

The Transformation of Healthcare

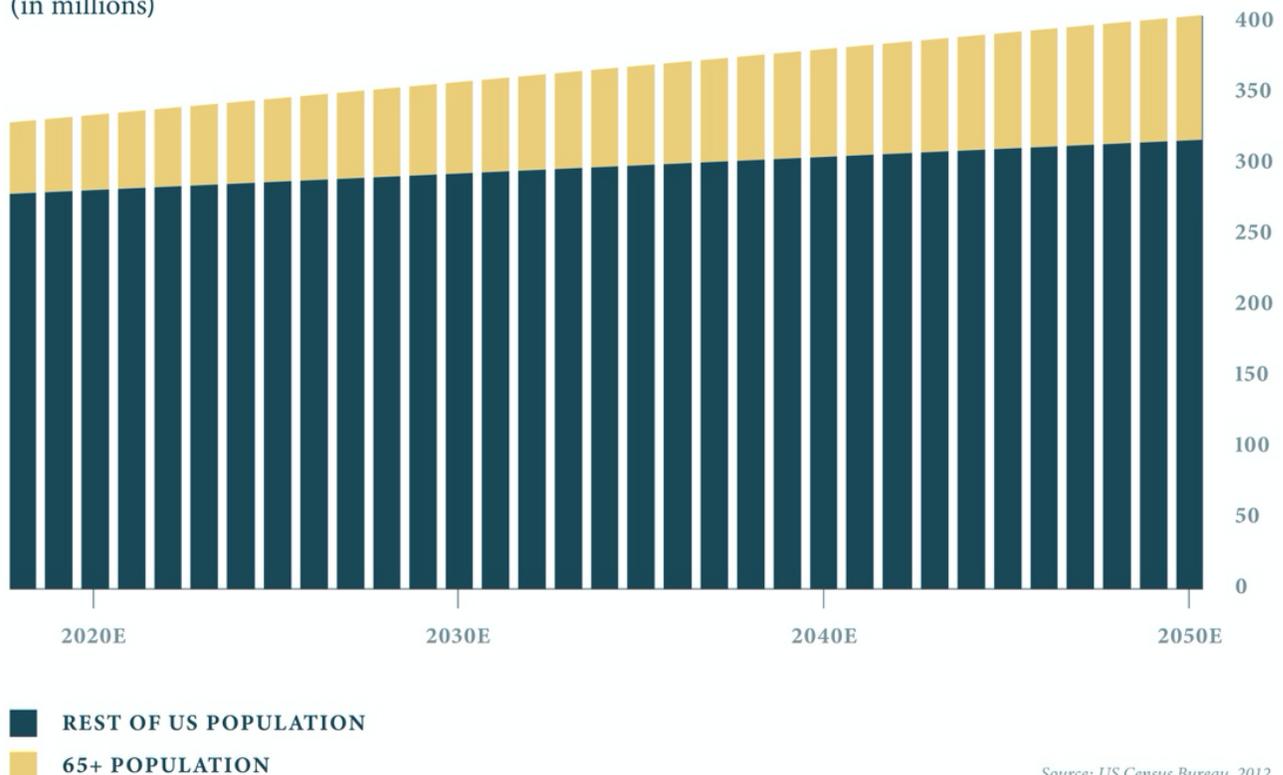
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Healthcare is positioned to become one of the most compelling sectors for 2020 and beyond. The sector is recently outperforming stock-market indices globally. As the world focuses on the recovery and treatment for COVID-19, we can expect to see more money and resources directed toward healthcare and its enhanced offerings. Ashfield views healthcare as a priority investment, and we are focusing our ongoing efforts to research and identify investments that benefit from developing tailwinds. Healthcare is defensive, non-cyclical, and essential. The aging US population, technological breakthroughs, and medical advancements are driving growth across the healthcare sector thereby increasing demand for companies that sell drugs, medical devices, insurance, and managed healthcare services.

The 65+ Age Group Will Make Up a Growing Portion of the US Population

(in millions)



Digital health technology and scientific discovery are catalysts for change and transformation across the industry to meet this growing demand. We apply our fundamental and quantitative analysis to identify the companies that are in the strongest position to introduce new efficiencies, accelerate breakthrough technologies and improve the healthcare delivery system. The COVID-19 pandemic is dramatically accelerating this trend, particularly in the following areas:

ARTIFICIAL INTELLIGENCE (AI) AND BIG DATA

Artificial Intelligence (AI) and Big Data are increasingly transformative throughout various industries. Most of us associate AI with self-driving cars, Alexa and robots, but the impact on the healthcare system is revolutionary. This is an exciting and significant area of investment and opportunity for companies, as the market value of AI and Big Data in healthcare industry is predicted to reach \$6.6 billion by 2021.



AI will revolutionize data feedback in drug trials, improve diagnosis accuracy, and facilitate patient interactions. For example, a public company called IQVIA is using large data sets and advanced analytics to assist their clients in a myriad of ways, from reducing clinical trial times with machine learning, to optimized dosages for specific demographics. AI solutions will enable medical companies to identify new potential therapies from vast databases of information on existing medicines, improve the success rate of drug development and accelerate the process of bringing new drugs to market. Radiology imaging is another area of interest for AI-powered solutions. Radiologists that use automated computer scanning for image analysis will see improvement in time and costs, while (and most importantly) reducing human error for diagnosis. This greatly impacts the direction of cancer treatment, and ultimately will result in faster adoption by healthcare providers that seek to mitigate risk, deliver measurable improvements in patient outcomes and bring operational efficiency to scale.

DIGITAL ENGAGEMENT

Digital engagement between patients, vendors, suppliers, government agencies and employees proved invaluable during the pandemic shelter in place orders. For many of us, shelter in place has introduced the term “telehealth” for the first time. Telehealth refers to the mobile technology platforms that allow medical professionals to monitor their patients outside of traditional settings like hospitals and clinics. A subset within telehealth is known as remote patient monitoring (RPM). This is a growing technology trend that refers to the flow of information between patients and medical professionals. Examples of RPM include smartphone app notifications that remind diabetes patients to take insulin, while alerting the doctor that their patient is following their prescription. This past month, a large retailer (Walmart) recently purchased CareZone, a prescription management mobile application. CareZone helps individuals manage medicines and insurance coverage for each member of the household and in its acquisition, we now have one of the largest retailers competing in this space. RPM technology also includes wearable gear like Fitbit bands or the Apple Watch which have a range of offerings from apps to hardware and privacy features. Wearable technology is capable of gathering volumes of data to monitor patient activity toward the aim of promoting healthier lifestyles. While many people still view Apple strictly as a technology company, Apple is merely in early stages of healthcare investment and has long-term plans to serve as a healthcare disruptor. Tim Cook stated in 2019, “If you zoom out into the future, and you look back and ask the question, ‘what was Apple’s greatest contribution to mankind?’, it will be about health”. If the largest retailers and tech companies are prioritizing healthcare and see great potential in this market, it is likely that other companies will follow and devote more resources toward that goal.

TECHNOLOGY INFRASTRUCTURE

Technology infrastructure and organizational support is a pre-requisite for meaningful reform, enabling health organizations to aggregate, communicate, and securely store vast amounts of patient information. Building-out adequate technology infrastructure (ex: broadband, 5G, sensor networks) will allow all organizational digital service capabilities to scale. Examples of services benefitting include pharmacy by mail, online appointment scheduling, monitoring of blood pressure/heart rate and other vitals at home, etc. Within hospitals and other facilities, technology infrastructure to improve administrative efficiency will include more revenue cycle management software, cloud-based productivity software (Veeva Systems is a niche example), and workflow applications. Expect to see more electronic health record adoption as the industry shifts from paper to electronic, with a number of companies standing to benefit.

HOME CARE

Finally, technology is critical to home care and is forecasted to balloon from a \$100 billion sub-industry in 2016 to \$225 billion by 2024. Future advances in home healthcare technologies have the potential not only to facilitate the role of home healthcare within the overall healthcare system, but also help to foster community-based independence for individuals.



Driving this are both an aging U.S. population and the recent realization of the contagion hazards in densely populated nursing homes. New technologies will play a pivotal role in providing improved monitoring and implementation of care for our elderly, and at lower cost. Retirees want access to an affordable healthcare approach that supports daily living, while being a part of the broader community. Voice assistants like Siri have the potential to help senior citizens remember their daily regimens (when to eat, take medication, go to the doctor) and maintain better independence. Active smart home telemonitoring devices can capture vital signs, weight, or symptoms and report them to a remote provider. Additionally, smart home technologies could be adopted with sophisticated algorithms that detect behavioral patterns of an individual's normal routine and deviations from those patterns. The goal of smart technology is ultimately to provide preventative care for retirees. The retirement community is one of the fastest growing segment of our society, and there is significant potential for companies to capture this opportunity.

THE OPPORTUNITY FOR BETTER OUTCOMES

So much of what we discussed in prior letters is the acceleration of secular trends and an information revolution, which is finally now impacting the American healthcare system in a pervasive manner. The information and technology revolution has already delivered lower consumer costs in other areas of our economy, while offering solid profit margins for shareholders of well positioned companies. It is now healthcare's turn for disruptive change, and the future for investment is promising. Instead of doing things the old way, for example incentivizing high frequency testing and treatment at large medical centers, healthcare innovators are extracting what has worked elsewhere and applying those lessons to develop forward-thinking solutions. Early intervention, data-driven health management at every level, technology for medical access and preventative care, will have meaningful impact on the global healthcare industry. As solutions evolve, obstacles are mitigated, and progress is made, improved clinical resources and optimal patient outcomes is our future.

It may feel like the strong secular tailwinds in healthcare make the entire sector a winner. While this may be true, Ashfield's research and long-term perspective guides us to uncover where the biggest and most impactful changes are poised to happen, early.

"We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten." - Bill Gates, Microsoft Founder - 1996

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