



2020 ACP Member Survey about Telehealth Implementation

Summary:

Many surveys are published reporting on telehealth adoption among physicians, but without additional layers of detail it is not clear how “adoption” is defined and where nuances in usage patterns exist. The American College of Physicians, therefore, has conducted a survey of members in the US for the past two years to understand telehealth implementation in more detail. With 159,000 members, ACP covers a broad spectrum of physicians by size of practice, rural vs. non-rural locations, and specialty (general internists offering primary care, hospital medicine specialists, and other medical subspecialists). As a result, our survey results can shed light on telehealth implementation in a range of medical practices.

The survey results in this report show variation in “adoption”, whether as a result of technology availability, or as a result of usage variations among those with the technologies. Some categories of telehealth are widely used, while others are still in the early stages. The results also show a clear increase in use since last year, but plenty of room to grow.

Background and Survey Methodology

The main purpose of the survey was to measure two aspects of internal medicine physicians’ adoption of telehealth: having the technology available and using the technology frequently and/or with a substantial number of patients. The survey evaluated both of these aspects of adoption among ACP members for six different categories of telehealth services: video visits, e-consults, asynchronous evaluation, remote patient monitoring, remote care management/coaching, and integration of data from patient wearables.

Between December 2019 and January 2020, ACP surveyed a random sample of 1,972 members in the US aged 65 and younger. Completed responses were received from 231 members (11.7% response rate) providing patient care (by specialty: 49% general internal medicine, 24% hospital medicine and 26% subspecialists).

This is the second year of ACP conducting this survey, so changes in adoption and usage of telehealth since 2019 can be reported. The 2019 survey did not include hospitalists, therefore year-over-year comparisons are made to the sample excluding hospitalists.

Definitions Used in Survey:

For discussion purposes, ACP finds it helpful to differentiate between “telemedicine” and “other digital health”. We define “telemedicine” as the use of electronic communications and software to provide clinical services to patients without an in-person visit. The technology categories of telemedicine and digital health tools were defined as follows for survey participants:

“Telemedicine”:

- **Video Visits:** Virtual/video visits with patients (e.g., live physician visits conducted via video technology).
- **E-Consults:** Physician-to-physician electronic consultations (e.g., virtual communication tools or portals (real-time or “store-and-forward”) for physicians to consult with each other about a patient.)
- **Asynchronous evaluation** by a physician or another clinician of information and/or images from a patient provided through a patient portal or other secure system.

“Other Digital Health”:

- **Monitoring:** Remote physiologic monitoring using digital technologies (e.g., monitoring BP, weight, blood glucose, pulse oximetry or respiratory flow rates).
- **Management:** Remote care management/coaching (i.e., regular contact between a physician or another clinician and patients by phone, text or video technologies to discuss health status and lifestyle behaviors).
- **Wearables:** Integration of data from consumer-grade patient wearables (for example, Apple Watch or Fitbit) into patient’s medical record. Data includes fitness, sleep quality, basic heart rate activity, and other consumer health tracking).

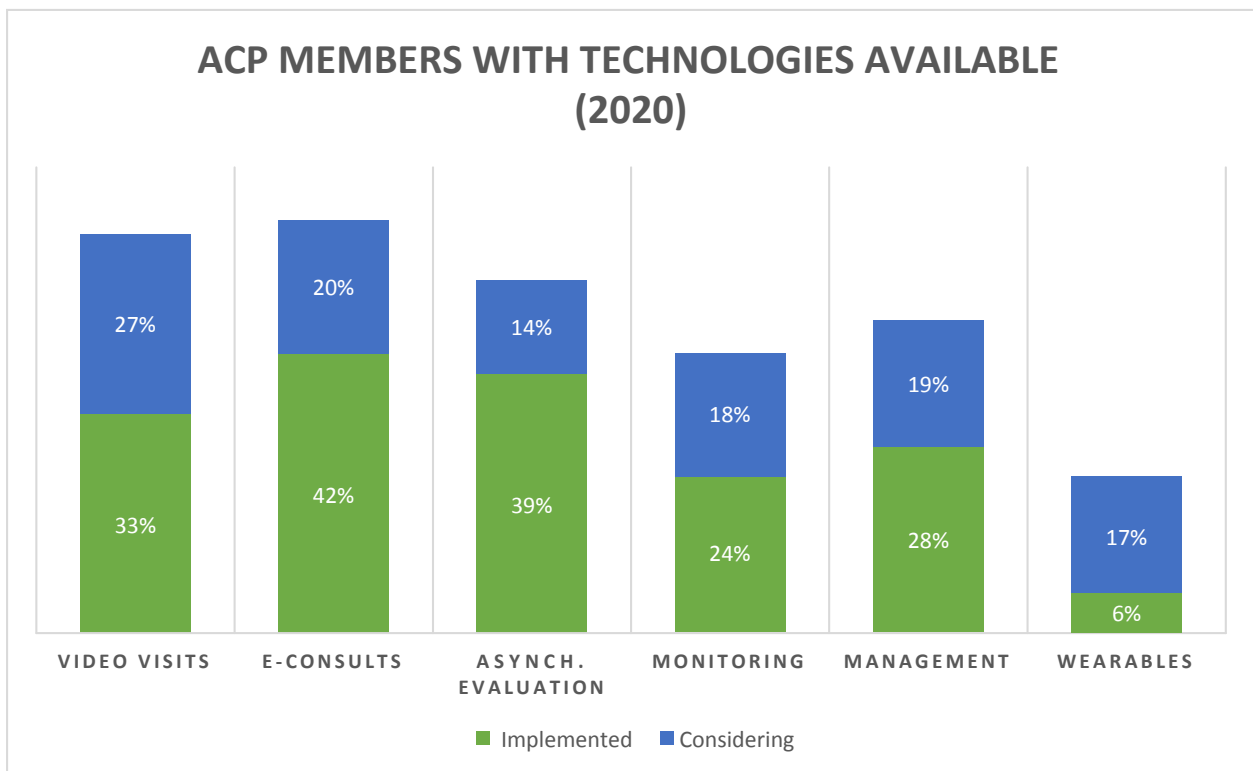
Key Findings

- Telemedicine technology is now commonly used to enable clinical care in internal medicine practices. One out of four physicians is using e-consults and asynchronous evaluation at least once a week. Only 14% are using video visits at least weekly.
- The technology implemented most widely is to support e-consults (42% have technology), and it is used frequently among those with the technology (58% use every week, only 8% have never used it).
- Technology is also commonly available for video visits (33%) and asynchronous evaluations (39%).
- Use of video visits, remote monitoring and remote management have all grown significantly over the past year (as measured among comparable audiences year-over-year).
- Remote care management tools are being used extensively (frequently and with a large number of patients) where the technology is available. Only the integration of patient wearables data remains a minor trend.
- Variations in telehealth usage by specialty reflect, to a certain extent, the nature of the various medical disciplines and the institutional resources likely to be available. Hospitalists are using video visits and e-consults at more than twice the rate as subspecialists. General internists and subspecialists are most likely to be using asynchronous evaluation of data/images (26% of GIM and 23% of SS).
- Subspecialists are not using e-consults as much as are general internists and hospitalists. This is primarily a result of not having the technology implemented; those with the technology are using e-consults at a similar rate across specialties. The lower adoption of e-consults among

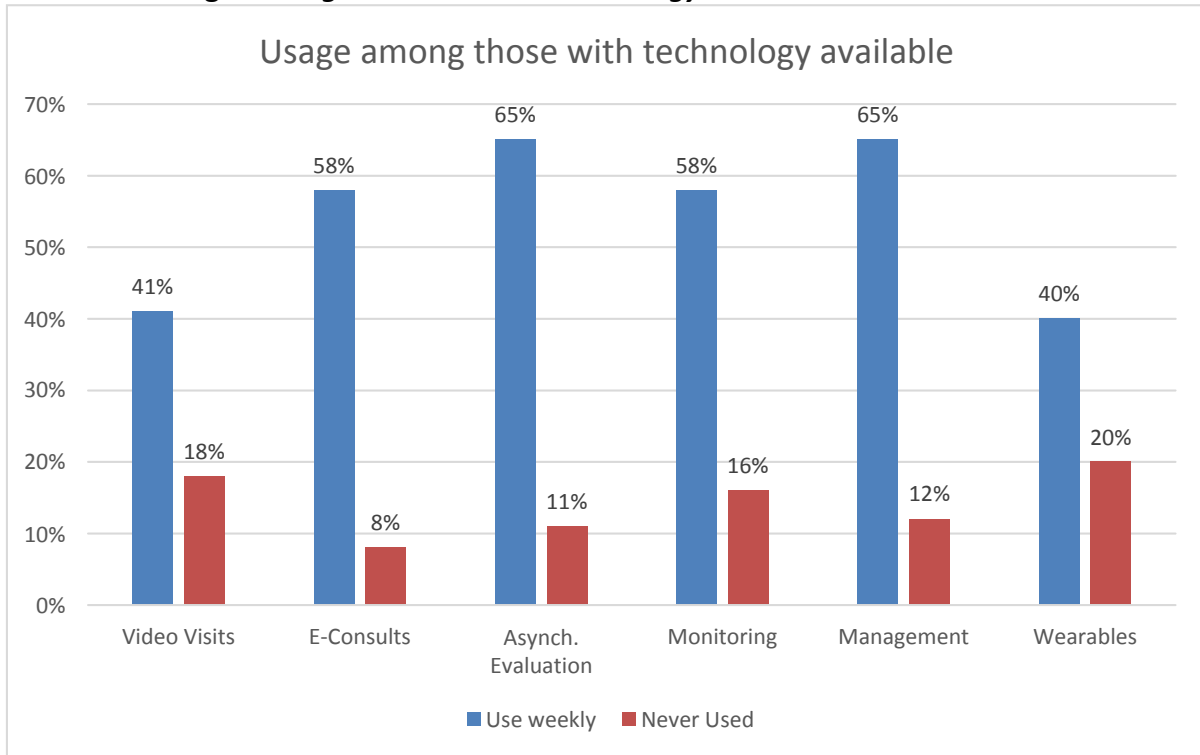
subspecialists is a missed opportunity to improve care coordination and referral communication between primary care general internists and subspecialists.

- By rural vs. non-rural locations, video visits are the only category with a noticeably higher rate of implementation (40% vs. 31%). However, where the technologies are available, remote monitoring and remote care management are both used significantly more often in rural practices.
- The short-term opportunities to increase telemedicine and digital health adoption include:
 - Increasing the implementation of remote monitoring and remote care management technology
 - Increasing the use of video visit technology where it is already implemented
- The primary barriers to adoption are now financial and structural concerns, not a lack of interest.
- The majority of ACP members are somewhat to very interested in learning more about telehealth technology, and its safe and effective use in practice.

Telehealth Technologies Implemented or Being Considered Within Next Year

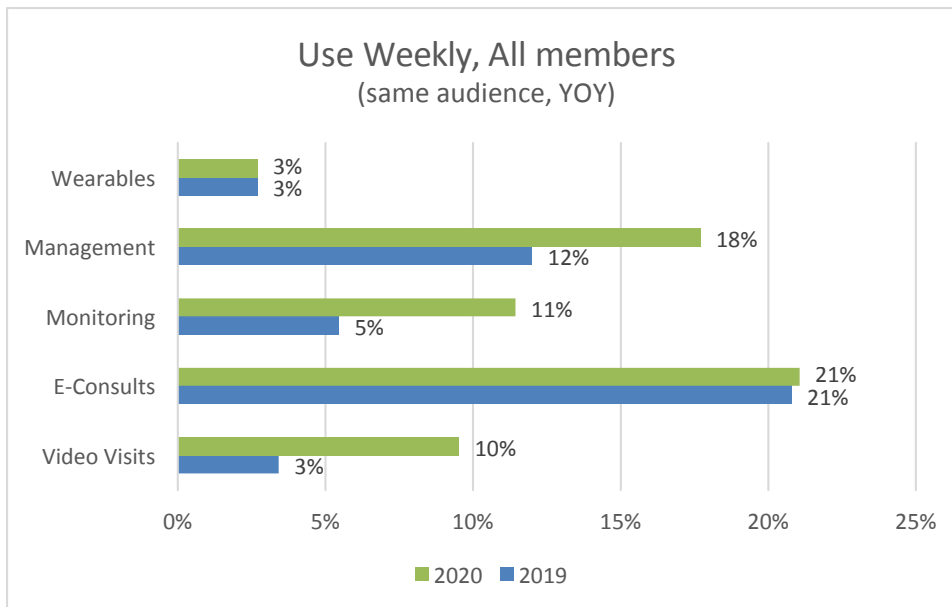


Telehealth Usage Among Those with the Technology Available



Year-over-year change in weekly use among all members (as opposed to just those with technology)

Note: Hospitalists were excluded from the 2019 survey, so this chart shows the 2020 results excluding hospitalists as well. This provides an accurate year-over-year comparison. The 2019 survey did not ask about asynchronous evaluation, so that is excluded from this graph.



Detailed Results

Video Visits

- 14% of ACP members are using video visits regularly (at least once per week).
- This category has seen the biggest year-over-year growth, from 3% use to 10% use for like audiences (general internists and subspecialists, excluding hospitalists).
- 33% have video visit technology available in their practice.
- By practice location, rural practices have greater access to the technology, at 40% availability, vs. 31% for non-rural.
- By specialty, hospitalists are significantly more likely to have access (48%) vs. general internists (30%) and subspecialists (25%).
- Usage is becoming more common (among those with the technology available)
 - 16% use it every day
 - 25% use it every week
 - 41% use it less often than every week
 - Only 18% have never used it
 - 56% of those who do not use video visits every day expect to increase use in the next year
- Hospitalists are the most likely specialty to use video visits regularly. Daily/weekly usage is 52% among hospitalists, 40% among subspecialists, and 33% among general internists (of those with the technology).
- Usage is also higher in rural practices (52% use at least weekly, vs. 36% in non-rural areas).

Physician e-Consults

- 24% of ACP members are using e-consults regularly (at least once per week)
- 42% have e-consult technology available in their practice.
- Usage is widespread (among those with technology available)
 - 58% use it every day (28%) or every week (30%)
 - 35% use it less often than every week
 - 8% have never used it
- There is not much difference in availability by practice location, with 45% of rural practices having the technology and 42% of non-rural having access.
- However, rural practices are using the technology somewhat less often vs. non-rural. Only 52% of rural physicians use e-consults every day (19%) or every week (33%) vs. 58% for non-rural physicians (29% daily and 29% weekly).
- By specialty, hospitalists are significantly more likely to have access to e-consult technology (52%) vs. subspecialists (30%). General internists (45%) were not found to be significantly different. Hospitalists are somewhat more likely to use e-consults daily or weekly (65%, vs. 56% of subspecialists and 53% of general internists).

Asynchronous Evaluation of information and/or images:

- This mode of telemedicine is the most widely used, with 25% of members using it at least once per week.
- 39% have this technology available in their practice.
- Usage is widespread (among those with technology available)
 - 65% use it every day (25%) or every week (40%)

- 24% use it less than every week
- 11% have never used it
- There is very little difference in availability and usage by practice location (40% in rural and 39% in nonrural).
- By specialty, general internists are most likely to have the technology (44%), followed by hospitalists (38%) and subspecialists (33%). However, among those with the technology, daily/weekly use is higher among hospitalists (72%) and subspecialists (70%) than general internists (60%).

Remote Physiologic Monitoring (RPM)

- 14% of ACP members use digital health tools for remote monitoring of patients on a weekly/daily basis.
- This category has seen the second largest year-over-year usage increase, from 5% to 11% for like audiences.
- 24% of practices have RPM technology available, a rate that is somewhat lower than other technologies
- Rural practices are somewhat more likely to have RPM technology available (30% rural vs. 22% non-rural)
- By specialty, hospitalists have the highest rate of implementation (30%), followed by general internists (25%) and subspecialists (16%).
- Usage is on par with the other technologies, with 58% of those with the technology using it daily (29%) or weekly (29%).
- Another relevant usage statistic is the number of patients with whom the technology is used. The survey indicates an early stage of adoption, with 16% of physicians using RPM with 26-100 patients, and only 7% using with more than 100 patients.
- Rural practices use remote monitoring more than non-rural (79% vs. 47%).
- Subspecialists (80%) and hospitalists (71%) use remote monitoring more than general internists (43%).

Remote Care Management/Coaching

- 18% of ACP members use digital health tools for remote care management or coaching on a weekly basis
- 28% of physicians have the technology available in their practice.
- Where the technology is available, it is being used extensively. Among those with the technology, 65% use remote care management daily (34%) or weekly (31%).
- Remote management is also being used with more patients than remote monitoring. 25% of those with the technology are using it with 26-100 patients, and 17% are using it with more than 100 patients.
- Implementation is higher among general internists (33%) and subspecialists (25%), compared to hospitalists (21%). This is the only category of telehealth where hospitalists have the lowest rates of implementation.
- By contrast, for those hospitalist practices with the technology, remote care management is more likely to be used on a daily or weekly basis (91%), compared to 60% daily/weekly use among general internists and 53% among subspecialists.
- Rural practices have implemented remote care management at a similar rate to non-rural practices, but are more likely to use it on a weekly or more frequent basis (75% vs. 63% for non-rural).

Integration of Data from Patient Wearables

- Implementation and use of patient wearables data is very limited among ACP members, and has not increased since last year.
- 6% of respondents have implemented technology; however, 17% say they are considering implementation in the next year, so adoption may grow.
- The use of the technology is also in the early stage in terms of frequency and number of patients. With only 15 respondents having patient wearables integration in place, the numbers are too small to report tiers of usage.

Differences by Specialty:

Tech Implemented			
	General IM	Hospitalists	Subspec.
Video Visits	30%	48%	25%
E-Consults	45%	52%	30%
Asynch. Evaluation	44%	38%	33%
Monitoring	25%	30%	16%
Management	33%	21%	25%
Wearables	9%	7%	2%
Use at least weekly among those with technology			
	General IM	Hospitalists	Subspec.
Video Visits	33%	52%	40%
E-Consults	53%	65%	56%
Asynch. Evaluation	60%	72%	70%
Monitoring	43%	71%	80%
Management	60%	91%	53%
Wearables	40%	25%	100%
Use at least weekly among all members			
	General IM	Hospitalists	Subspec.
Video Visits	10%	25%	10%
E-Consults	24%	34%	17%
Asynch. Evaluation	26%	27%	23%
Monitoring	11%	21%	13%
Management	20%	19%	13%
Wearables	4%	2%	2%

Differences by Practice Location:

Tech Implemented		
	Rural	Non-Rural
Video Visits	40%	31%

E-Consults	45%	42%
Asynch. Evaluation	40%	39%
Monitoring	30%	22%
Management	26%	28%
Wearables	11%	5%
N =	47	165
Use at least weekly (those with technology)		
	Rural	Non-Rural
Video Visits	52%	36%
E-Consults	52%	58%
Asynch. Evaluation	68%	61%
Monitoring	79%	47%
Management	75%	63%
Wearables	40%	26%

Additional Survey Results

Barriers to Adoption

- The primary barriers to adoption are now financial and structural concerns, not a lack of interest.
- Only 6% said they are not interested in offering virtual care, and only 7% said they don't think there is a need for virtual care in their practices.

The survey asked: Assuming satisfactory reimbursement and no regulatory or licensing barriers for virtual care, what are reasons you would not use these technologies? Looking at the responses over two years illustrates how barriers are declining:

	2019	2020
No reasons – I would definitely use	18%	22%
I am more comfortable examining a patient in person and communicating face-to-face	Not asked	35%
Challenging to integrate virtual care into practice workflow	42%	29%
I don't have the staff support to set up and run the technologies	Not asked	28%
Patients do not have access to the technology to support virtual care	36%	25%
Concern about potential medical errors	29%	26%
Cost – increased expense to my practice, or don't have the funds to invest in the technology needed	24%	16%
Security and privacy of patient information	23%	15%

Interest in Learning

ACP members are generally interested in learning more about telehealth.

- Physicians are seeking educational resources and guidance from ACP to safely and effectively implement telehealth:
 - 29% Very interested
 - 33% Somewhat interested
- Physicians are also very interested in learning about telehealth technology solutions:
 - 26% Very interested
 - 32% Somewhat interested
- If ACP created a learning collaborative around telehealth, there is strong interest in participating as a learner:
 - 27% Very interested
 - 34% somewhat interested
- There is less interest in participating as a contributor of expertise, but those with the knowledge seem willing to share:
 - 10% Very interested
 - 10% Somewhat interested