ARSENAL
CAPITAL PARTNERS

A NEW ERA IN TELEHEALTH

In 2020, the Arsenal Capital Partners' healthcare team hosted a telehealth-focused workshop to explore opportunities and thematic initiatives within the telehealth subsector. Attending were industry leaders with distinct perspectives across various functional areas: Integrated Delivery Networks (IDNs), Health Systems, Payers, Life Sciences, and Healthcare Technology to share their respective expert insights at the workshop.

ARSENAL'S TELEHEALTH WORKSHOP

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Key Takeaways

- Despite regulatory and payment uncertainty, we expect telehealth adoption to remain significantly higher than prior to the COVID-19 pandemic. Major adoption tailwinds have propelled telehealth's ubiquity, though many solutions remain immature with disparate platforms that are insufficiently tailored to meet unique healthcare needs.
- Reimbursement and regulatory uncertainty are key risks to telehealth providers. Technological and operational integration also remain top considerations.
- Successful telehealth solutions have focused more on improving care than offering unique technology, as EMR integration will soon be universal. Scalability and customization should become the key drivers of sustained adoption beyond the current pandemic.
- Functional focus on coordinating care and enabling hospital-at-home care models are emerging telehealth trends for the foreseeable future. Care coordination services will remain important to overcome telehealth's inherent challenges of further fragmenting care delivery.
- Several clinical use cases, including remote patient monitoring and virtual care for behavioral health, are becoming more widely adopted with clear value propositions.
- Consolidation in the telehealth market is accelerating, but still involves significant risk tolerance. Recent telehealth demand spikes have infused new capital into the market beyond traditional venture capital sources, which is a leading indicator for increased consolidation.

COMMENTARY

Telehealth is the remote provision of healthcare services using technology to exchange information for the diagnosis, treatment, and prevention of disease. Telehealth technologies can facilitate a broad range of interactions utilizing different use cases (clinician-to-clinician, clinician-to-patient, patient-to-technology) and modalities (synchronous, asynchronous) to deliver healthcare services across various therapeutic areas.

The COVID-19 pandemic has created an unprecedented level of regulatory and commercial support for virtual methods of care delivery and coordination. A recent McKinsey & Company study detailed a long-term opportunity to virtualize $250 billion, or 20% of all office, outpatient, and home health spend across Medicare, Medicaid, and commercially insured populations.[1] As the nation has undergone its "forced trial" during the pandemic, a significant commercial opportunity has emerged for companies to virtualize care through newer modalities. However, the reactivation of in-person care operations has recently caused telehealth utilization to begin retreating, with telehealth visits at 17.0% of total visits nationally today, after peaking at 51.7% in early April.[2] This is substantially higher than figures of less than 1.0% prior to March 2020. It has become clear that integrated virtual and physical care models require thoughtful design and implementation to demonstrate value and drive sustainability.

The impact of COVID-19 has been felt by all stakeholders – none more so than providers and patients. The direct provision of care and investments required to continue to treat patients have exhausted providers and increased willingness to adopt telehealth solutions, which effectively bridge geographic divides and assuage patient fears of re-engaging with providers for in-person care. In doing so, virtual care has made a favorable impression on consumers, creating new patient expectations regarding quality, cost, and access of virtual care from their provider.

But despite this favorable backdrop, there are challenges with today's solutions. Telehealth platforms have yet to offer a full end-to-end workflow and technology integration, creating pain points for providers and patients alike. A lack of integration leaves "open feedback loops" that stifle learning and hinder quality care from being delivered. Additionally, a number of solutions lack integrated decision support at the point of care, which is necessary to realize the promise of leveraging big data in healthcare towards concurrently improving care quality and cost efficiency. This lack of integrated, easy to use decision support tools further limits provider adoption of the technology, and curtails the ability for patient data to effectively follow patients across their journeys throughout the care continuum and provide actionable insights to providers to enable optimal delivery of care.

These challenges have created a clear market need for a holistic platform, one that will create a seamless experience for all stakeholders, addressing the following facets of telehealth: (1) clinical communications, including primary care, behavioral health, and provider-to-provider interactions (2) remote patient monitoring, including diagnostics and chronic conditions (3) care coordination, including an integrated workflow across various modalities of care delivery (4) services, including last-mile services, clinician staffing, device distribution and support, and more. Further categories for integration are detailed in our comprehensive telehealth taxonomy.

1. McKinsey & Company. "Telehealth: A Quarter-Trillion-Dollar Post-COVID-19 Reality?" May 29, 2020.
2. The Chartis Group and Kythera Labs. "Telehealth Adoption Tracker." January 22, 2021.

Our View of the Telehealth Taxonomy

TECHNOLOGY

Care Coordination	Facilitating individualized patient care using simple visualization of comprehensive, data-driven, real-time clinical decision support. Effectively sharing information across the care team
Patient Engagement	Intelligent, automated engagement of patients based on specific clinical needs, coverage, preferences, etc. as indicated by comprehensive, real-time data
Clinical Communications	Provides voice, video and chat communications between clinicians and from clinicians to patients
Remote Patient Monitoring	The use of clinical devices, such as wearables, for providers to periodically or continuously monitor a patient's health remotely
Remote Diagnostics	Technology that allows clinicians to fully conduct exams remotely using video paired with clinical peripheral devices, such as stethoscopes or BP cuffs
Data Analytics & Machine Learning	The use of clinical devices, such as wearables, to periodically or continuously monitor a patient's health remotely. Data is automatically transmitted to clinicians
Data Collaboration	Both contribution and access to a shared data repository used for identification of target health populations across a spectrum of market data contributors

SERVICES

24 x 7 Healthcare Coordinators

Non-physician clinical staff coordinating real-time and on-going care for patients using video visits, chat, text messaging, alert monitoring, etc. to immediately resolve issues or triage patients to the right level of care

Primary Care Physicians ⟷ **Specialty Care Physicians**

Last Mile Services

Resources dispatched to patient's home for diagnostic testing, prescription delivery, transportation, etc. to "close the loop" on remote care

Device Distribution & Technical Support

Packaging, delivery and support of remote patient monitoring devices specific to the patient's personal health needs. 24 x 7 proactive and responsive support to ensure the technology is enhancing the care experience

Data Realization

Leveraging individual and collective data to personalize care, implement preventative measures, provide real-time automation, identify population trends, etc.

Strategic Consulting

Collaborate with customers to develop, proven actionable strategies to successfully implement virtual care

Telehealth is an emerging, diverse market of software and services designed to provide care remotely. Adoption and investment has been greatly accelerated by the COVID-19 pandemic. There is an unmet need for a comprehensive virtual care ecosystem that combines best-of-breed technologies with high quality services needed to deliver personalized care remotely

REGULATORY AND REIMBURSEMENT

Reimbursement and regulatory uncertainty remain key risks to the telehealth space. While COVID-19 enabled waivers across privacy, reimbursement, and licensure dimensions, the longevity of such waivers remains uncertain.

> "The business model will ultimately drive behavior; Telehealth has to demonstrate value in the near term to command higher rates."
>
> **Mark Kestner, M.D.**

From a privacy perspective, we expect there to be a modernization of legacy regulations (e.g., HIPAA), but the timeline of those potential updates remains vague, in our view.

From a reimbursement standpoint, a number of positive changes were enacted in the last few years to enable virtual technologies, starting with CMS' three new remote patient monitoring codes within the 2019 Physician Fee Schedule as well as the 2021 addition of the first ever artificial intelligence reimbursement code within Medicare. Today, under the regulatory waivers enacted during the COVID-19 pandemic, care delivered via virtual methods receives "payment parity" to in-person care. While the longevity of this development is yet to be determined, there is increasing confidence that telehealth will continue to see a more favorable payment and regulatory landscape than in prior years.

The emergence of value-based care will also shape utilization. While current revenue streams for telehealth are mainly channeled through fee-for-service and episodic care, the increasing prevalence of value-based payment models will incentivize further telehealth utilization, which is integral to the success of primary care and preventative models that seek to optimize cost efficiencies in otherwise low-margin services.

Spotlight: Remote Patient Monitoring ("RPM")

One area of growing interest is RPM. RPM uses digital technologies to collect medical and other forms of relevant patient data and electronically transmit that information securely to healthcare providers in a different location for assessment and care management.

This electronic bridge in care communications allows providers to continuously track patient data to help manage chronic disease and also monitor health status after discharge to a home or post-acute care facility, reducing costly readmission rates and increasing patient satisfaction with their seamless care support.[3]

With increasing focus on bridging gaps in care, RPM solutions provide a compelling avenue to achieving improved quality care metrics across disparate therapeutic indications, medication adherence and management, and diagnostics. By enabling efficiencies in care delivery, cost savings, and patient access, such solutions are critical towards addressing the demands of key stakeholders within the healthcare ecosystem: patients, providers, and payers.

One emerging modality is mobile-enabled technologies. Physicians are increasingly leveraging mobile-enabled remote patient monitoring (mRPM), a technology hailed as both more efficient and cost-effective compared to standard RPM. mRPM utilizes notifications to prompt patients to enter important data and provides nearly immediate clinical and financial value to large group and solo practices, with little need for additional care staff. There is also a growing area of technology innovation associated with passive, noninvasive monitoring at home that would reduce the need for wearable technologies.[4]

Early adopters of RPM have seen high returns on their investment. Research suggests that when patient-generated health data is leveraged in remote care programs, hospitals and health systems see a reduction in care costs due to greater operational efficiency and improved clinical outcomes via patient engagement, education, and adherence.[5] Our workshop participants cited emergent success in the avoidance of readmission penalties and lower cost of care for high-risk patients in value-based contracts.

Providers have struggled to maintain relationships with chronic care patients during the pandemic. Remote patient monitoring ensures continuity of care while obviating the need for patients to return for in-person routine visits. However, as the pandemic eventually subsides and in-person care re-emerges as a "preferred choice" for certain patient segments, RPM will have to further accentuate its value proposition to accelerate greater adoption.

Our workshop concluded that in order for a remote patient monitoring solution to succeed, it must be complemented by care coordination services and robust analytics capabilities and visualization tools. Care coordinators facilitate enhanced bi-directional feedback while analytics enable consistent triage of RPM alerts. This paradigm is emblematic of the necessary components for telehealth to continue its impact on the delivery of healthcare.

3. The Center for Connected Health Policy. "About Telehealth." September 18, 2020.
4. Dillard, Robert. Docwirenews. "Every Step You Take: What is the Future of Remote Patient Monitoring?" February 28, 2020.
5. eHealth Initiative; Validic. "The Return on Investment of Patient-Generated Health Data & Remote Patient Monitoring." July 26, 2018.

ABOUT ARSENAL CAPITAL PARTNERS

Arsenal is a private equity firm that specializes in investments in healthcare and specialty industrials companies. Within healthcare, Arsenal seeks to address fundamental challenges in healthcare through systemic process improvement, therein improving health outcomes and transforming the healthcare system.

We believe that advancements in biomedical science and information technology provide a unique opportunity to build highly valuable, middle-market companies that accelerate innovation, enable better care delivery, and address the system's fundamental inefficiencies. Our integrated healthcare team consists of experienced investment professionals, operating executives, and healthcare industry luminaries who collaborate with our portfolio companies to help them optimize operational performance and clinical outcomes. For more information, visit www.arsenalcapital.com

Arsenal's Portfolio Companies Impacting Telehealth

hopebridge® Autism Therapy Centers

- Provides autism therapy through telehealth services for patients who are unable to access in-person therapy

wcg™ WIRB COPERNICUS GROUP®

- Supports secure, remote assessment of patients by qualified raters in virtual clinic trials
- ePRO solution allows patients in their home-setting to provide clinical information to the investigator

BestValue Healthcare

- Telehealth platform fully integrated with existing EMR system, allowing patients to book appointments, view lab results, and access medical records
- Enables telehealth consultations with broader primary care team to address social determinants of health and barriers to care

Areas of Telehealth Investment Interest for Arsenal

The Arsenal team endeavors to invest into differentiated telehealth platforms. Areas of interest, among others, include remote patient monitoring, virtual clinical trials, patient engagement, and care coordination. As we seek to engage with innovative businesses, we are confident that we offer a compelling and differentiated mix of resources to help our investment partners grow. If you have investment opportunities or would like to discuss our strategy, we look forward to hearing from you.

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