Effects of the COVID-19 Pandemic on Telehealth

April 2021
Telehealth Observations

After spiking in March 2020, the share of all ambulatory health visits conducted virtually leveled off and ranged between 19-25% through January 2021.

- Prior to March 2020, virtual health represented only 0.3% of ambulatory visits.
- The volumes of ambulatory visits fell around the 3rd week of March 2020.

Organizations responded by shifting visits to the virtual environment, either with telephone or video approaches.

- In the 4th quarter of 2019, only about 25,000 telehealth visits per month were performed by all organizations. More than 2 million visits were recorded just in April of 2020.
  - Only 8 organizations billed more than 8,000 telehealth visits in all of 2019. Members averaged 12,000 visits in April of 2020 alone.
- Telephone visits provided an opportunity to easily pivot to virtual. 29% of the virtual visits in April 2020 were telephone-only. By October, that had dropped to 17%.
- Even organizations with established Telehealth programs used telephone encounters to scale upward.

Some clinical areas were better able to utilize telehealth than others.

- In April of 2020, specialty areas like Primary Care, Cardiology, Behavioral Health and Neurology performed more than 70% of their ambulatory visits virtually.
- As in-person visits rose to near-normal in September and October, Behavioral Health and Neurology retained telehealth as an approach with 63% and 33% virtual visits, respectively.
Telehealth Key Takeaways

Behavioral Health and Neurology virtual visits have remained high.
- While virtual visits in many areas dropped after their early peak, Behavioral Health and Neurology appointments represented 68% and 40% of visits in January 2021, respectively.

Consumer preferences forecast continued utilization of virtual environment.
- According to a January 2021 survey, 78% indicated a desire to continue virtual visits once the crisis abates, while 93% said they were likely to continue video sessions moving forward with existing providers.
- Vizient projects a continued rise in virtual sessions over the next decade, with levels matching or exceeding peak pandemic levels.

Social determinants of health, including access to reliable internet, continues to impact access to care.
- Increased access to broadband may increase availability/uptake of telehealth.
- Medicare patients were more likely than commercially insured or Medicaid to use phone visits for their virtual visits.
- Medicaid patients had less virtual visits than commercially insured and Medicare patients.
Virtual visit volumes were relatively low in the pre-pandemic years, but were on the rise.

Virtual Visit Volumes by Quarter 2017-2019
Based on 153,244 providers and more than 700M patient encounters

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
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</thead>
<tbody>
<tr>
<td>2017</td>
<td>24,405</td>
<td>25,492</td>
<td>28,362</td>
<td>33,915</td>
<td>41,420</td>
<td>43,005</td>
<td>41,776</td>
<td>52,189</td>
<td>61,731</td>
<td>68,518</td>
<td>68,852</td>
<td>76,338</td>
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Source: CPSC (Q1 2017-Q4 2019)

AAMC-Vizient Clinical Practice Solutions Center | April 2021
Beginning in March the share of virtual health visits to all visits rose, peaking in April 2020.

% of Ambulatory Virtual Visits by Month
66.6 million visits - 96,500 providers - 18,000 locations

Includes all visits with Site of Service: Telehealth, Office, On Campus Outpatient Hospital and Off Campus Outpatient Hospital. Standard visit codes (e.g. 99211-99215) are categorized as online visits if billed with telehealth service site or modifier.
Without the shift to virtual care, more than 200,000 patient visits would not have taken place in April.

Total ambulatory visits dropped 41% in April with virtual visits accounting for 65% of the completed visits.

2020 CPSC Member Monthly Visit Volumes
66.6 million visits - 96,500 providers - 18,000 locations

Includes all visits with Site of Service: Telehealth, Office, On Campus Outpatient Hospital and Off Campus Outpatient Hospital. Standard visit codes (e.g., 99211-99215) are categorized as online visits if billed with telehealth service site or modifier.
Behavioral Health virtual visits remained high across the year

Neurology also maintained high proportions of virtual visits throughout the year.

% of Ambulatory Visits Delivered Virtually
Top 10 Specialties by Volume

26.9 million visits - 96,500 providers - 18,000 locations

Includes all visits with CMS Site of Service: Telehealth, Office, On Campus Outpatient Hospital and Off Campus Outpatient Hospital.
Observations on the Impact of Organization Size on Telehealth Utilization
Larger organizations appeared to ramp virtual care up faster and sustained virtual services at a slightly higher level in 2020.

Percent of Ambulatory Visits Via Telehealth
62.1 million visits - 96,500 providers - 18,000 locations

Small organization cohort included 24 organizations and 17,500 providers. Large organization cohort included 39 organizations and 79,000 providers.
Across the second half of 2020 larger organizations were better able to return to pre-pandemic visit levels.
Larger organizations consistently had a higher percentage of ambulatory encounters performed virtually.

As COVID-19 cases rose at year’s end, the increased levels of virtual care helped larger organizations maintain their levels of visits and serve more patients.

<table>
<thead>
<tr>
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<th>Small Orgs (&lt;1,000 providers)</th>
<th>Large Orgs (&gt; 1,000 providers)</th>
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<tbody>
<tr>
<td></td>
<td>% of Feb Volume</td>
<td>% Telehealth</td>
</tr>
<tr>
<td>Feb</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Mar</td>
<td>-21%</td>
<td>11%</td>
</tr>
<tr>
<td>Apr</td>
<td>-41%</td>
<td>56%</td>
</tr>
<tr>
<td>May</td>
<td>-30%</td>
<td>38%</td>
</tr>
<tr>
<td>Jun</td>
<td>-10%</td>
<td>23%</td>
</tr>
<tr>
<td>Jul</td>
<td>-5%</td>
<td>21%</td>
</tr>
<tr>
<td>Aug</td>
<td>-8%</td>
<td>19%</td>
</tr>
<tr>
<td>Sep</td>
<td>-2%</td>
<td>17%</td>
</tr>
<tr>
<td>Oct</td>
<td>1%</td>
<td>15%</td>
</tr>
<tr>
<td>Nov</td>
<td>-10%</td>
<td>17%</td>
</tr>
<tr>
<td>Dec</td>
<td>-9%</td>
<td>20%</td>
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Consumer preference and projected shift to virtual care
January survey reveals significant drop in consumer comfort level with on-site health care

How safe would you feel if you or a family member went to your preferred hospital for an elective (nonurgent) procedure?

<table>
<thead>
<tr>
<th></th>
<th>Today</th>
<th>May 2020 survey</th>
<th>July 2020 survey</th>
<th>Sept 2020 survey</th>
<th>Jan 2021 survey</th>
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<tbody>
<tr>
<td>Very/somewhat safe</td>
<td>60%</td>
<td>73%</td>
<td>82%</td>
<td>50%↓</td>
<td></td>
</tr>
<tr>
<td>In three months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very/somewhat unsafe</td>
<td>6%</td>
<td>18%</td>
<td>13%</td>
<td>27%↑</td>
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</tbody>
</table>

- **21%** would proceed with surgery today, a significant decline from September.
- **59%** indicate telehealth is their preferred setting, remaining consistent since July.
- **33%** feel safe visiting an emergency department today, down from **54%** in July.
- **Over 67%** feel safe receiving a face-to-face visit in a physician’s office, down from **84%** in September.

Sources: Sg2 and Vizient Patient and Physician Advisory Council Survey, Sg2 analysis, January 2021, Vizient CPSC.

A Vizient and Sg2 Presentation | April 2021
Consumer preferences during COVID-19 reveal opportunity to rethink longstanding approaches.

What services would you like to see continued once this crisis abates?

- Face-to-Face Visits: 71%
- Robust Home Care: 34%
- No Waiting Room: 66%
- Drive-Through Testing: 48%
- Virtual Visits: 78%

How likely are you to seek virtual services using the following formats?

- Video Visit–New Provider: 63%
- Video Visit–Existing Provider: 93%
- Asynchronous Visit–New Provider: 56%
- Asynchronous Visit–Existing Provider: 92%

Sources: Sg2 and Vizient Patient and Physician Advisory Council Survey, Sg2 analysis, January 2021, Vizient CPSC.
Shift to Virtual Is Variable Across Service Line Groups

Virtual Visit Shift by Service Line Group
US Market, 2019–2029

Source: Sg2 Analysis, 2021.
Observations on Telehealth for Primary Care, Behavioral Health and Neurology
Primary Care Observations

- In-person ambulatory visits dropped 79% from February to April 2020.
- Of the visits that still occurred in April 2020, 65% were virtual. By January 2021, this was down to 22%.
- In this same time period, general exams by primary care providers dropped 86%. By July, these visits had nearly returned to pre-pandemic levels. General exam visits were almost entirely in-person, just 4% virtual by the fall.
- Primary care visits for patients with diagnoses of “Exposure to communicable diseases,” which includes COVID-19, started rising in April and remained high through the summer, with a second spike starting in October as COVID cases surged.
- Primary care visits for hypertension and Type 2 Diabetes, chronic conditions requiring sustained care, remained relatively high, with just 35% and 42% drops from February to April.
In April 2020, primary care provider visits for communicable disease exposure (which included COVID-19) began to rise and remained high through the end of 2020.

2020 Primary Care Provider Visits
Suspected exposure to communicable diseases
15.7 million visits - 12,000 primary care providers - 3,100 locations

Includes visits with primary care providers and CMS Site of Service: Telehealth, Office, On Campus Outpatient Hospital and Off Campus Outpatient Hospital.
Behavioral Health Observations

• While overall ambulatory visits fell 41% from February to April, Behavioral Health specialties (Psychiatry, Psychology and Social Work) fell by just 13% due to a rapid shift to virtual health.

• In April, 80% of Behavioral Health visits happened virtually, and remained high at 69% in December.

• Visits for conditions pertaining to stress, depression and anxiety rose across the year until peaking in October.
Without the shift to virtual visits, 165,000 behavioral health encounters may have been lost in April 2020.

2020 Behavioral Health Visits
All Diagnoses
2.8 million visits - 4,000 providers - 1,500 locations

Includes visits with behavioral health providers, including psychologists, psychiatrists and social workers and CMS Site of Service: Telehealth, Office, On Campus Outpatient Hospital and Off Campus Outpatient Hospital.
Neurology Observations

- Neurology specialty total patient activity dropped 29% in April from February but had returned to normal levels by the fall of 2020.
- In April 2020, 84% of Neurology visits were virtual and were still at 41% virtual by December.
- The largest drop in activity was seen for general complaints of cognitive function and awareness while chronic conditions such as migraine, epilepsy, Parkinson’s and MS held fairly steady but with a significant shift to virtual delivery.
- Care for Epilepsy, MS and Migraines saw a 13% drop in activity in April 2020, but with 89% of visits virtual. Parkinson’s disease saw a slightly higher drop in all activity (24%) with 88% occurring virtual.
- Neurology chronic care was still 40% virtual by the fall of 2020.
Neurology visits for non-chronic care saw a large drop in volume in April 2020

Neurology visits for ‘other symptoms involving cognitive functions and awareness’ includes patients seeking evaluation and treatment for non-disease specific, or currently undiagnosed neurological concerns.

Neurology Visits
Other symptoms involving cognitive functions and awareness
2 million visits - 2,900 providers - 1,000 locations

Includes visits with neurology providers and CMS Site of Service: Telehealth, Office, On Campus Outpatient Hospital and Off Campus Outpatient Hospital.
Observations on Demographics for Telehealth Users
Older patients have the highest volume of total visits but lower rates of telehealth than other adults by December 2020.

Ambulatory Volume by Patient Age Range
April, August and December 2020
14.1 million visits – 96,500 providers – 18,000 locations

Includes all visits with CMS Site of Service: Telehealth, Office, On Campus Outpatient Hospital and Off Campus Outpatient Hospital.
All ages saw fewer phone visits as a percentage of overall telehealth in Dec as acceptance and availability shifted.

Telehealth Delivery By Patient Age
3.4 million visits – 96,500 providers – 18,000 locations

Includes all visits with CMS Site of Service: Telehealth, Office, On Campus Outpatient Hospital and Off Campus Outpatient Hospital.
Medicaid patients had less virtual visits than commercial and Medicare patients.

Ambulatory Visits by Payer Type
19.9 million visits - 96,500 providers - 18,000 locations

- Commercial: Apr-20 = 69%, Aug-20 = 19%, Dec-20 = 23%
- Medicaid: Apr-20 = 56%, Aug-20 = 22%, Dec-20 = 27%
- Medicare: Apr-20 = 68%, Aug-20 = 25%, Dec-20 = 24%
- Self Pay: Apr-20 = 55%, Aug-20 = 25%, Dec-20 = 21%

Includes all visits with CMS Site of Service: Telehealth, Office, On Campus Outpatient Hospital and Off Campus Outpatient Hospital.
Medicare patients were more likely than Commercial or Medicaid to use phone visits for their virtual visits.

Virtual Visit Delivery By Payer
4.7 million visits - 96,500 providers - 18,000 locations

Includes all visits with CMS Site of Service: Telehealth, Office, On Campus Outpatient Hospital and Off Campus Outpatient Hospital.
Methodology – Data Identification

Unless noted otherwise, the data reported in this presentation was derived from the Clinical Practice Solutions Center (CPSC) developed by the Association of American Medical Colleges (AAMC) and Vizient. Based on clinician professional fee billing data, these views represent activity captured from 96,500 physicians in 18,000 locations.

For this reporting:

- **Visits** include any billed patient evaluation and management visit CPT® code eligible for telehealth via CMS or commercial carriers.
- **Ambulatory** includes CPT Codes billed at one of the following CMS Sites of Service: Telehealth, Office, On Campus Outpatient Hospital or Off Campus Outpatient Hospital. All other sites of service, including inpatient and emergency room, were excluded from the evaluation.

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Methodology - Telehealth Visit Identification

For this evaluation, telehealth includes any synchronous care, i.e. live, real-time settings where the patient interacts with a provider via phone or video.

- **Phone visits** include a provider using audio only real-time communication. These are identified using specific CPT codes (98966-98968, G0406-G0408, G0459, G2012, 99441-99443 and G0071). *CMS also approved additional codes for audio-only service but did not provide coding to distinguish between audio only or online visits, so will be included in online visits below.*

- **Online visits** include a provider using an interactive audio and video telecommunications system that permits real-time communication. These visits are flagged as telehealth using the telehealth CMS place of service, specific telehealth modifiers and/or CPT codes designated for online visits.