

Tracking U.S. Telehealth Adoption a Year Into the COVID-19 Pandemic

Trend Analysis & Implications for Health Systems

April 2021

Telehealth Adoption Steadying Toward a New Normal Rate

ANALYSIS SUMMARY

A year into the COVID-19 pandemic, several key trends in telehealth adoption have emerged that suggest ongoing and focused care model transformation. While overall telehealth adoption is generally expected to continue to trend upwards in the months and years to come, providers must further understand how telehealth is best utilized by specific service lines and for specific patients and use cases to supplement — and in some cases, supplant — in-person ambulatory care.

This analysis uses several million claims records from Jan. 1, 2020, through Jan. 25, 2021, to track telehealth adoption trends since the beginning of the pandemic to identify where we see the greatest impact — and infer where it is likely to remain in the future. Distinctive pockets of sustained adoption are emerging, like behavioral health, which have become truly transformed care models over the last year. Primary care and some medical specialties are also expanding their experimentation with integrating telehealth into their care delivery platforms in a more deliberate way.

Looking ahead, telehealth will continue to play an important role for health systems to recapture demand, both by onboarding new patients and by maintaining their existing relationships. Offering a compelling experience to patients and providers alike will dictate how well telehealth can be leveraged to recover volumes in the post-pandemic era and carve out differentiated care models that will determine market leaders over the long term.

<u>The Chartis Group</u> and <u>Kythera Labs</u> have brought together a team of data scientists, visualization experts and industry thought leaders to develop the Telehealth Adoption Tracker, an advanced analytic tool designed to measure how COVID-19 has driven rapid telehealth adoption across the country. The <u>Telehealth Adoption Tracker</u> allows a user to analyze how geographies and specialties have been impacted by the rapid switch to telehealth over time.

We reviewed 6 key areas of telehealth adoption to identify emerging trends in the data:



GEOGRAPHIC TRENDS

Are there patterns of greater adoption in certain regions of the country? Does adoption follow local or regional spikes in COVID-19 infection rates?



PATIENT DEMOGRAPHICS

Are there patterns among different age groups of patients accessing telehealth visits?



NEW VS. ESTABLISHED PATIENT VISITS

Are telehealth volumes more from follow-up visits or initial consults? Are there notable distinctions between new and established patient telehealth visits?



PRIMARY AND SPECIALTY CARE

Are there patterns regarding what type of visits (e.g., primary care, medical specialties, surgical specialties) are being accessed via telehealth platforms?



CLINICAL SERVICE LINE ADOPTION

Which clinical service areas have shown the greatest sustainability in telehealth adoption? Are there similarities or distinctions between adoption curves of those service areas?



AGGREGATE DEMAND AND SUBSTITUTION EFFECTS

As telehealth visits began to subside in the late spring of 2020, what did the growth pattern of in-person visits look like? Has overall aggregate demand for clinical services risen or fallen in the last year?

What We Observed in the Data

What It Means for Health Systems





GEOGRAPHIC TRENDS

Are there patterns of greater adoption in certain regions of the country? Does adoption follow local or regional spikes in COVID-19 infection rates?

Key Observations

- There are pockets of sustained adoption on both coasts and through parts of the Midwest. Contrastingly, adoption trends have been consistently low through most of the Gulf Coast up through the Great Plains.
- 2. There's a significant spread in adoption rates (7-33%) of outpatient visits between states with highest and lowest adoption.

Conclusion/Implications

A year into the pandemic, there are significant variations in sustained telehealth adoption across America. Some regions, such as New England, are also showing higher overall adoption of telehealth, and may foster greater regional agreements, reciprocal credentialing, licensure, and payment coverage.

However, such regional variation may leave an ever-increasing gap for low-adopting states to catch up to the digitally forward care models being adopted elsewhere in the U.S.



Significant Range of Sustained Adoption



PATIENT DEMOGRAPHICS

Are there patterns among different age groups of patients accessing telehealth visits?

Key Observations

- While all age bands adopted telehealth at a similar rate during the early stages of the pandemic and followed a similar pattern of adoption since, a split is emerging, with those aged 18-44 having the highest steadying rate of adoption.
- Those aged 65 and older were the highest telehealth adopters early in the pandemic but now account for the lowest adoption rate. This could indicate that current telehealth user experiences do not adequately meet the needs among the 65+ patient population.

Conclusion/Implications

Congruent with recent studies of patient consumer preferences, there are sustained higher rates of adoption among middle aged patients who typically value telehealth convenience most. Seniors (65+), by contrast, are relatively lower utilizers of telehealth, but significant gains have been maintained. This signals that there is potentially a combination of stronger preference and clinical appropriateness for in-person care, and an underwhelming telehealth experience among older patients.





NEW VS. ESTABLISHED PATIENT VISITS: DISTINCTIONS IN ADOPTION

Are telehealth volumes more from follow-up visits or initial consults? Are there notable distinctions between new and established patient telehealth visits?

Key Observations

- 1. A greater range of patient acuity is managed among established visits.
- 2. Telehealth is a significant new patient onboarding tool. New patients generally present as low acuity, with telehealth serving as a screening tool for triage.
- 3. However, providers may have a reluctance to onboard higher acuity new patients via telehealth than an in-person clinic visit.

Conclusion/Implications

A clear pattern is emerging that suggests higher acuity care needs can be managed via telehealth, but only after a patient-provider relationship has already been established. Recent policy changes permitting those relationships to be established virtually has enabled a significant number of new patient virtual visits.

Another key adoption trend for telehealth has been the onboarding of low-acuity new patients. Virtual triage has been a necessity through the pandemic and will continue to be an important access point for new patients seeking care.





NEW VS. ESTABLISHED PATIENT VISITS: TRENDS IN VISIT TYPES

Are telehealth volumes more from follow-up visits or initial consults? Are there notable distinctions between new and established patient telehealth visits?

Key Observations

- Established patients accounted for significantly more telehealth visit types than new patients.
- 2. Established patients have a wider range of acuity levels being served through telehealth than do new patients to a care practice.

Conclusion/Implications

Once a medical history has been established and the patient can be appropriately triaged for follow-up care, higher acuity patient needs can often be managed via telehealth. These established patient visits dominate total telehealth volumes.

There's clearly a new baseline care delivery model that is emerging. Developing business cases and tying them to strategic planning priorities with intention and specificity is important to adopt these trends in a sustainable way after the pandemic recedes.





PRIMARY AND SPECIALTY CARE

Are there patterns regarding what type of visits (e.g., primary care, medical specialties, surgical specialties) are being accessed via telehealth platforms?

Key Observations

- 1. Primary care and medical specialties have exhibited similar adoption and sustainability, with higher rates than surgical specialties.
- 2. Despite relatively similar starting points pre-pandemic, primary care and medical specialties spiked and maintained their higher adoption compared to surgical specialties.

Conclusion/Implications

Given the relatively higher need for surgical specialties to conduct a physical exam, especially for pre-procedure planning, it is not surprising that these specialties are returning to a largely in-person care model, though a notable rise in telehealth adoption compared to pre-pandemic trends appears sustainable.

Contrastingly, primary care and medical specialties are experimenting with greater integration of digital capabilities into their respective care models. Behavioral health, by comparison, has adopted a sustained digitally forward care model, given adoption trends throughout the pandemic.





CLINICAL SERVICE LINE ADOPTION: VARIATION IN MEDICAL SERVICE LINES

Which clinical service areas have shown the greatest sustainability in telehealth adoption? Are there similarities or distinctions between adoption curves of those service areas?

Key Observations

- Psychiatry, which includes broader behavioral health-related visits, is by far the most <u>digitally forward clinical service line</u>, with a steady two-thirds of visits delivered via telehealth, whereas many other service lines have receded closer to pre-pandemic levels.
- Gastroenterology and neurology are also exhibiting higher sustained adoption (25%-30%) and even showed higher peak adoption last spring than did psychiatry.

Conclusion/Implications

Acknowledging that psychiatry is the clear leader in clinical services adopting telehealth, several medical specialties like neurology, cardiology, and gastroenterology, have also demonstrated sustained adoption in recent months, likely spurred by innovations across the care continuum that integrates telehealth into both diagnostic and follow-up care visit pathways.

Other service lines, however, likely perceive the diagnostic limitations and possible technical and logistical challenges of telehealth as significant compared to the streamlined and more familiar capabilities and workflow of in-person visits.



Variation in Sustained Telehealth Adoption Across Medical Specialties



CLINICAL SERVICE LINE ADOPTION: VARIATION IN SUSTAINED TELEHEALTH ADOPTION ACROSS SURGICAL SPECIALTIES

Which clinical service areas have shown the greatest sustainability in telehealth adoption? Are there similarities or distinctions between adoption curves of those service areas?

Key Observations

- Surgical specialties are reverting back to mostly in-person clinical visits, compared to medical specialties, likely to allow for pre- and post-procedure physical exams.
- Neurosurgery follows the relatively higher trend set by neurology among their respective specialty groupings.
- 3. OB/GYN didn't spike as much as other surgical specialties in the early months of the pandemic but is now showing notable sustainability of telehealth adoption.

Conclusion/Implications

Surgical specialties, though still reliant on in-person physical exams for part of the care continuum, are adopting telehealth to varying degrees. Some specialties are demonstrating greater integration of telehealth into care paths, reflecting a broadening range of use cases for telehealth, particularly for postprocedure follow-up visits.



Variation in Sustained Telehealth Adoption Across Surgical Specialties



AGGREGATE DEMAND AND SUBSTITUTION EFFECTS

As telehealth visits began to subside in the late spring of 2020, what did the growth pattern of in-person visits look like? Has overall aggregate demand for clinical services risen or fallen in the last year?

Key Observations

- There seems to be a strong substitution effect between in-person and telehealth visits during the early pandemic months.
- 2. The "new normal" taking shape exhibits a smaller gap between in-person and telehealth visits as a percentage of total visits.
- 3. A brief period of greater telehealth than in-person visits reflects the initial shutdown period of the pandemic that is unlikely to be replicated again soon.

Conclusion/Implications

Whereas in-person outpatient clinic visits accounted for more than 99% of volumes prepandemic, the new normal emerging is closer to an 80/20% split between in-person and virtual clinic visits, with an overall lower level of total visits. Consumer-friendly telehealth solutions are a critical modality to support demand recapture and patient access. Going forward, telehealth may soon be a prerequisite for digitally forward care models of the future that offer a more efficient and convenient delivery option.



Sustained Telehealth Adoption Despite Lower Aggregate Demand for OP Services

Appendix:

PANDEMIC IMPACT ON STATES WITH HIGHEST AND LOWEST TELEHEALTH ADOPTION RATES





GEOGRAPHIC TRENDS

Are there patterns of greater adoption in certain regions of the country? Does adoption follow local or regional spikes in COVID-19 infection rates?

Key Observations

- 1. States with large urban centers tend to be higher adopters of telehealth than more rural states.
- 2. More populated states had a higher telehealth adoption rate at the peak last spring and have continued to maintain high adoption, despite starting at relatively similar starting points as rural states pre-pandemic.
- 3. Areas with greater broadband market penetration have adopted telehealth at greater rates through the pandemic.

Conclusion/Implications

The divergence between states that were relatively higher adopters of telehealth prior to the pandemic and those that were not has increased over the last year, indicating very different care models being employed between the high- and low-adopting states.

However, such regional variation may leave an ever-increasing gap for low-adopting states to catch up to the digitally forward care models being adopted elsewhere in the U.S.



Divergence in Telehealth Usage Between Highest and Lowest Adopting States



GEOGRAPHIC TRENDS

Are there patterns of greater adoption in certain regions of the country? Does adoption follow local or regional spikes in COVID-19 infection rates?

Key Observations

- 1. The highest per capita COVID outbreaks came at the end of 2020, when outpatient clinical services were largely still available.
- 2. Overlaying the trend lines on the previous page, it seems as though telehealth adoption was driven more by the lack of availability of in-person clinical services than it was by the local/ regional outbreak of COVID.
- 3. Even relatively higher per capita outbreaks in sparsely populated states didn't drive sustained telehealth adoption in recent months.

Conclusion/Implications

Telehealth adoption was driven by a forcing function of it being the only outpatient option during the early part of the pandemic. Health systems should note that adoption trends don't follow closely with local/regional pandemic infection rates and that patient and provider preferences are likely more predictive indicators of sustained telehealth adoption.



Pattern of COVID-19 Infection Rates Among Highest and Lowest Telehealth Adopting States

Take an intentional approach to telehealth.

While telehealth adoption has waned from the initial spike in the early phase of the pandemic shutdowns, telehealth is clearly here to stay. Health systems must thoughtfully integrate virtual care into their care delivery models for enduring value.

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Underlying data provided by Kythera Labs are sourced from clearinghouse claims vendors which comprise a national representation of submitted professional medical claims. These claims include self-insured and fully insured health plans across most major commercial payors and Medicare Advantage. The level of claims coverage varies by geography. Geographic and specialty utilization patterns may change over time based upon timing and mix of claims reporting by clearinghouse. Data is refreshed on a weekly basis, which includes data for the subsequent week, in addition to newly submitted claims from prior weeks.

Effective July 2020: Modified methodology has been implemented for geographic analysis, now defined based upon patient location.

Data excludes providers billing from US territories: Puerto Rico, Guam and the Virgin Islands. Telehealth adoption rates for multi-state CBSAs will aggregate into the respective telehealth adoption rate calculation, identified and assigned by the respective provider state. Physician specialties are determined based upon the specialty assigned to the rendering provider NPI. Certain physician specialties are combined or excluded to form the 20 specialties reported in the analysis. APP-defined practitioners have been excluded from this analysis. Percentage telehealth rate is calculated as the ratio of unique telehealth visits as a proportion of total physician visits.



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