the past decade, NYCHBL has helped transform New York into an epicenter of healthcare innovation.

OUR MISSION

Increase the visibility of New York as a thriving center of healthcare innovation.

Encourage communication across healthcare sectors to break down silos and foster collaboration.

Provide healthcare leaders with access to thought-provoking ideas and people to further their careers and businesses.

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SURVEY METHODOLOGY

Data used in the creation of this report was obtained from a variety of sources including but not limited to company press releases, EDGAR filings, Crunchbase, Pitchbook, CB Insights and covered the period from 01/01/2020 to 12/31/2020. A company was included if it (1) listed New York City as its corporate headquarters or a major office (2) the company received seed, angel, early-stage or late-stage funding of at least \$1M during the period 01/01/2020 to 12/31/2020. Deal date was used to determine placement in 2020. Companies that won grant funding, prize money or acceptance into accelerators/incubators were not included in the analysis nor companies that received less than \$1M in total funding.

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This report is provided for informational purposes only. Where possible, we verified information obtained through publicly-available sources (e.g. company press releases, news reports). If you find an error in the report, please contact us at info@nychbl.com so that we can correct it.



