

Telemedicine Utilization Exploded in the Early Days of the Pandemic. What's Next?



Tom Bremner
Partner, Growth Equity

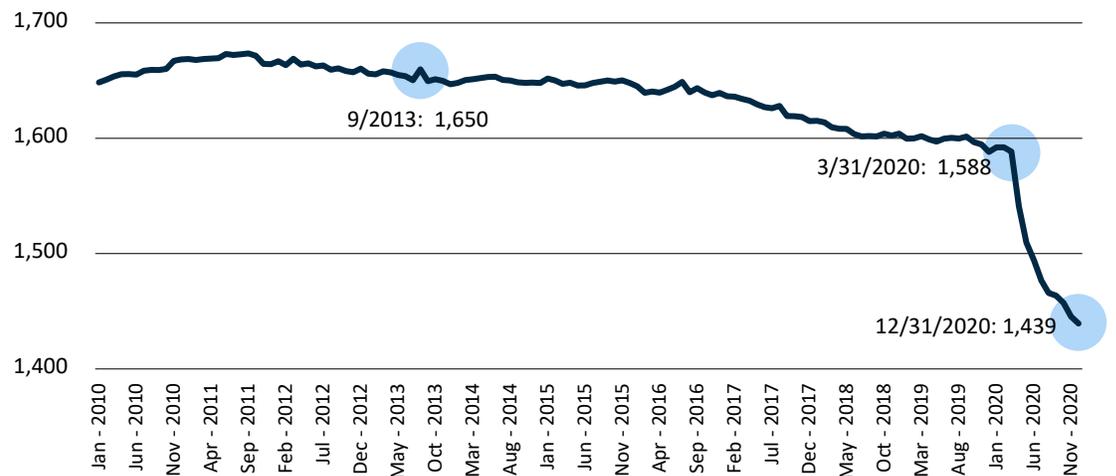
Todd Havill
Associate, Growth Equity

Much has been written about how COVID-19 has altered the landscape of health care delivery. In the weeks after the global pandemic began, the percentage of virtual outpatient care visits skyrocketed from 0.1% to 14% before settling (for now) at around 6-7%, which is ~60-70x above pre-pandemic levels.¹

Simultaneous to this rapid adoption of virtual health care, we've observed a free fall in both the utilization of and employment in nursing care facilities.²

Figure 1: Employment in Nursing Care Facilities³

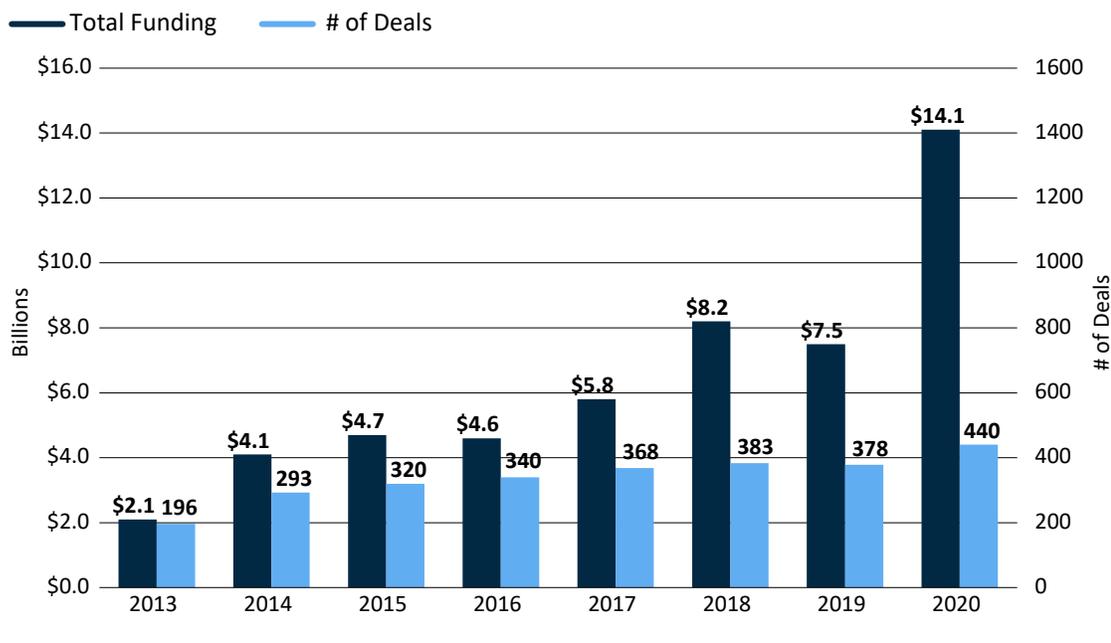
Employment in thousands



Similarly, healthcare systems have experienced major disruption from massive budget shortfalls related to delayed elective procedures as they took an “all hands on deck” approach preparing for an influx of COVID-19 patients.

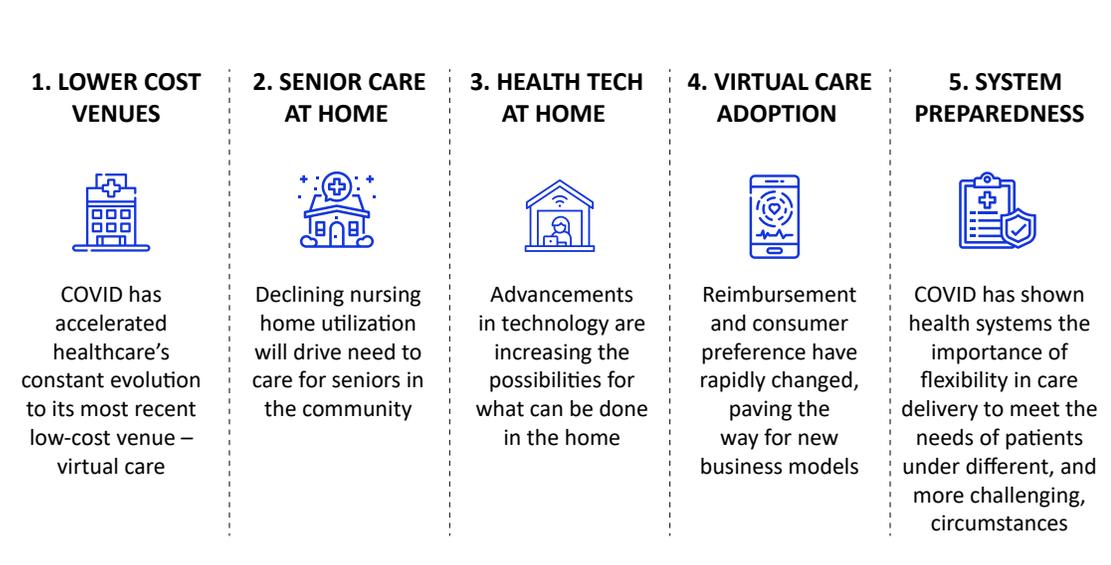
Yet amidst all this chaos, the recognition that the healthcare system needs to quickly join the rest of the technology-enabled world has driven digital health investment to new heights.

Figure 2: US Digital Health Venture Funding⁴



As Yogi Berra said, “It’s tough to make predictions, especially about the future.” And while Yogi’s words have never been more true, there are old lessons and new trends from which we can draw insights to help inform investment themes which we believe will drive further innovation in healthcare technology.

Figure 3: Five Trends Opening the Door to New Health Tech Investment Themes



1. The healthcare system has always pushed (albeit gradually at times) toward lower cost venues.

We’ve seen shifts from emergency rooms to urgent care facilities, hospitals to ambulatory surgery centers, and, in recent years, doctor offices to video (or telephone). In addition to improving the cost and quality tradeoff, these venue changes have also improved patient experience. Continued innovation will push (or keep pushing) the next iterations of this constant transformation.



We believe healthcare delivery in the home will grow and as that happens, new technologies and new business models will be formed that will further innovation

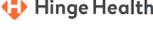
- 2. Fewer of our nation's elderly will utilize nursing care facilities, increasing the burden on effectively managing care at home.** With close to 200,000 COVID-19 deaths tied to nursing homes, public opinion of these facilities has been dealt a meaningful blow. Most seniors already had a strong preference for aging in place prior to the pandemic, but with this new safety concern we are seeing rapid expansion of the boundaries governing how these seniors can be cared for at home.
- 3. Advancements in technology are increasing the possibilities for what can be done in the home.** Connected devices monitoring everything from blood pressure to inhaler usage to continuous glucose levels to heart rhythms to anomalies in time spent in bed or on our phones (or even anomalies in toilet usage) are allowing seniors to receive, in their own homes, a level of attention from healthcare professionals that wasn't possible before. Similarly, ideas borrowed from the on-demand economy are enabling today's healthcare consumers to receive diagnostic tests, medications, and medical equipment without ever leaving the comfort of their living room.
- 4. The reimbursement paradigm for technology-enabled services has turned a corner. COVID-19 has blasted through institutional resistance to remote health care and provided an opportunity for virtual care technologies to establish themselves much faster than expected.** Signs point toward staying power, as a large group of bipartisan US senators in late 2020 co-signed a letter urging permanent implementation of telehealth policies rolled out due to COVID-19. The improvement virtual health care offers on the dimensions of cost, quality, and access would seem to make this an easy decision. Regardless of exactly how virtual care reimbursement unfolds, we expect a more thoughtful and accepting approach to reimbursement for technologies enabling the investment themes we outline in Figure 4.
- 5. We must be better prepared next time.** While the direct impact of COVID-19 has been devastating, the indirect effects are staggering and still mounting. For example, emergency room admissions for heart attacks declined 40-50% while medical experts contend that heart attack prevalence remains the same. As alarming, screenings for common cancers declined by 40-90% at the peak of the pandemic per IQVIA⁵, likely leading to a significant increase in cancer morbidity and mortality for years to come. An analysis by the Wall Street Journal⁶ suggests that excess deaths (total observed deaths less expected deaths based on recent year trends) is more than 50% greater than the deaths attributed directly to COVID-19. This undoubtedly is a partial reflection of foregone care in order to avoid healthcare facilities, and the system's failure to deliver that care remotely. Whether the next pandemic is around the corner or a century away, there is much to be gained from a health system that can engage patients, through technology and convenience, to access the right diagnostics and the right care at the right time.

If you accept these five assertions, you can begin to form a view on the areas of healthcare that are likely to see rapid adoption in the years ahead. The healthcare system will always work to balance financial sustainability with improving its ability to deliver value (in its many forms – outcomes, convenience, engagement, satisfaction).

We believe healthcare delivery in the home will grow, even care thought to be impossible to deliver without the equipment and staff in a hospital or clinic setting. As that happens, we would expect to see new technologies and new business models being (while noting some are already being) formed that will further innovation. Along with that will come new stresses on healthcare's technology and human infrastructure (e.g. remote monitoring systems, medical supplies, family caregivers), which we think will also be solved by a continuous cycle of innovation and growth.

Below are a few investment themes about which we are particularly excited at the moment.⁷

Figure 4: Investment Themes

Theme	Thesis	Market Size	Companies
ER AT HOME	<p>A study showed that about two-thirds of total hospital ER visits could be treated effectively in lower acuity settings. Transitioning care has been estimated to yield \$45 billion in savings to patients and payers and create \$15 billion in revenue opportunities.</p> <p>Players in the space have demonstrated not just that emergency-level patients can be treated in their home, but that it can be done with better health outcomes, better patient experience, and much lower expenses (the average expense may be \$200-\$300 compared with an average ER visit approaching \$2,000).</p>	\$1 – \$10bn	 
HOSPITAL AT HOME	<p>Physician preference for home health has increased dramatically from pre-COVID to post-COVID. Growth is fueled by strong demographic tailwinds, a lower cost setting, and changing consumer preference. In addition to the increasing patient and provider preference for home care, the average cost per day is 90% lower than the average skilled nursing facility cost per day, so payer preference is also aligned towards the home.</p>	\$1 – \$10bn	 
CAREGIVERS	<p>More than 1 in 6 Americans help care for older family or friends, which is poised to increase as nursing facilities fall further out of favor. Caregiving is associated with higher levels of depression and anxiety, worse physical health, and increased risk of premature death. Responsibilities can include coordinating home care services, administering medication, managing appointments, selecting insurance, and making end of life decisions. Addressing the factors most associated with caregiving stress, such as financial hardship, sleep deprivation, and physical strain, can improve quality of life for caregivers and keep older adults in their homes for longer.</p>	\$10 – \$20bn	  
MEDICAL SUPPLIES	<p>Platforms are emerging to help streamline patient procurement of necessary home medical equipment, an offering ripe for a market where 9 out of 10 seniors say that they want to age in place. The post-acute transition from institutions involves procurement of a variety of medical equipment and supplies that can be challenging to coordinate.</p>	\$20bn+	
MUSCULOSKELETAL HEALTH (MSK)	<p>Roughly 100 million Americans suffer from chronic pain, and only a small percentage of that population gets physical therapy referrals versus much more common, albeit dangerous, treatments such as opioid prescriptions. MSK digital offerings can guide patients through therapy sessions, including supplemental education, with the goal of avoiding opioids or surgery to treat MSK disorders.</p>	\$20bn+	  
KIDNEY CARE	<p>With the average life expectancy of a dialysis patient between 5 and 10 years, providing dialysis in the home is significantly more cost effective over the patient's lifetime. This transition to home dialysis was highlighted by CMS finalizing new payment models to encourage home dialysis over in-center dialysis to improve quality of care and reduce Medicare expenditures for patients with chronic kidney disease.</p>	\$20bn+	  
DIABETES AND PREDIABETES	<p>Diabetes is the third most common chronic disease, and the vast majority is the largely preventable type 2. Also, more than 1 in 3 adults in the U.S. have prediabetes, increasing their risk of developing type 2 diabetes, heart disease, or stroke. Most cases of prediabetes go undiagnosed and roughly 15-30% of people with prediabetes will develop type 2 diabetes within five years. Both diabetes and prediabetes have easily measurable indicators which makes this condition a great target in digital health.</p>	\$20bn+	 

LEADING WITH FORESIGHT™

Adams Street Partners is a global private markets investment manager with investments in more than thirty countries across five continents. Drawing on 45+ years of private markets experience, proprietary intelligence, and trusted relationships, Adams Street strives to generate actionable investment insights across market cycles. Adams Street is 100% employee-owned and has approximately \$44 billion in assets under management. Adams Street has offices in Beijing, Boston, Chicago, London, Menlo Park, Munich, New York, Seoul, Singapore, and Tokyo. adamsstreetpartners.com

For more information, please email adamsstreetpartners@adamsstreetpartners.com.

1. Research from The Commonwealth Fund. www.commonwealthfund.org/publications/2020/oct/impact-covid-19-pandemic-outpatient-care-visits-return-prepandemic-levels
2. Article from Modern Healthcare. www.modernhealthcare.com/post-acute-care/nursing-home-employment-continues-free-fall-industry-prepares-worker-exodus
3. Source: Bureau of Labor Statistics. Latest data is preliminary.
4. Source: Rock Health. Note: Includes U.S. deals >\$2mm; data through December 31, 2020
5. Analysis from IQVIA. www.iqvia.com/insights/the-iqvia-institute/covid-19/shifts-in-healthcare-demand-delivery-and-care-during-the-covid-19-era
6. Analysis from The Wall Street Journal. www.wsj.com/articles/the-covid-19-death-toll-is-even-worse-than-it-looks-11610636840
7. Adams Street views the listed companies in Figure 4 as illustrative of the themes described; these are all not Adams Street investments.

Important Considerations: This information (the “Paper”) is provided for educational purposes only and is not investment advice or an offer or sale of any security or investment product or investment advice. Offerings are made only pursuant to a private offering memorandum containing important information. Statements in this Paper are made as of the date of this Paper unless stated otherwise, and there is no implication that the information contained herein is correct as of any time subsequent to such date. All information has been obtained from sources believed to be reliable and current, but accuracy cannot be guaranteed. References herein to specific companies or sectors are not to be considered a recommendation or solicitation for any such companies or sector. Projections or forward-looking statements contained in the Paper are only estimates of future results or events that are based upon assumptions made at the time such projections or statements were developed or made; actual results may be significantly different from the projections. Also, general economic factors, which are not predictable, can have a material impact on the reliability of projections or forward-looking statements.