Advancing the Telehealth Revolution Through Enabling Technologies

Healthcare Industry Leaders Need to Take Steps to Ensure Telehealth's Longevity and Potential

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By Chris Gough

Telehealth is having a defining moment in 2020. Although the first uses of telehealth date back to the 1950s, until recently it was largely sidelined from widespread adoption, hindered by the red tape associated with implementation, privacy, security, licensing and reimbursement issues in the U.S. The dramatic acceleration of doctors providing online care and health services for their patients was born out of necessity amid COVID-19. However, both clinicians and patients have come to realize telehealth's enormous benefits, from greater convenience and safety to lower costs. The resulting growth has been staggering, with estimated annual telehealth visits expected to reach 1 billion by the end of 2020. At Intel, we believe this is just the beginning, with the number and acuity of conditions that can be effectively treated with telehealth services increasing over time.

Although telehealth adoption has been encouraging, the healthcare industry needs to take steps to ensure its longevity and realize its potential. Recent reports have found remote clinical services through telemedicine visits are declining since peaking in April. Could this indicate the reliance on telehealth may soon fall back to pre-pandemic levels?

To explore further, Intel conducted a survey of senior leaders at U.S. health companies. Overwhelmingly, respondents agree telehealth is here to stay; they ranked telehealth (including remote monitoring) as their top technology investment over the next 12 months – above investments in electronic medical records enhancement, clinical workload optimization, data analysis and artificial intelligence (AI). Eighty-four percent of U.S. healthcare leaders believe we will continue to see increases in telehealth and telemedicine in the next 12 months, with only 11% thinking we've reached the peak – and 5% believing adoption will decrease to pre-COVID-19 levels in the same period.

A Focus on Enabling Technology

Importantly, our survey identified three perceived barriers to telehealth adoption. It reveals U.S health company leaders:

- Are concerned about the process of reimbursement for their services.

- Worry about consumer access to technology required to make telehealth work for patients, especially among seniors and low-income individuals.

- Are concerned they do not have the adequate technology to properly examine a patient or collect data remotely, such as check patient vitals, conduct physical examinations and gather necessary samples.

In this third area, technology companies like Intel can make a significant difference. If there's a silver lining from the pandemic, it's that we now have proven solutions that have demonstrated their potential to integrate telehealth into our daily lives. Now, we must ensure they become a permanent reality: While telehealth has expanded care by making it easier to see a doctor from the safety and convenience of home, we must focus on how to open access for enabling technologies that will allow for greater flexibility to bring this data to clinicians.

At Intel, increasing access to enabling technology is a priority. Through our [Pandemic Response Technology Initiative](), Intel has committed $50 million to combating the coronavirus through accelerating access to technology at the point of patient care, speeding scientific research and ensuring access to online learning for students and teachers. Since first announcing that commitment in April, we've supported innovative new ideas and projects exploring uses of telehealth.

Some examples:

- Intel and Medical Informatics Corp. (MIC) announced the [Scale to Serve]() program to rapidly install and scale MIC's Sickbay™ platform to deliver remote access to all real-time and retrospective data. This data can help hospitals expand ICU capacity, create flexible command centers to protect staff, serve more patients, and develop and deploy patient centered AI at scale.

- The Cleveland Clinic Weston partnered with Intel and others to monitor patients at home with COVID-19, and pulmonary outpatients with borderline low oxygen saturations (89-95%): these may be acute (post COVID) or chronic. These patients do not qualify for supplemental oxygen based upon the desaturation test done in the office. The home monitoring gives a real-world representation of their saturations in their day-to-day activities and might better reflect changes. Patients use the platform to enter symptoms, temperature and oxygen levels once a day, which providers use to assess their progress and step in if conditions worsen.

- Intel partnered with Banner Health, one of the largest nonprofit healthcare systems in the U.S., to provide an innovative acute-care telemedicine solution, enabling physicians and specialists to conduct virtual visits across its 28 hospitals.

While COVID-19 has dramatically accelerated the use of telehealth solutions, this technology has proven itself useful in providing effective care with improved patient satisfaction. It enables doctors and clinicians to see more patients, provide continuity of care for those with chronic illnesses, and deliver convenient and high-quality care while keeping themselves and others safe.

We need to continue sharing success with policy makers and encourage the continuation of secure, effective telehealth, including:

- Removing restrictions of patient locations (geographic and originating site) to allow virtual care in home or the location of patient's choice.

- Increasing flexibility to expand eligible practitioners and services for telehealth.

- Ensuring all federally qualified health center and rural health clinic programs can provide telehealth.

- Making the Department of Health and Human Services [waiver]() permanent to open greater access to telehealth services.

We should embrace this rapid wave of telehealth innovation. Intel is committed to collaborating with industry to overcome the remaining barriers to ensure long-term adoption of enabling technology, and by extension better healthcare access for all.

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